At Orange Coast College, we know that life will sometimes throw adversity your way. That’s why we’re committed to giving you the real-world skills you need to succeed, no matter what — it’s our personal commitment to you and to each of our 20,000 students.

OCC’s expansive 164-acre campus — located in the heart of Orange County — features the latest in modern technology. State-of-the-art facilities include our brand-new Student Union, Aquatics Center, Planetarium, and Fitness Complex. Over the next few years, the College will continue to invest millions of dollars in premier facilities for students, including a new Social Science and Language Arts building.

OCC also is returning to its roots with the addition of a new 800-bed student housing facility. Transitioning back into a residential campus not only pays homage to OCC’s history, it removes barriers to education by providing students with much-needed affordable housing.

Our Pirates’ Promise program makes it easier for you to concentrate on your classes by paying for your tuition and books for up to two years. More information and eligibility criteria can be found at www.orangecoastcollege.edu/piratespromise.

Students at OCC enjoy big-time amenities in a small-college atmosphere. In addition to free tutoring, counseling, health and wellness services and on-campus public safety, OCC offers a variety of programs to meet the needs of every student, from first-time college students, single parents, former foster youth/wards of the court, veterans, international students and much more. Best of all, with appointments available both in-person and virtually, OCC offers flexibility, getting you the services you need when you need them.

OCC is a leader in transfer, ranking among the top two-year colleges in helping students transfer to the University of California and California State University systems. This fall we are embarking on acceleration of completion in Math and English with a redesign in curriculum support and improved placement into the correct courses. In addition to transfer degrees, the College also offers Associate in Arts and Science degrees, Associate Degree for Transfer (ADT), CSU/GE and IGETC certification, and certificates in a wide variety of career programs. Plus, OCC provides limitless opportunities in student government, student clubs, honors societies and 20 athletics programs.
PRESIDENT’S WELCOME

Welcome to Orange Coast College!

We are excited to share with you the new college catalog for the 2020-2021 year. Inside this catalog, you will find an array of exciting and innovative programs that lead to various degrees and certificates. This catalog, and the wealth of information it contains, represent our shared vision, to be the standard of excellence in transforming lives through education.

With this commitment in mind, you will have access to comprehensive student support services to help you in your journey at Coast. Whether your goal is to transfer to a four-year university, enhance your skills, receive training and certification in high-demand fields or you simply love to learn, at OCC, we value each and every one of our students’ journeys.

You have chosen an institution that has been at the forefront of higher education locally, regionally and nationally since 1947. The College has supported thousands of students, like you, in reaching their academic and career goals, impacting multiple generations of families. This is a testament to not only OCC’s world-class facilities, extensive student support resources and stellar academic programs, but also to the dedicated and caring faculty, classified staff and administrators, whose commitment to your success is consistently demonstrated.

Students who attend OCC will find a campus that is evolving to meet the needs of our community, with innovative and state-of-the-art facilities. We recently completed construction on a new Planetarium and Recycling Center, two extraordinary facilities that signal our shared community values of sustainability and STEAM education. Additionally, construction is underway on several exciting projects, including a new Student Union, Student Housing complex, new social science and language arts building, Kinesiology & Athletics Complex, and a new phase of the School of Sailing & Seamanship in Newport Beach. Each of these facilities was planned with the needs of our students at the forefront.

As you explore our catalog, you will notice that OCC is a global institution, where different cultures, customs, and points of view are celebrated to create a campus that is inclusive, with a robust learning environment where our students can grow and thrive. The College has garnered a reputation for excellence ranking among the top community colleges in California. As a multicultural and academic multinational institution, OCC is a qualifying Hispanic Serving (HSI) and Asian American Native American and Pacific Islander Serving (AANAPISI) institution and serves nearly 1,200 international students representing more than 70 countries.

The OCC faculty, administration and staff are dedicated to not only maintaining the highest standards of academic excellence, but to increasing resources for you, our students, so that you may continue to succeed.

Thank you for choosing Orange Coast College.

#GoCoast

Angelica L. Suarez, Ph.D.
President
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## About the College

Orange Coast College in Costa Mesa, California, was founded in 1947 on a site granted by the federal government. The campus currently consists of 164 acres used for instructional facilities, athletic fields, and parking areas. The Coast Community College District is comprised of three public community colleges: Orange Coast College, Golden West College, and Coastline Community College. Each is a tax-supported community college.

### Vision Statement

To be the standard of excellence in transforming lives through education.

### Mission Statement

Orange Coast College serves the educational needs of our diverse local and global community. The College empowers students to achieve their educational goals by providing high quality and innovative programs and services leading to academic degrees, college transfers, certificates in career and technical education, basic skills, and workforce development to enable lifelong learning. The College promotes student learning and development through fostering a respectful, supportive, participatory, and equitable campus climate of student engagement and academic inquiry.

### Institutional Commitment

Orange Coast College is committed to providing a unique learning community where freedom of thought and personal and intellectual growth is valued by all. As an outcome of their academic study, graduates of Orange Coast College possess proficiency in four core areas: Communication, Thinking Skills, Global Awareness, and Personal Development and Responsibility. Administrators, faculty, and staff are committed to the development of students as individuals and as citizens of the world. We value teaching and learning relationships, support services, and co-curricular programs that contribute to meaningful personal growth in our students and to their quest for knowledge.

## Calendar

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<td><strong>Fall 2020 Calendar</strong></td>
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</tr>
<tr>
<td>August 21, 2020</td>
<td>Semester Begins</td>
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<tr>
<td>August 21, 2020</td>
<td>Mandatory Flex Day for faculty and staff</td>
</tr>
<tr>
<td>September 7, 2020</td>
<td><strong>Holiday</strong> – Labor Day</td>
</tr>
<tr>
<td>September 14, 2020</td>
<td>Applications accepted for Spring 2021 Semester, including 2021 Winter Intersession</td>
</tr>
<tr>
<td>October 19, 2020</td>
<td>Beginning of second 8-week classes</td>
</tr>
<tr>
<td>November 11, 2020</td>
<td><strong>Holiday</strong> – Veterans’ Day</td>
</tr>
<tr>
<td>November 26 – November 29, 2020</td>
<td><strong>Holiday</strong> – Thanksgiving</td>
</tr>
<tr>
<td>December 12, 2020</td>
<td>Last day of Thanksgiving</td>
</tr>
<tr>
<td>December 21, 2020 – January 3, 2021</td>
<td>Winter Break</td>
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<tr>
<td><strong>Spring 2021 Calendar</strong></td>
<td></td>
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<tr>
<td>January 4, 2021</td>
<td>First day of Winter Intersession</td>
</tr>
<tr>
<td>January 18, 2021</td>
<td><strong>Holiday</strong> – Martin Luther King Jr. Day</td>
</tr>
<tr>
<td>January 29, 2021</td>
<td>Last day of Winter Intersession</td>
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All dates and hours of operation are subject to change without notice.

Deadlines for refunds, fee cancellations, registration, and withdrawals are different for each course.

For specific course deadlines, please refer to one of the following:

- Student Class Program/Web Schedule Bill (Available via MyCoast)
- Dates to Remember – Available online
- Academic Calendar – Available online
- Contact the Answer Center at (714) 432-5072

If a holiday falls on Friday, then Saturday and Sunday classes will not meet. If a holiday falls on Monday, then Saturday and Sunday classes will meet.

Final examinations are held during regular class meeting times during the last week of the semester.

## General Information

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- College Programs (p. 7)
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## About this Catalog

This publication must be prepared well in advance of the time period it covers; therefore, changes in some programs, policies and fees may occur. Courses as described are subject to change without notice and some listed courses are not offered each year. In addition, some courses or programs that are offered may have to be canceled because of insufficient enrollment, elimination or reduction in programs or for any other reason considered sufficient by the College president or designee. Any questions about courses or programs listed in this catalog should be directed to the Counseling Office located in Watson Hall.
Accreditation and Approvals

Orange Coast College is accredited by:

The Accrediting Commission for Community and Junior Colleges
Western Association of Schools and Colleges
10 Commercial Blvd., Ste. 204
Novato, CA 94949
(415) 506-0234

For an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U. S. Department of Education. Additional information about accreditation, including the filing of complaints against member institutions, can be found at www.accjc.org (http://www.accjc.org)

The College and its instructional programs are also approved by the Board of Governors of the California Community Colleges and by the State Department of Veteran Affairs for training veterans.

In addition, Orange Coast College offers programs which have specialty accreditations or external approval by recognized agencies:

- Accreditation Council for Education in Nutrition and Dietetics (ACEND);
- American Culinary Federation Education Foundation Accrediting Commission (ACFEFAC);
- California State Department of Public Health (CDPH) Dietary Services Supervisor
- California State Department of Public Health – Radiologic Health Branch
- California Certifying Medical Assistants Association (CCBMAA)
- California Community College Student Affairs Association (CCCSAA)
- California Department of Consumer Affairs - Dental Board of California (DBC)
- California Department of Consumer Affairs - Speech-Language Pathology and Audiology Board
- Commission on Dental Accreditation (CODA);
- Commission on English Language Program Accreditation (CEA);
- Commission on Accreditation of Allied Health Education Programs (CAAAEP);
- Committee on Accreditation for Neurodiagnostic Technology (CoA-NDT);
- Committee on Accreditation for Polysomnography Technology (CoA-PST);
- Commission on Accreditation for Respiratory Care (CoA-RC)
- County of Orange Health Care Disaster Management Agency – National Association of Emergency Medical Technicians
- Federal Aviation Administration (FAA) – Maintenance Schools; US Department of Transportation
- Joint Review Committee on Education in Cardiovascular Technology (JRC-CVT);
- Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS);
- Joint Review Committee on Education in Radiologic Technology (JRCERT);
- Student Affairs Administrators in Higher Education (NASPA)

Career Services

Career Services is a multi-faceted department that focuses on preparing students for careers. It encompasses the Career Library Resource Center, Career Programs, Tech Prep Career Pathways/Articulation, the Internship Academy and the Job Placement Center. Career Services is located on the third floor of Watson Hall. For more information, visit www.orangecoastcollege.edu/careerservices (http://www.orangecoastcollege.edu/careerservices/)

Career Resource Center

The Career Resource Center offers a variety of materials for students to do research on various aspects of occupational or educational goals. Students can access school catalogs, college major directories, college rankings, career information, job outlook and trends, and much more. There also are career assessments available to help students in making the right decision about their future. The Career Resource Center will help students to pave their own path to success. For more information, phone (714) 432-5576 ext. 4 or visit us online at www.orangecoastcollege.edu/careerservices (http://www.orangecoastcollege.edu/careerservices/)

Career Pathways/Articulation

The Career Services Department receives funding from the California Community College's Chancellor's Office through a CTE Transitions Grant and a SB70/SB1133 Career Technical Education Community Collaborative Grant to develop and maintain articulated courses between local high schools and the College; plan sequences of study in career technical education programs that begin in high school, and extend through at least two years of postsecondary education or an apprenticeship program; and develop and operate career pathway day events to showcase the College's career technical education programs to high school students and community members.

This funding is essential in helping to promote a bridge between secondary and postsecondary career technical education programs, providing career pathways, and helping all students make the connection between school and employment.

For more information on our career programs, call (714) 432-5576 ext. 5 or visit us online at www.orangecoastcollege.edu/careerservices (http://www.orangecoastcollege.edu/careerservices/).

Internship Academy

The Internship Academy at Orange Coast College offers students the opportunity to attend college classes and earn college credit for concurrent learning on the job. The program is designed to meet the demands of the students and employers for internship experience, and is “in compliance” with Title 5 regulations for accredited field experience. Together, the employment experience and educational aspects enable the student to acquire the knowledge, skills and attitudes necessary to enter and progress in a chosen career.

The Internship Academy assists students in making the transition from school to work by providing hands-on, “real world” learning experiences, and practical application of classroom theory.

The Academy delivers career-related field experience to students interested in or planning to enter a specific career related to their education.
The Academy experience is a compilation of career exploration, training-related field experience and clinical fieldwork. For more information, call (714) 432-5576 ext. 2 or visit www.orangecoastcollege.edu/careerservices (http://www.orangecoastcollege.edu/careerservices/)

Job Center
The Job Center provides a connection between employers and Orange Coast College students. The Center assists students in their job search by providing listings from local employers that include temporary or permanent part-time, full-time and internship opportunities. Workshops are provided to improve resume-writing skills and interviewing techniques. Books dealing with job preparation and search skills are available for checkout. Computers are accessible to assist with job searches. Job Center personnel also are available to discuss particular job search needs. For more information, call (714) 432-5576 ext. 1 or visit us online at www.orangecoastcollege.edu/careerservices (http://www.orangecoastcollege.edu/careerservices/)

College Programs
Career and Technical Education Programs
Orange Coast College offers more than 150 Career & Technical Education programs. OCC offers a variety of programs combining theory, practical training and experience. A program advisory committee, composed of local employers and workers, helps plan and offers ongoing advice and supervision for career programs. An extensive list of program descriptions is located in the College's catalog under “Degrees and Certificates.” Pick up one of the career program information sheets in the Transfer Center to find what career and certificate programs OCC offers. To learn more about career options, please visit www.orangecoastcollege.edu/careerservices (http://www.orangecoastcollege.edu/careerservices/) or call (714) 432-5575.

College Transfer Information
Many students choose careers that require four or more years of college. Orange Coast College has a comprehensive transfer program that satisfies lower division requirements for most majors. A student, working with a counselor may plan a two-year program at Orange Coast College then transfer to a college or university to complete a four-year degree.

Courses numbered A100 or higher are transferable to the California State University system. A list of courses that transfer to the University of California system is available in the Counseling Center and Transfer Center. These courses also are marked “UC” in the Courses section of this catalog. Counselors can help determine which courses transfer to other colleges and universities.

The Transfer Information section of this catalog contains additional information about transfer.

Counseling and Guidance
The counseling program at Orange Coast College is in place to help students identify and clarify personal, career and educational goals. The intent is to help students choose options that will improve the quality of their lives.

The counseling process encourages the building of a strong self-concept by helping students identify their needs and motivations, and by guiding them in learning and applying effective decision-making skills. Personal, career and academic choices are not viewed as separate and disconnected entities, but as interrelated issues, the combination and interaction of which determine the present and future quality of each individual's life experience.

Community Education Programs
Orange Coast College's Community Education programs provide a variety of lifestyle, recreation, enrichment and professional development opportunities to our community members. All of OCC’s Community Education courses are low-cost, fee-based, not-for-credit and not supported by any state or local taxes; enrollment fees support this programming. For more information about Community Education, please call (714) 432-5155 or visit www.orangecoastcollege.edu/commed (http://www.orangecoastcollege.edu/commed/)

Developmental Programs
Many special programs are offered to students who are not prepared for the demands of college-level courses. OCC offers special programs and courses in developmental reading, vocabulary building, spelling, oral communication, basic mathematics and English as a Second Language.

Consumer Information
Orange Coast College is committed to providing comprehensive Consumer Information to all students and stakeholders. For a complete listing of Consumer Information please visit http://www.orangecoastcollege.edu/about_occ/Pages/Consumer-Information.aspx

Degrees and Certificates
By authorization of the Board of Governors of the California Community Colleges, Orange Coast College confers the Associate in Arts degree on students who complete sixty (60) units with a grade of “C” or better in prescribed courses.

Orange Coast College also grants the degree of Associate in Science only for the majors listed in the Associate in Science Degree requirements section in this catalog.

In addition, Orange Coast College grants the Associate Degree for Transfer (ADT). It is a joint program between the California Community Colleges and the California State University (CSU) that makes it easier for students to transfer. Students who earn the ADT are guaranteed:

1. Admission to a CSU campus in a similar major to their ADT. However, it does not guarantee admission to a specific campus or major.
2. Ability to finish the bachelor degree with an additional 60 units.

Orange Coast College awards the Certificate of Achievement to students who successfully complete the required courses of a certificate program including a minimum of 18 units. Orange Coast College also grants the Certificate of Specialization (less than 18 units) to students who complete a specially designed or intensive learning activity.

Noncredit Certificates
The noncredit programs at Orange Coast College provide students access to higher education for skill attainment, college preparation, career enhancement, and personal enrichment. To earn a noncredit award, students must complete the list of required courses identified within the program of their choice. Noncredit courses are offered free of charge, except for instructional materials fees, if applicable, and are repeatable.
These courses are identified with course numbers ending in "N," for example, A001N. Students taking only noncredit courses do not earn college credits, and are not eligible for financial aid.

**Career Development and College Preparation (CDCP) Programs**

- Certificate of Competency—a certificate in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution
- Certificate of Completion—a certificate leading to improved employability or job opportunities

For more information regarding noncredit, please visit www.orangecoastcollege.edu/academics/adult-education

**Goals and Objectives**

The college Master Plan is available online at: http://www.orangecoastcollege.edu/academics/adult-education/ (http://www.orangecoastcollege.edu/academics/adult-education/)

**Goal 1: Community** – Foster a culture that serves, engages and connects the campus to the local and global community.

- Objective 1: Promote an inclusive college environment and intercultural understanding, to enable a stable society and the ability of graduates and employees to work in a diverse, culturally rich environment.
- Objective 2: Develop and encourage faculty, staff, management and student engagement in global and international experiences, and facilitate a means to bring those experiences back to campus.
- Objective 3: Develop, expand and institutionalize community and industry connections

**Goal 2: Learning** – Ensure students receive a quality education to become self-directed and successful lifelong learners.

- Objective 1: Increase completion rates for a wide range of students from a wide-range of backgrounds while preserving access and enhancing quality.
- Objective 2: Implement a comprehensive approach for the development of integrated academic and support services to holistically address the needs of students.
- Objective 3: Strengthen the scheduling processes for program/discipline pathways and learning practices to increase student goal completion.
- Objective 4: Foster adaptable, innovative learning environments.

**Goal 3: Access** – Create equitable access through effective and innovative pathways and programs that result in increased student success.

- Objective 1: Adapt basic skills instruction and support processes to increase skill development, and accelerate college level preparedness.
- Objective 2: Assist students by creating a coordinated K-12, OCC and four-year academic seamless pathway to degree and job attainment.
- Objective 3: Increase completion rates for students from diverse social and academic backgrounds and eliminate academic achievement gaps.

**Goal 4: Stewardship** – Sustain, improve and create programs, physical and human resources, and infrastructure through processes that ensure accountability, continuous improvement, and long-term viability.

- Objective 1: Model and embed environmental sustainability practices within College instruction and programs.
- Objective 2: Develop and maximize financial resources to benefit OCC students and programs.
- Objective 3: Cultivate human potential to advance our mission and enhance the quality of the work and personal lives of our employees.
- Objective 4: Promote an open environment with rigor, transparency, continuous improvement, and recognition of collaboration and individual achievement.
- Objective 5: Enhance services and instruction through the use of self-directed, intuitive on-line technology.

**Goal 5: Student and Employee Engagement** – Promote active and collaborative participation leading to meaningful connections among people, places and ideas within the College.

- Objective 1: Create structured opportunities for student engagement within curriculum, co-curricular activities and service learning opportunities.
- Objective 2: Develop programs to promote faculty and student interaction, along with team and community building that advances the mission of the College.
- Objective 3: Support the development of students and employees as individuals, and as community members.

**Guided Pathways**

The Guided Pathways initiative will make students’ pathways to success easier to navigate. The College attempts via this effort to provide solutions to barriers that students face in their journeys to complete their educational goals. The Guided Pathways framework for student success at OCC will:

- Assist students in identifying the path to attaining their educational goals.
- Provide all students with a set of clear course-taking patterns that promote better enrollment decisions and prepare students for future success.
- Integrate support services in ways that make it easier for students to get the help they need during every step of their community college experience.
- Assess student learning to assure students are leaving the college with the skills, knowledge, and dispositions required to be successful in their chosen fields.

For more information, please visit the Guided Pathways website at: http://www.orangecoastcollege.edu/about_occ/guided-pathways/Pages/gp-events.aspx
Institutional Student Learning Outcomes (ISLOs)

Communication – Students will communicate effectively, which includes:

1. Reading: Students will be able to comprehend and interpret various types of written information in prose and in documentation.
2. Writing: Students will demonstrate the ability to communicate thoughts, ideas and information in writing.
3. Listening: Students will be able to receive, attend to, interpret and respond appropriately to verbal and/or nonverbal messages and cues.
4. Speaking: Students will be able to organize ideas and communicate verbal or non-verbal messages and cues appropriate to the audience and the situation.
5. Non-verbal: Students will be able to interpret and communicate nonverbal messages and cues.

Thinking Skills – Students will think critically, which includes:

1. Critical, creative and analytical thinking: Students will be able to reach decisions, solve problems, and make judgments and evaluations using critical, creative and analytical skills.
2. Quantitative reasoning: Students will develop and demonstrate problem-solving skills by using critical thinking and logical reasoning.
3. Information competency: Students will demonstrate abilities to determine the extent of information needed; obtain data from various sources; evaluate the information and its sources critically; cite their sources correctly to avoid plagiarism; and understand the ethical and legal issues surrounding the use of information.
4. Technological competency: Students will demonstrate a firm grounding in the foundational concepts of computing in information technology; apply these concepts through the use of contemporary hardware, software and network infrastructure; and access, interpret, and apply information that facilitates learning and critical inquiry.

Social and Global Awareness – Students will demonstrate a measurable understanding of the world, which includes:

Science and society: Students will apply critical thinking skills concerning the causes and effects of natural phenomena and will become familiar with the rational approach that researchers use to analyze data and formulate logical conclusions.

1. The arts and society: Students will develop skill sets associated with the arts by analyzing aesthetic qualities, evaluating and devising rational arguments, identifying cultural and historical influences, and engaging in artistic expression and experiences.
2. Social diversity: Students will describe how knowledge from different cultural and moral perspectives would affect their interpretations of prominent problems in politics, society, the arts and /or global relations.
3. Civics: Students will use theoretical and methodological principles of the social and behavioral sciences to explain and evaluate the human experience; describe institutional, group, and individual processes across social and global contexts or historical periods; and communicate the concepts, theories, and methods used to understand social, political, economic institutions and individual behavior.

Personal Development and Responsibility – Students will demonstrate personal development and responsibility, which includes:

1. Self-management: Students will be able to accurately assess their own knowledge, skills and abilities; motivate self and set realistic goals; accept that taking feedback well is important to success; respond appropriately to challenging situations.
2. Social and emotional wellness: Students will engage in self-evaluation in regard to social and emotional wellbeing, and will demonstrate an awareness of the skills and behaviors necessary to develop plans for behavior change for the achievement of satisfactory relationships on an individual, community and societal level.
3. Physical wellness: Students will manage personal health and physical fitness by actively applying appropriate principles for the development and implementation of a plan of health and fitness-enhancing behaviors.
4. Workplace/professional skills: Students will be dependable, reliable and accountable; meet deadlines and complete tasks; maintain a professional attitude; and work as a productive member of a team.
5. Ethics: Students will demonstrate individual moral responsibilities toward themselves and others.

Memberships

Orange Coast College maintains membership with the following organizations:

- Academic Senate for California Community Colleges
- Accrediting Commission for Community and Junior Colleges
- American Association for State and Local History
- American Association of Community Colleges
- American College Dance Festival Association (ACDFA)
- American College Health Association (Acha)
- Association of Community and Continuing Education Membership
- Association of Core Texts and Courses
- California Association of Community College Registrars & Admissions Officers (Caccrao)
- California Community Colleges Chief Instructional Officers (CCCCIO)
- California Community College Student Services Association (Cccsaa)
- California Community College Student Services Association
- California Community College Student Financial Aid Administrators Association
- Community College Public Relations Organization (Ccpco)
- California Council of Cultural Centers in Higher Education (CaCccche)
- Honors Transfer Council of California
- International Association for College Admission Counseling (Iacac)
- Institute of International Education (IIE) Learning Resources Network
- Nafsa: Association of International Educators
- National Association of Colleges and Employers (Nace)
- National Association of Student Financial Aid Administrators (Nasfaa)
- National Collegiate Honors Council
- National Council for Marketing and Public Relations (Ncmpr)
- South Coast Higher Education Council (Schec)
- Student Affairs Administrators in Higher Education (Naspa)
- Trash for Teaching (T4t)
• Western Association of College Admission Counseling (Wacac)
• Western Regional Honors Council

The Orange Coast College Foundation

The Orange Coast College Foundation serves as a community and financial support organization to help Orange Coast College achieve its mission. The goals of the Orange Coast College Foundation include providing financial support for the College, involvement opportunities for board and community members, advocacy to help the College meet its goals, and advisement to the college’s administration.

The OCC Foundation accepts donations of cash, securities, real property, insurance and personal property from individuals, businesses and other foundations. The Foundation strengthens the educational objectives of the College by providing funds for faculty development, student scholarships, Library acquisitions, and capital improvements and repairs to the campus of Orange Coast College.

Members of the Orange Coast College Foundation Board of Directors are volunteers. They generally serve three-year renewable terms. Members are appointed from the community and can include alumni, business leaders, community leaders, parents, donors, and members of the College’s current and retired faculty and staff who are interested in supporting the missions of the college and the Foundation.

For additional information on the Foundation, please call (714) 432-5126.

Career and Academic Pathways

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General Education Certificates

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## Associate Degree General Education 2020-2021: Option 2 (California State University General Education)

To earn a Bachelor’s degree from the California State University, each student must complete 48-51 semester units in general education. Nine to twelve of these units must be taken as upper-division course work after transfer. Orange Coast College will certify the extent to which the lower-division General Education Breadth Requirements have been met for students meeting the following A-E pattern. Students seeking certification must complete at least 12 of these units at OCC.

Students seeking GE transfer certification are eligible for a Certificate of Achievement award.

Any one course may be used to satisfy only one required sub-area (i.e. if Communication Studies A110 is used to satisfy sub-area A1, it may not be used to satisfy sub-area C2), with the exception of Area B where lab courses taken to meet the B3 requirement will also count in B1 or B2. A cross-listed course (the same course listed under more than one department such as History A150 and Ethnic Studies A150) may be used to meet only one requirement.

**Important Note:** Courses on this list are approved for a specific academic term. Students wishing to use a course to meet a CSU General Education Breadth Requirement must be sure that the course is approved for the academic term in which it is taken.

**This list is valid only for courses taken Fall 2020 through Summer 2021.**

For courses taken prior to Fall 2020, students should check the master list which shows the dates that courses were added or deleted since the original list was published in 1991. This list is available in the Counseling Center or Transfer Center in Watson Hall.

### Course Title Units

<table>
<thead>
<tr>
<th>Area A: Communication in the English Language and Critical Thinking</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>A1 Oral Communication</strong></td>
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<tr>
<td>CMST A100</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>CMST A110</td>
<td>Public Speaking</td>
<td>3</td>
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<tr>
<td><strong>A2 Written Communication</strong></td>
<td></td>
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<tr>
<td>ENGL A100</td>
<td>Freshman Composition</td>
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<tr>
<td>ESL A100</td>
<td>ESL College Composition</td>
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<tr>
<td><strong>A3 Critical Thinking</strong></td>
<td></td>
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<tr>
<td>CMST A220</td>
<td>Essentials of Argumentation</td>
<td>3</td>
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<tr>
<td>CMST A240</td>
<td>Media Literacy</td>
<td>3</td>
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<tr>
<td>ENGL A101</td>
<td>Critical Reasoning: Fiction</td>
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<tr>
<td>or ENGL A101H</td>
<td>Critical Reasoning: Fiction Honors</td>
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<tr>
<td>ENGL A102</td>
<td>Critical Reasoning: Nonfiction</td>
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<tr>
<td>or ENGL A102H</td>
<td>Critical Reasoning: Nonfiction Honors</td>
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<tr>
<td>ENGL A109</td>
<td>Critical Reasoning and Writing for Science and Technology</td>
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<table>
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<tr>
<th>Area B: Physical Universe and Its Life Forms</th>
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<tr>
<td><strong>B1 Physical Science</strong></td>
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<tr>
<td>ANTH A280</td>
<td>Introduction to Archaeology</td>
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<tr>
<td>ASTR A100</td>
<td>Introduction to Astronomy</td>
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<td>or ASTR A100H</td>
<td>Introduction to Astronomy Honors</td>
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<td>ASTR A100 &amp; A100L</td>
<td>Introduction to Astronomy and Introduction to Astronomy Laboratory</td>
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<tr>
<td>ASTR A100H &amp; ASTR A100L</td>
<td>Introduction to Astronomy Honors and Introduction to Astronomy Laboratory</td>
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<tr>
<td>or ASTR A100M</td>
<td>Introduction to Astronomy Laboratory Honors</td>
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<tr>
<td>ASTR A101</td>
<td>Planetary Astronomy</td>
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<tr>
<td>ASTR A102</td>
<td>Stellar Astronomy</td>
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<tr>
<td>ASTR A103</td>
<td>Cosmology</td>
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<td>ASTR A104</td>
<td>Galactic Astronomy</td>
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<td>ASTR A200</td>
<td>Introduction to Astrophysics</td>
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<td>Introduction to Astrophysics Honors</td>
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<td>CHEM A100</td>
<td>Principles of Chemistry</td>
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<td>CHEM A110</td>
<td>Introduction to Chemistry</td>
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<tr>
<td>CHEM A130</td>
<td>Preparation for General Chemistry</td>
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<td>CHEM A180</td>
<td>General Chemistry A</td>
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<td>CHEM A185</td>
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<td>CHEM A220</td>
<td>Organic Chemistry A</td>
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<td>Organic Chemistry A Lab</td>
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<td>CHEM A225</td>
<td>Organic Chemistry B</td>
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<td>CHEM A225L</td>
<td>Organic Chemistry B Laboratory</td>
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<tr>
<td>GEGE A130</td>
<td>Introduction to Weather &amp; Climate</td>
<td>3</td>
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<tr>
<td>GEGE A180</td>
<td>Physical Geography</td>
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<td>or GEGE A180H</td>
<td>Physical Geography Honors</td>
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<tr>
<td>GEGE A180 &amp; A180L</td>
<td>Physical Geography and Physical Geography Lab</td>
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<tr>
<td>or GEGE A180H</td>
<td>Physical Geography Honors and Physical Geography Lab</td>
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<td>GEGE A105</td>
<td>General Geology</td>
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<td>General Geology and General Geology Laboratory</td>
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<td>GEGE A105H</td>
<td>General Geology Honors</td>
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<td>&amp; GEGE A105M</td>
<td>General Geology Laboratory Honors</td>
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<td>General Geology Honors and General Geology Laboratory</td>
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<td>GEGE A105 &amp; A105M</td>
<td>General Geology and General Geology Laboratory Honors</td>
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<td>GEGE A106</td>
<td>Earth Science for Teachers</td>
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<tr>
<td>GEGE A110</td>
<td>Physical Geology</td>
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<tr>
<td>GEGE A160</td>
<td>Environmental Geology</td>
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<tr>
<td>GEGE A185</td>
<td>Evolution of the Earth</td>
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### Associate Degree General Education 2020-2021: Option 2 (California State University General Education)

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<tr>
<th>Course</th>
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<th>Units</th>
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<td>GEOL A185 &amp; A185L</td>
<td>Evolution of the Earth and Oceanography</td>
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<tr>
<td>MRSC A185 &amp; A185L</td>
<td>Coastal Oceanography and Coastal Oceanography Laboratory</td>
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<tr>
<td>MRSC A185 &amp; A185L</td>
<td>Coastal Oceanography and Coastal Oceanography Laboratory</td>
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<tr>
<td>PHYS A100 &amp; A100L</td>
<td>Conceptual Physics</td>
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<td>PHYS A130</td>
<td>University Physics (non-majors)</td>
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<td>PHYS A185</td>
<td>Calculus Based Physics: Mechanics</td>
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<tr>
<td>PHYS A280</td>
<td>Calculus Based Physics: Electricity/Magnetism</td>
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<td>PHYS A285</td>
<td>Calculus Based Physics: Modern</td>
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<tr>
<td><strong>B2 Life Science</strong></td>
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<td>ANTH A185 or ANTH A185H</td>
<td>Physical Anthropology</td>
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<td>ANTH A185 &amp; A185L</td>
<td>Physical Anthropology</td>
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<tr>
<td>BIOL A100</td>
<td>Introduction to Biology</td>
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<tr>
<td>BIOL A100H</td>
<td>Introduction to Biology Honors</td>
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<tr>
<td>BIOL A101</td>
<td>The Biology of Cooking</td>
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<td>BIOL A115</td>
<td>Introduction to the Biology of Animals</td>
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<td>BIOL A125</td>
<td>Human Biology</td>
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<td>BIOL A180</td>
<td>Introduction to Biology for Majors: Cell and Molecular Biology</td>
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<tr>
<td>BIOL A182 or BIOL A182H</td>
<td>Zoology and Zoology Lab</td>
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<td>BIOL A182 &amp; A182L</td>
<td>Zoology and Zoology Lab</td>
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<td>BIOL A183</td>
<td>Botany</td>
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<tr>
<td>BIOL A183 &amp; A183L</td>
<td>Botany and Botany Lab</td>
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<tr>
<td>BIOL A185</td>
<td>Introduction to Biology for Majors: 2: Ecology, Evolution, Diversity,</td>
<td>5</td>
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<tr>
<td></td>
<td>and Physiology</td>
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<tr>
<td>BIOL A210</td>
<td>General Microbiology</td>
<td>5</td>
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<tr>
<td>BIOL A220</td>
<td>Human Anatomy</td>
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<tr>
<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
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<tr>
<td>BIOL A225</td>
<td>Human Physiology</td>
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<tr>
<td>BIOL A283</td>
<td>Genetics</td>
<td>4</td>
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<tr>
<td>ESEC A100 or ESEC A100H</td>
<td>Introduction to Environmental Science</td>
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<tr>
<td>ESEC A101</td>
<td>Principles of Ecology</td>
<td>3</td>
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<tr>
<td>HORT A100</td>
<td>Horticulture Science</td>
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<tr>
<td>MRSC A100 or MRSC A100H</td>
<td>Oceanography</td>
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<tr>
<td>MRSC A100 &amp; A100L</td>
<td>Oceanography and Oceanography Laboratory</td>
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<tr>
<td>MRSC A100H &amp; MRSC A100M</td>
<td>Oceanography Honors and Oceanography Laboratory Honors</td>
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<tr>
<td>MRSC A100 &amp; A100M</td>
<td>Oceanography and Oceanography Laboratory Honors</td>
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<td>MRSC A100H &amp; MRSC A100L</td>
<td>Oceanography Honors and Oceanography Laboratory</td>
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<tr>
<td>MRSC A180</td>
<td>Marine Biology</td>
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<tr>
<td>MRSC A180 &amp; A180L</td>
<td>Marine Biology</td>
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<tr>
<td>MRSC A187</td>
<td>Marine Mammals</td>
<td>3</td>
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<tr>
<td>PSYC A250</td>
<td>Psychobiology</td>
<td>3</td>
</tr>
</tbody>
</table>

### Course Options

#### B3 Laboratory Activity
- One of the courses taken in Area B1 or B2 must include a lab.

#### B4 Mathematical Concepts
- One course from the following with a grade of “C” or better:
  - MATH A100: Liberal Arts Mathematics
  - MATH A103: Statistics for Elementary Teachers
  - MATH A104: Mathematics for Elementary Teachers
  - MATH A115: College Algebra
  - MATH A120: Trigonometry
  - MATH A140: Business Calculus
  - MATH A155: Finite Mathematics with Applications
  - MATH A160: Introduction to Statistics
  - MATH A170: Pre calculus
  - MATH A180: Calculus 1
  - MATH A182H: Calculus 1 Honors
  - MATH A185: Calculus 2
  - MATH A185H: Calculus 2 Honors
  - MATH A230: Introduction to Discrete Mathematics
  - MATH A235: Applied Linear Algebra
  - MATH A280: Calculus 3
  - MATH A280H: Calculus 3 Honors
  - MATH A285: Introduction to Linear Algebra and Differential Equations
  - MATH A285H: Introduction to Linear Algebra and Differential Equations Honors
  - MATH A290H: Introduction to Tensors and Calculus on Manifolds Honors
  - PSYC A160: Statistics for the Behavioral Sciences

### Area C: Literature, Philosophy, & Foreign Language

- A minimum of nine semester units (or 12-15 quarter units) with at least one course in C1 and one course in C2.

#### C1 Arts
- ARCH A290 or ARCH A290H: History of Architecture 1
- ARCH A296 or ARCH A296H: History of Architecture 2
- ART A100 or ART A100H: Survey of Western Art from Prehistory Through Gothic
- ART A101 or ART A101H: Survey of Western Art from Renaissance to Modern
- ART A102: Survey of Modern and Contemporary Art History
- ART A103: Survey of Asian Art
- ART A107: Introduction To Art

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### Course Title

- MRSC A180 & A180L: Marine Biology and Marine Biology Lab
- MRSC A187: Marine Mammals
- PSYC A250: Psychobiology

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### Units

- MRSC A180 & A180L: 4 units
- MRSC A187: 3 units
- PSYC A250: 3 units

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### Additional Notes

- At least one course in C1 and one course in C2.
- A minimum of nine semester units (or 12-15 quarter units).
- One course must include a lab.
- One course from the following with a grade of “C” or better.
- A course from the following with a grade of “C” or better.
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>ART A108</td>
<td>Women in Art</td>
<td>3</td>
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<tr>
<td>ART A109</td>
<td>Ancient Greek Art and Architecture</td>
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<td>or ART A109H</td>
<td>Ancient Greek Art and Architecture Honors</td>
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<tr>
<td>ART A114</td>
<td>Art of the Ancient Americas</td>
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<tr>
<td>ART A115</td>
<td>Art of Africa, Oceania, and Indigenous North America</td>
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<td>ART A120</td>
<td>Beginning Drawing</td>
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<tr>
<td>ART A125</td>
<td>Perspective Drawing</td>
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<tr>
<td>ART A141</td>
<td>Sculpture 1</td>
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<td>ART A142</td>
<td>Life Sculpture 1</td>
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<td>ART A145</td>
<td>Exhibition Design 1</td>
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<tr>
<td>ART A147</td>
<td>Jewelry 1</td>
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<td>ART A150</td>
<td>Ceramics 1</td>
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<td>ART A263</td>
<td>Watercolor 1</td>
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<td>ART A269</td>
<td>Cartooning 1</td>
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<td>DANC A200</td>
<td>Appreciation Of Dance</td>
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<td>DANC A230</td>
<td>World Dance and Culture</td>
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<td>DMAD A181</td>
<td>Introduction to Computer Graphics</td>
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<td>FILM A100</td>
<td>History and Appreciation of the Cinema</td>
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<td>FILM A150</td>
<td>History of Radio &amp; Television</td>
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<td>HUM A100</td>
<td>Introduction to the Humanities 2</td>
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<td>ID A180</td>
<td>History of Interior Architecture and Furnishings 1</td>
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<tr>
<td>ID A190</td>
<td>Hist Arch/Furnishings 2</td>
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<tr>
<td>MUS A100</td>
<td>History and Appreciation of Western Classical Music</td>
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<tr>
<td>MUS A105</td>
<td>Music from Bach Up to Rock</td>
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<td>MUS A115</td>
<td>Fundamentals of Music</td>
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<td>MUS A116</td>
<td>Basic Guitar</td>
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<td>MUS A139</td>
<td>History of Rock Music</td>
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<td>MUS A140</td>
<td>Beginning Instruments</td>
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<td>MUS A143</td>
<td>History of Jazz</td>
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<td>Theory 1</td>
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<td>Introduction to Photography</td>
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<td>PHOT A123</td>
<td>Introduction to Digital Photography</td>
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<td>History and Aesthetics of Still Photography</td>
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<td>RLST A135</td>
<td>Religion, Spirituality and Society</td>
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<td>Introduction to Theatre</td>
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<td>THEA A101</td>
<td>Introduction to History and Literature of the Theatre</td>
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<td>Drama And Acting</td>
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<td>THEA A106</td>
<td>Acting Fundamentals</td>
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<td>THEA A110</td>
<td>Theatre Laboratory Level 1</td>
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A minimum of nine semester units (or 12-15 quarter units) with courses from at least two sub-areas.

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<td>Elementary Spanish 1</td>
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<td>or SPAN A185</td>
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<tr>
<td>or SPAN A280</td>
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<td>or SPAN A285</td>
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<tr>
<td>or VIET A180</td>
<td>Elementary Vietnamese 1</td>
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</tr>
<tr>
<td>or VIET A185</td>
<td>Elementary Vietnamese 2</td>
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</table>
Non-Activity

One unit of activity courses.

Three semester units (or four-five quarter units); no more than

Area E: Life Long Learning and Self-Development

<table>
<thead>
<tr>
<th>Course</th>
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<td>HIST A145</td>
<td>History of Mexico</td>
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<tr>
<td>HIST A150</td>
<td>Ethnic Groups of the United States: Their Histories</td>
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<tr>
<td>HIST A151</td>
<td>History of the Middle East to 1500</td>
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<td>HIST A152</td>
<td>History of the Middle East Since 1500</td>
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<td>HIST A161H</td>
<td>World History 1 Honors</td>
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<td>HIST A162H</td>
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<td>HIST A176</td>
<td>Women In U.S. History</td>
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<td>HIST A180</td>
<td>Western Civilization 1</td>
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<td>Women in History</td>
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<td>HIST A195</td>
<td>History of England and Greater Britain</td>
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<td>HMDV A180</td>
<td>Child Growth and Development</td>
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<td>PSCI A101</td>
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<td>PSCI A185</td>
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<td>PSCI A188</td>
<td>Introduction to Political Theory</td>
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<td>PSCI A190</td>
<td>Introduction to American Legal System</td>
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<td>PSCI A200</td>
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<td>PSYC A100</td>
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<td>PSYC A105</td>
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<td>PSYC A130</td>
<td>Life Span Developmental Psychology</td>
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<td>PSYC A165</td>
<td>Principles of Human Sexuality 1</td>
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<td>PSYC A185</td>
<td>Principles of Psychology</td>
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<td>PSYC A220</td>
<td>Psychology of Personality</td>
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<td>PSYC A260</td>
<td>Social Psychology</td>
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<td>PSYC A270</td>
<td>Psychology of Learning</td>
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<td>SOC A100</td>
<td>Introduction to Sociology</td>
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<td>SOC A110</td>
<td>Introduction to Dating, Relationships, and Marriage</td>
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<td>Introduction to Race and Ethnicity</td>
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<tr>
<td>SOC A185</td>
<td>Analysis of Social Problems</td>
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<td>SOC A200</td>
<td>Introduction to Research Methods</td>
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Area E: Life Long Learning and Self-Development

Three semester units (or four-five quarter units); no more than one unit of activity courses.

Non-Activity
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<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>ATHL A253</td>
<td>Cross Country Team - Men's</td>
<td>3</td>
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<tr>
<td>ATHL A254</td>
<td>Football Team</td>
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<td>ATHL A255</td>
<td>Golf Team - Men's</td>
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<td>ATHL A257</td>
<td>Soccer Team - Men's</td>
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<td>ATHL A258</td>
<td>Swimming Team - Men's</td>
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<td>ATHL A259</td>
<td>Tennis Team - Men's</td>
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<tr>
<td>ATHL A260</td>
<td>Track and Field Team - Men's</td>
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<td>ATHL A261</td>
<td>Volleyball Team - Men's</td>
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<td>ATHL A263</td>
<td>Water Polo Team - Men's</td>
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<td>DANCA 101</td>
<td>Modern Dance 1</td>
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<td>DANCA 102</td>
<td>Modern 2</td>
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<tr>
<td>DANCA 106</td>
<td>Strength and Stretch</td>
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<td>DANCA 107</td>
<td>Conditioning for Dance</td>
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<tr>
<td>DANCA 108</td>
<td>Pilates Mat Work</td>
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<tr>
<td>DANCA 110</td>
<td>Ballet 1</td>
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<td>DANCA 111</td>
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<td>DANCA 113</td>
<td>Pointe Work</td>
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<td>DANCA 115</td>
<td>Yoga For Dancers</td>
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<td>DANCA 116</td>
<td>Latin Dance Styles I</td>
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<td>DANCA 117</td>
<td>American Social Dance Styles</td>
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<td>DANCA 118</td>
<td>Movement for Longevity</td>
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<td>DANCA 120</td>
<td>Jazz Dance 1</td>
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<td>DANCA 121</td>
<td>Jazz Dance 2</td>
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<td>DANCA 125</td>
<td>Tap 1</td>
<td>0.5-2</td>
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<tr>
<td>DANCA 126</td>
<td>Tap 2</td>
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<td>DANCA 129</td>
<td>Pilates Methodology</td>
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<td>DANCA 130</td>
<td>Mid-Eastern Dance 1</td>
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<td>DANCA 133</td>
<td>Intro To World Dance</td>
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<td>DANCA 135</td>
<td>Flamenco Dance 1</td>
<td>0.5-2</td>
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<td>DANCA 137</td>
<td>Classical Danc of India</td>
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<tr>
<td>DANCA 138</td>
<td>African Dance and Drumming I</td>
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<td>DANCA 139</td>
<td>Gyrokinesis</td>
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<td>Folk Dance</td>
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<td>DANCA 143</td>
<td>Jazz Dance III</td>
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<td>Ballet III</td>
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<td>DANCA 145</td>
<td>Modern Dance III</td>
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<td>DANCA 146</td>
<td>Tap III</td>
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<td>DANCA 147</td>
<td>Flamenco Dance 2</td>
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<td>DANCA 148</td>
<td>Mid-Eastern Dance 2</td>
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<tr>
<td>DANCA 149</td>
<td>Hip-Hop Dance I</td>
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<td>DANCA 150</td>
<td>Dance Improvisation I</td>
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<td>DANCA 152</td>
<td>Pilates Apparatus &amp; Mat Work Level 1</td>
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<td>DANCA 153</td>
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<td>DANCA 155</td>
<td>Latin Dance Styles II</td>
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<td>DANCA 156</td>
<td>Polynesian Dance</td>
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<td>DANCA 158</td>
<td>African Dance and Drumming II</td>
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<td>DANCA 159</td>
<td>Hip-Hop Dance II</td>
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<td>DANCA 171</td>
<td>Modern Dance Basics</td>
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<td>DANCA 172</td>
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<td>Jazz Dance Basics</td>
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<td>DANCA 174</td>
<td>Tap Dance Basics</td>
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</tbody>
</table>
Achievement award.

Students seeking GE transfer certification are eligible for a Certificate of the campus to which they have been admitted.

or the student may be subject to the general education requirements of system. The IGETC should be completed in its entirety before transferring of either the California State University or the University of California (IGETC) will satisfy the lower division general education requirements.

Completion of the Intersegmental General Education Transfer Curriculum (IGETC) will satisfy the lower division general education requirements listed above, all students must complete Breadth. May be completed prior to transfer.)

American Institutions Requirement (Not part of CSU General Education Breadth. May be completed prior to transfer.) In addition to the General Education Requirements listed above, all students must complete coursework in American History and Constitution for graduation from CSU. Completion of HIST A170 History of the United States to 1876 or HIST A170H History of the United States to 1876 Honors, HIST A175 History of the United States Since 1876 or HIST A175H History of the United States Since 1876 Honors, in Area D and PSCI A180 American Government or PSCI A180H American Government Honors in Area D will fulfill this requirement.

Associate Degree General Education 2020-2021: Option 3 (IGETC)

Completion of the Intersegmental General Education Transfer Curriculum (IGETC) will satisfy the lower division general education requirements of either the California State University or the University of California system. The IGETC should be completed in its entirety before transferring or the student may be subject to the general education requirements of the campus to which they have been admitted.

Students seeking GE transfer certification are eligible for a Certificate of Achievement award.

All courses must be completed with grades of “C” or better. Grades of “credit” can be used if “credit” is equal to a “C” or better. There are limits to the number of units that can be taken P/NP.

Courses used to meet IGETC requirements must be at least three semester units or four quarter units.

Important Note: Courses on this list are approved for a specific academic term. Students wishing to use a course to meet an IGETC requirement must be sure that the course is approved for the academic term in which it is taken. This list is valid only for courses taken Fall 2020 through Summer 2021. For courses taken prior to Fall 2020, students should check the master list which shows the dates that courses were added or deleted since the original list was published in 1991. This list is available in the Counseling Center or Transfer Center in Watson Hall.

<table>
<thead>
<tr>
<th>Course</th>
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<td>KIN A172</td>
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<td>KIN A173</td>
<td>Adapted Strength and Balance</td>
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<td>KIN A174</td>
<td>Adapted Cardiovascular Fitness</td>
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<tr>
<td>KIN A175</td>
<td>Adapted Aerobic Exercise</td>
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<td>KIN A176</td>
<td>Adapted Stretching</td>
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<td>KIN A207</td>
<td>Fitness Programs II</td>
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<td>KIN A208</td>
<td>Strength and Conditioning Level 3</td>
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<td>KIN A211</td>
<td>Step Cardio and Core Level 2</td>
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<tr>
<td>KIN A212</td>
<td>Body Sculpting Level 2</td>
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<td>KIN A215</td>
<td>Cross Training Level 2</td>
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<td>KIN A228</td>
<td>Hatha Yoga Level II</td>
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<td>Swimming for Fitness - Level 2</td>
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<td>KIN A232</td>
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<td>KIN A241</td>
<td>Surfing and Ocean Safety Level 2</td>
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<td>Tennis Level 2</td>
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<td>Table Tennis - Level 2</td>
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<td>Futsal/Indoor Soccer Level 2</td>
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<td>Drugs &amp; Sports</td>
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<td>KIN A282</td>
<td>Introduction to Exercise Physiology</td>
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<td>Introduction to Sailing</td>
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<td>Intermediate Sailing - Intro to Keel Boats</td>
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<td>Introduction to Ocean Sailing</td>
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<td>MARA A140</td>
<td>Outrigger Canoeing</td>
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1. Lab course
2. Course will satisfy either C1 or C2

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<td>Group 1A: English Composition</td>
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<td>ENGL A101</td>
<td>Critical Reasoning: Fiction</td>
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<td>Critical Reasoning: Fiction Honors</td>
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<tr>
<td>ENGL A102</td>
<td>Critical Reasoning: Nonfiction</td>
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<tr>
<td>or ENGL A102H</td>
<td>Critical Reasoning: Nonfiction Honors</td>
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<tr>
<td>PHIL A150</td>
<td>Critical Reasoning &amp; Writing</td>
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<td>Group 1C: Oral Communication (CSU only)</td>
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<tr>
<td>CMST A100</td>
<td>Interpersonal Communication</td>
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<td>CMST A110</td>
<td>Public Speaking</td>
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<td>Area 2: Mathematical Concepts and Quantitative Reasoning</td>
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<td>One course. At least three semester units (or four to five quarter units).</td>
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<td>MATH A100</td>
<td>Liberal Arts Mathematics</td>
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<td>MATH A115</td>
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<td>MATH A155</td>
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<td>Introduction to Statistics</td>
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<td>MATH A170</td>
<td>Precalculus</td>
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### Area 3: Arts and Humanities

Three courses, with at least one course from Group A and one from Group B. Nine semester units (or 12-15 quarter units).

**Group 3A: Arts**

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**Group 3B: Humanities**

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**Area 4: Social and Behavioral Sciences**

Three courses from at least two disciplines. 9 semester units (or 12-15 quarter units).

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<td>HIST A187</td>
<td>Women in History</td>
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<td>HMDV A180</td>
<td>Child Growth and Development</td>
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<tr>
<td>PSCI A101</td>
<td>Survey of Current Issues</td>
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<td>PSCI A110</td>
<td>International Relations</td>
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<tr>
<td>PSCI A180</td>
<td>American Government</td>
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<td>or PSCI A180H</td>
<td>American Government Honors</td>
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<tr>
<td>PSCI A185</td>
<td>Comparative Politics</td>
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<tr>
<td>PSYC A100</td>
<td>Introduction to Psychology</td>
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<td>or PSYC A100H</td>
<td>Introduction to Psychology Honors</td>
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<td>PSYC A105</td>
<td>Psychology of Women</td>
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<tr>
<td>PSYC A130</td>
<td>Life Span Developmental Psychology</td>
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<tr>
<td>PSYC A165</td>
<td>Principles of Human Sexuality</td>
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<tr>
<td>PSYC A185</td>
<td>Principles of Psychology</td>
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<tr>
<td>PSYC A190</td>
<td>Cross-Cultural Psychology</td>
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<td>or PSYC A190H</td>
<td>Cross-Cultural Psychology Honors</td>
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<td>PSYC A220</td>
<td>Psychology of Personality</td>
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<tr>
<td>PSYC A260</td>
<td>Social Psychology</td>
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<tr>
<td>SOC A100</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>or SOC A100H</td>
<td>Introduction to Sociology Honors</td>
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### Group 5A: Physical Science

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<td>ASTR A100</td>
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<td>or ASTR A100H</td>
<td>Introduction to Astronomy Honors</td>
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<tr>
<td>ASTR A100 &amp; A100L</td>
<td>Introduction to Astronomy and Introduction to Astronomy Laboratory</td>
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<tr>
<td>or ASTR A100M</td>
<td>Introduction to Astronomy Laboratory Honors</td>
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<td>ASTR A100H &amp; ASTR A100M</td>
<td>Introduction to Astronomy Honors and Introduction to Astronomy Laboratory Honors</td>
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<tr>
<td>or ASTR A100L</td>
<td>Introduction to Astronomy Laboratory</td>
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<tr>
<td>ASTR A101</td>
<td>Planetary Astronomy</td>
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<tr>
<td>ASTR A102</td>
<td>Stellar Astronomy</td>
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<td>ASTR A103</td>
<td>Cosmology</td>
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<td>CHEM A100</td>
<td>Principles of Chemistry</td>
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<tr>
<td>CHEM A110</td>
<td>Introduction to Chemistry</td>
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<tr>
<td>CHEM A130</td>
<td>Preparation for General Chemistry</td>
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<tr>
<td>CHEM A180</td>
<td>General Chemistry A</td>
<td>5</td>
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<tr>
<td>CHEM A185</td>
<td>General Chemistry B</td>
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<td>CHEM A220</td>
<td>Organic Chemistry A</td>
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<td>CHEM A220L</td>
<td>Organic Chemistry A Lab</td>
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<td>CHEM A225</td>
<td>Organic Chemistry B</td>
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<td>CHEM A225L</td>
<td>Organic Chemistry B Laboratory</td>
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<td>GEOG A180</td>
<td>Physical Geography</td>
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<td>or GEOG A180H</td>
<td>Physical Geography Honors</td>
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<td>GEOG A180 &amp; A180L</td>
<td>Physical Geography and Physical Geography Lab</td>
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<tr>
<td>or GEOG A180H &amp; GEOG A180L</td>
<td>Physical Geography Honors and Physical Geography Lab</td>
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<tr>
<td>GEOL A105</td>
<td>General Geology</td>
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<td>or GEOL A105H</td>
<td>General Geology Honors</td>
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<tr>
<td>GEOL A105 &amp; A105L</td>
<td>General Geology and General Geology Laboratory</td>
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<tr>
<td>or GEOL A105M</td>
<td>General Geology Laboratory Honors</td>
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<tr>
<td>GEOL A105H &amp; GEOL A105M</td>
<td>General Geology Honors and General Geology Laboratory Honors</td>
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<tr>
<td>or GEOL A105L</td>
<td>General Geology Laboratory</td>
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<tr>
<td>GEOL A110</td>
<td>Physical Geology</td>
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<tr>
<td>GEOL A160</td>
<td>Environmental Geology</td>
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<td>GEOL A185 &amp; A185L</td>
<td>Evolution of the Earth and Evolution of the Earth Lab</td>
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<tr>
<td>MRSC A185</td>
<td>Coastal Oceanography</td>
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<td>MRSC A185 &amp; A185L</td>
<td>Coastal Oceanography and Coastal Oceanography Lab</td>
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### Group 5B: Biological Science

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<tr>
<td>PHYS A110</td>
<td>Conceptual Physics</td>
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<td>PHYS A110 &amp; PHYS A111</td>
<td>Conceptual Physics and Introductory Physics Laboratory</td>
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<tr>
<td>PHYS A120</td>
<td>Algebra Based Physics: Mechanics</td>
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<tr>
<td>PHYS A130</td>
<td>University Physics 1 (non-majors)</td>
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<tr>
<td>PHYS A185</td>
<td>Calculus Based Physics: Mechanics</td>
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<tr>
<td>PHYS A280</td>
<td>Calculus Based Physics: Electricity/ Magnetism</td>
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<tr>
<td>PHYS A285</td>
<td>Calculus Based Physics: Modern</td>
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<tr>
<td>ANTH A185</td>
<td>Physical Anthropology</td>
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<td>or ANTH A185H</td>
<td>Physical Anthropology Honors</td>
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<td>ANTH A185 &amp; A185L</td>
<td>Physical Anthropology and Phys Anthropology Lab</td>
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<td>ANTH A185H &amp; ANTH A185L</td>
<td>Physical Anthropology Honors and Phys Anthropology Lab</td>
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<tr>
<td>BIOL A100</td>
<td>Introduction to Biology</td>
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<tr>
<td>or BIOL A100H</td>
<td>Introduction to Biology Honors</td>
<td>4</td>
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<tr>
<td>BIOL A101</td>
<td>The Biology of Cooking</td>
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<tr>
<td>BIOL A115</td>
<td>Introduction to the Biology of Animals</td>
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<td>BIOL A125</td>
<td>Human Biology</td>
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<tr>
<td>BIOL A180</td>
<td>Introduction to Biology for Majors 1: Cell and Molecular Biology</td>
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<tr>
<td>BIOL A182</td>
<td>Zoology</td>
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<td>BIOL A182 &amp; A182L</td>
<td>Zoology and Zoology Lab</td>
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<td>BIOL A183</td>
<td>Botany</td>
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<td>BIOL A183 &amp; A183L</td>
<td>Botany and Botany Lab</td>
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<tr>
<td>BIOL A185</td>
<td>Introduction to Biology for Majors 2: Ecology, Evolution, Diversity, and Physiology</td>
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<tr>
<td>BIOL A210</td>
<td>General Microbiology</td>
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<td>BIOL A220</td>
<td>Human Anatomy</td>
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<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
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<tr>
<td>BIOL A225</td>
<td>Human Physiology</td>
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<tr>
<td>BIOL A283</td>
<td>Genetics</td>
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<td>ESEC A100</td>
<td>Introduction to Environmental Science</td>
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<tr>
<td>ESEC A101</td>
<td>Principles of Ecology</td>
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<tr>
<td>MRSC A100</td>
<td>Oceanography</td>
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<td>Oceanography Honors</td>
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<td>MRSC A100 &amp; MRSC A100M</td>
<td>Oceanography and Oceanography Honors</td>
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<td>MRSC A100H &amp; MRSC A100M</td>
<td>Oceanography Honors and Oceanography Laboratory Honors</td>
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<td>MRSC A100H &amp; MRSC A100M</td>
<td>Oceanography and Oceanography Laboratory Honors</td>
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<tr>
<td>MRSC A180</td>
<td>Marine Biology</td>
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<td>MRSC A180 &amp; A180L</td>
<td>Marine Biology and Marine Biology Lab</td>
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<tr>
<td>PSYC A250</td>
<td>Psychobiology</td>
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</table>
Language Other than English (UC only)
1. Complete two years of a single high school foreign language with grades of "C" or better (high school transcripts must be on file at OCC), or
2. Complete Chinese, French, German, Hebrew, Italian, Japanese, Portuguese, Vietnamese A180 or Spanish A160 and A180. Advanced courses will validate this requirement, or
3. Earn a satisfactory score on one of the following (results must be on file at OCC):
   b. College Board Advanced Placement Examination in a language other than English (score: 3 or better) International Baccalaureate Higher Level Examination in language other than English (score: 5 or better)
   c. An achievement test administered by a college or university (score: proficiency equivalent to at least two years of high school language).
   d. A passing grade on the international O Level or A Level exam in a language other than English.
4. Complete, with grades of "C" or better, two years of formal schooling at the sixth grade level or higher in an institution where the language of instruction is not English (documentation must be on file at OCC).
5. Complete a Defense Language Institute course in a language other than English with a grade of "C" or better (documentation must be on file with Admissions and Records).

American Institutions Requirement
(Not part of IGETC. May be completed prior to transfer.)

CSU has an American Institutions requirement that is separate from IGETC. Courses used to meet the CSU requirement can be double counted in Area 3 or 4. To meet the CSU requirement, students should take PSCI A180 American Government or PSCI A180H American Government Honors and one of the following courses: HIST A170 History of the United States to 1876, HIST A170H History of the United States to 1876 Honors, HIST A175 History of the United States Since 1876, HIST A175H History of the United States Since 1876 Honors.

UC requires the completion of a college course or courses with a grade of "C" or better OR a one-year course in high school in U.S. history or a half-year course in U.S. history and a half-year course in American government with grades of "C" or better (UCLA requires grades of "B"). UCSB requires the completion of a college course. If you are using college coursework to satisfy this requirement, check the appropriate UC catalog to determine which course(s) to take.

Note: Transfer credit for some courses may be limited by the University of California. Please see the UC Transferable Course List available in the Counseling Center or Transfer Center, or the Transfer Center home page on the Internet for these limitations.

Liberal Arts
- Liberal Arts, Associate in Arts Degree (p. 21)

Liberal Arts, Associate in Arts Degree
Financial Aid Eligible
Banner Code: 1_AA_LIB
Control Number: 04040

Complete eighteen (18) units from the following and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan must be developed with a counselor and placed on file prior to petitioning for graduation.

Associate in Arts Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 2 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/find-pathway/liberal-arts/liberal-arts-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.
All coursework must be 100 level or above.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<td>Select 18 units from the following:</td>
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<tr>
<td>ANTH A100</td>
<td>Cultural Anthropology (or above)</td>
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<tr>
<td>ART A100/A100H</td>
<td>Survey of Western Art from Prehistory Through Gothic</td>
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<tr>
<td>ART A101/A101H</td>
<td>Survey of Western Art from Renaissance to Modern</td>
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<tr>
<td>ART A102</td>
<td>Survey of Modern and Contemporary Art History</td>
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<td>ART A108</td>
<td>Women in Art</td>
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<tr>
<td>ASTR A100</td>
<td>Introduction to Astronomy (or above)</td>
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<tr>
<td>BIOL A100</td>
<td>Introduction to Biology (or above)</td>
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<tr>
<td>CHEM A100</td>
<td>Principles of Chemistry (or above)</td>
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<tr>
<td>CMST A100</td>
<td>Interpersonal Communication (or above)</td>
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<tr>
<td>DANC A200</td>
<td>Appreciation Of Dance</td>
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<tr>
<td>ECON A100</td>
<td>Economics: General Concepts (or above)</td>
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<td>ETHE A100</td>
<td>Contemporary Ethnic America (or above)</td>
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<td>ESEC A100</td>
<td>Introduction to Environmental Science (or above)</td>
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<td>ENGL A100</td>
<td>Freshman Composition (or above)</td>
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<td>FILM A100</td>
<td>History and Appreciation of the Cinema</td>
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<td>FILM A104</td>
<td>The Great Directors of the Cinema</td>
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<tr>
<td>CHIN, FREN,</td>
<td>A180 or above</td>
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<tr>
<td>GERM, ITAL,</td>
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<td>JAPN, PORT,</td>
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<td>SPAN, VIET</td>
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<td>GNDR A100</td>
<td>Introduction to Gender Studies (or above)</td>
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<td>GEOG A100</td>
<td>World Regional Geography (or above)</td>
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<tr>
<td>HUM A100</td>
<td>Introduction to the Humanities (or above)</td>
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<td>MRSC A100</td>
<td>Oceanography (or above)</td>
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<tr>
<td>MUS A100</td>
<td>History and Appreciation of Western Classical Music</td>
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<td>MUS A105</td>
<td>Music from Bach Up to Rock</td>
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<td>MUS A180</td>
<td>Theory 1</td>
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<td>PHIL A100</td>
<td>Introduction to Philosophy (or above)</td>
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<td>PHOT A101</td>
<td>Photography and Society</td>
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<td>PHOT A130</td>
<td>History and Aesthetics of Still Photography</td>
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<td>PSYC A100</td>
<td>Introduction to Psychology (or above)</td>
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<td>RLST A100</td>
<td>Introduction to Religious Studies (or above)</td>
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<tr>
<td>SOC A100</td>
<td>Introduction to Sociology (or above)</td>
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<td>THEA A100</td>
<td>Introduction to Theatre</td>
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<td>THEA A101</td>
<td>Introduction to History and Literature of the Theatre</td>
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<tr>
<td>THEA A105</td>
<td>Drama And Acting</td>
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Minimum Program Major Units 18
AA General Education Option 1, 2, or 3 Varies
Transferable electives as needed to satisfy unit requirement Varies
Total Units 60

Noncredit Certificate Programs

- Allied Health (p. 22)
  - Personal Care Aide Noncredit, Certificate of Completion (p. 22)
  - Skills Enhancement for Consumer and Health Sciences, Certificate of Completion (p. 23)
- Business (p. 23)
  - Not for Profit Management, Certificate of Completion (p. 23)
- Chemistry (p. 24)
  - Chemistry Skills, Certificate of Competency (p. 24)
- Computer & High Technology (p. 24)
  - Computer Basics, Certificate of Completion (p. 24)
- Consumer and Health Sciences (p. 25)
  - Customer Service for the Retail Industry, Certificate of Completion (p. 25)
- English (p. 25)
  - Academic Preparation in English, Certificate of Competency (p. 25)
- English as a Second Language (p. 25)
  - ESL Support for Freshman Composition, Certificate of Competency (p. 26)
- English Language Learning (p. 26)
  - Advanced English Language Skills, Certificate of Competency (p. 26)
  - Developmental English Language Skills, Certificate of Competency (p. 27)
  - Emergent English Language Skills, Certificate of Competency (p. 27)
  - English Language Learning for Career Development, Certificate of Competency (p. 27)
  - English Language Learning for Parents, Certificate of Competency (p. 28)
  - English Language Learning for Transition to Academics, Certificate of Competency (p. 28)
  - English Language Support for U.S. Citizenship, Certificate of Competency (p. 28)
- Grammar Review, Certificate of Competency (p. 29)
- Kinesiology (p. 29)
  - Lifeguard Training, Professional Rescue, Certificate of Completion (p. 29)
  - Yoga Instructor Training, Certificate of Completion (p. 30)
- Mathematics (p. 30)
  - Math Skills Training, Certificate of Competency (p. 30)
- Tutoring (p. 30)
  - Tutoring Skills and Strategies, Certificate of Completion (p. 30)

Allied Health

- Personal Care Aide Noncredit, Certificate of Completion (p. 22)
- Skills Enhancement for Consumer and Health Sciences, Certificate of Completion (p. 23)

Personal Care Aide Noncredit, Certificate of Completion

Not Financial Aid Eligible
Banner Code: 1_NCH_PCA
This is an entry-level program designed for those with little or no college experience. Personal Care Aides (PCA) provide assistance to consumers who are sick, injured, mentally or physically disabled, elderly and/or frail. They work in the home and help their clients with daily activities, such as bathing and bathroom functions, feeding, grooming, taking medication, and some housework. Personal Care Aides help clients make and keep appointments with doctors, provide or arrange transportation, make and serve meals, make sure they take their medicine and serve as a companion for their clients. The demand for Personal Care Aides is expected to increase up to 60% by 2019. This course is designed to prepare you to enter the workforce upon successful completion and provide the skills necessary to move upward in the healthcare field, should the student choose this career path.

Program Outcome
1. The graduates of the program will be prepared for entry-level employment as professional and competent Personal Care Aides to meet the needs of the local health care community and its consumers.

Certificate of Completion
A certificate leading to improved employability or job opportunities.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

Course | Title | Units
--- | --- | ---
ALH A001N | Personal Care Aide I: Foundational Knowledge, Attitudes and Skills Non-Credit | 36
ALH A002N | Personal Care Aide II: Person Centered Care Noncredit | 27
Total Hours | 63

Business

• Not for Profit Management, Certificate of Completion (p. 23)

Not for Profit Management, Certificate of Completion

Not Financial Aid Eligible
Banner Code: 1_NCJ_NFPM
Control Number: 38099

Through the Not-for-Profit Management certificate of completion (noncredit) a potential, new or mid-level professional will be prepared to take on the challenges and opportunities of an evolving not-for-profit industry that demands strong management, communication, and critical thinking skills. It will prepare these professionals to take on new roles and approaches in the areas of strategic planning, financial management, capacity building, and program creation and evaluation.

Program Outcomes
1. Students who complete this certificate will be equipped with the knowledge, skills, and resources to take on the challenges and opportunities of an evolving not-for-profit industry that demands strong management, communication, and critical thinking skills.

Certificate of Completion
A certificate leading to improved employability or job opportunities.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

Course | Title | Units
--- | --- | ---
ACCT A007N | Not for Profit Recordkeeping and Compliance Noncredit | 54
BUS A086N | Not-for-Profit Management Noncredit | 54
BUS A087N | Not-for-Profit Marketing Noncredit | 54
Total Hours | 162

Skills Enhancement for Consumer and Health Sciences, Certificate of Completion

Not Financial Aid Eligible
Banner Code: 1_NCG_CHS
Control Number: 38321

Skills Enhancement for Consumer and Health Science Students offers students the opportunity to develop or enhance the specific written and computational skills required for program success. The courses that comprise the program are intended to be offered as either stand-alone prior to program start or within a particular program in order to promote student success.

Program Outcomes
1. Enhance student success for those enrolled in consumer and health science programs.

Certificate of Completion
A certificate leading to improved employability or job opportunities.
Chemistry

• Chemistry Skills, Certificate of Competency (p. 24)

Chemistry Skills, Certificate of Competency

Not Financial Aid Eligible
Banner Code: 1_NCH_CHEM
Control Number: 37987

This certificate addresses skills and competencies generally developed during a student’s secondary educational experiences. Students are awarded the Chemistry Skills Certificate as evidence they have passed at least three Chemistry Skills classes, to ensure their competency in the material. Students that complete this certificate have had extended exposure and practice in the areas of applying mathematical principles, problem-solving, and laboratory techniques to chemistry concepts to compensate for skills not learned in high school. This will improve student retention, success, and ability to transfer colleges and get laboratory work.

Program Outcomes

1. Explain and give examples of common problem-solving skill strategies in chemistry.
2. Employ critical thinking and common problem-solving strategies to solve chemistry problems.
3. Learn how to make and record proper observations and measurements with standard laboratory equipment.

Certificate of Competency

A certificate in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

Course Required Courses

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<tr>
<td>CHEM A010N</td>
<td>Chemistry Skills for Introductory Chemistry Noncredit</td>
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<tr>
<td>CHEM A030N</td>
<td>Chemistry Skills for Preparation for General Chemistry Noncredit</td>
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<td>CHEM A080N</td>
<td>Chemistry Study Skills for General Chemistry A</td>
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<tr>
<td>CHEM A081N</td>
<td>Lab Skills for General Chemistry A</td>
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<tr>
<td>CHEM A085N</td>
<td>Chemistry Study Skills for General Chemistry B</td>
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<tr>
<td>CHEM A086N</td>
<td>Lab Skills for General Chemistry B</td>
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<tr>
<td>Total Hours</td>
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</table>

Computer Basics, Certificate of Completion

Not Financial Aid Eligible
Banner Code: 1_NCH_COMP
Control Number: 39639

This Certificate of Completion is a noncredit program designed to build a foundation in basic computer and Internet usage for any learner with little or no computer experience. Students will develop an understanding and competency in basic computer usage, terminology and navigating the Internet to obtain, sustain, advance employment opportunities, transition to the Business Information Worker Certificate or other college-level credit course work. Students who successfully complete CHT A001N and CHT A002N will receive a Certificate of Completion.

Program Outcomes

Students will demonstrate how to operate a computer and perform basic tasks in a Windows environment, identify components of a computer and develop a basic Word document.

Students will demonstrate how to navigate and conduct a basic search on the Internet using safety precautions and various web browser and online tools.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Computer & High Technology

• Computer Basics, Certificate of Completion (p. 24)
Course | Title | Units
---|---|---
CHT A001N | Computer Basics - An Introduction | 27
CHT A002N | Computer Basics - Navigating the Internet | 27

Total Units | 54

**Consumer and Health Sciences**

- Customer Service for the Retail Industry, Certificate of Completion (p. 25)

**Customer Service for the Retail Industry, Certificate of Completion**

Not Financial Aid Eligible
Banner Code: 1_NCG_RETL
Control Number: 36847

The completion of the Certificate of Completion in Retail Employment is to prepare students for entry-level retail employment.

**Program Outcome**

1. The outcome of this certificate is to prepare students for entry level retail employment.

**Certificate of Completion**

A certificate leading to improved employability or job opportunities.

For more information regarding noncredit, please visit [http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx](http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx)

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<tr>
<td>ENGL A001N</td>
<td>Grammar Within Reach - Noncredit</td>
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<tr>
<td>ENGL A002N</td>
<td>Reading for Success - Noncredit</td>
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<tr>
<td>ENGL A003N</td>
<td>Perfecting Paragraphs - Noncredit</td>
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</tr>
<tr>
<td>ENGL A004N</td>
<td>Building A College Essay - Noncredit</td>
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</tr>
<tr>
<td>ENGL A006N</td>
<td>Support Skills for English Composition</td>
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</table>

**Total Hours** | 19-36

**English as a Second Language**

The English as a Second Language Department linguistically prepares second-language learners for academic success—in college-level courses, for transfer to four year universities, and for degree and certificate attainment—and for business and professional life—by helping develop digital literacy (through the use of technology for research and presentations) and essential (soft) skills through collaborative work to promote a global mindset. We foster language acquisition and language learning while developing the critical thinking skills needed for academic and professional success.

We offer grammar/writing/reading (G/W/R) courses—ESL 015, ESL 022, ESL 032, ESL 052, ESL 062, ESL 192 (a CSU elective), and ESL 100 (CSU A2) and listening/speaking/note-taking/presentation (L/S) courses: ESL 011, ESL 024, ESL 034, and ESL 054.

Our G/W/R classes focus on students' being able to understand and correct their second language errors through explicit grammar instruction and through writing based on readings. Students learn to analyze text to evaluate, summarize, and synthesize it in their writing. These courses have a cultural component to help students understand and navigate the complexities of American culture and other cultures through inquiry and analysis to develop cultural competence.

Students learn to take academic notes by listening and responding to interdisciplinary (the arts, technology, sociology, economics, biology, etc.) lectures in our L/S courses. Working collaboratively with classmates, students also learn how to do research on academic topics and present their findings through group presentations (using PPT, Prezi, or Google Slides). We also work on stress and intonation, word linking, and...
pronunciation (using the IPA) in classroom discussions, impromptu focused questions, and individualized text reading.

Additionally, we offer supplemental courses for students who are currently enrolled in Freshman Comp and need additional assistance with reading and vocabulary (ESL 045), sentence structure (ESL 046), spelling (ESL 047), pronunciation (ESL 048), and 2nd language grammar (ESL 049). These classes are free and OER.

Department Contact Information

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María Lerma (Co-Chair/Scheduler)
mlerma@occ.cccd.edu

English as a Second Language Department Website (http://www.orangecoastcollege.edu/academics/divisions/lit_lang/english_second_language/Pages/default.aspx)

- ESL Support for Freshman Composition, Certificate of Competency (p. 26)

### ESL Support for Freshman Composition, Certificate of Competency

Not Financial Aid Eligible
Banner Code: 1_NCH_ESL
Control Number: 38293

Students enrolled in English 100 often need additional assistance. This program offers courses students may select based on individual need. Courses included in the program are ESL A045N, ESL A046N, ESL A047N, ESL A048N, and ESL A049N.

#### Program Outcomes

1. Upon completion of courses in this program, students will be able to apply specific language skills to their assignments in English 100 and other courses requiring advanced abilities.

#### Certificate of Competency

A certificate in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

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<tr>
<th>Course</th>
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<td>ESL A045N</td>
<td>ESL Support for Freshman Composition: Reading and Vocabulary Noncredit</td>
<td>36</td>
</tr>
<tr>
<td>ESL A046N</td>
<td>ESL Support for Freshman Composition: Sentence Structure Noncredit</td>
<td>36</td>
</tr>
<tr>
<td>ESL A047N</td>
<td>ESL Support for Freshman Composition: Spelling Techniques Noncredit</td>
<td>36</td>
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<tr>
<td>ESL A048N</td>
<td>ESL Support for Freshman Composition: Advanced Pronunciation Noncredit</td>
<td>36</td>
</tr>
<tr>
<td>ESL A049N</td>
<td>ESL Support for Freshman Composition: Advanced Grammar Noncredit</td>
<td>36</td>
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</table>

**Total Hours** 72

### English Language Learning

- Advanced English Language Skills, Certificate of Competency (p. 26)
- Developmental English Language Skills, Certificate of Competency (p. 27)
- Emergent English Language Skills, Certificate of Competency (p. 27)
- English Language Learning for Career Development, Certificate of Competency (p. 27)
- English Language Learning for Parents, Certificate of Competency (p. 28)
- English Language Learning for Transition to Academics, Certificate of Competency (p. 28)
- English Language Support for U.S. Citizenship, Certificate of Competency (p. 28)
- Grammar Review, Certificate of Competency (p. 29)

### Advanced English Language Skills, Certificate of Competency

Not Financial Aid Eligible
Banner Code: 1_NCK_ELLA
Control Number: 38798

This certificate program is designed to help adult non-native speakers of English continue to develop their ability to use English to communicate more effectively in a variety of settings. The courses in this program provide direct instruction of English listening, speaking, reading and writing skills at the low advanced level. Special attention is given to helping students consider the possibility to transition to career development or academic program.

#### Program Outcomes

1. Students will demonstrate increased ability to engage in extended discussion orally and in writing with minimal language disruptions.
2. Students will be able to evaluate the development of various texts, oral and written.

### Certificate of Competency

A certificate in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution.
For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

Developmental English Language Skills, Certificate of Competency

Not Financial Aid Eligible
Banner Code: 1_NCK_ELLA
Control Number: 36893

This program is designed for intermediate English language learners. Students will develop listening, speaking, grammar, reading, and writing skills alongside the foundational skills for a potential transfer to career development or academic program.

Program Outcome
1. Students will demonstrate the ability to engage in extended discussions about less familiar topics orally and in writing with a growing grammar and pronunciation accuracy.
2. Students will show comprehension of the main idea and supporting details of level-appropriate written and/or oral texts.

Certificate of Competency
A certificate in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

Course | Title | Units
--- | --- | ---
**Required Courses**
ELL A056N | English Language Learning Advanced | 90
ELL A047N | Advanced Grammar Review 1 | 54
ELL A057N | Advanced Grammar Review 2 | 54

**Restricted Electives**
ELL A048N
or ELL A049N | Speaking about Non-Fiction-Intermediate | 36

Total Hours 234

Emergent English Language Skills, Certificate of Competency

Not Financial Aid Eligible
Banner Code: 1_NCK_ELLS
Control Number: 36913

This Emergent English Language certificate consists of three courses: ELL A016N, English Language Learning: Beginning A; ELL A026N, English Language Learning: Beginning B; and ELL A027N, Beginning Grammar Review. This program is designed for beginning English language learners who want to improve their communication skills.

Program Outcome
1. Students will demonstrate the listening and speaking skills required to have short conversations with members of their communities orally and in writing.
2. Students will be able to express an opinion about a short, simplified oral or written text.

Certificate of Competency
A certificate in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

Course | Title | Units
--- | --- | ---
**Required Courses**
ELL A036N | English Language Learning: Intermediate A | 90
ELL A026N | English Language Learning: Intermediate B | 90
ELL A037N | Intermediate Grammar Review | 54
or ELL A047N | Advanced Grammar Review 1 | 54

Total Hours 234

English Language Learning for Career Development, Certificate of Competency

Not Financial Aid Eligible
Banner Code: 1_NCI_ELLC
Control Number: 36921

This program is designed for English language learners with at least an intermediate English proficiency level wanting to develop the English skills necessary to obtain and/or advance their possibilities in the American workplace. The courses will focus on developing students’ language skills, knowledge of the American workplace, post-secondary opportunities to advance in the workplace, and cross-cultural expectations of U.S. working environments.

Program Outcome
1. Students will demonstrate English proficiency to enter or advance in the workplace.
2. Students will demonstrate knowledge of the American cultural workplace expectations.
3. Students will demonstrate knowledge of the opportunities afforded by the U.S. postsecondary educational system applicable to career advancement.
Certificate of Competency

A certificate in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

<table>
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<tr>
<td>ELL A043N</td>
<td>Intermediate English Skills for Career Preparation</td>
<td>36</td>
</tr>
<tr>
<td>ELL A044N</td>
<td>Intermediate English Skills for Career Advancement</td>
<td>36</td>
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Select one course: 36-90

| ELL A036N | English Language Learning: Intermediate A            |       |
| ELL A037N | Intermediate Grammar Review                          |       |
| ELL A046N | English Language Learning: Intermediate B            |       |
| ELL A047N | Advanced Grammar Review 1                            |       |
| ELL A048N | Speaking about Non-Fiction--Intermediate              |       |

Total Hours 108-162

English Language Learning for Transition to Academics, Certificate of Competency

Not Financial Aid Eligible
Banner Code: 1_NCI_ELLA
Control Number: 36920

This program is designed for adult English language learners seeking to transition to college-level credit course work. The Listening/ Speaking course and the Reading/ Writing course may be taken in either order.

Program Outcomes

1. Students will demonstrate the English proficiency in listening and speaking needed to participate in college-level activities.
2. Students will demonstrate the English proficiency in reading and writing needed to succeed in college-level credit courses.
3. Students will demonstrate knowledge of postsecondary educational system in the U.S.

Certificate of Competency

A certificate in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

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<tr>
<td>ELL A058N</td>
<td>Advanced Listening &amp; Speaking: Transition to Academics</td>
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<tr>
<td>ELL A059N</td>
<td>Advanced Reading &amp; Writing: Transition to Academics</td>
<td>36</td>
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</table>

Select one course:

| ELL A047N | Advanced Grammar Review 1                            |       |
| ELL A048N | Speaking about Non-Fiction--Intermediate              |       |
| ELL A049N | Speaking about Fiction-Intermediate                   |       |
| ELL A056N | English Language Learning Advanced                    |       |
| ELL A057N | Advanced Grammar Review 2                            |       |

Total Hours 108-162

English Language Support for U.S. Citizenship, Certificate of Competency

Not Financial Aid Eligible
Banner Code: 1_NCJ_ELUS

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<tr>
<th>Course</th>
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<tr>
<td>ELL A030N</td>
<td>Intermediate ELL for Parents: Elementary School Years</td>
<td>36</td>
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</tbody>
</table>

Select one course: 90
This program is designed for English Language Learners working towards obtaining U.S. citizenship through naturalization. The courses focus on developing students' language skills and understanding of American history, laws and government to help them become more engaged U.S. citizens.

Program Outcomes
1. Students will demonstrate basic reading and writing ability.
2. Students will show increased ability to apply English pronunciation rules, active listening techniques and knowledge of non-verbal cues in one-on-one conversations.
3. Students will demonstrate basic understanding of U.S. history, government, and geography.
4. Students will be able to explain and apply the rights and responsibilities of U.S. citizens to real-life situations.

Certificate of Competency
A certificate in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

<table>
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<td>English Language Learning for U.S. Citizenship 1</td>
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<tr>
<td>ELL A021N</td>
<td>English Language Learning for U.S. Citizenship 2</td>
<td>36</td>
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<tr>
<td>ELL A016N</td>
<td>English Language Learning: Beginning A</td>
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<td>Select one course:</td>
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<td>ELL A026N</td>
<td>English Language Learning: Beginning B</td>
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<td>ELL A036N</td>
<td>English Language Learning: Intermediate A</td>
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<td>ELL A046N</td>
<td>English Language Learning: Intermediate B</td>
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<td>Total Hours</td>
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Grammar Review, Certificate of Competency
Not Financial Aid Eligible
Banner Code: 1_NCJ_ELLG
Control Number: 36892

This sequence of grammar review courses is designed for English language learners who want to improve their command of essential grammar structures. Specific grammar structures are targeted at each level. Students will be given the opportunity to practice using target structures in written, oral and listening activities in various contexts, including academic, work-related and community-based scenarios.

Program Outcome
1. Students will increase their proficiency in targeted grammar structures, both at the sentence level and in longer writings.
2. Students will increase their proficiency in using target grammar structures in speaking assignments.

Certificate of Competency
A certificate in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

<table>
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<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td></td>
<td>Select three (3) courses from the following:</td>
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<tr>
<td>ELL A027N</td>
<td>Beginning Grammar Review</td>
<td>54</td>
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<tr>
<td>ELL A037N</td>
<td>Intermediate Grammar Review</td>
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<tr>
<td>ELL A047N</td>
<td>Advanced Grammar Review 1</td>
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<td>ELL A057N</td>
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Kinesiology
- Lifeguard Training, Professional Rescue, Certificate of Completion (p. 29)
- Yoga Instructor Training, Certificate of Completion (p. 30)

Lifeguard Training, Professional Rescue, Certificate of Completion
Not Financial Aid Eligible
Banner Code: 1_NCH_LFGD
Control Number: 35945

This noncredit certificate will provide the necessary training in emergency assessment and lifeguard rescue skills to be certified as an American Red Cross lifeguard. Students interested in employment at an aquatics facility, either pool or ocean, will receive the necessary training and certification in lifeguarding and professional rescue for these positions.

Program Outcomes
1. Students will be able to assess emergency situations in a pool or the ocean and identify an action plan for immediate implementation.
2. Students will be able to perform water rescues and perform CPR as necessary.

Certificate of Completion
A certificate leading to improved employability or job opportunities.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

<table>
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<td>KIN A001N</td>
<td>Lifeguard Training, Professional Rescue</td>
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<tr>
<td></td>
<td>Noncredit</td>
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<tr>
<td>KIN A002N</td>
<td>Aquatic First Aid/CPR/AED for Lifeguard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rescue Noncredit</td>
<td>13</td>
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</tbody>
</table>
Yoga Instructor Training, Certificate of Completion

Not Financial Aid Eligible
Banner Code: 1_NCJ_YOGA
Control Number: 36374

Orange Coast College’s Yoga Instructor 200-hour certification training provides students with the fundamentals required to teach yoga to a variety of levels and abilities. This program meets the requirements for Yoga Alliance, a professional membership and trade association, to become a registered yoga teacher (RYT). The Yoga Instructor Training program features an inclusive curriculum that focuses on philosophy, anatomy, theory, practice, and teaching. Once completed, the student is prepared for employment in health clubs, spas, yoga/dance studios, hospitals, the health industry, and self-employment as private yoga instructor. Students need to have completed KIN A128 Hatha Yoga - Level I, KIN A228 Hatha Yoga Level II or have prior yoga/movement experience before enrollment.

Program Outcomes
1. Properly instruct a yoga class for all levels and abilities including the use of prop, utilizing themes and yoga philosophy to enhance classes.
2. Understand the history and evolution of yoga.
3. Satisfy the 200 hour requirement to qualify for the Yoga Alliance 200-Hour certification.

Certificate of Completion
A certificate leading to improved employability or job opportunities.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

Tutoring
- Tutoring Skills and Strategies, Certificate of Completion (p. 30)

Tutoring Skills and Strategies, Certificate of Completion
Not Financial Aid Eligible
Banner Code: 1_NCG_TUTR
Control Number: 36917

The Certificate of Completion in Tutoring Skills and Strategies program focuses on topics such as communication skills and Socratic Method, learning styles, diversity, learning disabilities, motivation, group tutoring and integrating study skills into content material. This program is intended for students wanting a job as a tutor in an education setting, private tutoring organization or as a private tutor.

Yoga Instructor Training, Certificate of Completion

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<td></td>
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<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>61</td>
</tr>
</tbody>
</table>

Note: Students who have not received standard first aid training will need to complete the American Red Cross First Aid and CPR/AED certification for employment.

Program Outcomes
1. Perform operations on real numbers and algebraic expressions.
2. Translate real life problems into algebraic expressions or equations and simplify or solve.

Certificate of Competency
A certificate in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/Pages/default.aspx

Mathematics
- Math Skills Development, Certificate of Competency (p. 30)

Math Skills Development, Certificate of Competency
Not Financial Aid Eligible
Banner Code: 1_NCH_MATH
Program Outcome
1. Students who complete the program will have the skills necessary to gain employment in the OCC Student Success Center, as well as private tutoring organizations or as a private tutor.

Certificate of Completion
A certificate leading to improved employability or job opportunities.

For more information regarding noncredit, please visit http://www.orangecoastcollege.edu/academics/adult-education/pages/default.aspx

<table>
<thead>
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<th>Course</th>
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<td>TUTR A090N</td>
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<td>TUTR A091N</td>
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Business, Management and Entrepreneurship

- Accounting (p. 32)
- Business (p. 38)
- Computer Information Systems (p. 42)
- Economics (p. 44)
- Fashion (p. 45)
- Food Service Management - Commercial (p. 56)
- Information Technology (p. 58)
- Interior Design (p. 63)
- Leadership Studies (p. 67)
- Management (p. 67)
- Marketing (p. 71)
- Nutrition and Dietetics (p. 76)
- Real Estate (p. 76)

- Accounting (p. 32)
  - Accounting Data Analytics, Certificate of Specialization (p. 32)
  - Accounting, Associate in Science Degree (p. 33)
  - Accounting, Certificate of Achievement (p. 34)
  - Business Taxation Competency, Certificate of Specialization (p. 34)
  - Cost Accounting Competency, Certificate of Specialization (p. 35)
  - Entry-Level Accounting, Certificate of Specialization (p. 35)
  - Financial Accounting Competency, Certificate of Specialization (p. 36)
  - Governmental Accounting Competency, Certificate of Specialization (p. 36)
  - Individual Taxation Competency, Certification of Specialization (p. 37)
  - Non-Profit Accounting Competency, Certification of Specialization (p. 37)
  - Payroll Accounting Competency, Certification of Specialization (p. 38)
  - Business (p. 38)
- Business Administration, Associate in Science Degree (p. 38)
- Business Administration, Associate in Science Degree for Transfer (p. 39)
- Business Administration, Certificate of Achievement (p. 40)
- Entrepreneurship, Certificate of Specialization (p. 40)
- Finance, Certificate of Specialization (p. 41)
- Not for Profit Management, Certificate of Specialization (p. 41)

- Computer Information Systems (p. 42)
  - Business Information Worker, Certificate of Specialization (p. 42)
  - Computer Information Systems, Associate in Science Degree (p. 43)
  - Computer Information Systems, Certificate of Achievement (p. 43)
  - Web Design, Certificate of Specialization (p. 44)

- Economics (p. 44)
  - Economics, Associate in Arts Degree for Transfer (p. 45)

- Fashion (p. 45)
  - Apparel Construction, Associate in Science Degree (p. 46)
  - Apparel Construction, Certificate of Achievement (p. 47)
  - Apparel Industry Sustainability, Certificate of Specialization (p. 48)
  - Apparel Production and Product Development Certificate of Achievement (p. 48)
  - Apparel Production and Product Development, Associate in Science Degree (p. 49)

  - Display and Visual Presentation, Associate in Science Degree (p. 50)
  - Display and Visual Presentation, Certificate of Achievement (p. 51)
  - Fashion Design, Associate in Science Degree (p. 51)
  - Fashion Design, Certificate of Achievement (p. 52)
  - Fashion Merchandising, Associate in Science Degree (p. 53)
  - Fashion Merchandising, Certificate of Achievement (p. 54)
  - Industrial Sewing, Certificate of Specialization (p. 55)

- Food Service Management - Commercial (p. 56)
  - Catering, Certificate of Achievement (p. 56)
  - Restaurant Supervision, Certificate of Achievement (p. 57)
  - Restaurant, Associate in Science Degree (p. 57)

- Information Technology (p. 58)
  - Enterprise Routing, Certificate of Specialization (p. 58)
  - Network Administration - Linux, Certificate of Specialization (p. 59)
  - Network Administration - Windows, Certificate of Specialization (p. 59)
  - Network Administration and Operations, Certificate of Specialization (p. 60)
  - Network Infrastructure, Certificate of Specialization (p. 60)
  - Network Professional, Certificate of Specialization (p. 61)
  - Network Security, Certificate of Specialization (p. 61)
  - Network Services and Applications, Certificate of Specialization (p. 62)
  - Network Technician, Certificate of Specialization (p. 62)
  - Virtualization and Cloud Computing, Certificate of Specialization (p. 63)
Accounting Department offers introductory courses in Financial Accounting, Managerial Accounting and Microcomputer Accounting. Completion of these three courses can earn the student a certificate of completion in Entry-Level Accounting. Applications for this certificate are in the Business & Computing Division Office.

Advanced courses are also offered in Cost Accounting, Intermediate Accounting, and Federal Income Tax. Completion of these courses plus the Introductory Accounting courses can earn the student our more comprehensive Certificate of Achievement in Accounting.

We have recently added two new courses to our accounting curriculum. Volunteer Income Tax Assistance (VITA) is our first service learning course - it involves students in actually preparing Federal and State Income Tax returns for qualifying community residents. Accounting with QuickBooks provides basic instruction in creating and maintaining a computerized accounting system with QuickBooks software.

DH Johnson, Department Chair

dhjohnson@occ.cccd.edu  (dhjohnson@occ.cccd.edu)
(714) 432-0202  x21030

Accounting Department Website (http://www.orangecoastcollege.edu/academics/divisions/business/accounting/)

- Accounting Data Analytics, Certificate of Specialization (p. 32)
- Accounting, Associate in Science Degree (p. 33)
- Accounting, Certificate of Achievement (p. 34)
- Business Taxation Competency, Certificate of Specialization (p. 34)
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- Entry-Level Accounting, Certificate of Specialization (p. 35)
- Financial Accounting Competency, Certificate of Specialization (p. 36)
- Governmental Accounting Competency, Certificate of Specialization (p. 36)
- Individual Taxation Competency, Certification of Specialization (p. 37)
- Non-Profit Accounting Competency, Certification of Specialization (p. 37)
- Payroll Accounting Competency, Certification of Specialization (p. 38)

Accounting Data Analytics, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_DATA

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework focusing on data analytics. Students are required to obtain a grade of “C” or better in all required courses at OCC.

Program Outcome

1. Students will be able to demonstrate generally accepted accounting practices in the area of data analytics using various forms of technology.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy
of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>ACCT A101</td>
<td>Financial Accounting</td>
<td>4</td>
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<tr>
<td>or ACCT A101H</td>
<td>Financial Accounting Honors</td>
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<td>ACCT A102</td>
<td>Managerial Accounting</td>
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<tr>
<td>or ACCT A102H</td>
<td>Managerial Accounting Honors</td>
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<td>ACCT A110</td>
<td>Excel for Accounting and Finance</td>
<td>3</td>
</tr>
<tr>
<td>ACCT A220</td>
<td>Data Analytics for Accounting</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>14</strong></td>
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Accounting, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_ACCT
Control Number: 03960

The Accounting certificate program contains coursework in financial and managerial accounting, computerized accounting, and intermediate, tax, and cost accounting. Completing the program will provide students with the skills necessary for employment in a variety of accounting positions. Career opportunities include: accounts payable/receivable specialist, cost accountant, disbursement specialist, full charge bookkeeper, general ledger specialist, junior accountant, payroll specialist, senior accountant, and tax staff.

Complete the Accounting Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Demonstrate various activities performed in the accounting function of industry, apply comprehensive accounting skills, utilize technical knowledge, and display ethical behaviors and practices.
2. Demonstrate technical knowledge of accounting related topics that provide major course transfer to a four-year institution.

Associate in Science Degree Requirements
1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/business-management-entrepreneurship/accounting/accounting-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>ACCT A101</td>
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<td>or ACCT A101H</td>
<td>Financial Accounting Honors</td>
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<td>Managerial Accounting</td>
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<td>ACCT A220</td>
<td>Data Analytics for Accounting</td>
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<td><strong>Total Units</strong></td>
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<td>ACCT A101</td>
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<td>BUS A100</td>
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<td>3</td>
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<td>ACCT A212</td>
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<td>ACCT A111</td>
<td>Individual Income Tax</td>
<td>3</td>
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<td>or ACCT A116</td>
<td>or Business Taxation</td>
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<td>ACCT A210</td>
<td>Cost Accounting</td>
<td>3</td>
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<td>ACCT A213</td>
<td>Intermediate Accounting 2</td>
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<td>ACCT A218</td>
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<td>Minimum Program Major Units</td>
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Accounting Suggested Electives

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<th>Course</th>
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<tr>
<td>ACCT A114</td>
<td>Volunteer Income Tax Assistance</td>
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<td>ACCT A119</td>
<td>Payroll</td>
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<td>ACCT A216</td>
<td>Not-for-Profit Accounting</td>
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</tr>
<tr>
<td>BUS A210</td>
<td>Securities Investment</td>
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</tr>
<tr>
<td>BUS A240</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
</tbody>
</table>
The Accounting certificate program contains coursework in financial and managerial accounting, computerized accounting, and intermediate, tax, and cost accounting. Completing the program will provide students with the skills necessary for employment in a variety of accounting positions. Career opportunities include: accounts payable/receivable specialist, cost accountant, disbursement specialist, full charge bookkeeper, general ledger specialist, junior accountant, payroll specialist, senior accountant, and tax staff.

Program Outcomes

1. Demonstrate various activities performed in the accounting function of industry, apply comprehensive accounting skills, utilize technical knowledge, and display ethical behaviors and practices.

2. Demonstrate technical knowledge of accounting related topics that provide major course transfer to a four-year institution.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The pettitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Accounting, Certificate of Achievement

**Financial Aid Eligible**

Banner Code: 1_CT_ACCT

Control Number: 22371

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework focusing on business taxation.

#### Program Outcome

1. Demonstrate generally accepted accounting practices in the area of business taxation using various forms of technology.

#### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The pettitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.
Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<tr>
<th>Required Courses</th>
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<th>Units</th>
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<td>ACCT A101</td>
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<td>ACCT A102</td>
<td>Managerial Accounting</td>
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<td>ACCT A110</td>
<td>Excel for Accounting and Finance</td>
<td>3</td>
</tr>
<tr>
<td>ACCT A116</td>
<td>Business Taxation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Units</td>
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</tr>
</tbody>
</table>

Cost Accounting Competency, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CACC

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework focusing on cost accounting. Completion of the certificate will enable students to apply for entry-level positions in the area of cost accounting.

Program Outcome
1. Demonstrate generally accepted accounting practices in the area of cost accounting using various forms of technology.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<tr>
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<tr>
<td>ACCT A101</td>
<td>Financial Accounting</td>
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<tr>
<td>ACCT A102</td>
<td>Managerial Accounting</td>
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<td>ACCT A110</td>
<td>Excel for Accounting and Finance</td>
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<td>ACCT A120</td>
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<td></td>
<td>Total Units</td>
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</tbody>
</table>

Entry-Level Accounting, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_ELA

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework. Completion of the certificate will enable students to apply for entry-level positions in accounting.

Program Outcomes
1. Demonstrate knowledge of an accounting process by performing appropriate accounting functions manually or by utilizing G/L software.
2. Define and apply the different concepts of cost used to assist managers in making business decisions by performing profitability and cost analysis

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.
Financial Accounting Competency, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_FACC

This certificate, issued through the Business and Computing Division, provides students with accounting and computer accounting coursework focusing on intermediate accounting concepts. Completion of the certificate will enable students to prepare for the financial reporting section of the CPA exam.

Program Outcome
1. Demonstrate generally accepted accounting practices in the area of business taxation using various forms of technology.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course | Title | Units
--- | --- | ---
ACCT A101 | Financial Accounting | 4

Governmental Accounting Competency, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_GAC

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework focusing on governmental accounting. Students are required to obtain a grade of "C" or better in all required courses at OCC.

Program Outcome
1. Students will be able to demonstrate generally accepted accounting practices in the area of governmental accounting using various forms of technology.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course | Title | Units
--- | --- | ---
ACCT A101 | Financial Accounting | 4
Individual Taxation Competency, Certification of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_ITCC

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework focusing on the taxation of individuals. Completion of the certificate will enable students to apply for entry-level positions in individual tax preparation.

Program Outcome
1. Demonstrate generally accepted accounting practices in the area of personal income tax setup and completion.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
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<td>ACCT A102</td>
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</tr>
<tr>
<td>ACCT A110</td>
<td>Excel for Accounting and Finance</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>14</td>
</tr>
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</table>

Non-Profit Accounting Competency, Certification of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_NPCC

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework focusing on non-profit accounting. Completion of the certificate will enable students to apply for entry-level positions in accounting with various non-profit agencies.

Program Outcome
1. Demonstrate generally accepted accounting practices in the area of non-profit accounting using various forms of technology.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT A101</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT A102</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT A110</td>
<td>Excel for Accounting and Finance</td>
<td>3</td>
</tr>
<tr>
<td>ACCT A216</td>
<td>Not-for-Profit Accounting</td>
<td>3</td>
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<tr>
<td>Total Units</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>
Payroll Accounting Competency, Certification of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_PACC

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework focusing on payroll accounting. Completion of the certificate will enable students to apply for entry-level positions in accounting with an emphasis in payroll.

Program Outcome
1. Demonstrate generally accepted accounting practices in the area of payroll accounting using various forms of technology.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT A101</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT A102</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT A107</td>
<td>Not for Profit Recordkeeping and Compliance</td>
<td>3</td>
</tr>
<tr>
<td>ACCT A119</td>
<td>Payroll</td>
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<td>Total Units</td>
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</tr>
</tbody>
</table>

Business

The Business & Computing Division at Orange Coast College offers courses that are applicable to more than financial operations and marketing. The Business division offers classes that integrate other topics and ideas, including Business English, International Business, Business Law, and Advanced Microcomputer Applications; additionally, introductory courses in business are provided for students who want to develop a strong background in the subject.

Greg Clark, Co-Department Chair
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(714) 432-5974

Danielle Scane, Program Lead
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(714) 432-5914

Lee Gordon, Program Lead
lgordon@occ.cccd.edu
(714) 432-0202 x21156

Business Department Website (http://www.orangecoastcollege.edu/academics/divisions/business/business/)

- Business Administration, Associate in Science Degree (p. 38)
- Business Administration, Associate in Science Degree for Transfer (p. 39)
- Business Administration, Certificate of Achievement (p. 40)
- Entrepreneurship, Certificate of Specialization (p. 40)
- Finance, Certificate of Specialization (p. 41)
- Not for Profit Management, Certificate of Specialization (p. 41)

Business Administration, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_BSAD
Control Number: 16910

The Business Administration program is designed to provide the opportunity for the transfer business major to achieve an Associate in Science degree. Students are advised to check course transferability for the school to which they intend to transfer.

Program Outcomes
1. Function effectively in entry-level business positions or at a four-year college business program using the skills, principles, and tools they have acquired.
2. Effectively apply and utilize the business principles and techniques they have learned in a business environment or at a four-year college business program.
3. Demonstrate effective written and/or oral skills.

Complete the Business Administration Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.
Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of an intermediate college mathematics course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/business-management-entrepreneurship/business/business-administration-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Business Administration, Associate in Science Degree for Transfer

Financial Aid Eligible  
Banner Code: 1_AST_BSAD  
Control Number: 32086

Students graduating with an Associate in Science in Business Administration for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Business Administration AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

#### Program Outcomes

1. Function effectively in entry-level business positions or at a four-year college business program using the skills, principles, and tools they have acquired.
2. Demonstrate effective written and/or oral skills.
3. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

#### Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

### Course Requirements

#### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ACCT A101</td>
<td>Financial Accounting</td>
<td>4</td>
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<tr>
<td>ACCT A102</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS A100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS A110</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS A139</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>CIS A111</td>
<td>Introduction to Computer Information</td>
<td>3</td>
</tr>
<tr>
<td>ECON A170</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON A175</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH A160</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>or PSYC A160</td>
<td>Statistics for the Behavioral Sciences</td>
<td></td>
</tr>
<tr>
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<td><strong>Total Units</strong></td>
<td><strong>34-35</strong></td>
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<tr>
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<tr>
<td>Minimum Program Major Units</td>
<td>34-35</td>
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<tr>
<td>AS General Education Option 1, 2, or 3</td>
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<td>Transferable electives to satisfy unit requirement</td>
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<td>Total Degree Units</td>
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</table>

**List A**

<table>
<thead>
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<tbody>
<tr>
<td>ACCT A101</td>
<td>Financial Accounting</td>
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<tr>
<td>ACCT A102</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>BUS A110</td>
<td>Business Law</td>
</tr>
<tr>
<td>ECON A170</td>
<td>Microeconomics</td>
</tr>
<tr>
<td>ECON A175</td>
<td>Macroeconomics</td>
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**List B**

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<tbody>
<tr>
<td>MATH A140</td>
<td>Business Calculus</td>
</tr>
<tr>
<td>MATH A155</td>
<td>Finite Mathematics with Applications</td>
</tr>
<tr>
<td>MATH A160</td>
<td>Introduction to Statistics</td>
</tr>
</tbody>
</table>

Select two of the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
</table>


Business Administration, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_BSAD
Control Number: 22372

The Business Administration program is designed to provide the opportunity for the transfer business major to achieve an Associate in Science degree. Students are advised to check course transferability for the school to which they intend to transfer.

Program Outcomes
1. Function effectively in entry-level business positions or at a four-year college business program using the skills, principles, and tools they have acquired.
2. Effectively apply and utilize the business principles and techniques they have learned in a business environment or at a four-year college business program.
3. Demonstrate effective written and/or oral skills.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Entrepreneurship, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_BAEN

The Entrepreneurship program is designed to develop skills in starting, maintaining, and growing a small business. Courses emphasize feasibility analysis, legal considerations, financial management, marketing plans, and sales techniques. Completion of this certificate will allow students to pursue various entrepreneurial interests.

Program Outcomes
1. Function effectively in an entrepreneurial venture and in a supporting role to an entrepreneur.
2. Effectively apply and utilize the small businesses principles and techniques they have learned in a business environment or at a four-year college entrepreneur program.
3. Determine the viability and net cash flows of a small business venture.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
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**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
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<th>Course</th>
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<th>Units</th>
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<tbody>
<tr>
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<td>Entrepreneurship</td>
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<tr>
<td>MKTG A100</td>
<td>Introduction to Marketing</td>
<td>3</td>
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<tr>
<td>or BUS A101</td>
<td>Social Media for Business</td>
<td></td>
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<tr>
<td>MKTG A110</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>or MKTG A130</td>
<td>Principles of Advertising</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**Finance, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_BAFN

The Certificate of Specialization of Finance is designed to develop analytic and critical thinking skills in the financial area in businesses. Courses emphasize financial accounting, securities valuation, financial analysis, cash flow and investment management.

**Program Outcomes**

1. Function effectively in an entry-level or training position in the Finance, Treasurer or Investment Department of a small to mid-size enterprise or as an entry-level or training analyst in a investment banking or financial services firm.
2. Effectively apply and utilize the accounting and financial principles and techniques they have learned in a business environment or at a four-year college business administration program.
3. Determine the viability and net cash flows of security and capital investments.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

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**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<td>ACCT A101</td>
<td>Financial Accounting</td>
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</tr>
<tr>
<td>or ACCT A102</td>
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<tr>
<td>BUS A100</td>
<td>Introduction to Business</td>
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</tr>
<tr>
<td>or BUS A110</td>
<td>Business Law</td>
<td></td>
</tr>
<tr>
<td>BUS A200</td>
<td>Business Finance</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
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<td>10</td>
</tr>
</tbody>
</table>

**Not for Profit Management, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_NFPM

Through the Not-for-Profit management certificate a potential, new or mid-level professional will be prepared to take on the challenges and opportunities of an evolving not-for-profit industry that demands strong management, communication, and critical thinking skills. It will prepare these professionals to take on new roles and approaches in the areas of strategic planning, financial management, capacity building, and program creation and evaluation.

**Program Outcomes**

1. Students who complete this certificate will be equipped with the knowledge, skills, and resources to take on the challenges and opportunities of an evolving not-for-profit industry that demands strong management, communication, and critical thinking skills.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing
his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT A107</td>
<td>Not for Profit Recordkeeping and Compliance</td>
<td>3</td>
</tr>
<tr>
<td>BUS A186</td>
<td>Not for Profit Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS A187</td>
<td>Not for Profit Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**Computer Information Systems**

The goal of the CIS program is to provide students with the technical skills and systems perspective necessary for entry-level positions in the computer and information industry. Students should not expect that they will necessarily meet the lower division requirements at specific colleges or universities. Students should consult the Transfer Information section of this catalog for specific transfer information.

Computer Information Systems offers certificate programs in more specific areas like Business Application Development, Technical Computer Programming, and Computer Information Systems. These courses are designed to prepare students for entry-level positions in the computer and information industry or to help business-oriented majors gain admission to a transfer institution.

Pam Barvarz, CIS Program Lead  
pbarvarz@occ.cccd.edu  
(714) 432-0202 x21664

Computer Information Systems Department Website (http://www.orangecoastcollege.edu/academics/divisions/business/computer_information_systems/)

- Business Information Worker, Certificate of Specialization (p. 42)
- Computer Information Systems, Associate in Science Degree (p. 43)
- Computer Information Systems, Certificate of Achievement (p. 43)
- Web Design, Certificate of Specialization (p. 44)

**Business Information Worker, Certificate of Specialization**

Not Financial Aid Eligible  
Banner Code: 1_CE_CSOA

Completion of this certificate, issued through the Business and Computing Division, will prepare students for entry-level employment in business environments using Microsoft Office Applications. All courses must be completed at Orange Coast College.

**Program Outcomes**

1. Use a computer operating system and computer applications for word processing, electronic spreadsheet creation, database management, multimedia presentations, and electronic personal management with competence.

2. Achieve personal development and responsibility for entering the job market.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
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<th>Course</th>
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<tr>
<td>BUS A138</td>
<td>Business English</td>
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<tr>
<td>CIS A090</td>
<td>Beginning Computer Keyboarding 1</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS A091</td>
<td>Keyboarding Speed and Accuracy</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS A092</td>
<td>Beginning Computer Keyboarding 2</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS A100</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIS/BUS A134</td>
<td>Excel 1</td>
<td>2</td>
</tr>
<tr>
<td>CIS A137</td>
<td>Microsoft Outlook</td>
<td>2</td>
</tr>
</tbody>
</table>
Computer Information Systems, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_CIST
Control Number: 03968

This program will meet major requirements for the Associate in Science degree but has not been articulated with any particular four-year institution. Students should not expect that they will necessarily meet the lower-division requirements at specific colleges or universities. Students should consult a counselor for specific transfer information.

This option provides the student with the lower-division transfer courses for some of the business oriented majors. Students are advised to check course transferability with an Orange Coast College counselor prior to enrolling in CIS courses.

Program Outcomes
1. Students will be prepared for employment in entry-level positions in the computer and information systems industries.

Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite. Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/business-management-entrepreneurship/computer-information-systems/computer-information-systems-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

<table>
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<tr>
<td>ACCT A102</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS A110</td>
<td>Business Law</td>
<td>3</td>
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<tr>
<td>CIS A111</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECON A170</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON A175</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH A140 or MATH A180</td>
<td>Business Calculus</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Calculus 1</td>
<td></td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>CS A131</td>
<td>Python Programming I</td>
<td></td>
</tr>
<tr>
<td>CS A140</td>
<td>Introduction to C#.NET Programming</td>
<td></td>
</tr>
<tr>
<td>CS A142</td>
<td>Introduction to Visual Basic.NET Programming</td>
<td></td>
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<tr>
<td>CS A150</td>
<td>C++ Programming Language 1</td>
<td></td>
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<tr>
<td>CS A170</td>
<td>Java Programming 1</td>
<td></td>
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</table>

Computer Information Systems, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_CIST
Control Number: 18193

This program will meet major requirements for the Associate in Science degree but has not been articulated with any particular four-year institution. Students should not expect that they will necessarily meet the lower-division requirements at specific colleges or universities. Students should consult a counselor for specific transfer information.

This option provides the student with the lower-division transfer courses for some of the business oriented majors. Students are advised to check course transferability with an Orange Coast College counselor prior to enrolling in CIS courses.

Program Outcomes
1. Students will be prepared for employment in entry-level positions in the computer and information systems industries.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded.
A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Course** | **Title** | **Units**
--- | --- | ---
**Required Courses**
ACCT A101 | Financial Accounting | 4
ACCT A102 | Managerial Accounting | 4
BUS A110 | Business Law | 3
CIS A111 | Introduction to Computer Information Systems | 3
ECON A170 | Microeconomics | 3
ECON A175 | Macroeconomics | 3
MATH A140 | Business Calculus | 4
or MATH A180 | Calculus 1 | 4
Select one of the following: | | 4
CS A131 | Python Programming I |
CS A140 | Introduction to C#.NET Programming |
CS A142 | Introduction to Visual Basic.NET Programming |
CS A150 | C++ Programming Language 1 |
CS A170 | Java Programming I |

**Total Units** 28

### Web Design, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CSWD

Completion of this certificate, issued through the Business and Computing Division, will enable students to apply for entry-level positions in designing for the World Wide Web.

### Program Outcomes

1. Students who receive the Web Design Certificate of Specialization will be able to create dynamic web pages.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Course** | **Title** | **Units**
--- | --- | ---
**Required Courses**
Select five of the following: 10-11
CIS A123 | Web Page Design 1 |
CIS A128 | Intro To Dreamweaver |
CIS A129 | Web Page Design 2 |
CIS A132 | Business Multimedia and Graphics |
CIS A171 | Introduction to JavaScript |
CIS A223 | JavaScript 2 |
CIS A227 | JavaScript 3 |
CIS A232 | Digital Video for Business: Adobe Premiere Pro |

**Total Units** 10-11

### Economics

The primary mission of the economics department is to provide a transfer education curriculum in economics for students majoring in business, social sciences, and other fields. Additionally, classes provide students a chance to explore the basic principles, thought, problems, and history of the American and international economies. The economics curriculum increases consumer skills and the awareness of individuals regarding consumer problems in the economy.

Students who study and major in economics often go on to pursue careers in finance, banking, consulting, and business. In addition, economics students often find careers in the public sector in various government agencies.
Economics, Associate in Arts Degree for Transfer

Financial Aid Eligible
Banner Code: 1_AAT_ECON
Control Number: 33283

Students graduating with an Associate in Arts in Economics for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Economics AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate Arts in Economics for Transfer (AA-T) focuses on fundamental principles and models in both microeconomics and macroeconomics. In Microeconomics, students examine the nature of optimal producer and consumer decisions, the structure of markets, and the application of optimal decision making to classic problems in microeconomics. This may include tax incidence, market failures, international trade, price controls, and market efficiency. In Macroeconomics, students examine economic concepts and principles as applied to markets, national income, unemployment, inflation, economic growth, fiscal and monetary policy, banking, the Federal Reserve System, and international economics. Additionally, students who choose the Associate in Arts in Economics for Transfer (AA-T) degree become literate in the language of economics: calculus and statistics. Crucial concepts of differentiation, integration, optimization, probability, and statistical inference are learned. These mathematical tools serve as the foundation for upper division economic analysis.

Program Outcomes
1. Explain the concepts of scarcity, opportunity cost, rational behavior, and economic efficiency.
2. Use economic models to evaluate situations in the micro and macro economy, to evaluate government policies, and to explain the responses of consumers and producers to changes in market conditions.
3. Develop the foundational skills in quantitative and computing methods to be eligible for admission (SB 1440 and Education Code 66746) to California State University system schools with similar degrees.

Associate Degree for Transfer Requirements
The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

Course | Title | Units
--- | --- | ---
**Core Courses** | | 14
ECON A170 | Microeconomics | 3
ECON A175 | Macroeconomics | 3
MATH A160 | Introduction to Statistics | 4
or PSYC A160 | Statistics for the Behavioral Sciences | |
MATH A140 | Business Calculus | 4
or MATH A180/ A180H | Calculus 1 | |
**List A** | | 3-4
ACCT A101 | Financial Accounting | |
ACCT A102 | Managerial Accounting | |
BUS A139 | Business Communication | |
CIS A111 | Introduction to Computer Information Systems | |
MATH A155 | Finite Mathematics with Applications | |
**List B** | | 3
Select any course not previously taken from List A or one of the following: | |
ECON A100 | Economics: General Concepts | |
ECON A110 | Consumer Economics | |
**Program Major Units** | | 6
General Education (CSU-GE or IGETC) Units | 37-39
Transferable elective to satisfy unit requirement | Varies
**Total Units** | | 60

Fashion
Orange Coast College Fashion Program
We welcome you to join the Fashion Program at Orange Coast College, where you can obtain the education to succeed in the fashion industry. This well-established program prepares you for transfer to a four-year program, a professional career, a career change, or advancement in your present fashion career.

Education in Fashion
Fashion is among the largest and most established industries in California. A fashion education can provide the necessary background and skills for a career in this ever thriving and dynamic world. Orange Coast College offers programs and courses that meet the needs of this vast industry. Our fashion program provides an environment that promotes critical thinking, creativity and multicultural awareness. If fosters understanding of social, organizational and technological systems.

A Career for You

Career opportunities in the fashion industry are endless and diverse. The fashion business is challenging, fast paced, exciting and constantly changing. It’s a multi-billion dollar industry and the second largest employer in the United States. Fashion is the second largest industry among Southern California’s manufacturing employers and second only to the aerospace industry.

Five Certificate of Achievement and Associate in Science options are available through the Fashion Department:

1. Apparel Construction,
2. Design,
3. Display and Visual Presentation,
4. Fashion Merchandising, and
5. Production/Product Development.

Completion of these programs prepares students for careers in the fashion industry and in related businesses. Students may also transfer to programs at four-year colleges. Additionally, the department offers a Certificate of Specialization in Industrial Sewing.

Department Contact Information

Lauren Becker
lbecker@occc.cccd.edu

Fashion Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/family_consumer_science/fashion/)

- Apparel Construction, Associate in Science Degree (p. 46)
- Apparel Construction, Certificate of Achievement (p. 47)
- Apparel Industry Sustainability, Certificate of Specialization (p. 48)
- Apparel Production and Product Development Certificate of Achievement (p. 48)
- Apparel Production and Product Development, Associate in Science Degree (p. 49)
- Display and Visual Presentation, Associate in Science Degree (p. 50)
- Display and Visual Presentation, Certificate of Achievement (p. 51)
- Fashion Design, Associate in Science Degree (p. 51)
- Fashion Design, Certificate of Achievement (p. 52)
- Fashion Merchandising, Associate in Science Degree (p. 53)
- Fashion Merchandising, Certificate of Achievement (p. 54)
- Industrial Sewing, Certificate of Specialization (p. 55)

Apparel Construction, Associate in Science Degree

Financial Aid Eligible

Banner Code: 1_AS_APCN
Control Number: 11635

Completion of the Apparel Construction certificate program prepares students for careers in the fashion industry and in related businesses.

Complete the Fashion Apparel Construction Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Note: This AS degree requires 66 units for completion.

Program Outcomes

1. The outcome of the program is to prepare students for entry-level employment as a competent professional in the fields of garment construction, alterations, patternmaking, tailoring, alterations, and dressmaking and meet the needs of the local fashion industry.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.occd.edu/orange-coast/pathways/business-management-entrepreneurship/fashion/apparel-construction-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

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<thead>
<tr>
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<tr>
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<td>FASH A110</td>
<td>Applied Textiles and Design</td>
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<tr>
<td>FASH A115</td>
<td>Introduction to the Fashion Industry</td>
<td>3</td>
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<td>FASH A120</td>
<td>History of Fashion</td>
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</tr>
<tr>
<td>FASH A121</td>
<td>Street Style</td>
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<tr>
<td>FASH A175</td>
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Semester 2

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<tr>
<td>FASH A150</td>
<td>Flat Pattern Techniques</td>
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<tr>
<td>FASH A180</td>
<td>Fundamental Principles of Clothing Construction 1</td>
<td>3</td>
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<tr>
<td>or FASH A183</td>
<td>Fundamental Principles of Clothing Construction 2</td>
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<td>FASH A255</td>
<td>Fashion Illustrating Techniques 1</td>
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<td>Industrial Sewing Techniques</td>
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<td>3</td>
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<td>or FASH A183</td>
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<td></td>
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<tr>
<td>FASH A190</td>
<td>Apparel Industry Sustainability: The Environment, Ethical Business Practices &amp; the Law</td>
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<tr>
<td>FASH A233</td>
<td>Couture Techniques</td>
<td>2</td>
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<td>FASH A235</td>
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<td>FASH A130</td>
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<td>FASH A170</td>
<td>Clothing Design and Selection</td>
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<td>FASH A181</td>
<td>Fashion Internship</td>
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<td>FASH A200</td>
<td>Fashion Internship Lecture</td>
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<td>FASH A182</td>
<td>Professional Practices</td>
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<td>FASH A266</td>
<td>Computerized Pattern System</td>
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</tbody>
</table>

**Requirement**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>Minimum Program Major Units</td>
</tr>
<tr>
<td>AS General Education Option 1, 2, or 3</td>
</tr>
<tr>
<td>Transferable electives to satisfy unit requirement</td>
</tr>
<tr>
<td>Total Degree Units</td>
</tr>
</tbody>
</table>

### Apparel Construction, Certificate of Achievement

Financial Aid Eligible  
Banner Code: 1_CT_APCN  
Control Number: 18199  

Completion of the Apparel Construction certificate program prepares students for careers in the fashion industry and in related businesses.

### Program Outcomes

1. The outcome of the program is to prepare students for entry-level employment as a competent professional in the fields of garment construction, alterations, patternmaking, tailoring, alterations, and dressmaking and meet the needs of the local fashion industry.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC:

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

### Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FASH A100</td>
<td>Beginning Clothing Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>FASH A110</td>
<td>Applied Textiles and Design</td>
<td>3</td>
</tr>
<tr>
<td>FASH A115</td>
<td>Introduction to the Fashion Industry</td>
<td>3</td>
</tr>
<tr>
<td>FASH A120</td>
<td>History of Fashion</td>
<td>1.5</td>
</tr>
<tr>
<td>FASH A121</td>
<td>Street Style</td>
<td>1.5</td>
</tr>
<tr>
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<td>FASH A137</td>
<td>Alterations</td>
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<td>Flat Pattern Techniques</td>
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</tr>
<tr>
<td>FASH A180</td>
<td>Fundamental Principles of Clothing Construction 1</td>
<td>3</td>
</tr>
<tr>
<td>or FASH A183</td>
<td>Fundamental Principles of Clothing Construction 2</td>
<td></td>
</tr>
<tr>
<td>FASH A255</td>
<td>Fashion Illustrating Techniques 1</td>
<td>3</td>
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<tr>
<td><strong>Subtotal</strong></td>
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<td><strong>11</strong></td>
</tr>
<tr>
<td><strong>Summer</strong></td>
<td></td>
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<tr>
<td>FASH A102</td>
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<tr>
<td><strong>Semester 3</strong></td>
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<td></td>
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<tr>
<td>FASH A180</td>
<td>Fundamental Principles of Clothing Construction 1</td>
<td>3</td>
</tr>
<tr>
<td>or FASH A183</td>
<td>Fundamental Principles of Clothing Construction 2</td>
<td></td>
</tr>
<tr>
<td>FASH A190</td>
<td>Apparel Industry Sustainability: The Environment, Ethical Business Practices &amp; the Law</td>
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<td>FASH A233</td>
<td>Couture Techniques</td>
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<tr>
<td>FASH A235</td>
<td>Draping</td>
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<tr>
<td><strong>Subtotal</strong></td>
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</table>
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Apparel Industry Sustainability, Certificate of Specialization

**Not Financial Aid Eligible**

**Banner Code:** 1_CE_AIS

This program focuses on sustainability in the apparel industry including, the study of responsible business, with a focus on environmental sustainability, responsible decision making, social impacts, corporate social responsibility, regulatory compliance, certifications, and other emerging technologies. Students will examine current topics, concepts, trends, and rules that are driving the sustainability and responsible business movement and will develop the skills to compete in the global fashion industry. Completion of the Apparel Industry Sustainability certificate program prepares students for careers in the fashion industry and in related businesses.

#### Program Outcomes

1. The outcome of the program is to prepare students for entry-level employment as a competent professional in the fields of sustainable apparel design, merchandising, compliance, product development, production, sales and marketing and meet the needs of the local fashion industry.

#### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

### Apparel Production and Product Development Certificate of Achievement

**Financial Aid Eligible**

**Banner Code:** 1_CT_APPD

**Control Number:** 18198

Completion of the Apparel Production and Product Development Certificate program prepares students for careers in the fashion industry and in related businesses. Students may also transfer to programs at four-year colleges.

#### Program Outcomes

1. The outcome of the program is to prepare students for entry-level employment in the fields of patternmaking, sample-making, technical design, sourcing management, production management, quality control supervising, grading, marker making, costing/spec production, pre-production merchandising and meet the needs of the local fashion industry.

#### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there
is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>Semester 1</td>
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<tr>
<td>FASH A100</td>
<td>Beginning Clothing Techniques</td>
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<td>FASH A115</td>
<td>Introduction to the Fashion Industry</td>
<td>3</td>
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<tr>
<td>FASH A120</td>
<td>History of Fashion</td>
<td>1.5</td>
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<tr>
<td>FASH A121</td>
<td>Street Style</td>
<td>1.5</td>
</tr>
<tr>
<td>FASH A175</td>
<td>Applied Color and Design Theory</td>
<td>3</td>
</tr>
<tr>
<td>or ART A110</td>
<td>Color and Design: Two-Dimensional</td>
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<td>FASH A177</td>
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<td>FASH A110</td>
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<td>3</td>
</tr>
<tr>
<td>FASH A145</td>
<td>Fashion Reporting and Analysis</td>
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<tr>
<td>FASH A180</td>
<td>Fundamental Principles of Clothing Construction 1</td>
<td>3</td>
</tr>
<tr>
<td>or FASH A183</td>
<td>Fundamental Principles of Clothing Construction 2</td>
<td></td>
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<tr>
<td>FASH A255</td>
<td>Fashion Illustrating Techniques 1</td>
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<tr>
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<tr>
<td>Summer</td>
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<td>FASH A102</td>
<td>Industrial Sewing Techniques</td>
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<td>Semester 3</td>
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<td>FASH A150</td>
<td>Flat Pattern Techniques</td>
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</tr>
<tr>
<td>FASH A170</td>
<td>Clothing Design and Selection</td>
<td>3</td>
</tr>
<tr>
<td>FASH A180</td>
<td>Fundamental Principles of Clothing Construction 1</td>
<td>3</td>
</tr>
<tr>
<td>or FASH A183</td>
<td>Fundamental Principles of Clothing Construction 2</td>
<td></td>
</tr>
<tr>
<td>FASH A190</td>
<td>Apparel Industry Sustainability: The Environment, Ethical Business Practices &amp; the Law</td>
<td>3</td>
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<tr>
<td>Subtotal</td>
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<tr>
<td>Semester 4</td>
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<tr>
<td>FASH A155</td>
<td>Tech-Packs</td>
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<tr>
<td>FASH A181</td>
<td>Fashion Internship</td>
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<tr>
<td>FASH A200</td>
<td>Fashion Internship Lecture</td>
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</tr>
<tr>
<td>FASH A182</td>
<td>Professional Practices</td>
<td>2</td>
</tr>
<tr>
<td>FASH A266</td>
<td>Computerized Pattern System</td>
<td>2</td>
</tr>
</tbody>
</table>

Apparel Production and Product Development, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_APPD
Control Number: 16888

Completion of the Apparel Production and Product Development Certificate program prepares students for careers in the fashion industry and in related businesses.

Students are encouraged to complete the Associate degree. Complete the Fashion Certificates of Achievement and the Associate in Science Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

Note: this AS degree requires 66 units for completion.

Program Outcomes
1. The outcome of the program is to prepare students for entry-level employment in the fields of patternmaking, sample-making, technical design, sourcing management, production management, quality control supervising, grading, marker making, costing/spec production, pre-production merchandising and meet the needs of the local fashion industry.

Associate in Science Degree Requirements
1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

Control Number: 03963

This certificate is designed to prepare students seeking careers as display and exhibit designers and covers interior, industrial, thematic, and promotional displays. The training program includes consideration of the total visual presentation design and production, including store planning, service promotion mix applied to retailers, wholesalers (trade show), corporate display, visual identity, and exhibits in cultural institutions (museums and galleries). Students are encouraged to work toward an Associate in Science degree.

Complete the Display and Visual Presentation Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes

1. Produce a digital presentation of a specific retail venue, illustrating continuity of theme through physical appearance, room settings, signage, merchandise, and website presentation.

2. Create the packaging for a product that will include product graphics and design, the merchandising concept for the retail venue, and an initial event or promotion to launch the product.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/business-management-entrepreneurship/fashion/display-visual-presentation-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Display and Visual Presentation, Associate in Science Degree

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Program Major Units</td>
<td>48</td>
</tr>
<tr>
<td>AS General Education Option 1, 2, or 3</td>
<td>Varies</td>
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<td>Total Degree Units</td>
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</table>

### Course Title and Units

**Course Required Courses**

**Semester 1**
- FASH A100 Beginning Clothing Techniques 1.5
- FASH A115 Introduction to the Fashion Industry 3
- FASH A120 History of Fashion 1.5
- FASH A121 Street Style 1.5
- FASH A175 Applied Color and Design Theory 3
  - or ART A110 Color and Design: Two-Dimensional 1
- FASH A177 Fashion Merchandising Concepts 3

Subtotal 13.5

**Semester 2**
- FASH A110 Applied Textiles and Design 3
- FASH A145 Fashion Reporting and Analysis 2
- FASH A180 Fundamental Principles of Clothing Construction 1 3
  - or FASH A183 Fundamental Principles of Clothing Construction 2 2
- FASH A255 Fashion Illustrating Techniques 1 3

Subtotal 11

**Summer**
- FASH A102 Industrial Sewing Techniques 2

Subtotal 2

**Semester 3**
- FASH A150 Flat Pattern Techniques 3
- FASH A170 Clothing Design and Selection 3
- FASH A180 Fundamental Principles of Clothing Construction 1 3
  - or FASH A183 Fundamental Principles of Clothing Construction 2 3
- FASH A190 Apparel Industry Sustainability: The Environment, Ethical Business Practices & the Law 3

Subtotal 12

**Semester 4**
- FASH A155 Tech-Packs 2.5
- FASH A181 Fashion Internship 2
- FASH A200 Fashion Internship Lecture 1
- FASH A182 Professional Practices 2
- FASH A266 Computerized Pattern System 2

Subtotal 9.5

**Total Units** 48

### Financial Aid Eligible

Banner Code: 1_AS_MKDV
Program Outcomes

1. Produce a digital presentation of a specific retail venue, illustrating continuity of theme through physical appearance, room settings, signage, merchandise, and website presentation.

2. Create the packaging for a product that will include product graphics and design, the merchandising concept for the retail venue, and an initial event or promotion to launch the product.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<td>Year 1</td>
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<tr>
<td>Fall</td>
<td></td>
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</tr>
<tr>
<td>ART A110</td>
<td>Color and Design: Two-Dimensional</td>
<td>3</td>
</tr>
<tr>
<td>or FASH A175</td>
<td>or Applied Color and Design Theory</td>
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<tr>
<td>or ID A175</td>
<td>or Applied Color and Design Theory</td>
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<tr>
<td>ART A145</td>
<td>Exhibition Design 1</td>
<td>3</td>
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<tr>
<td>DVP A180</td>
<td>Introduction to Display and Visual Presentation</td>
<td>3</td>
</tr>
<tr>
<td>ID A110</td>
<td>Design Communications 1: Design Graphics</td>
<td>2</td>
</tr>
<tr>
<td>MKTG A130</td>
<td>Principles of Advertising</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
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<td>ART A111</td>
<td>Color and Design: Three-Dimensional</td>
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<td>ART A116</td>
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<td>or CNST A116</td>
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<tr>
<td>FASH A181</td>
<td>Fashion Internship</td>
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</tr>
<tr>
<td>FASH A200</td>
<td>Fashion Internship Lecture</td>
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</tr>
<tr>
<td>FASH A255</td>
<td>Fashion Illustrating Techniques 1</td>
<td>3</td>
</tr>
<tr>
<td>or ID A260</td>
<td>or Design Communication 4: Digital Visualization</td>
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</tr>
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<td>PHOT A120</td>
<td>Introduction to Photography</td>
<td>3</td>
</tr>
<tr>
<td>or PHOT A123</td>
<td>or Introduction to Digital Photography</td>
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<td>30</td>
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Display and Visual Presentation, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_MKDV
Control Number: 22379

This certificate is designed to prepare students seeking careers as display and exhibit designers and covers interior, industrial, thematic, and promotional displays. The training program includes consideration of the total visual presentation design and production, including store planning, service promotion mix applied to retailers, wholesalers (trade show), corporate display, visual identity, and exhibits in cultural institutions (museums and galleries). Students are encouraged to work toward an Associate in Science degree.

Program Outcomes

1. Produce a digital presentation of a specific retail venue, illustrating continuity of theme through physical appearance, room settings, signage, merchandise, and website presentation.

2. Create the packaging for a product that will include product graphics and design, the merchandising concept for the retail venue, and an initial event or promotion to launch the product.

Fashion Design, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_FSDE
Control Number: 11634

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>ID A110</td>
<td>Design Communications 1: Design Graphics</td>
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<td>MKTG A130</td>
<td>Principles of Advertising</td>
<td>3</td>
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<tr>
<td>Total Units</td>
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Display and Visual Presentation, Suggested Electives

Minimum Program Major Units 30
AS General Education Option 1, 2, or 3 Varies
Transferable electives to satisfy unit requirement Varies
Total Degree Units 60
Completion of the Design Certificate program prepares students for careers in the fashion industry and in related businesses. Students are encouraged to complete the Associate degree.

Complete the Fashion Certificates of Achievement and the Associate in Science Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

Note: This AS degree may require over 70 units for completion, depending on course selection in the major.

### Program Outcome

1. The outcome of the program is to prepare students for entry-level employment as a professional and competent fashion designer in the fields of design, technical design, and merchandising and meet the needs of the local fashion industry.

### Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/business-management-entrepreneurship/fashion/design-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Design Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>FASH A107</td>
<td>Introduction To Art</td>
<td>3</td>
</tr>
<tr>
<td>ART A111</td>
<td>Color and Design: Three-Dimensional</td>
<td>3</td>
</tr>
<tr>
<td>BUS A118/A118H</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>FASH A235</td>
<td>Draping</td>
<td>2</td>
</tr>
<tr>
<td>MKTG A220</td>
<td>Retail Buying</td>
<td>3</td>
</tr>
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### Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Minimum Program Major Units</td>
<td>52</td>
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<td>AS General Education Option 1, 2, or 3</td>
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### Fashion Design, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_FSDE
Control Number: 18194

Completion of the Fashion certificate programs prepares students for careers in the fashion industry and in related businesses. Students may also transfer to programs at four-year colleges.
Students are encouraged to complete the Associate degree. Complete the Fashion Certificates of Achievement and the Associate in Science Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome

1. The outcome of the program is to prepare students for entry-level employment as a professional and competent fashion designer in the fields of design, technical design, and merchandising and meet the needs of the local fashion industry.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" grade of "C" or better in all program-required courses.

In order to be awarded a certificate, students are required to obtain a certificate in the fields of retail management, retail buying, special events and employment as a professional and competent fashion designer in the fields of design, technical design, and merchandising and meet the needs of the local fashion industry.

Program Outcomes

1. The outcome of the program is to prepare students for entry-level employment as a professional and competent fashion merchandiser in the fields of retail management, retail buying, special events and
promotions, visual merchandising, styling, fashion marketing, and public relations.

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/business-entrepreneurship/fashion/fashion-merchandising-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

<table>
<thead>
<tr>
<th>Course</th>
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<th>Units</th>
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<tr>
<td><strong>Semester 1</strong></td>
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</tr>
<tr>
<td>FASH A110</td>
<td>Applied Textiles and Design</td>
<td>3</td>
</tr>
<tr>
<td>FASH A115</td>
<td>Introduction to the Fashion Industry</td>
<td>3</td>
</tr>
<tr>
<td>FASH A120</td>
<td>History of Fashion</td>
<td>1.5</td>
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<tr>
<td>FASH A121</td>
<td>Street Style</td>
<td>1.5</td>
</tr>
<tr>
<td>FASH A175</td>
<td>Applied Color and Design Theory</td>
<td>3</td>
</tr>
<tr>
<td>FASH A177</td>
<td>Fashion Merchandising Concepts</td>
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<td><strong>Subtotal</strong></td>
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<tr>
<td><strong>Semester 2</strong></td>
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<tr>
<td>FASH A118</td>
<td>Trend Forecasting</td>
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</tr>
<tr>
<td>FASH A255</td>
<td>Fashion Illustrating Techniques</td>
<td>3</td>
</tr>
<tr>
<td>FASH A170</td>
<td>Clothing Design and Selection</td>
<td>3</td>
</tr>
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<td>FASH A145</td>
<td>Fashion Reporting and Analysis</td>
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<td><strong>Subtotal</strong></td>
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<tr>
<td><strong>Semester 3</strong></td>
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<tr>
<td>FASH A116</td>
<td>Fashion Styling</td>
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<tr>
<td>FASH A190</td>
<td>Apparel Industry Sustainability: The</td>
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</tr>
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<td>DVP A180</td>
<td>Introduction to Display and Visual</td>
<td>3</td>
</tr>
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<td>MKTG A220</td>
<td>Retail Buying</td>
<td>3</td>
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**Fashion Merchandising Suggested Electives**

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<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>BUS A118/A118H</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS A239</td>
<td>Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>CIS A132</td>
<td>Business Multimedia and Graphics</td>
<td>2</td>
</tr>
<tr>
<td>DMAD A181</td>
<td>Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>BUS A240</td>
<td>Entrepreneurship</td>
<td>3</td>
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<tr>
<td>MKTG A142</td>
<td>Direct Marketing</td>
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</table>

**Fashion Merchandising, Certificate of Achievement**

Financial Aid Eligible  
Banner Code: 1_CT_FSMC  
Control Number: 22421

Completion of the Fashion Merchandising Certificate programs prepares students for careers in the fashion industry and in related businesses.

**Program Outcomes**

1. The outcome of the program is to prepare students for entry-level employment as a professional and competent fashion merchandiser in the fields of retail management, retail buying, special events and promotions, visual merchandising, styling, fashion marketing and public relations.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing
his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
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<tr>
<td>FASH A110</td>
<td>Applied Textiles and Design</td>
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</tr>
<tr>
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<td>Introduction to the Fashion Industry</td>
<td>3</td>
</tr>
<tr>
<td>FASH A120</td>
<td>History of Fashion</td>
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<tr>
<td>FASH A121</td>
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<tr>
<td>FASH A177</td>
<td>Fashion Merchandising Concepts</td>
<td>3</td>
</tr>
<tr>
<td>Subtotal</td>
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<td>15</td>
</tr>
<tr>
<td>Semester 2</td>
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<td>FASH A118</td>
<td>Trend Forecasting</td>
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<td>Fashion Illustrating Techniques 1</td>
<td>3</td>
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<tr>
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<tr>
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<td>Fashion Styling</td>
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<tr>
<td>FASH A190</td>
<td>Apparel Industry Sustainability: The Environment, Ethical Business Practices &amp; the Law</td>
<td>3</td>
</tr>
<tr>
<td>DVP A180</td>
<td>Introduction to Display and Visual Presentation</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A220</td>
<td>Retail Buying</td>
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<td>FASH A181</td>
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<td>FASH A200</td>
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<tr>
<td>FASH A182</td>
<td>Professional Practices</td>
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<td>FASH A225</td>
<td>Media, Events, and Promotions</td>
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<td>MKTG A110</td>
<td>Professional Selling</td>
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<tr>
<td>or MKTG A200</td>
<td>Retail E-Commerce Management</td>
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**Total Units** 49

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**Fashion Merchandising Suggested Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>Required Courses</td>
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<td>BUS A118/A118H</td>
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</tr>
<tr>
<td>BUS A239</td>
<td>Professional Communication</td>
<td>3</td>
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<tr>
<td>or MGMT A239</td>
<td>Professional Communication</td>
<td></td>
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<tr>
<td>CIS A132</td>
<td>Business Multimedia and Graphics</td>
<td>2</td>
</tr>
<tr>
<td>DMAD A181</td>
<td>Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>BUS A240</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A142</td>
<td>Direct Marketing</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Industrial Sewing, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_FAIS

The courses in this certificate provide short-term training in the areas of clothing construction and the use of high-speed industrial sewing equipment. The certificate can be completed in one to two semesters. The program offers a self-paced open entry, open exit lab that allows for enrollment throughout the semester. Employment possibilities include apparel construction and textile product assembly careers.

**Program Outcomes**
1. The outcome of the program is to prepare students for entry-level employment as a competent professional in the field of clothing construction and the use of high-speed sewing equipment and meet the needs of the local fashion industry.

**Certificate Requirements**
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.
The outcome of the program is to prepare students for professional positions within the industry and to provide the foundation skills for owning and operating their own catering business. Meets the needs of the local catering community.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Food Service Management - Commercial
The Food Service Management program at Orange Coast College provides a varied curriculum in Culinary Arts, Restaurant Management, Catering, Fast Food Management, and Institutional Food Service. Certificate programs are provided in each of these specialties and by completing the general education requirements, a student is eligible for the Associate in Arts degree.

All classroom studies are reinforced with hands-on opportunities in the Captain’s Table Restaurant and the Instructional Food Services Cafeteria.

Food Service Management Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/hospitality_professions/food-service-management/)

- Catering, Certificate of Achievement (p. 56)
- Restaurant Supervision, Certificate of Achievement (p. 57)
- Restaurant, Associate in Science Degree (p. 57)

Catering, Certificate of Achievement
Not Financial Aid Eligible
Banner Code: 1_CN_FSCC

Students who complete the Catering certificate will be trained to operate a catering business, whether it is a business conducted on premises or off premises. Those enrolling in this program will learn about organization and management, menu pricing, selling, advertising and promotion, and preparing and serving food, as well as cost accountability, a most important factor in operating a catering service successfully. Students will be employable in the catering departments of hotels and restaurants and will be knowledgeable enough to reasonably decide about opening their own catering business. Opportunities for employment in this field are excellent.
Restaurant Supervision, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_FMRS
Control Number: 08663

Students completing this certificate are qualified to manage food service operations in commercial establishments, such as restaurants and hotels. Restaurant management is an attractive profession which has been described a number of ways by those who are active in it, including such accolades as glamorous, well-paying, creative, challenging, and filled with excitement. One employment estimate shows a need for more than 250,000 additional employees annually. The future of restaurant management holds promise for individuals willing to devote their talents to this lively career.

Program Outcome
1. Prepare students for entry-level employment as competent Food Service supervisors and meet the needs of the local hospitality/food-service industry.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Restaurant, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_FMCR
Control Number: 08664

Students completing this degree are qualified to manage food service operations in commercial establishments, such as restaurants and hotels. Restaurant management is an attractive profession which has been described a number of ways by those who are active in it, including such accolades as glamorous, well-paying, creative, challenging, and filled with excitement. One employment estimate shows a need for more than 250,000 additional employees annually. The future of restaurant management holds promise for individuals willing to devote their talents to this lively career.

Program Outcomes
1. Prepare students for entry-level employment as competent Food Service supervisors and meet the needs of the local hospitality/food-service industry.

Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate...
Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/business-management-entrepreneurship/food-service-management-commercial/restaurant-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

**Recommended Preparation**

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**Required Prerequisites**

**Restaurant Supervision Certificate of Achievement**

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</thead>
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<td><strong>Semester 1</strong></td>
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<tr>
<td>FSM A100</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>FSM A150</td>
<td>Principles of Quantity Food Preparation</td>
<td>4</td>
</tr>
<tr>
<td>FSM A160</td>
<td>Sanitation and Safety</td>
<td>3</td>
</tr>
<tr>
<td>FSM A190</td>
<td>Dining Room Service</td>
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</tr>
<tr>
<td><strong>Units</strong></td>
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</tr>
<tr>
<td><strong>Semester 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSM A151</td>
<td>Food Production Management</td>
<td>2</td>
</tr>
<tr>
<td>FSM A210</td>
<td>Dining Room Management</td>
<td>3</td>
</tr>
<tr>
<td>FSM A240</td>
<td>Food Service Math/Accounting</td>
<td>4</td>
</tr>
<tr>
<td>FSM A260</td>
<td>Supervision and Training Techniques</td>
<td>3</td>
</tr>
<tr>
<td>FSM A283</td>
<td>Directed Practice in Food Service Management 1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td><strong>Subtotal 26</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Restaurant AS Suggested Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS A090</td>
<td>Beginning Computer Keyboarding 1</td>
<td>1.5</td>
</tr>
<tr>
<td>EMS A100</td>
<td>Emergency Medical Responder</td>
<td>4</td>
</tr>
<tr>
<td>KIN A203</td>
<td>First Aid and CPR</td>
<td>2</td>
</tr>
</tbody>
</table>

**Information Technology**

Completion of these certificates will enable students to acquire the skills needed by professionals in information and communication technologies to support and/or manage the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth. All courses must be completed at Orange Coast College for these certificates.

- Enterprise Routing, Certificate of Specialization
- Network Administration and Operations, Certificate of Specialization
- Network Administration — Linux, Certificate of Specialization
- Network Administration — Windows, Certificate of Specialization
- Network Infrastructure, Certificate of Specialization
- Network Professional, Certificate of Specialization
- Network Security, Certificate of Specialization
- Network Services and Applications, Certificate of Specialization
- Network Technician, Certificate of Specialization
- Virtualization and Cloud Computing, Certificate of Specialization
- Enterprise Routing, Certificate of Specialization (p. 58)
- Network Administration - Linux, Certificate of Specialization (p. 59)
- Network Administration - Windows, Certificate of Specialization (p. 59)
- Network Administration and Operations, Certificate of Specialization (p. 60)
- Network Infrastructure, Certificate of Specialization (p. 60)
- Network Professional, Certificate of Specialization (p. 61)
- Network Security, Certificate of Specialization (p. 61)
- Network Services and Applications, Certificate of Specialization (p. 62)
- Network Technician, Certificate of Specialization (p. 62)
- Virtualization and Cloud Computing, Certificate of Specialization (p. 63)

**Enterprise Routing, Certificate of Specialization**

Not Financial Aid Eligible

Banner Code: 1_CE_CSER

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and
video traffic. This career is an emerging IT-related career that sees high demand and growth.

Program Outcomes

1. Students who receive the Enterprise Routing Certificate of Specialization will be able to design and implement a converged network.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT A197</td>
<td>Introduction to Networking (Cisco 1)</td>
<td>3</td>
</tr>
<tr>
<td>IT A198</td>
<td>Routing and Switching Essentials (Cisco 2)</td>
<td>3</td>
</tr>
<tr>
<td>IT A265</td>
<td>Enterprise Router Configurations 1</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

Network Administration - Windows, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CSAW

Completion of this certificate will enable students to acquire the skills needed in the areas of technical operations and network management. In addition, this certificate provides preparation for students seeking industry-standard certification tests from CompTIA and Microsoft.

Program Outcomes

1. Students who complete the Network Administration – Windows Certificate of Specialization will be capable of deploying, building, designing, optimizing, and operating a Linux environment and they will be able to make the design and technology decisions necessary to ensure successful technology implementation projects.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT A106</td>
<td>Introduction to Linux: LPI Certification</td>
<td>3</td>
</tr>
<tr>
<td>IT A163</td>
<td>Windows Desktop Administration</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Network Administration - Linux, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CSLX

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth.

Program Outcomes

1. Students who complete the Network Administration – Linux Certificate of Specialization will be capable of deploying, building, designing, optimizing, and operating a Windows Server and Desktop environment and they will be able to make the design and technology decisions necessary to ensure successful technology implementation projects.
Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT A163</td>
<td>Windows Desktop Administration</td>
<td>3</td>
</tr>
<tr>
<td>IT A192</td>
<td>Network Systems Administration</td>
<td>4</td>
</tr>
<tr>
<td>IT A193</td>
<td>Network Infrastructure Administration</td>
<td>3</td>
</tr>
<tr>
<td>IT A194</td>
<td>Network Directory Services Administration</td>
<td>3</td>
</tr>
<tr>
<td>IT A196</td>
<td>Network Enterprise Administration</td>
<td>4</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

**Network Administration and Operations, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_CSNO

Completion of this certificate will enable students to acquire the skills needed in the areas of technical operations and network management. In addition, this certificate provides preparation for students seeking industry-standard certification from CompTIA and Microsoft. A grade of "C" or better is required in all courses. All courses must be completed at Orange Coast College.

**Program Outcomes**

1. Students who receive the Network Administration and Operations Certificate of Specialization will be able to design and implement a small to medium network environment.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT A110</td>
<td>PC Concepts: A+ Certification Preparation</td>
<td>4</td>
</tr>
<tr>
<td>IT A191</td>
<td>Network and Communications Technologies</td>
<td>4</td>
</tr>
<tr>
<td>IT A192</td>
<td>Network Systems Administration</td>
<td>4</td>
</tr>
<tr>
<td>IT A193</td>
<td>Network Infrastructure Administration</td>
<td>3-4</td>
</tr>
<tr>
<td>IT A196</td>
<td>Network Enterprise Administration</td>
<td>4</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>15-16</td>
</tr>
</tbody>
</table>

**Network Infrastructure, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_CSNI

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth.
Program Outcomes
1. Students who receive the Network Infrastructure Certificate of Specialization will be able to design and implement a converged network.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT A197</td>
<td>Introduction to Networking (Cisco 1)</td>
<td>3</td>
</tr>
<tr>
<td>IT A198</td>
<td>Routing and Switching Essentials (Cisco 2)</td>
<td>3</td>
</tr>
<tr>
<td>IT A267</td>
<td>Scaling Networks- Cisco 3</td>
<td>3</td>
</tr>
<tr>
<td>IT A268</td>
<td>Connecting Networks - Cisco 4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Total Units</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal 8</strong></td>
<td></td>
</tr>
</tbody>
</table>

Network Professional, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CSNS

In order to receive this Certificate of Achievement, students are required to have the Information and Communications Technologies: Network Technician Certificate of Achievement.

Program Outcomes
1. Students who receive the Network Professional Certificate of Specialization will be able to design and implement a converged network.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT A110</td>
<td>PC Concepts: A+ Certification Preparation</td>
<td>4</td>
</tr>
<tr>
<td>IT A191</td>
<td>Network and Communications</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Total Units</strong></td>
<td><strong>8</strong></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>Subtotal 8</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Units</strong></td>
<td></td>
</tr>
</tbody>
</table>

Network Security, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CSNS

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and
video traffic. This career is an emerging IT-related career that sees high demand and growth.

**Program Outcomes**

1. Students who receive the Network Security Certificate of Specialization will be able to design and implement a converged network.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT A162</td>
<td>Fundamentals of Information Security</td>
<td>3</td>
</tr>
<tr>
<td>IT A282</td>
<td>Ethical Hacking and Network Defense</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

**Network Services and Applications, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_CSNA

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth.

**Program Outcomes**

1. Students who receive the Network Services and Applications Certificate of Specialization will be able to design and implement a converged network.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT A261</td>
<td>Fundamentals of Wireless Networking</td>
<td>3</td>
</tr>
<tr>
<td>IT A262</td>
<td>Fundamentals of Voice over IP Protocols</td>
<td>3</td>
</tr>
<tr>
<td>IT A263</td>
<td>Introduction to the Internet of Things</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

**Network Technician, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_CSNT

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth.
Program Outcomes
1. Students who receive the Network Technician Certificate of Specialization will be able to design and implement a converged network.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course | Title | Units
--- | --- | ---
IT A110 | PC Concepts: A+ Certification Preparation | 4
IT A191 | Network and Communications Technologies | 4
Total Units | | 8

Virtualization and Cloud Computing, Certificate of Specialization
Not Financial Aid Eligible
Banner Code: 1_CE_CSVC

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth.

Program Outcomes
1. Students who receive the Virtualization and Cloud Computing Certificate of Specialization will be able to design and implement a converged network.

Certificate of Specialization
Certificate Requirements
Virtualization and Cloud Computing, Certificate of Specialization

Course | Title
--- | ---
IT A280 | Information and Storage Management
IT A281 | Cloud Infrastructure & Services
IT A285 | VMware View: Installation, Configuration & Management
IT A286 | VMware vSphere: Installation, Configuration & Management

Total Units | 12

Interior Design
The Interior Design Program at Orange Coast College is dedicated to helping students develop their fullest potential in academic, professional, and personal skills, preparing them for a rewarding career in design.

This exceptional, multi-level program, developed by educators and industry professionals, promotes an interdisciplinary, equal opportunity education committed to building confident, responsible, and socially aware individuals who will contribute to the quality of life through Interior Design. We offer 3 certificates and an AS Degree.

Department Contact Information
Charlene Reed
creed@occ.cccd.edu

Interior Design Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/family_consumer_science/interior_design/Pages/default.aspx)
Kitchen And Bath Advanced Certificate, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_IDKB

The Kitchen and Bath Advanced Certificate builds upon the foundation of Level 2 by applying added knowledge and technology to more advanced projects and a focused specialization. Students earning this certificate are ready to begin their interior design careers as entry level Kitchen and Bath designers and to pursue industry certifications.

Program Outcome
1. To prepare students for entry-level employment as a specialized Kitchen and Bath designer and for industry certifications.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Level 1 — Interior Merchandising, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_IDIM
Control Number: 19548

The Interior Merchandising certificate prepares students for employment in retail furnishings and merchandising and to prepare students for the Level 2- Interior Design Associate in Science Degree.

Program Outcome
1. To prepare students for entry-level employment in retail furnishing and merchandising and to prepare students for the Level 2- Interior Design Associate in Science Degree.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that
students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1</td>
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</tr>
<tr>
<td>ID A100</td>
<td>Fundamentals of Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>ID A105</td>
<td>Interior Design Studio 1</td>
<td>3</td>
</tr>
<tr>
<td>ID A110</td>
<td>Design Communications: Design Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ID A120</td>
<td>Interior Design Careers</td>
<td>1</td>
</tr>
<tr>
<td>ID A180</td>
<td>History of Interior Architecture and Furnishings 1</td>
<td>3</td>
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<tr>
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<td>Units</td>
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<tr>
<td>Semester 2</td>
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</tr>
<tr>
<td>ART A110</td>
<td>Color and Design: Two-Dimensional</td>
<td>3</td>
</tr>
<tr>
<td>or ID A175</td>
<td>Color and Design Theory</td>
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</tr>
<tr>
<td>ID A130</td>
<td>Design Communication: CAD 2D</td>
<td>3</td>
</tr>
<tr>
<td>ID A150</td>
<td>Interior Materials and Products</td>
<td>3</td>
</tr>
<tr>
<td>ID A190</td>
<td>Hist Arch/Furnishings 2</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A110</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
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<tr>
<td></td>
<td>Total Units</td>
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</table>

Level 2 — Interior Design Assistant, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1-AS_IDA
Control Number: 11632

The Level 2 Interior Design Assistant degree furthers the process of education by offering additional knowledge in design history, space planning, drafting, illustration, computer applications, selection and specification of materials and products, lighting, construction documents, building codes, business/professional practices, plus internship and portfolio development. Course information is applied to both residential and commercial design.

Program Outcomes
1. To prepare students for entry-level employment as an interior design assistant to a professional interior designer. In addition, the outcome of this level is for students to progress to Level 3 – Interior Design Professional Level and/or for transfer.

Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation.

Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/business-management-entrepreneurship/interior-design/level-2-interior-design-assistant-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Required Prerequisites

**Level 1 Interior Merchandising Certificate of Achievement**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Semester 1</td>
<td></td>
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<tr>
<td>ID A100</td>
<td>Fundamentals of Interior Design</td>
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<td>ID A105</td>
<td>Interior Design Studio 1</td>
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</tr>
<tr>
<td>ID A110</td>
<td>Design Communications: Design Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ID A120</td>
<td>Interior Design Careers</td>
<td>1</td>
</tr>
<tr>
<td>ID A180</td>
<td>History of Interior Architecture and Furnishings 1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Units</td>
<td>12</td>
</tr>
<tr>
<td>Semester 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART A110</td>
<td>Color and Design: Two-Dimensional</td>
<td>3</td>
</tr>
<tr>
<td>or ID A175</td>
<td>Color and Design Theory</td>
<td></td>
</tr>
<tr>
<td>ID A130</td>
<td>Design Communication: CAD 2D</td>
<td>3</td>
</tr>
<tr>
<td>ID A150</td>
<td>Interior Materials and Products</td>
<td>3</td>
</tr>
<tr>
<td>ID A190</td>
<td>Hist Arch/Furnishings 2</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A110</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
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<td></td>
<td>Units</td>
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<td>Total Units</td>
<td>27</td>
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**Subtotal 27**

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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Semester 3</td>
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<tr>
<td>ID A170</td>
<td>Space Planning</td>
<td>3</td>
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<tr>
<td>ID A200</td>
<td>Design Communication: Illustration</td>
<td>3</td>
</tr>
<tr>
<td>ID A210</td>
<td>Fundamentals of Lighting</td>
<td>3</td>
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<tr>
<td>ID A260</td>
<td>Design Communication: Digital Visualization</td>
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<td></td>
<td>Units</td>
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<td>Semester 4</td>
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<td>ID A215</td>
<td>Interior Design Studio 2</td>
<td>3</td>
</tr>
<tr>
<td>ID A220</td>
<td>Interior Design Construction Documents</td>
<td>3</td>
</tr>
<tr>
<td>ID A230</td>
<td>Business and Professional Practice</td>
<td>3</td>
</tr>
<tr>
<td>ID A240</td>
<td>Interior Design Internship</td>
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</tbody>
</table>
The Interior Design Professional certificate builds upon the foundation of Level 2 by applying added knowledge and technology to more advanced projects. Students in Level 3 are prepared to begin their interior design careers as entry level professional designers and to pursue industry certifications.

**Program Outcome**

1. To prepare students for entry-level employment as a professional interior designer and for industry certifications.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Level 3 – Interior Design Professional, Certificate of Achievement**

Financial Aid Eligible  
Banner Code: 1_CF_IDP  
Control Number: 19547

The Interior Design Professional certificate builds upon the foundation of Level 2 by applying added knowledge and technology to more advanced projects. Students in Level 3 are prepared to begin their interior design careers as entry level professional designers and to pursue industry certifications.

**Program Outcome**

1. To prepare students for entry-level employment as a professional interior designer and for industry certifications.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.
Leadership Studies

The goal of this program is to enhance individual and organizational effectiveness. Students will develop personal leadership skills, study ethical dimensions of leadership, understand how leadership affects people, organizations, and society, and articulate and apply their own philosophy of leadership in their careers and lives.

Department Contact Information

Greg Clark,
Co-chair Business Department
gclark@occ.cccd.edu
(714) 432-5974

Leadership Studies Department Website (http://www.orangecoastcollege.edu/academics/divisions/business/leadership_studies/Pages/default.aspx)

- Leadership Studies, Certificate of Specialization (p. 67)

Leadership Studies, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_LDST

The goal of this program is to enhance individual and organizational effectiveness. Students will develop personal leadership skills, study ethical dimensions of leadership, understand how leadership affects people, organizations, and society, and articulate and apply their own philosophy of leadership in their careers and lives.

Program Outcomes

1. Function effectively in a leadership role using the skills, principles, and tools they have acquired.
2. Apply the leadership principles they have learned in their personal and/or organizational lives.
3. Distinguish between the qualities of effective and ineffective leaders.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
while enhancing individual and organizational effectiveness within the workplace. Courses emphasize leading, organizing, planning, communicating, training, and controlling.

Complete the Certificate of Achievement and the Associate in Science Degree Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

**Program Outcomes**
1. Function effectively in a leadership or management role using the skills, principles, and tools they have acquired.
2. Apply the leadership and management principles they have learned in their personal and/or organizational lives.
3. Distinguish between the qualities of effective and ineffective leaders and managers.
4. Analyze the ethical dimensions of effective leaders and managers in everyday conduct and decision making.
5. Demonstrate effective written and/or oral skills.

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A120 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/business-management-entrepreneurship/management/management-leadership-studies-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC 10) (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Management and Leadership Studies, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_MGMT
Control Number: 22373

The Management and Leadership Studies certificate program is designed to build and/or upgrade skills in leading and managing people while enhancing individual and organizational effectiveness within the workplace. Courses emphasize leading, organizing, planning, communicating, training, and controlling.

**Program Outcomes**
1. Function effectively in a leadership or management role using the skills, principles, and tools they have acquired.
2. Apply the leadership and management principles they have learned in their personal and/or organizational lives.
3. Distinguish between the qualities of effective and ineffective leaders and managers.
4. Analyze the ethical dimensions of effective leaders and managers in everyday conduct and decision making.
5. Demonstrate effective written and/or oral skills.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better in all program-required courses. Grades of "CR" or "P" are not accepted in the following courses:

- BUS A115
- BUS A120
- BUS A240
- CMST A110
- MKTG A100
- MKTG A110
- PHIL A120

A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Management and Leadership Studies

**Restricted Electives**

Select one (1) course from the following:

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<thead>
<tr>
<th>Course</th>
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<td>ACCT A101</td>
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<tr>
<td>ACCT A102</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS A120</td>
<td>Personal Financial Success</td>
<td>3</td>
</tr>
<tr>
<td>BUS A240</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>CMST A110</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A100</td>
<td>Introduction to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A110</td>
<td>Professional Speaking</td>
<td>3</td>
</tr>
<tr>
<td>PHIL A120</td>
<td>Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Management Institute, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_MGMI

These selected courses are designed for students who desire to sharpen their managerial skills. Completion of all three courses will provide the basic skills necessary to succeed in any managerial position.

Program Outcomes

1. Function effectively in a management position using the skills, principles, and tools they have acquired.
2. Apply the management principles they have learned to effectively manage in a variety of settings. Distinguish between the qualities of effective and ineffective managers.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-
Retail, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_MGRT
Control Number: 16229

This program is approved by the Western Association of Food Chains and persons completing the prescribed courses are eligible to receive both the OCC Certificate of Achievement and the WAFC Retail Management Certificate.

Complete the Retail Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes

1. Function effectively as a manager in a retail environment using the skills, principles, and tools they have acquired.
2. Apply the retail principles they have learned in their professional lives.
3. Analyze the ethical dimensions of effective retail managers in everyday conduct and decision making.
4. Demonstrate effective written and/or oral skills.

Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/business-science-degree/orange-coast/general-education-patterns/associate-science-general-education-pattern-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

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</tr>
<tr>
<td>MGMT A115</td>
<td>Human Relations and Supervision</td>
<td>3</td>
</tr>
<tr>
<td>or LEAD A200</td>
<td>Organizational Leadership</td>
<td>3</td>
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<tr>
<td>BUS/MGMT A239</td>
<td>Professional Communication</td>
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</tbody>
</table>

Total Units 9

Retail, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_MGRT
Control Number: 22374

This program is approved by the Western Association of Food Chains and persons completing the prescribed courses are eligible to receive both the OCC Certificate of Achievement and the WAFC Retail Management Certificate.

Program Outcomes

1. Function effectively as a manager in a retail environment using the skills, principles, and tools they have acquired.
2. Apply the retail principles they have learned in their professional lives.
3. Analyze the ethical dimensions of effective retail managers in everyday conduct and decision making.
4. Demonstrate effective written and/or oral skills.
Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Course Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT A100</td>
<td>Accounting for Small Business</td>
<td>3-4</td>
</tr>
<tr>
<td>or ACCT A101</td>
<td>Financial Accounting</td>
<td></td>
</tr>
<tr>
<td>BUS A139</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>CIS A100</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>LEAD A200</td>
<td>Organizational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>MGMT A100</td>
<td>Applied Management for Public and Private Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MGMT A115</td>
<td>Human Relations and Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A100</td>
<td>Introduction to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A200</td>
<td>Retail E-Commerce Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>24-25</strong></td>
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### Retail Suggested Electives

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACCT A102</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS A110</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS A138</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>BUS A240</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A110</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A220</td>
<td>Retail Buying</td>
<td>3</td>
</tr>
</tbody>
</table>

### Marketing

The Marketing certificate programs are designed to train those individuals whose career paths involve the creative techniques of both oral and written sales presentations, advertising, and marketing. Courses emphasize the tools used by marketers, the environmental forces affecting the marketing process, sales communication skills, the major components of modern advertising and promotion, marketing research, and advertising planning and strategy.

#### Department Contact Information

Dennis Morgan, Department Chair
dmorgan@occ.cccd.edu
(714) 432-5651

Marketing Department Website (http://www.orangecoastcollege.edu/academics/divisions/business/marketing/Pages/default.aspx)

- Advertising, Certificate of Specialization (p. 71)
- Entry-Level Marketing, Certificate of Specialization (p. 72)
- General Marketing, Associate in Science Degree (p. 72)
- General Marketing, Certificate of Achievement (p. 73)
- International Business, Associate in Science Degree (p. 74)
- International Business, Certificate of Achievement (p. 74)
- International Business, Certificate of Specialization (p. 75)
- Sales, Certificate of Specialization (p. 75)

### Program Outcomes

1. Function effectively in entry-level advertising business positions using the skills, principles, and tools they have acquired.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.
as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART A120/A120H or DMAD A182</td>
<td>Beginning Drawing or Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>CMST A180 or FILM A150</td>
<td>Introduction to Mass Communications or History of Radio &amp; Television</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A130</td>
<td>Principles of Advertising</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

General Marketing, Associate in Science Degree
Financial Aid Eligible
Banner Code: 1_AS_MKGN
Control Number: 03962

The Marketing certificate programs are designed to train those individuals whose career paths involve the creative techniques of both oral and written sales presentations, advertising, and marketing. Courses emphasize the tools used by marketers, the environmental forces affecting the marketing process, sales communication skills, the major components of modern advertising and promotion, marketing research, and advertising planning and strategy. All courses must be completed with a grade of “C” or better.

Complete the Certificate of Achievement and the Associate in Science Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Function effectively in a multitude of first-entry marketing positions using the skills, tools and principles they have acquired.
2. Effectively apply and utilize their acquired knowledge of the principles of marketing to market and/or promote a business, product, or service.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG A100</td>
<td>Introduction to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A110</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A130</td>
<td>Principles of Advertising</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior course work, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite. Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.occ.edu/orange-coast/pathways/business-management-entrepreneurship/marketing/general-marketing-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Program Outcomes

1. Function effectively in a multitude of first-entry marketing positions using the skills, tools and principles they have acquired.

2. Communicate effectively and persuasively in personal, organizational, and selling environments.

3. Effectively apply and utilize their acquired knowledge of the principles of marketing to market and/or promote a business, product, or service.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

### Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### General Marketing, Certificate of Achievement

**Financial Aid Eligible**

**Banner Code:** 1_CN_MKGN

**Control Number:** 22376

The Marketing certificate programs are designed to train those individuals whose career paths involve the creative techniques of both oral and written sales presentations, advertising, and marketing. Courses emphasize the tools used by marketers, the environmental forces affecting the marketing process, sales communication skills, the promotion, marketing research, and advertising planning and strategy. All courses must be completed with a grade of "C" or better.

### Courses and Course Titles

#### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS A100/A100H</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS/MGMT A239</td>
<td>Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A100</td>
<td>Introduction to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A110</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A130</td>
<td>Principles of Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A150/A150H</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS A138</td>
<td>Business English</td>
<td></td>
</tr>
<tr>
<td>BUS/CMST A185</td>
<td>Public Relations</td>
<td></td>
</tr>
<tr>
<td>CMST A180</td>
<td>Introduction to Mass Communications</td>
<td></td>
</tr>
<tr>
<td>MKTG A142</td>
<td>Direct Marketing</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units:** 27

#### Requirements

- **Program Major Units:** 27
- **AS General Education Option 1, 2, or 3 Varies**
- **Transferable electives to satisfy unit requirement Varies**
- **Total Degree Units:** 60

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**General Marketing, Certificate of Achievement**

Financial Aid Eligible

Banner Code: 1_CN_MKGN

Control Number: 22376
International Business, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_IBUS
Control Number: 08617

Complete the International Business Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Function effectively in an entrepreneurial, managerial, or entry-level international business position using the skills, tools and principles they have acquired.
2. Effectively apply the international business principles they have learned to effectively facilitate international business transactions in a variety of settings.

Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior course work, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite. Psychology A150 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/business-management-entrepreneurship/marketing/international-business-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Course | Title | Units
--- | --- | ---
BUS A100/A100H | Introduction to Business | 3
BUS A118/A118H | Introduction to International Business | 3
BUS/SGMT A239 | Professional Communication | 3
MKTG A100 | Introduction to Marketing | 3
MKTG A110 | Professional Selling | 3
MKTG A130 | Principles of Advertising | 3

International Business, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_IBUS
Control Number: 22375

Complete the Certificate of Achievement Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Function effectively in an entrepreneurial, managerial, or entry-level international business position using the skills, tools and principles they have acquired.
2. Effectively apply the international business principles they have learned to effectively facilitate international business transactions in a variety of settings.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.
Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

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Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS A100/A100H</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS A118/A118H</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS/MGMT A239</td>
<td>Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A100</td>
<td>Introduction to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A110</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A130</td>
<td>Principles of Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A150/A150H</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

**International Business, Certificate of Specialization**
Not Financial Aid Eligible
Banner Code: 1_CE_MKIB

The Marketing certificate programs are designed to train those individuals whose career paths involve the creative techniques of both oral and written sales presentations, advertising, and marketing. Courses emphasize the tools used by marketers, the environmental forces affecting the marketing process, sales communication skills, the promotion, marketing research, and advertising planning and strategy. All courses must be completed with a grade of “C” or better.

**Program Outcomes**
1. Function effectively in an entrepreneurial, managerial, or entry-level international business position using the skills, tools and principles they have acquired.
2. Effectively apply the international business principles they have learned to effectively facilitate international business transactions in a variety of settings.

**Certificate Requirements**
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

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Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS A118/A118H</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A100</td>
<td>Introduction to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A110</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>MKTG A150/A150H</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

**Sales, Certificate of Specialization**
Not Financial Aid Eligible
Banner Code: 1_CE_MKSL

The Marketing certificate programs are designed to train those individuals whose career paths involve the creative techniques of both oral and written sales presentations, advertising, and marketing. Courses emphasize the tools used by marketers, the environmental forces affecting the marketing process, sales communication skills, the promotion, marketing research, and advertising planning and strategy. All courses must be completed with a grade of “C” or better.
Nutrition and Dietetics

The Nutrition and Dietetics Technician Program is part of the School of Allied Health in the Consumer and Health Sciences Division at Orange Coast College. Students completing this program are prepared to join the dietetics team and participate in the nutrition care process for clients and patients that may be in the following settings: acute care, long term care, rehabilitation hospitals, and community agencies that provide education in nutrition.

Completion of the required courses, along with the Associate Degree program at Orange Coast College qualifies the student to sit for the Commission of Dietetics Registration national exam for the Nutrition and Dietetics Technician, Registered (NDTR) level.

Department Contact Information
Beth Blake, MPH, RDN
Associate Professor, Nutrition and Dietetics
Program Director
eblake@occ.cccd.edu (eblake@occ.cccd.edu)

Verna Grace, MS, RDN
Instructor, Nutrition and Dietetics
vgrace@occ.cccd.edu (vgrace@occ.cccd.edu)

Nutrition and Dietetics Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/dietetic%20technician/Pages/default.aspx)

• Dietetic Service Supervisor/Certified Dietary Manager, Certificate of Achievement (p. 76)

Dietetic Service Supervisor/Certified Dietary Manager, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_FNDS
Control Number: 04015

Dietary Service Supervisors/Certified Dietary Managers plan and supervise employees in Food and Nutrition services at a health care facility. Responsibilities include assisting the dietitian with patient care activities, coordinating work of food production personnel, and ensuring safe and nutritionally adequate food for patients and residents.

Program Outcomes
1. The program will prepare students for successful employment as entry-level Food and Nutrition managers to meet the needs of healthcare facilities and other employers.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

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Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Certificate Requirements Table

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
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<td>Nutrition</td>
<td>3</td>
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<tr>
<td>FSM A150</td>
<td>Principles of Quantity Food Preparation</td>
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<tr>
<td>FSM A151</td>
<td>Food Production Management</td>
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<td>FSM A250</td>
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<td>FSM A260</td>
<td>Supervision and Training Techniques</td>
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<td>NC A175</td>
<td>Health Care Field Experience</td>
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<td>NC A180</td>
<td>Introduction to Medical Nutrition Therapy</td>
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<tr>
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</tbody>
</table>

Upon successful completion of the certificate, student meets California Department of Health Licensing Requirements for Dietetic Service Supervisor.

Real Estate

Real Estate Broker Students who complete the Real Estate-Broker Certificate of Achievement are equipped with immediately marketable skills and also the coursework necessary to sit for the California Real Estate Broker’s Examination.
Real Estate-Broker, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_RE
Control Number: 16568

Students who complete the Real Estate-Broker Certificate of Achievement are equipped with immediately marketable skills and also the coursework necessary to sit for the California Real Estate Broker’s Examination.

Complete the Real Estate Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Function effectively in an entry-level real estate position using the skills, principles, and tools they have acquired.
2. Communicate effectively in personal organizational and real estate environments.
3. Apply the real estate principles they have learned to effectively facilitate real estate transactions in a variety of settings.
4. Be prepared to sit for the California Real Estate Broker’s Exam.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (p. 384), Option 2 (CSU GE) (p. 384), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Real Estate-Broker, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_RE
Control Number: 22380

Students who complete the Real Estate-Broker Certificate of Achievement are equipped with immediately marketable skills and also the coursework necessary to sit for the California Real Estate Broker’s Examination.

Program Outcomes
1. Function effectively in an entry-level real estate position using the skills, principles, and tools they have acquired.
2. Communicate effectively in personal organizational and real estate environments.
3. Apply the real estate principles they have learned to effectively facilitate real estate transactions in a variety of settings.
4. Be prepared to sit for the California Real Estate Broker’s Exam.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the Orange Coast College 2020-2021 Catalog
beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization**: 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z ([https://catalog.cccd.edu/orange-coast/programs-study/](https://catalog.cccd.edu/orange-coast/programs-study/)) section of this catalog. Check with a counselor to determine the requirements for completion.

**Course** | **Title** | **Units**
--- | --- | ---
ACCT A100 or ACCT A101 | Accounting for Small Business | 3-4
BUS A110 | Business Law | 3
ECON A170 or ECON A175 | Microeconomics | 3
RE A110 | Real Estate Principles | 3
RE A120 | Legal Aspects of Real Estate | 3
RE A130 | Real Estate Practice | 3
RE A140 | Real Estate Appraisal | 3
RE A150 | Real Estate Finance | 3

**Total Units**: 24-25

### Real Estate-Salesperson, Certificate of Specialization

Not Financial Aid Eligible  
Banner Code: 1_CE_MKRS

This program is designed for those individuals interested in pursuing a career in real estate. Real Estate Salesperson license requirements: RE A110 Real Estate Principles and RE A130 Real Estate Practice are required courses, plus one other real estate elective. All three are required to take the state exam. Check with the California Department of Real Estate for any additional requirements and forms.

### Program Outcomes
1. Function effectively in an entry-level real estate position using the skills, principles, and tools they have acquired.
2. Apply the real estate principles they have learned to effectively facilitate real estate transactions in a variety of settings.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement**: 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization**: 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z ([https://catalog.cccd.edu/orange-coast/programs-study/](https://catalog.cccd.edu/orange-coast/programs-study/)) section of this catalog. Check with a counselor to determine the requirements for completion.

**Course** | **Title** | **Units**
--- | --- | ---
RE A110 | Real Estate Principles | 3
RE A130 | Real Estate Practice | 3
Select one of the following:
RE A120 | Legal Aspects of Real Estate | 3
RE A140 | Real Estate Appraisal | 3
RE A150 | Real Estate Finance | 3

**Total Units**: 9

### Real Estate - Salesperson Suggested Electives

**Course** | **Title** | **Units**
--- | --- | ---
ACCT A100 | Accounting for Small Business | 3
BUS A110 | Business Law | 3
CIS A100 | Introduction to Computer Applications | 3
ECON A170 | Microeconomics | 3
ECON A175 | Macroeconomics | 3

### Careers in Healthcare

- Cardiovascular Technology (p. 79)
- Dental Assisting (p. 81)
- Diagnostic Medical Sonography (p. 84)
- Emergency Medical Services (p. 85)
- Integrative Health (p. 86)
- Medical Assisting (p. 88)
- Neurodiagnostic Technology (p. 90)
- Nutrition and Dietetics (p. 92)
Cardiovascular Technology

Cardiovascular technology is an allied health profession concerned with the diagnosis and treatment of patients with heart and blood vessel disease. The cardiovascular technologist performs tests at the request of a physician to obtain information about that patient's heart and blood vessel anatomy and function so the physician can make a diagnosis. The profession of cardiovascular technology includes three areas of diagnostic evaluation:

1. invasive cardiovascular technology (diagnosis of heart disease by cardiac catheterization),
2. noninvasive cardiovascular technology (diagnosis of heart disease by cardiac ultrasound, exercise, and electrocardiographic testing), and
3. noninvasive peripheral vascular study (diagnosis of blood vessel disease using ultrasound testing).

The Cardiovascular Technology program provides the necessary classroom and clinical courses to allow graduates to work as noninvasive cardiovascular technologists.

Specifically, the program objectives include:

1. Graduate qualified ECG technologists.
2. Graduate qualified noninvasive cardiovascular technologists who obtain RDCT within two years of completing the program and who are qualified in all noninvasive tests.
3. Provide an adequate number of graduates to meet the need for employees within the community.

During the first year of the program, students learn basic medical sciences and noninvasive cardiovascular tests including electrocardiography (ECG), exercise testing, Holter monitor technician, pacemaker technician and/or monitor (telemetry) technician.

Students wishing to complete the two-year program must complete the first year courses and the general education for the Associate in Science degree. Graduates of the Noninvasive Cardiovascular Technology program option may obtain employment as a cardiovascular technologist performing all noninvasive tests, particularly cardiac ultrasound or echocardiography. Additionally, graduates may perform limited cerebrovascular ultrasound tests.

The Cardiovascular Technology program is fully accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Program Admission

ALH A010 Health Occupations course – application and orientation.

The student must complete the General Education requirements for an Associate in Science Degree and the program prerequisites prior to acceptance to the program.
Department Contact Information

Darryl Isaac, Cardiovascular Technology (CVT) Program Director and Instructor
disaac@occ.cccd.edu (disaac@occ.cccd.edu)

Kristy Norfolk, CVT Clinical Coordinator and Instructor
knorfolk@occ.cccd.edu (knorfolk@occ.cccd.edu)

Cardiovascular Technology Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/cardiovascular%20technology/Pages/default.aspx)

- American Society of Echocardiography (ASE) www.asecho.org (https://www.asecho.org/)
- Society of Diagnostic Medical Sonography (SDMS) https://www.sdms.org/
- Cardiovascular Credentialing International (CCI) www.cci-online.org (http://cci-online.org/)
- Echocardiography and Vascular Ultrasound, Associate in Science Degree (p. 80)
- Electocardiography Technician, Certificate of Achievement (p. 81)

Echocardiography and Vascular Ultrasound, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_CTEV
Control Number: 04043

Completion of this associate degree will allow students to pursue career opportunities such as noninvasive cardiovascular technologists, echocardiographer/echocardiography technologists, and cerebrovascular ultrasound technologists.

Program Outcomes

1. Be prepared for entry-level employment as a professional and competent Cardiovascular Technologist to meet the needs of the local health care community.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/careers-healthcare/cardiovascular-technology/echocardiography-vascular-ultrasound-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Program Prerequisites

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<td>ALH A010</td>
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Required Prerequisites

Electrocardiography Technician Certificate of Achievement

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Program Prerequisites

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**Electrocardiography Technician**

**Suggested Elective**

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<td>PHIL A120</td>
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**Electrocardiography Technician, Certificate of Achievement**

Financial Aid Eligible  
Banner Code: 1_CT_CTEV  
Control Number: 22416

Completion of this certificate will allow students to pursue career opportunities as holter monitor technicians, ECG technicians, monitor (telemetry) technicians, pacemaker technicians, and stress testing technicians.

**Program Outcomes**

1. Be prepared for entry-level employment as a professional and competent Cardiovascular Technologist to meet the needs of the local health care community.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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**Total Units**  7.5

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<td>CVT A100</td>
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<td>CVT A160</td>
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**Spring**

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<td>CVT A130</td>
<td>Introduction to Invasive Cardiology</td>
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<td>CVT A170</td>
<td>ECG Clinical Experience</td>
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<tr>
<td>CVT A190</td>
<td>Introduction to Sonography and Imaging Physics</td>
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</table>

**Total Units**  13

**Dental Assisting**

The goals of the Registered Dental Assisting program is to provide marketable skills in clinical chairside, radiographic and laboratory procedures. Registered Dental assistants perform a broad scope of dental procedures and administrative functions under the supervision of dentists and dental hygienists. Orange Coast College Registered Dental Assistant programs prepares you to sit for the Registered Dental Assistant examination through the Dental Board of California, and National Certified Dental Assistant examination, through Dental Assisting National Board.

The Registered Dental Assisting Program is approved by the Dental Board of California and accredited by the Commission on Dental Accreditation. Registered Dental assistants may perform the following services:

- Operate and maintain dental equipment;
- Expose and prepare dental x-rays;
- Administer periodontal dressings;
- Apply topical anesthetics;
- Place preventative sealants;
- Take tooth impressions;
- Coronal Polish;
- Maintain Infection Control protocols related to patient care
- Assist in all aspects of dental patient care and oral care instruction;
- Schedule patients and maintain dental records;
- Ultrasonic scaling for cement removal

The work may include laboratory and clinical procedures, office duties, patient intake and education. Registered Dental assistants may work in
private or group dental practices, general dentistry or dental specialties such as orthodontics, periodontics, children’s dentistry, and other specialties. The work schedule can be full-time or part-time, providing flexibility in working hours.

The employment outlook is excellent and is expected to continue growing. In California, there is a severe shortage of qualified Registered Dental Assistants. Opportunities exist in general dentistry or dental specialties, such as oral and maxillofacial surgery, orthodontics, endodontics, periodontics, children’s dentistry, and other specialties. Preventive dentistry has reduced the incidence of oral disease. As a result, the growing older population will retain their teeth longer and will be even more aware of the importance of regular dental care. Dentists will need to employ more dental assistants than ever before to meet the increased demand for dental services.

A career as a Registered Dental Assistant is a pathway to pursue additional certification after obtaining your RDA. Registered Dental Assistant Expanded Function (RDAEF). Registered Dental Assistant Oral Sedation (RDAOS) Registered Dental Assistant Orthodontic Assistant. Other areas of interest include Dental Hygiene and Dental School after Registered Dental Assisting clinical experience.

Department Contact Information

Heather Moreno
hmoreno10@occ.cccd.edu (%E2%80%8Bhmoreno10@occ.cccd.edu)

Dental Assisting Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/dental_assisting/Pages/default.aspx)

- Dental Assisting - Registered, Associate in Science Degree (p. 82)
- Dental Assisting - Registered, Certificate of Achievement (p. 83)

Dental Assisting - Registered, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_DENA
Control Number: 04006

Dental assisting is a challenging field requiring skills in chairside assisting, which includes manual dexterity, dental radiology, preventive therapy, patient management, receptionist duties, expanded functions and office management.

Qualified dental assistants find employment opportunities in a variety of settings such as private dental offices, specialty practices, federal or state dental programs and dental schools.

The Dental Assisting program is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of approval. The commission is a specialized accrediting body recognized by the United States Department of Education.

The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The program is also approved by:

The State of California Department of Consumer Affairs, Dental Board of California
2005 Evergreen Street, Suite 1550

Sacramento, CA 95815

RDA functions are taught to laboratory competency and clinical competency where applicable. A list of laboratory and clinical competencies are available upon request.

Program application process is accomplished by taking program prerequisite, Allied Health A010. This short-term course is mandatory for all prospective program applicants. See current class schedule for specific course meeting times. The Dental Assisting Registered program starts only in the fall semester of every school year.

This program is a sequential program. All fall semester courses must be taken concurrently in the fall semester. All spring semester courses must be taken concurrently in the spring semester.

Complete the Dental Assisting - Registered Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes

1. The outcome of the program is to meet the needs of the local health care community by preparing students for employment as a professional and competent registered dental assistant.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/career-healthcare/dental-assisting/dental-assisting-registered-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.
Required Prerequisites

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<tr>
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<td>ALH A010</td>
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<td>DA A120</td>
<td>Dental Materials</td>
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<td>DA A130</td>
<td>Preventive and Community Dentistry</td>
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<td>DA A140</td>
<td>Dental Radiography 1</td>
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<td>DA A160</td>
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<td>DA A100</td>
<td>Dental Anatomy</td>
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<td>DA A125</td>
<td>Expanded Functions</td>
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<td>DA A145</td>
<td>Specialized Practices</td>
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<tr>
<td>DA A150</td>
<td>Biomedical Sciences</td>
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<td>Clinical Experience 2</td>
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<td>DA A165</td>
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<td>DA A168</td>
<td>Clinical Experience 4</td>
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<tr>
<td>DA A175</td>
<td>Principles of Business and Practice Management</td>
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Dental Assisting – Registered Suggested Electives

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<td>CIS A100</td>
<td>Introduction to Computer Applications</td>
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<tr>
<td>CMST A100</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>CMST A110</td>
<td>Public Speaking</td>
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<tr>
<td>COUN A105</td>
<td>Strategies for College Success</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A100</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>PHIL A120</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC A100</td>
<td>Introduction to Psychology</td>
<td>3</td>
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</table>

Program approved by the American Dental Association. Graduates are eligible to take the California Registered Dental Assistant Exam and the National Certification Exam upon program completion and qualify for their State radiation license and coronal polishing, pit and fissure sealant and ultrasonic scaling for cement removal certificates.

Control Number: 22420

Dental assisting is a challenging field requiring skills in chairside assisting, which includes manual dexterity, dental radiology, preventive therapy, patient management, receptionist duties, expanded functions and office management.

Qualified dental assistants find employment opportunities in a variety of settings such as private dental offices, specialty practices, federal or state dental programs and dental schools.

The Dental Assisting program is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of approval. The commission is a specialized accrediting body recognized by the United States Department of Education.

The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The program is also approved by:

The State of California Department of Consumer Affairs, Dental Board of California
2005 Evergreen Street, Suite 1550
Sacramento, CA 95815

RDA functions are taught to laboratory competency and clinical competency where applicable. A list of laboratory and clinical competencies are available upon request.

Program application process is accomplished by taking program prerequisite, Allied Health A010. This short-term course is mandatory for all prospective program applicants. See current class schedule for specific course meeting times. The Dental Assisting Registered program starts only in the fall semester of every school year.

This program is a sequential program. All fall semester courses must be taken concurrently in the fall semester. All spring semester courses must be taken concurrently in the spring semester.

Program Outcomes

1. The outcome of the program is to meet the needs of the local health care community by preparing students for employment as a professional and competent registered dental assistant.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy
Diagnostic Medical Sonography

Diagnostic Medical Sonography is a technique using high-frequency sound waves to create images of specific areas of the body from which pathology may be diagnosed. A competent Sonographer must have a thorough knowledge of cross-sectional anatomy and pathology, as well as the skills to manipulate a wide variety of sophisticated instruments. This is a Commission on Accreditation of Allied Health Education Program (CAAHEP).

Department Contact Information

Cynthia Reber-Bonhall, Program Director
cbonhall@occ.cccd.edu

Diagnostic Medical Sonography Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/diagnostic_medical_sonography/Pages/default.aspx)

- Diagnostic Medical Sonography, Associate in Science Degree (p. 84)

Diagnostic Medical Sonography, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_DMS
Control Number: 04009

Diagnostic Medical Sonography (DMS) is a medical imaging modality using high-frequency sound waves to create images of specific areas of the body for which pathology may be diagnosed. A competent Sonographer must have a thorough knowledge of cross-sectional anatomy and pathology, as well as the skills to manipulate a wide variety of sophisticated instruments. The DMS Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). In addition to completion of the prerequisite and required courses below, this program requires completion of the Associate in Science General Education as listed in the catalog. Also, the completion of MATH A030 or higher college-level mathematics course is required by the CAAHEP and Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS). ALH A120 Human Diseases may be taken prior to program start. A “C” grade is required in all program courses.

Program Admission

Allied Health 010 course – application and orientation.

Students must complete Associate in Science degree graduation requirements and the program prerequisites prior to acceptance to the program.

Program Outcomes

1. The outcome of the program is to prepare students as competent Diagnostic Medical Sonographers for employment in the imaging field as professionals to meet community needs, and apply the concept of life-long learning through professional growth activities.
Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384). Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/careers-healthcare/diagnostic-medical-sonography/diagnostic-medical-sonography-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Recommended Preparation

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<tr>
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Required Prerequisites

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<td>ALH A111</td>
<td>Medical Terminology</td>
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<tr>
<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
<td>4</td>
</tr>
<tr>
<td>DMS A110</td>
<td>Introduction to Sonography</td>
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<td>RADT A100</td>
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Year 1

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<td>Sonographic Physics and Instrumentation for DMS</td>
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<td>DMS A161</td>
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Year 2

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<td>DMS A271</td>
<td>DMS Clinical Experience 3</td>
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<td>DMS A274</td>
<td>Abdominal Sonography</td>
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<td>DMS A276</td>
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Spring

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### Diagnostic Medical Sonography Suggested Elective

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<td>PHIL A120</td>
<td>Ethics</td>
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### Emergency Medical Services

- Emergency Medical Services, Certificate of Specialization (p. 85)

**Emergency Medical Services, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_EMS

EMS certification is required to work for an ambulance service or in an emergency department and may be required for lifeguards, ski patrol and fire fighters. The EMS provides the care necessary to preserve life and to prevent disability among the acutely ill and the seriously injured and assist and communicate with other healthcare providers with a higher scope of practice.

The EMS must have basic knowledge of anatomy and physiology, medical terminology and sterile techniques. The course of study emphasizes treating traumatic injuries and medical emergencies, as well as treating minor disorders and emotional problems. Specialized areas include obstetrical and pediatric emergencies and extricating entrapped persons. Special emphasis is placed on proper patient moving techniques and transport to definitive and appropriate medical care.

Successful completion of the EMS course qualifies the student to sit for the National Registry of Emergency Medical Technicians’ certifying examination, and therefore obtain EMS certification in any California County.
Program Outcomes

1. The graduate of the Emergency Medical Services program will be prepared for entry-level employment as a professional and competent Emergency Medical Technician and meet the needs of the local health care community.

2. The EMS certification course is a prerequisite for paramedic training. Job opportunities are good.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Program Recommended Preparation

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<td>Emergency Medical Responder</td>
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Required Prerequisites

Valid American Heart Association Healthcare Provider CPR

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<td>Emergency Medical Services Laboratory</td>
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Emergency Medical Services Suggested Electives

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<td>ALH A111</td>
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<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
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<td>CMST A100</td>
<td>Interpersonal Communication</td>
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</table>

Integrative Health

- Integrative Health Coach, Associate in Science Degree (p. 86)
- Integrative Health Coach, Certificate of Achievement (p. 87)

Integrative Health Coach, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_IHC
Control Number: 38587

The Integrative Health Coach will have a holistic approach to patient services and will have knowledge of integrative modalities that support health and wellness. Integrative Health Coaches assist patients in understanding the recommendations of their clinicians for improved health outcomes. Tools used by Integrative Health Coach include goal setting for behavior change, motivational interviewing, and health education. Their understanding of the U.S. healthcare system and health insurance will allow them to help patients navigate the healthcare system, assuring that patients are connected to services including under coverage and/or connecting the patient to additional community resources. The Integrative Health Coach program will prepare students to serve on health care teams, providing patient navigational support in understanding and accessing medical care.

The Integrative Health Coach empowers patients to make lasting health behavior changes that are the cornerstones of lifelong well-being. It bridges the gap between medical recommendations and patients’ ability to successfully implement their clinician’s recommendations into their behavior choices.

Students who complete the Integrative Health Coach Certificate of Achievement may elect to complete additional graduation requirements and earn an Associate of Science, Integrative Health Coach. The program is structured to allow students who have completed the Medical Assisting program can complete the requirements in one semester. It will also benefit individuals who are currently working within health care or who have completed an undergraduate degree and desire addition skills.

Program Outcomes

1. Students will have the knowledge, skills, and dispositions to be successful members of an integrated healthcare team.
2. Students will understand basic disease etiology and treatment and be able to assist patients in understanding diagnostic test in relationship to behaviors and treatment adherence.

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/careers-healthcare/integrative-health/integrative-health-coach-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

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### Course and Title Details

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<tr>
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<td>ALH A111</td>
<td>Medical Terminology</td>
<td>3</td>
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<tr>
<td>ALH A115</td>
<td>Patient Care</td>
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<tr>
<td>or INHL A115</td>
<td>Clinical Skills for the Integrative Health Coach</td>
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<tr>
<td>ALH A120</td>
<td>Human Diseases</td>
<td>2</td>
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<tr>
<td>INHL A100</td>
<td>Integrative Health Coach Principles &amp; Practice</td>
<td>3</td>
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<tr>
<td>FN A140</td>
<td>Introduction to Nutrition Concepts</td>
<td>2-3</td>
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<td>or FN A170</td>
<td>Nutrition</td>
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| **Semester 2** |                                                                 |       |
| INHL A210 | Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs | 3-5   |
| or MA A205 | Administrative Medical Assisting                                     | 2     |
| or PUBH A210 | Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs |       |
| INHL A220 | Techniques and Topics in Health Education                            | 3     |
| or PUBH A220 | Techniques and Topics in Health Education                            |       |
| INHL A225 | Introduction to Complementary and Alternative Medicine              | 3     |

**Total Units** 26.5-29.5

### Integrative Health Coach, Certificate of Achievement

Financial Aid Eligible

Banner Code: 1_CN_IHC

Control Number: 38598

The Integrative Health Coach will have a holistic approach to patient services and will have knowledge of integrative modalities that support health and wellness. Integrative Health Coaches assist patients in understanding the recommendations of their clinicians for improved health outcomes. Tools used by Integrative Health Coach include goal setting for behavior change, motivational interviewing, and health education. Their understanding of the U.S. healthcare system and health insurance will allow them to help patients navigate the healthcare system, ensuring that patients are connected to services including under coverage and/or connecting the patient to additional community resources. The Integrative Health Coach program will prepare students to serve on health care teams, providing patient navigational support in understanding and accessing medical care.

The Integrative Health Coach empowers patients to make lasting health behavior changes that are the cornerstone of lifelong well-being. It bridges the gap between medical recommendations and patients' ability to successfully implement their clinician's recommendations into their behavior choices.

Students who complete the Integrative Health Coach Certificate of Achievement may elect to complete additional graduation requirements and earn an Associate of Science, Integrative Health Coach. The program is structured to allow students who have completed the Medical Assisting program can complete the requirements in one semester. It will also benefit individuals who are currently working within health care or who have completed an undergraduate degree and desire addition skills.
Program Outcomes
1. Students will have the knowledge, skills, and dispositions to be successful members of an integrated healthcare team.
2. Students will understand basic disease etiology and treatment and be able to assist patients in understanding diagnostic test in relationship to behaviors and treatment adherence.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

## Graduation Requirements

### Minimum Grade Requirement
- 88
- 89

### Courses for Each Semester

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<th>Course</th>
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<th>Units</th>
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<tr>
<td><strong>Semester 1</strong></td>
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</tr>
<tr>
<td>ALH A111</td>
<td>Medical Terminology</td>
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</tr>
<tr>
<td>ALH A115</td>
<td>Patient Care</td>
<td>2.5</td>
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<tr>
<td>FN A140</td>
<td>Introduction to Nutrition Concepts</td>
<td>2-3</td>
</tr>
<tr>
<td>or FN A170</td>
<td>Nutrition</td>
<td></td>
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<td></td>
<td>12.5-13.5</td>
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| **Semester 2**                                |                                               |       |
| INHL A210 | Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs | 3.5   |
| or MA A205 | Administrative Medical Assisting 2                                     |       |
| or PUBH A210 | Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs |       |

### Total Units
26.5-29.5

### Medical Assisting
The Medical Assisting program includes specific business and medical courses that prepare students for employment as clinical or administrative assistants in medical offices, clinics, hospitals, or in related medical and business fields. Medical Assisting is the second-highest growing health career in the State of California. The Medical Assisting coursework is completed in two (2) semesters and includes 160-hour on-the-job experience in a medical office or a clinic.

### Department Contact Information
Lynne Cottrell, MSN, BSN, PHN, CMA (AAMA)
Program Director/Clinical Coordinator
lcottrell@occ.cccd.edu (%E2%80%8Blcottrell@occ.cccd.edu)

Medical Assisting Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/medical_assisting/Pages/default.aspx)
- CCMA Eligible Program, Associate in Science Degree (p. 88)
- CCMA Eligible Program, Certificate of Achievement (p. 89)

### CCMA Eligible Program, Associate in Science Degree

#### Financial Aid Eligible
Banner Code: 1_AS_MACE
Control Number: 04005

The Medical Assisting program includes specific business and clinical courses that prepare students for employment as clinical and/or administrative assistants in medical offices, clinics, or in related medical and business fields. The coursework can be completed in two semesters, and includes on-the-job experience in a medical office or ambulatory care center.

Orange Coast College is accredited by the Accreditation Commission of Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges (WASC). Such accreditation permits graduates of this program to take the California Certified Medical Assistant
examination (CCMA) immediately upon graduation. The California Certifying Board for Medical Assistants has been administering the CCMA exam since 1990. CCMA is one of three Boards that is recognized by the Medical Board of California. The medical assisting profession is highly diversified, and the work is challenging and personally rewarding. Employment opportunities are excellent in the expanding health care field.

Program Admission
Allied Health 010 course – application and orientation

Program Outcome
1. The graduates of the program will be prepared for entry-level employment as a professional and competent Medical Assistant to meet the needs of the local health care community.

Complete the Medical Assisting CCMA Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/careers-healthcare/medical-assisting/ccma-eligible-program-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Required Prerequisites
All prerequisite courses must be completed prior to admission into the program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
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<td>Health Occupations</td>
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Course | Title                      | Units |
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<tr>
<td>BIOL A221</td>
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<td>Medical Assisting Core</td>
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<tr>
<td>MA A175</td>
<td>Administrative Medical Assisting I</td>
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<td></td>
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<td>Units</td>
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<tr>
<td></td>
<td></td>
<td>11</td>
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Medical Assisting Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ALH A130</td>
<td>Applied Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>BUS A138</td>
<td>Business English</td>
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<td>PHIL A120</td>
<td>Ethics</td>
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<th>Requirement</th>
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<tr>
<td>AS General Education Option 1, 2, or 3</td>
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<tr>
<td>Transferable electives to satisfy unit requirement</td>
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<td><strong>Total Degree Units</strong></td>
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</table>

CCMA Eligible Program, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_MACE
Control Number: 18204

The Medical Assisting program includes specific business and clinical courses that prepare students for employment as clinical and/or administrative assistants in medical offices, clinics, or in related medical and business fields. The coursework can be completed in two semesters, and includes on-the-job experience in a medical office or ambulatory care center.

Orange Coast College is accredited by the Accreditation Commission of Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges (WASC). Such accreditation permits graduates of this program to take the California Certified Medical Assistant examination (CCMA) immediately upon graduation. The California Certifying Board for Medical Assistants has been administering the CCMA exam since 1990. CCMA is one of three Boards that is recognized by the Medical Board of California. The medical assisting profession is highly diversified, and the work is challenging and personally rewarding. Employment opportunities are excellent in the expanding health care field.
Program Admission
Allied Health 010 course – application and orientation

Program Outcome
1. The graduates of the program will be prepared for entry-level employment as a professional and competent Medical Assistant to meet the needs of the local health care community.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Required Prerequisites
All prerequisite courses must be completed prior to admission into the program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALH A010</td>
<td>Health Occupations</td>
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<td>Medical Terminology</td>
<td>3</td>
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<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
<td>4</td>
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<td></td>
<td>Total Units</td>
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Course   | Title                        | Units |
<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>ALH A115</td>
<td>Patient Care</td>
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<td></td>
<td>Units</td>
<td>13.5</td>
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</table>

Spring
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ALH A120</td>
<td>Human Diseases</td>
<td>2</td>
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</table>

Medical Assisting Suggested Electives

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<th>Units</th>
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</thead>
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</tr>
<tr>
<td>PHIL A120</td>
<td>Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

Neurodiagnostic Technology

Neurodiagnostic Technology (NDT) is an allied health specialty involved with testing brain, spinal cord, and nerve function. Neurodiagnostic Technologists work with patients who have neurological disorders such as seizures, epilepsy, stroke, coma, multiple sclerosis, and brain tumors. NDT’s are employed in hospitals, clinics, physicians’ offices, university medical centers, and research centers.

The program provides theory and clinical experience in Electroencephalography (EEG) and in Evoked Potential (BAEP, PVEP, SSEP) testing, as well as preparation for the national board registry exam in EEG. Students gain entry level skills with successful completion of courses involving knowledge of the nervous system, brain rhythms, hands-on lab practice with specialized instrumentation, and clinical rotations.

Introductory courses to other neurological testing procedures include: Nerve Conduction Studies (NCS), Long-term Monitoring (LTM) for Epilepsy, Intraoperative Neurophysiological Monitoring (IONM), and Transcranial Doppler (TCD) Studies. The program serves as a solid foundation for many graduates who choose to pursue credentials in these specialty areas.

OCC Neurodiagnostic Technology graduates are highly sought after by employers.

Department Contact Information
Tabitha Liang, BS, R.EEGT, CNIM, RPSGT
Program Director
tliang3@occ.cccd.edu

Neurodiagnostic Technology Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/neurodiagnostic_technology/Pages/default.aspx)

• Neurodiagnostic Technology Upgrade, Certificate of Specialization (p. 90)
• Neurodiagnostic Technology, Associate in Science Degree (p. 91)

Neurodiagnostic Technology Upgrade, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_NDTU

The courses required in this professional upgrade certificate are intended for the advanced neurodiagnostic student or for technologists working...
Neurodiagnostic Technologists are employed in hospitals, clinics, physicians’ offices, university medical centers and research centers. Orange Coast College’s Neurodiagnostic Technologist program provides theory and clinical experience in Electroencephalography (EEG) and in Evoked Potential (BAEP, PVER, SSEP) testing as well as an introduction to other neurological testing procedures. Some of the testing procedures include Nerve Conduction Studies (NCS), Long-term Monitoring (LTM) for Epilepsy, Intraoperative Neurophysiological Monitoring (IONM), Transcranial Doppler (TCD) Studies, and more.

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) has accredited this NDT Program. The program meets the eligibility requirements to take the EEG and EP exams of the American Board of Registration in Electroencephalographic and Evoked Potential Technologists (ABRET).

The program can be completed in approximately 22 months (4 semesters and 1 summer). Completion of the program earns an Associate in Science Degree in Neurodiagnostic Technology. A new group of students begins this program in the fall semester of even years.

Program Admission
1. Allied Health 010 course – application and orientation
2. The student must complete Associate in Science degree General Education requirements and the program prerequisites prior to acceptance into the program.

Program Outcome
1. The goal of the program is to meet the needs of the local health care community by preparing students for entry level employment as a professional and competent Neurodiagnostic technologist.

Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/careers-healthcare/neurodiagnostic-technology/neurodiagnostic-technology-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general

Neurodiagnostic Technology, Associate in Science Degree
Financial Aid Eligible
Banner Code: 1 AS NDT
Control Number: 08657

Neurodiagnostic Technology is an allied health specialty for diagnosing patients with neurological disorders such as epilepsy, stroke, coma, multiple sclerosis, and many others. A competent Neurodiagnostic Technologist has knowledge of the nervous system and knows how to properly operate many types of sophisticated instruments.

in the field of electroneurodiagnostic technology. The required courses reflect the most recent industry changes, and many have listed required prerequisites. Certificates will be awarded through the Consumer and Health Sciences division office.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course | Title | Units
--- | --- | ---
NDT A296 | Introduction to Intraoperative Monitoring | 2
NDT A297 | Microcomputer Applications in Neurodiagnostics | 2
PSG A100 | Polysomnography Basics | 1
Select one of the following: | | 1-3
NDT A284 | Introduction to Transcranial Doppler | 
NDT A285 | Introduction to Nerve Conduction Velocity | 
PSYC A160 | Statistics for the Behavioral Sciences | 
Total Units | | 6-8

Orange Coast College 2020-2021 Catalog
**Program Prerequisites**

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<tr>
<th>Course</th>
<th>Title</th>
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<td>ALH A010</td>
<td>Health Occupations</td>
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<tr>
<td>ALH A111</td>
<td>Medical Terminology</td>
<td>3</td>
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<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
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**Year 1**

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<td>NDT A110</td>
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**Intersession**

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<td>NDT A190</td>
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<td>NDT A191</td>
<td>EEG Record Review-Normal</td>
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<td>NDT A286</td>
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<td>NDT A288</td>
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**Spring**

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<td>NDT A297</td>
<td>Microcomputer Applications in Neurodiagnostics</td>
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<td>NDT A298</td>
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<td>PSG A100</td>
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**Program Option Prerequisites**

**Neurodiagnostic Technology Associate in Science Degree**

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<tr>
<th>Course</th>
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<td>PSG A160</td>
<td>Polysomnography Testing</td>
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<td>PSG A165</td>
<td>Polysomnography Clinical 1</td>
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<td>PSG A170</td>
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<td>RSPC A185</td>
<td>Respiratory Anatomy and Physiology</td>
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<td>RSPC A265</td>
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<td><strong>13.5</strong></td>
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**Intersession**

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>PSG A175</td>
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<td>1</td>
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<td><strong>Units</strong></td>
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**Nutrition and Dietetics**

The Nutrition and Dietetics Technician Program is part of the School of Allied Health in the Consumer and Health Sciences Division at Orange Coast College. Students completing this program are prepared to join the dietetics team and participate in the nutrition care process for clients and patients that may be in the following settings: acute care, long term care, rehabilitation hospitals, and community agencies that provide education in nutrition.

Completion of the required courses, along with the Associate Degree program at Orange Coast College qualifies the student to sit for the Commission of Dietetics Registration national exam for the Nutrition and Dietetics Technician, Registered (NDTR) level.

**Department Contact Information**

Beth Blake, MPH, RDN
Associate Professor, Nutrition and Dietetics
Program Director
eblake@occ.cccd.edu (eblake@occ.cccd.edu)
Verna Grace, MS, RDN  
Instructor, Nutrition and Dietetics  
vgrace@occ.cccd.edu (vgrace@occ.cccd.edu)

Nutrition and Dietetics Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/dietetic%20technician/Pages/default.aspx)

• Dietary Service Supervisor/Certified Dietary Manager, Certificate of Achievement (p. 93)
• Nutrition and Dietetics Technician, Associate in Science Degree (p. 93)
• Nutrition and Dietetics, Associate in Science Degree for Transfer (AS-T) (p. 94)
• Nutrition and Fitness Education, Certificate of Achievement (p. 95)
• Nutrition Education, Associate in Science Degree (p. 96)
• Nutrition Education, Certificate of Achievement (p. 96)

Dietetic Service Supervisor/Certified Dietary Manager, Certificate of Achievement

Financial Aid Eligible  
Banner Code: 1_CN_FNDS  
Control Number: 04015

Dietary Service Supervisors/Certified Dietary Managers plan and supervise employees in Food and Nutrition services at a health care facility. Responsibilities include assisting the dietitian with patient care activities, coordinating work of food production personnel, and ensuring safe and nutritionally adequate food for patients and residents.

Program Outcomes

1. The program will prepare students for successful employment as entry-level Food and Nutrition managers to meet the needs of healthcare facilities and other employers.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>FN A170</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FSM A150</td>
<td>Principles of Quantity Food Preparation</td>
<td>4</td>
</tr>
<tr>
<td>FSM A151</td>
<td>Food Production Management</td>
<td>2</td>
</tr>
<tr>
<td>FSM A160</td>
<td>Sanitation and Safety</td>
<td>3</td>
</tr>
<tr>
<td>FSM A250</td>
<td>Menu Planning and Purchasing</td>
<td>3</td>
</tr>
<tr>
<td>FSM A260</td>
<td>Supervision and Training Techniques</td>
<td>3</td>
</tr>
<tr>
<td>NC A175</td>
<td>Health Care Field Experience</td>
<td>4</td>
</tr>
<tr>
<td>NC A180</td>
<td>Introduction to Medical Nutrition Therapy</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

Nutrition and Dietetics Technician, Associate in Science Degree

Financial Aid Eligible  
Banner Code: 1_AS_NADT  
Control Number: 08667

Students completing this program are prepared to join the nutrition and dietetics team in various nutritional aspects of health care. Graduates from this program are employed by acute care, long term care, and rehabilitation hospitals, as well as by community agencies that provide education in nutrition. Completion of the following courses, along with the Associate Degree program at Orange Coast College qualifies the student to sit for the Nutritional and Dietetics Technician, Registered (NDTR) exam. Students are highly encouraged to become a member of the Academy of Nutrition and Dietetics.

Upon successful completion of these courses (with grade of ‘C’ or better), the program requirements, and the General Education Requirements, students will receive a Verification Statement from the program director confirming that all requirements of the program have been met. Students will then be eligible to take the National Registration Exam administered by the Commission on Dietetic Registration.

This program has been granted full accreditation by:

The Accreditation Council for Education in Nutrition and Dietetics, of the Academy of Nutrition and Dietetics  
120 S. Riverside Plaza, Suite 2190  
Chicago, IL 60606-6995  
800-877-1600 x5400  
www.eatrightpro.org/ACEND (https://www.eatrightpro.org/acend/)

It is recommended that the student complete at least 15-17 units of general education requirements prior to entering the program.
Program Outcomes
1. Demonstrate competent entry-level skills of a Nutrition and Dietetics Technician, Registered (NDTR) in order to meet the employment needs of the community.
2. Communicate and work effectively with an interdisciplinary workforce and clientele of the community.
3. Participate in personal growth and lifelong learning activities.

Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/careers-healthcare/nutrition-dietetics/nutrition-dietetics-technician-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Required Prerequisites

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<tr>
<td>ALH A111</td>
<td>Medical Terminology</td>
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<tr>
<td>NC/FN A100</td>
<td>Careers-Dietetics/Fdscl</td>
<td>1</td>
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<td>FSM A150</td>
<td>Principles of Quantity Food Preparation</td>
<td>4</td>
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<td>FSM A160</td>
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<td>3</td>
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<td>Supervision and Training Techniques</td>
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<td>BIOL A221</td>
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<tr>
<td>FSM A151</td>
<td>Food Production Management</td>
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<td>NC A175</td>
<td>Health Care Field Experience</td>
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Year 2

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1 These courses meet the California Department of Public Health requirement for Dietetic Service Supervisor.

Nutrition and Dietetics, Associate in Science Degree for Transfer (AS-T)

<table>
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<td>Minimum Program Major Units</td>
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Dietetic Technician Suggested Electives

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<th>Course</th>
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<th>Units</th>
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<tr>
<td>ALH A120</td>
<td>Human Diseases</td>
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<tr>
<td>ALH A130</td>
<td>Applied Pharmacology</td>
<td>3</td>
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<tr>
<td>CMST A100</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>FN A195</td>
<td>Food Science</td>
<td>4</td>
</tr>
<tr>
<td>PSYC A100</td>
<td>Introduction to Psychology</td>
<td>3</td>
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Financial Aid Eligible
Banner Code: 1_AST_NUTR
Control Number: 35524

Students graduating with an Associate in Science in Nutrition and Dietetics for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Nutrition and Dietetics AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

This degree provides students with the foundational knowledge and common core of lower division courses required to transfer and pursue a baccalaureate degree in nutrition/dietetics to further prepare for careers as a registered dietitian nutritionist (RDN). There are many career opportunities for dietitians. They work in a variety of settings
such as hospitals, long-term care facilities, school districts, community organizations, and corporations.

**Program Outcomes**
1. Evaluate scientific concepts of nutrition related to the functioning of nutrients in the basic life process.
2. Demonstrate basic food science principles and food preparation techniques.
3. Apply chemistry and biology concepts to determine the effects of nutrients on the human body.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

**Associate Degree for Transfer Requirements**
The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

**Course Requirements**

**Core Courses**
- BIOL A210 General Microbiology 5
- CHEM A180 General Chemistry A 5
- FN A170 Nutrition 3
- PSYC A100 Introduction to Psychology 3

**List A**
Select two of the following:
- 1. BIOL A225 Human Physiology 3
- 2. CHEM A220 Organic Chemistry A 5
- 3. CHEM A220L Organic Chemistry A Lab 3
- 4. MATH A160 Introduction to Statistics 5

**List B**
- FN A180 Principles of Foods 3
- Program Major Units 52-54
- CSU or IGETC for CSU 37-39
- Transferable electives as needed to satisfy unit requirement Varies

**Total Units** 60

In order to be better prepared for transfer, OCC Nutrition and Dietetics faculty strongly recommend that all students completing this degree use elective credits to complete all courses in List A. Note - CHEM A220 Organic Chemistry A and CHEM A220L Organic Chemistry A Lab are considered one course.

**Nutrition and Fitness Education, Certificate of Achievement**

Financial Aid Eligible
Banner Code: 1_CT_NCFE
Control Number: 18842

Students who graduate from this program are prepared for entry-level positions in the health and fitness industry, encompassing weight control clinics, sports medicine clinics, health clubs and gyms, corporate fitness and wellness centers, fitness and nutrition programs in schools, and community agencies concerned with health, fitness and nutrition education. Students in this program will be able to advise clients on normal nutrition, weight control and improved performance by working with other nutrition professionals. The fitness industry is experiencing rapid growth and has a growing demand for trained fitness and nutrition educators.

**Program Outcome**
1. Graduates will be competent entry-level Nutrition and Fitness professionals meeting the employment needs of the community.

**Certificate Requirements**
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Course** | **Title** | **Units**
--- | --- | ---
**Year 1**
**Semester 1**
- BIOL A221 Anatomy-Physiology 4
- FN/NC A100 Careers in Dietetics and Food Science 1
- FN A136 Nutrition, Fitness and Performance 3
Nutrition Education, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_NCNE
Control Number: 08668

Students who graduate from this program are prepared for employment in nutrition programs and industries in Southern California, encompassing weight control clinics, health and fitness organizations, community nutrition agencies, and manufacturers of nutrition related products.

Complete the Nutrition Education Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome
1. Graduates will be competent entry-level Nutrition Education Assistants meeting the employment needs of the community.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/careers-healthcare/nutrition-dietetics/nutrition-education-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

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<thead>
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<table>
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<td>BIOL A221 Citates Physiology</td>
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<tr>
<td>FN/NC A100 Careers in Dietetics and Food Science</td>
</tr>
<tr>
<td>FN A144 Life Cycle Nutrition</td>
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<td>FSM A160 Sanitation and Safety</td>
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<td>FN A170 Nutrition</td>
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Suggested Electives

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<tr>
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<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>FN A136</td>
<td>Nutrition, Fitness and Performance</td>
<td>3</td>
</tr>
<tr>
<td>HMDV A180</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Requirement</th>
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<tbody>
<tr>
<td>Minimum Program Major Units</td>
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<tr>
<td>AS General Education Option 1, 2, or 3</td>
</tr>
<tr>
<td>Transferable electives to satisfy unit requirement</td>
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<tr>
<td>Total Degree Units</td>
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</table>

Nutrition Education, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_NCNE
Control Number: 22428

Students who graduate from this program are prepared for employment in one of the fastest growing and most prolific industries in Southern California, encompassing weight control clinics, health and exercise spas and gymnasiums, community agencies concerned with nutrition.
education, and manufacturers and distributors of nutrition-related products.

**Program Outcome**
1. Graduates will be competent entry-level Nutrition Education Assistants meeting the employment needs of the community.

**Certificate Requirements**
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z ([https://catalog.cccd.edu/orange-coast/programs-study/](https://catalog.cccd.edu/orange-coast/programs-study/)) section of this catalog. Check with a counselor to determine the requirements for completion.

**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z ([https://catalog.cccd.edu/orange-coast/programs-study/](https://catalog.cccd.edu/orange-coast/programs-study/)) section of this catalog. Check with a counselor to determine the requirements for completion.

**Suggested Electives**
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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>FN A136</td>
<td>Nutrition, Fitness and Performance</td>
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<tr>
<td>HMDV A180</td>
<td>Child Growth and Development</td>
<td>3</td>
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</table>

**Polysomnographic Technology**
It is estimated that about 23.5 million U.S. adults who have sleep apnea remain undiagnosed according to the Academy of Sleep Medicine. Identifying and treating sleep disorders using technology is a rapidly growing area in the health care field. As a polysomnographic technologist, you will work with physicians to identify, diagnose and provide treatment for sleep disorders such as sleep apnea and insomnia. The OCC PSG associate degree program prepares you to enter the field, and can also provide cross-training options for neurodiagnostic and respiratory care technologists. Experienced, skilled sleep technologists earn a median annual wage of $67,600. If you see yourself helping others improve their quality of life through a good night’s sleep, read on to learn what training OCC has to offer in this important, growing health care career.

**Department Contact Information**
Daniel D. Lane, BS, RPSGT, CCSH
dgoyalane@occ.cccd.edu (%E2%80%8Bdgoyalane@occ.cccd.edu)

**Polysomnographic Technology Department Website** ([http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/polysomnographic_technology/Pages/Program-Information.aspx](http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/polysomnographic_technology/Pages/Program-Information.aspx))

- Polysonomnographic Technology, Associate in Science Degree (p. 97)

**Polysomnographic Technology, Associate in Science Degree**

Financial Aid Eligible
Banner Code: 1_AS_PSG
Control Number: 08658

Polysomnographic (PSG) Technology is an allied health specialty for the diagnosis and treatment of disorders of sleep and daytime alertness. The range of sleep disorders is varied but includes common disorders such as narcolepsy, sleep apnea, insomnias and many others. PSG technologists operate a variety of sophisticated electronic monitoring devices which record brain activity (EEG), muscle and eye movement, respiration, blood oxygen and other physiological events. Technologists are also involved in evaluation of various treatment methods.

PSG technologists are employed in Sleep Disorders Centers which can be located in medical centers, hospitals or clinic/office settings. The PSG program offers instruction which includes lecture, laboratory experience on campus, clinical experience at accredited sleep centers and physician lectures.

As a CAAHEP-accredited PSG Program, this course of instruction meets the eligibility requirements to take the PSG exam of the Board of Registered Polysomnographic Technologists (BRPT) and The Medical Board of California Licensure as a “Registered Polysomnographic Technologist”.

**Course**  | **Title**                                | **Units** |
<table>
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<tr>
<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
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<tr>
<td>FN/NC A100</td>
<td>Careers in Dietetics and Food Science</td>
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<td>FN A144</td>
<td>Life Cycle Nutrition</td>
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<tr>
<td>FSM A160</td>
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<td>FN A125</td>
<td>Vegetarian Nutrition</td>
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<td>FN A180</td>
<td>Principles of Foods</td>
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<td>NC A180</td>
<td>Introduction to Medical Nutrition Therapy</td>
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<td>FN A171</td>
<td>Applied Nutrition</td>
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<td>FN A185</td>
<td>Cultural Foods</td>
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<tr>
<td>NC A280</td>
<td>Intermediate Nutrition Care</td>
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<td>NC A281</td>
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Program Prerequisites

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<td>ALH A111</td>
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<tr>
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Graduates from OCC’s Neurodiagnostic Technology or Respiratory Care programs may complete the PSG degree program with one additional year of study, as many courses from these programs are directly related to Polysomnography (see the Neurodiagnostic Technology and/or Respiratory Care sections of this catalog for more information). Students without these backgrounds can complete the AS degree in Polysomnographic Technology within two years. This program will accept new students to begin in the fall semester of odd years.

Program Admission

1. Allied Health 010 course – application and orientation
2. The student must complete Associate in Science degree General Education requirements and the program prerequisites prior to acceptance into the program.

Program Outcome

1. The goal of the program is to meet the needs of the local health care community by preparing students for entry level employment as a professional and competent Polysomnographic Technologist.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/careers-healthcare/polysomnographic-technology/polysomnographic-technology-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Program Prerequisites

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<td>NDT A110</td>
<td>Basic Electroencephalography</td>
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<td>RSPC A185</td>
<td>Respiratory Anatomy and Physiology</td>
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<td>PSG A160</td>
<td>Polysomnography Testing 2</td>
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<td>PSG A165</td>
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<td>PSG A260</td>
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Polysonomnographic Technology Suggested Electives

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<td>CMST A100</td>
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<td>PHIL A120</td>
<td>Ethics</td>
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<td>PHYS A110</td>
<td>Conceptual Physics</td>
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<tr>
<td>PSYC A255</td>
<td>Abnormal Psychology</td>
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</tr>
<tr>
<td>PSYC A160</td>
<td>Statistics for the Behavioral Sciences</td>
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Public Health

The Public Health program introduces students to the fields of public health and health science. “Public health is the science of protecting and improving the health of people and their communities. This work is achieved by promoting healthy lifestyles, researching disease and
injury prevention, and detecting, preventing, and responding to infectious diseases” (CDC, 2020).

Public health is about prevention. Through the investigation of health problems, public health professionals figure out the what, where, how, who, and why of illness and injury. They then develop and deliver interventions to reduce the incidence of disease and promote healthy lifestyles.

Examples of public health professions include health educator, epidemiologist, public health nurse, environmental scientist, emergency management, data analyst, biostatistician, health communications – any job that promotes health within a community. There are three awards available: Associate in Science for Transfer, Public Health Science; Associate in Arts, Public Health, General Studies; and, Certificate of Achievement, Public Health.

Department Contact Information
Diane Brown, MPH, MPW
Department Chair
dbrown226@occ.cccd.edu
Anna Hanlon, MS, MPH, EdD
ahanlon@occ.cccd.edu

Public Health Department Website (http://www.orangecoastcollege.edu/academics/divisions/kinesiology-athletics/degrees-certificates/Pages/Public-Health.aspx)

- Public Health - General Studies, Associate in Arts Degree (p. 99)
- Public Health Science, Associate in Science Degree for Transfer (AS-T) (p. 100)
- Public Health, Certificate of Achievement (p. 101)

Public Health - General Studies, Associate in Arts Degree
Financial Aid Eligible
Banner Code: 1_AA_PUBG
Control Number: 08673

This program will introduce students to health, including personal health and public health. Students can choose from a variety of courses that will increase their knowledge and understanding of the biopsychosocial model of health to be able to make personal choices that reduce their risk of disease. Students will also understand health from a public health view and be able to analyze global health issue and the impact of the environment, socio-economics, politics, and culture on health and health systems. Though not a transfer degree, this option will prepare students for transfer to CSU Fullerton. Students should see a counselor for questions related to the requirements of specific CSUs.

Program Outcomes
1. Students will be able to analyze disparity in health outcomes across populations using evidence-based methods and identify effective intervention strategies.

2. Students will be able to advocate for policy and structural change as supported by their ability to identify the impact of environment, socioeconomics, politics, and culture on health and health systems.

3. Student will prepare for transfer to local CSUs, ie., CSU Fullerton.

Associate in Arts Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite. Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/careers-healthcare/public-health/public-health-general-studies-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC) (p. 17) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<td>PUBH A200</td>
<td>Introduction to Public Health</td>
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<tr>
<td>CMST A100</td>
<td>Interpersonal Communication</td>
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<td>or CMST A110</td>
<td>Public Speaking</td>
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<td>Subtotal</td>
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Social Science

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<tr>
<td>PSYC A100</td>
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<tr>
<td>or PSYC A100H</td>
<td>Introduction to Psychology Honors</td>
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</tr>
<tr>
<td>or SOC A100</td>
<td>Introduction to Sociology</td>
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</tr>
<tr>
<td>or SOC A100H</td>
<td>Introduction to Sociology Honors</td>
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Course | Title | Units
---|---|---
**Biolo**y | 8-9
BIOL A100 | Introduction to Biology | 3
or BIOL A100H | Introduction to Biology Honors | 3
BIOL A220 | Human Anatomy | 3
or BIOL A221 | Anatomy-Physiology | 3
or BIOL A225 | Human Physiology | 3
**Select a minimum of 6 units from the following:** | 6
PUBH A202 | Drugs, Health, and Society | 3
PUBH A203 | Health and Social Justice | 3
PUBH A230 | Assessing and Analyzing Health Information | 3
PUBH A160 | Peer Health Education Level 1 | 2
PUBH A210 | Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs | 3
or INHL A210 | Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs | 3
PUBH A260 | Peer Health Education Level 2 | 2
INHL A225 | Introduction to Complementary and Alternative Medicine | 3
GEOG A190 | Digital Mapping: Introduction to GIS | 3
ETHS A150 | Ethnic Groups in the U.S.: Their Histories | 3
PUBH A220 | Techniques and Topics in Health Education | 3
or INHL A220 | Techniques and Topics in Health Education | 3

**Program Major Units** | 26-28
**AA General Education Option 1, 2, or 3** | Varies
**Transferable electives as needed to satisfy unit requirement** | Varies
**Total Units** | 60

### Public Health Science, Associate in Science Degree for Transfer (AS-T)

**Financial Aid Eligible**
Banner Code: 1_AST_HLTH
Control Number: 35503

Students graduating with an Associate in Science in Public Health Science for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Public Health Science AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate in Science in Public Health Science for Transfer focuses on an understanding of the health of populations. This degree is designed to prepare students in the study of public health science and provide comprehensive preparation for upper-division work. Students choosing this degree program will study a range of topics related to human health and disease including: core functions and disciplines of public health; human anatomy and physiology; diseases and their causes, including risk factor; distributions of diseases; primary prevention strategies; and behavior-change theory and application. Students will be gain an understanding of the biopsychosocial basis for health and healthy populations. Further they will be able to understand and assess the burden of disease on the health of populations, including the impact of environmental exposures; use of data to support evidence based practices; develop and deliver health programs and interventions that are based on behavior frameworks; and evaluate health programs and initiatives for effectiveness. Public Health Science bridges the gap between scientific discoveries and the application of this knowledge to improve the quality of life.

### Program Outcomes
1. Students will be able to assess the burden of disease on the health of populations, including the impact of environmental exposures and use data to support evidence based practices.
2. Students will be able to develop and deliver health programs and interventions that are based on behavior frameworks, and evaluate health programs and initiatives for effectiveness.
3. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

### Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

#### Course | Title | Units
---|---|---
**Core Courses** |  | 
PUBH A100 | Personal Health | 3
PUBH A200 | Introduction to Public Health | 3
MATH A160 | Introduction to Statistics | 4
or PSYC A160 | Statistics for the Behavioral Sciences | 4
BIOL A100/A100H | Introduction to Biology | 4
CHEM A180 | General Chemistry A | 5
PSYC A100/A100H | Introduction to Psychology | 3
BIOL A220 | Human Anatomy | 5
BIOL A225 | Human Physiology | 5

**List A**
Select one of the following: | 3
---|---
ECON A170/ A170H | Microeconomics | 3
ECON A175/ A175H | Macroeconomics | 3
FN A170 | Nutrition | 3
PSYC A165 | Principles of Human Sexuality | 1
Public Health, Certificate of Achievement

This program will introduce students to health science, including personal health and public health. Students can choose from a variety of courses that will increase their knowledge and understanding of the biopsychosocial model of health, the determinants of health, and how to work towards reducing health disparities across communities. Students will be able to evaluate the burden of disease for a population and analyze global health issues for a social justice perspective. The impact of the environment, socio-economics, politics, and culture on health and health systems are also explored.

Program Outcomes
1. Students will be able to analyze disparity in health outcomes across populations using evidence-based methods and identify effective intervention strategies.
2. Students will be able to analyze global health issues and identify the impact of environment, socioeconomics, politics, and culture on health and health systems.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<td>PUBH A203</td>
<td>Health and Social Justice</td>
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<td>SOC A100/A100H</td>
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Program Major Units 35
CSU or IGETC for CSU 37-39
Transferable electives as needed to satisfy unit requirement Varies
Total Units 60

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<td>PUBH A200</td>
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Restricted Electives 9-10
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<td>PUBH A230</td>
<td>Assessing and Analyzing Health Information</td>
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<td>Introduction to Complementary and Alternative Medicine</td>
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<td>ETHS A150</td>
<td>Ethnic Groups in the U.S.: Their Histories</td>
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<td>GEOL A190</td>
<td>Digital Mapping: Introduction to GIS</td>
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<td>Introduction to Biology</td>
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Social Science 3
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<td>SOC A100</td>
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<td>Introduction to Sociology Honors</td>
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Total Units 18-19

Radiologic Technology
The Radiologic Technology program is a full-time (21-month including one summer session and two intersessions) program of study. A Radiologic Technologist acquires images of human anatomy for diagnostic use by a Radiologist or other medical specialist. Graduates of the program are eligible for certification by examination through the American Registry of Radiologist Technologists and to apply for licensing by the Department of Public Health Services in Sacramento. Graduates are also able to enroll in post-graduate courses leading to certification by examination in Computed Tomography and Mammography.

Department Contact Information
Loren Sachs
lsachs@occ.cccd.edu
Radiologic Technology, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_RADT
Control Number: 04008

The Radiologic Technologist captures images of human anatomy utilizing digital, x-ray film, or video for diagnostic use by a radiologist or other medical specialist. Graduates of the program are eligible for examination by the American Registry of Radiologist Technologists. Successful applicants have the right to use the title "Registered Radiologic Technologist" (RT)(R)(ARRT). In order to practice in California, the R.T. must also apply for licensure by the Department of Health Services in Sacramento. Completion of the Associate in Science degree a program qualifies the student for eligibility for the state C.R.T. Examination. A bachelor degree program has been articulated with CSU Northridge. The Orange Coast College Radiologic Technology program is accredited by:

The Joint Review Committee on Education in Radiologic Technology
20 N. Wacker Drive, Suite 900
Chicago, IL 60606-2901
Tel: (312) 704-5300
Fax: (312) 704-5304

And approved by the California Department of Public Health and is affiliated with numerous hospitals in Orange County. Classrooms are well equipped and include on-campus energized x-ray laboratories.

Program application process is accomplished by taking program prerequisite, Allied Health A010. This short-term course is mandatory for all prospective program applicants. The Radiologic Technology program starts only in the fall semester of every school year.

The Radiologic Technology program is a full-time (two years including one summer session and two intersessions) program. Successful program completion requires the following:

1. completion of all required radiologic technology courses as outlined in catalog,
2. completion of approximately 1850 clinical hours, and
3. completion of all requirements for an Associate in Science degree as required by Orange Coast College.

These specific program completion requirements must be satisfied within the two-year time frame of the Radiologic Technology program. Eligibility for the post program state and registry examinations is dependent upon meeting these requirements.

This program requires the student to participate in clinical experience concurrent with classroom courses. Clinical responsibilities will be arranged by the Radiologic Technology faculty and will include evening and/or weekend assignments. The student receives no salary for this clinical experience but will receive course credit toward program completion. Clinical sites will be within a 30 mile radius of the school and transportation is the responsibility of the student and may include parking fees.

Radiologic Technology is a rapidly expanding allied health profession.

Program Admission
1. Allied Health A010 course - application and orientation.
2. The student must complete the general education requirements for an Associate in Science Degree requirements and the program prerequisites prior to acceptance to the program.

Program Outcomes
1. Graduate students who are clinically competent and ready to begin a successful career in the Radiologic Sciences.
2. Students will be able to demonstrate professional and ethical behaviors.
3. Students will exhibit the communication skills necessary to effectively perform the duties of a Radiographer in a variety of health care environments.
4. Students will demonstrate independent critical thinking skills to solve clinical practice related problems to optimize diagnostic outcomes.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/careers-healthcare/radiologic-technology/radiologic-technology-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.
### Program Prerequisites

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ALH A010</td>
<td>Health Occupations</td>
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<td>ALH A111</td>
<td>Medical Terminology</td>
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<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
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<td>RADT A100</td>
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| Year 1 | | |
|------ | | 
| **Fall** | | 
| ALH A115 | Patient Care | 2.5 |
| RADT A105 | Radiation and Imaging Safety | 1 |
| RADT A165 | Beginning Radiologic Practice | 1.5 |
| RADT A170 | Radiographic Positioning and Critique | 3 |
| RADT A171 | Clinical Lab 1 | 2 |
| RADT A180 | Radiographic Imaging | 3 |
| **Units** | | **13** |
| **Intersession** | | 
| RADT A172 | Clinical Lab 2 | 2 |
| **Units** | | **2** |

| **Spring** | | 
| ALH A120 | Human Diseases | 2 |
| RADT A175 | Radiographic Positioning and Critique 2 | 3 |
| RADT A176 | Clinical Lab 3 | 7 |
| RADT A185 | Radiographic Pathology | 1 |
| **Units** | | **13** |

| **Summer** | | 
| RADT A177 | Clinical Lab 4 | 4.5 |
| **Units** | | **4.5** |

### Year 2

| **Fall** | | 
| RADT A265 | Principles of Digital Imaging and Computer Applications | 2 |
| RADT A270 | Radiographic Positioning and Critique 3 | 2.5 |
| RADT A271 | Clinical Lab 5 | 9 |
| **Units** | | **13.5** |

| **Intersession** | | 
| RADT A276 | Clinical Lab 6 | 2 |
| **Units** | | **2** |

| **Spring** | | 
| RADT A216 | Advanced Radiologic Patient Care | 2 |
| RADT A275 | Radiographic Positioning and Critique 4 | 3 |
| RADT A277 | Clinical Lab 7 | 7 |
| RADT A285 | ARRT Board Preparation | 1 |
| RADT A290 | Applied Physics & Fluoroscopy | 2.5 |
| **Units** | | **15.5** |
| **Total Units** | | **63.5** |

### Requirement

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### Radiologic Technology Suggested Elective

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<td>PHIL A120</td>
<td>Ethics</td>
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### Respiratory Care

Respiratory Care is an allied health specialty dealing with the diagnosis, treatment, and management of patients with acute and chronic diseases affecting the pulmonary system. Respiratory Therapists work in all areas within the hospital, especially within the critical care areas with patients who are in a life-threatening phase of their illness. Their responsibilities include administering medications and therapy, providing life support, managing patients on life support ventilator systems, performing diagnostic tests, and assisting chronic patients with rehabilitation and home care. Specialties within the profession may include adult critical care, neonatal and pediatric intensive care, pulmonary function testing, home care and rehabilitation, management, and education.

### Department Contact Information

Alison Riggio, Program Director, ariggio@occ.cccd.edu

Christina Montano, Director of Clinical Education, cmontano@occ.cccd.edu

Respiratory Care Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/respiratory_care/Pages/default.aspx)

- Respiratory Care, Associate in Science Degree (p. 103)

### Respiratory Care, Associate in Science Degree

Financial Aid Eligible

Banner Code: 1_AS_RSPC

Control Number: 04007

Respiratory Care is an allied health specialty dealing with the diagnosis, treatment, and management of patients with acute and chronic diseases affecting the pulmonary system. Respiratory Care Practitioners/Respiratory Therapists work in all areas within the hospital, especially within the critical care areas with patients who are in a life-threatening phase of their illness. Additionally, some Respiratory Care Practitioners/Respiratory Therapists work with home care agencies to treat patients in their homes. Duties include analysis of pulmonary function and arterial blood gases, life support ventilation, CPR, assessment of pulmonary status, airway care, plus other related duties. Specialties in Respiratory Care include adult critical care, neonatal and pediatric critical care, pulmonary function testing, home care and rehabilitation, management, and education.

The Respiratory Care program at Orange Coast College is a two-year Associate in Science Degree program beginning each fall semester. Courses within the program include lectures, skills applications of procedures and techniques in a laboratory setting on campus, and approximately 1000 hours of clinical practice. Clinical practice is within area hospitals performing the latest procedures in medicine. There is also a series including discussions with physicians.

The Respiratory Care program at Orange Coast College is a fully accredited entry-level practitioner program, accredited by the Commission on Accreditation for Respiratory Care (CoARC).

Program graduates are eligible candidates for the Certified Respiratory Therapist (CRT) and Registered Respiratory Therapist (RRT) credential.
from the National Board for Respiratory Care (NBRC). Licensure in the state of California as a Respiratory Care Practitioner (RCP) requires the RRT credential and satisfying all other requirements for licensure set forth by the Respiratory Care Board of California. The employment outlook for Respiratory Care Practitioners/ Respiratory Therapists is good throughout the United States.

National Credential: CRT and RRT issued by the National Board for Respiratory Care. State License: Respiratory Care Practitioner issued by the Respiratory Care Board of California.

**Program Admission**
1. Allied Health A010 course – application and orientation.
2. The student must complete the general education requirements for Mathematics and English composition for the Associate in Science Degree and the program prerequisites prior to acceptance to the program.

**Program Outcomes**
1. The outcome of the program is to prepare students as competent Respiratory Care Practitioners for employment in the field as respiratory care professionals providing cognitive, psychomotor, and affective qualities to meet community needs.

Employment possibilities include:
- Registered Respiratory Therapist
- Respiratory Therapy Specialist
- Respiratory Care Practitioner

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC.
   A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

   See the General Education Patterns section of this catalog for more information.

---

**Program Prerequisites**

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<thead>
<tr>
<th>Course</th>
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<th>Units</th>
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<td>ALH A010</td>
<td>Health Occupations</td>
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<tr>
<td>ALH A111</td>
<td>Medical Terminology</td>
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<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
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<td>CHEM A110</td>
<td>Introduction to Chemistry</td>
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<td>MATH A030</td>
<td>Intermediate Algebra (or higher)</td>
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<tr>
<td>ALH A120</td>
<td>Human Diseases</td>
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<tr>
<td>BIOL A114</td>
<td>Basic Microbiology</td>
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<tr>
<td>RSPC A185</td>
<td>Respiratory Anatomy and Physiology</td>
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<td>RSPC A190</td>
<td>Basic Respiratory Care Equipment</td>
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<td>RSPC A195</td>
<td>Respiratory Pharmacology</td>
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<td>RSPC A191</td>
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<td>RSPC A260</td>
<td>Arterial Blood Gases, Theory and Practice</td>
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<td>RSPC A275</td>
<td>Respiratory Care Procedures</td>
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<td>PSG A100</td>
<td>Polysomnography Basics</td>
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<td>RSPC A192</td>
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<tr>
<td>RSPC A265</td>
<td>Pulmonary Pathology</td>
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<td>RSPC A270</td>
<td>Ventilators and Respiratory Management</td>
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<td>RSPC A276</td>
<td>Clinical Lab 3</td>
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<td>RSPC A279</td>
<td>Physician Series 1</td>
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<td>RSPC A278</td>
<td>Pulmonary Case Assessment</td>
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<td>RSPC A280</td>
<td>Advanced Monitoring, Procedures and Therapies in Critical Care</td>
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<td>RSPC A285</td>
<td>Pulmonary Function Testing</td>
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<td>RSPC A286</td>
<td>Clinical Lab 4</td>
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<td>RSPC A287</td>
<td>Clinical Internship</td>
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<td>RSPC A290</td>
<td>Neonatal Intensive Care</td>
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<td>RSPC A296</td>
<td>Respiratory Care Board Review</td>
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**Requirement**

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</table>

**Polysomnography Cross-Training Option**
This option is recommended for Respiratory Care graduates who would like to cross-train as Polysomnographic Technologists. Upon completing the cross-training courses, students will earn an additional AS in Polysomnography.

**Program Option Prerequisite**

**Requirement** | **Units**  
--- | ---  
Respiratory Care Associate in Science Degree | 83  

**Course** | **Title** | **Units**  
--- | --- | ---  
**Year 1** |  |  
**Fall** |  |  
NDT A110 | Basic Electroencephalography | 4  
PSG A150 | Introduction to Polysomnography | 3  
PSG A160 | Polysomnography Testing | 2  
PSG A165 | Polysomnography Clinical 1 | 1  
PSG A170 | Polysomnographic Practice | 0.5  
PSG A175 | Polysomnography Clinical 2 | 1  
--- | --- | ---  
**Spring** |  |  
HMDV A180 | Child Growth and Development | 3  
NDT A115 | Advanced Electroencephalography | 4  
NDT A190 | Introduction to Neuro Anatomy and Physiology | 3  
PSG A250 | Polysomnography Record Review | 2  
PSG A260 | Advanced Polysomnography | 2  
PSG A265 | Polysomnography Clinical 3 | 2  
PSG A270 | Physician Lecture Series | 1  
PSG A285 | Polysomnography Internship | 2  
--- | --- | ---  
**Units** | **11.5**  
**Total Units** | **30.5**  

1. Required Clinical: course must be taken in sequence. Contact the department for additional information.

**Speech-Language Pathology Assistant**

The Speech-Language Pathology Assistant program will provide the community with professionally trained personnel to assist the speech pathologist in this specialized field and to provide services in multiple settings to a diverse population in the administration of therapeutic and screening services. Employment opportunities include jobs as speech-language pathology assistants in educational institutes, hospitals, private offices, and rehabilitation centers. State of California Department of Consumer Affairs, Speech-Language Pathology and Audiology Board approved for licensure.

**Program Admission**

1. Allied Health A010 course – application and orientation.
2. The student must complete the general education requirements for Mathematics and English composition for the Associate in Science Degree and the program prerequisites prior to acceptance to the program.

**Program Outcome**

1. Graduates of the program will be competent Speech-Language Pathology Assistants meeting the employment needs of the community and participating in professional growth activities.

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “Pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/careers-healthcare/speech-language-pathology-assistant/speech-language-pathology-assistant-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy
the general education requirement. See the General Education
Patterns section of this catalog for more information.

**Required Prerequisites**

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<th>Course</th>
<th>Title</th>
<th>Units</th>
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<td>Health Occupations</td>
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<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
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<td>Child Growth and Development ¹</td>
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<td>Medical Terminology</td>
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<tr>
<td>SLPA A100</td>
<td>Introduction to Speech-Language Pathology Assistant</td>
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<td>SLPA A115</td>
<td>Speech, Language, and Hearing Development</td>
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<td>EC A155</td>
<td>Principles &amp; Practices of Teaching Young Children</td>
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<td>SLPA A140</td>
<td>Introduction to Communication Disorders</td>
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<td>EC A165</td>
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<td>SLPA A180</td>
<td>Screening and Therapeutic Processes</td>
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¹ ANTH A190 Introduction to Linguistic Anthropology, BIOL A221 Anatomy-Physiology, and HMDV A180 Child Growth and Development in program double count towards General Education Breadth.

**Computers and Computing**

- Aviation Science (p. 106)
- Computer Information Systems (p. 107)
- Computer Science (p. 110)
- Information Technology (p. 113)
- Network Administration - Linux, Certificate of Specialization (p. 114)
- Network Administration - Windows, Certificate of Specialization (p. 114)
- Network Infrastructure, Certificate of Specialization (p. 115)
- Network Professional, Certificate of Specialization (p. 116)
- Network Security, Certificate of Specialization (p. 116)
- Network Services and Applications, Certificate of Specialization (p. 117)
- Network Technician, Certificate of Specialization (p. 117)
- Virtualization and Cloud Computing, Certificate of Specialization (p. 118)

**Aviation Science**

In order to attain licensing as a pilot, students are required to satisfy aeronautical experience requirements as outlined in applicable subparts of the Federal Aviation Regulations (FAR). The majority of this experience must be accumulated in actual aircraft. Flight training is necessary for students to meet the specific requirements of FAR 61.109 (Private Pilot), FAR 61.65 (Instrument), and FAR 61.129 (Commercial) licensing.

Flight time and instructor fees are billed separately from ground school courses. In all APT Flight Lab classes, fees are $125 per hour for primary training aircraft, $155 per hour for complex training aircraft, and flight instructor fees are $60 per hour in college-owned aircraft. Minimum cost to meet the requirements of FAR 61.109 in college-owned aircraft is approximately $5500. However, most students require training beyond the minimum hours required in FAR 61.109, which increases total cost. Aircraft and instructor fees are subject to change.

College-owned aircraft are currently being used for training under flight labs APT A120, APT A121, APT A122, APT A123, and APT A124. Total cost to meet the minimum requirements of FAR 61.65 is approximately $8000. Most students require training beyond the minimum hours required of FAR 61.65. This will increase the total cost. Fees are subject to change. The estimated cost to meet the minimum aeronautical experience requirements of FAR 61.129 is $21,000. Aircraft and instructor
fees are subject to change. At the completion of APT A120, (35 hours), APT A121, (74 hours), APT A122, (120 hours), APT A123 (variable hours), and APT A124 (variable hours) students should have acquired the 250 minimum hours of total flight time required for licensing as a commercial pilot. Total program cost is approximately $34,000.

FAA Certified Advanced Aviation Training Devices (AATD) may be used to accrue aeronautical experience requirements of FAR 61.109, FAR 61.65, and FAR 61.129. Costs for students to use college-owned AATD’s will be $60 per hour and flight instructor fees are $60 per hour. Prices for AATD's and instructor fees are subject to change. The amount of aeronautical experience the FAA will accept in AATD’s will be dependent on the airmen certificate sought. Refer to FAR 61.109, FAR 61.65, and FAR 61.129 for more information regarding the approved usage of AATD’s for aeronautical experience.

Flight training is conducted in accordance with an FAA-approved part 141 syllabus provided by the vendor. Veteran students using GI Bill Education Benefits are limited to a maximum amount of flight and ground training hours. Training expenses incurred beyond the maximum approved hours will be at the student’s expense. Refer to the program requirements as outlined in the course syllabus.

All flight lab students are required to obtain a second-class medical certificate in order to qualify for flight lab participation and program certification.

Additional costs include but are not limited to, second-class medical certificate, pilot supplies, program materials, airport badge, no show fees, and check-rides. These fees are not included in the total program cost and must be paid separately by the student. All APT courses are financial aid eligible and VA benefit eligible if the student is enrolled with Aviation Science as their declared program of study (major).

All students, including VA benefit eligible students, are responsible to complete scheduled flight times. Students that fail to “show” for a scheduled flight time assume all fees incurred with the “no show” designation and will be responsible for fees owed to the scheduled flight time provider. For additional information regarding Aviation Pilot Training courses, contact the instructor or Division Dean of Technology (714) 432-5194.

For additional information regarding Veterans Administration benefits contact the Veterans Services Office at (714) 432-0202 ext. 26376.

- Unmanned Aircraft Systems, Certificate of Specialization (p. 107)

**Unmanned Aircraft Systems, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CM_UMA
Control Number: 38209

The program curriculum allows students to explore the entirety of unmanned aircraft systems. Courses highlight specific characteristics of different aircraft, how they are built and fundamentals of control and propulsion systems. Students will explore how unmanned aircraft systems integrate into the larger aviation systems, including safety policies, regulations and automation procedures.

The program can be tailored to meet the needs of individual students without any prior unmanned aircraft systems operating experience.

Upon completion of the program students will be prepared to become commercial Unmanned Aircraft Systems pilots, technicians and programmers in various industry sectors in a broad range of applications.

**Program Outcomes**

1. Students who complete the Unmanned Aircraft Systems Certificate of Specialization will be capable of deploying and piloting unmanned aircraft systems, managing flight control systems, collecting and analyzing telemetry data, programming autonomous flight missions and securely communicating with a variety of different aircraft flying different types of missions.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>APT A131</td>
<td>Introduction to Unmanned Aircraft Systems</td>
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<tr>
<td>APT A151</td>
<td>Unmanned Aircraft Systems Lab</td>
<td>1</td>
</tr>
<tr>
<td>CIS A160</td>
<td>Introduction to UAS Automation</td>
<td>4</td>
</tr>
<tr>
<td>CIS A177</td>
<td>Business Intelligence and Data Mining</td>
<td>3</td>
</tr>
<tr>
<td>CIS A263</td>
<td>Introduction to the Internet of Things</td>
<td>3</td>
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<td><strong>Total Units</strong></td>
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<td><strong>14</strong></td>
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</table>

**Computer Information Systems**

The goal of the CIS program is to provide students with the technical skills and systems perspective necessary for entry-level positions in the computer and information industry. Students should not expect that they will necessarily meet the lower division requirements at specific colleges
Computer Information Systems offers certificate programs in more specific areas like Business Application Development, Technical Computer Programming, and Computer Information Systems. These courses are designed to prepare students for entry-level positions in the computer and information industry or to help business-oriented majors gain admission to a transfer institution.

Pam Barvarz, CIS Program Lead
pbarvarz@occ.cccd.edu
(714) 432-0202 x21664

Computer Information Systems Department Website (http://www.orangecoastcollege.edu/academics/divisions/business/computer_information_systems/)

- Business Information Worker, Certificate of Specialization (p. 108)
- Computer Information Systems, Associate in Science Degree (p. 108)
- Computer Information Systems, Certificate of Achievement (p. 109)
- Web Design, Certificate of Specialization (p. 110)

**Business Information Worker, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_CSOA

Completion of this certificate, issued through the Business and Computing Division, will prepare students for entry-level employment in business environments using Microsoft Office Applications. All courses must be completed at Orange Coast College.

**Program Outcomes**

1. Use a computer operating system and computer applications for word processing, electronic spreadsheet creation, database management, multimedia presentations, and electronic personal management with competence.
2. Achieve personal development and responsibility for entering the job market

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Course** | **Title** | **Units**
--- | --- | ---
BUS A138 | Business English | 3
CIS A090 | Beginning Computer Keyboarding 1 | 1.5
CIS A091 | Keyboarding Speed and Accuracy | 1.5
CIS A092 | Beginning Computer Keyboarding 2 | 1.5
CIS A100 | Introduction to Computer Applications | 3
CIS/BUS A134 | Excel 1 | 2
CIS A137 | Microsoft Outlook | 2
CIS A149 | Office Procedures | 2

Total Units 16.5

**Computer Information Systems, Associate in Science Degree**

Financial Aid Eligible
Banner Code: 1_AS_CIST
Control Number: 03968

This program will meet major requirements for the Associate in Science degree but has not been articulated with any particular four-year institution. Students should not expect that they will necessarily meet the lower-division requirements at specific colleges or universities. Students should consult a counselor for specific transfer information.

This option provides the student with the lower-division transfer courses for some of the business oriented majors. Students are advised to check course transferability with an Orange Coast College counselor prior to enrolling in CIS courses.

**Program Outcomes**

1. Students will be prepared for employment in entry-level positions in the computer and information systems industries.

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/computers-computing/computer-information-systems/computer-information-systems-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

<table>
<thead>
<tr>
<th>Course</th>
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<th>Units</th>
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<tr>
<td>ACCT A101</td>
<td>Financial Accounting</td>
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<tr>
<td>ACCT A102</td>
<td>Managerial Accounting</td>
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</tr>
<tr>
<td>BUS A110</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>CIS A111</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECON A170</td>
<td>Microeconomics</td>
<td>3</td>
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<tr>
<td>ECON A175</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH A140</td>
<td>Business Calculus</td>
<td>4</td>
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<td>or MATH A180 Calculus 1</td>
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<td>CS A131</td>
<td>Python Programming I</td>
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<tr>
<td>CS A140</td>
<td>Introduction to C#.NET Programming</td>
<td></td>
</tr>
<tr>
<td>CS A142</td>
<td>Introduction to Visual Basic.NET Programming</td>
<td></td>
</tr>
<tr>
<td>CS A150</td>
<td>C++ Programming Language 1</td>
<td></td>
</tr>
<tr>
<td>CS A170</td>
<td>Java Programming 1</td>
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**Total Units**: 28

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<tr>
<th>Requirement</th>
<th>Units</th>
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<tbody>
<tr>
<td>Program Major Units</td>
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<tr>
<td>AS General Education Option 1, 2, or 3</td>
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<tr>
<td>Transferable electives to satisfy unit requirement</td>
<td>Varies</td>
</tr>
<tr>
<td><strong>Total Degree Units</strong></td>
<td>60</td>
</tr>
</tbody>
</table>

**Computer Information Systems, Certificate of Achievement**

Financial Aid Eligible
Banner Code: 1_CN_CIST
Control Number: 18193

This program will meet major requirements for the Associate in Science degree but has not been articulated with any particular four-year institution. Students should not expect that they will necessarily meet the lower-division requirements at specific colleges or universities. Students should consult a counselor for specific transfer information.

This option provides the student with the lower-division transfer courses for some of the business oriented majors. Students are advised to check course transferability with an Orange Coast College counselor prior to enrolling in CIS courses.

**Program Outcomes**

1. Students will be prepared for employment in entry-level positions in the computer and information systems industries.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<td>CIS A111</td>
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<td>Microeconomics</td>
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<td>ECON A175</td>
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<td>Business Calculus</td>
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<tr>
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<td>or MATH A180 Calculus 1</td>
<td></td>
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<tr>
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</tr>
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<td>Python Programming I</td>
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</tr>
<tr>
<td>CS A140</td>
<td>Introduction to C#.NET Programming</td>
<td></td>
</tr>
<tr>
<td>CS A142</td>
<td>Introduction to Visual Basic.NET Programming</td>
<td></td>
</tr>
<tr>
<td>CS A150</td>
<td>C++ Programming Language 1</td>
<td></td>
</tr>
</tbody>
</table>

This option provides the student with the lower-division transfer courses for some of the business oriented majors. Students are advised to check course transferability with an Orange Coast College counselor prior to enrolling in CIS courses.
Web Design, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CSWD

Completion of this certificate, issued through the Business and Computing Division, will enable students to apply for entry-level positions in designing for the World Wide Web.

Program Outcomes

1. Students who receive the Web Design Certificate of Specialization will be able to create dynamic web pages.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<thead>
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<td>CS A170</td>
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<td></td>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CIS A232</td>
<td>Digital Video for Business: Adobe Premiere Pro</td>
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</tr>
<tr>
<td></td>
<td>Total Units</td>
<td>10-11</td>
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</tbody>
</table>

Computer Science

The Computer Science (CS) department at Orange Coast College prepares students for transfer to four-year university programs. Students who have completed the CS program at OCC have successfully transferred to UC Irvine, UC San Diego, UC Berkeley, UC Santa Cruz, UC Davis, CSU Fullerton, CSU Long Beach, and Cal Poly Pomona.

Our two-year program teaches Java, C++ and Python, and includes courses on data structures, computer architecture, and software engineering. In addition to a Computer Science Certificate of Achievement and an Associates of Science degree, we offer Certificates of Specialization in Java, C++ and Python, to help students find entry-level positions and internships in the computing field.

Department Contact Information

Gabriela Ernsberger, Department Chair
gernsberger@occ.cccd.edu
(714) 432-0202 x22559

Computer Science Department Website (http://www.orangecoastcollege.edu/academics/divisions/business/computer_science/Pages/default.aspx)

- C ++ Programming, Certificate of Specialization (p. 110)
- Computer Science, Associate in Science Degree (p. 111)
- Computer Science, Certificate of Achievement (p. 111)
- Java Programming, Certificate of Specialization (p. 112)
- Python Programming, Certificate of Specialization (p. 113)

C ++ Programming, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CSCP

Completion of this certificate, issued through the Business and Computing Division, will enable students to apply for entry-level positions in C++ programming. All courses must be completed at Orange Coast College.

Program Outcome

1. Program completers will be able to write programs in C++ using classes, flow-of-control and fundamental data structure.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing
his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

### Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Computer Science, Associate in Science Degree

Financial Aid Eligible  
Banner Code: 1_AS_CSPR  
Control Number: 08624

This certificate is designed to provide the student with comprehensive grounding in the theory and practice of modern computer programming. Based on the recommendations of the Association of Computing Machinery, the Computer Programming Certificate prepares students to work as entry-level programmers. Students should not expect that they will necessarily meet the lower division requirements at specific colleges or universities. Students should consult the Transfer Information section of this catalog for specific transfer information.

Complete the Computer Science Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

### Program Outcome

1. Based on the recommendations of the Association for Computing Machinery, The Computer Programming Certificate prepares students to work as entry-level programmers, or used to fulfill some of the requirements for transfer to a Computer Science program at a four-year university.

### Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/computers-computing/computer-science/computer-science-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Course Title Units

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<tr>
<th>Course</th>
<th>Title</th>
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<td>CS A150</td>
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<tr>
<td>CS A300</td>
<td>Data Structures</td>
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</tr>
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<td>CS A150</td>
<td>C++ Programming Language 2</td>
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<tr>
<td>Total Units</td>
<td></td>
<td>12</td>
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</table>

### Computer Science, Certificate of Achievement

Financial Aid Eligible  
Banner Code: 1_CN_CSPR

This certificate is designed to provide the student with comprehensive grounding in the theory and practice of modern computer programming. Based on the recommendations of the Association of Computing Machinery, the Computer Programming Certificate prepares students to work as entry-level programmers. Students should not expect that they will necessarily meet the lower division requirements at specific colleges or universities. Students should consult the Transfer Information section of this catalog for specific transfer information.

Complete the Computer Science Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

### Program Outcome

1. Based on the recommendations of the Association for Computing Machinery, The Computer Programming Certificate prepares students to work as entry-level programmers, or used to fulfill some of the requirements for transfer to a Computer Science program at a four-year university.

### Course Title Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS A150</td>
<td>C++ Programming Language 1</td>
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<td>CS A170</td>
<td>Java Programming 1</td>
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<td>CS A250</td>
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<td></td>
</tr>
<tr>
<td>MATH A180/ A180H</td>
<td>Calculus 1</td>
<td>4-5</td>
</tr>
<tr>
<td>MATH A182H</td>
<td>Calculus 1 and 2 Honors</td>
<td></td>
</tr>
<tr>
<td>MATH A185/ A185H</td>
<td>Calculus 2</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>19-21</td>
</tr>
</tbody>
</table>

### Computer Science, Certificate of Achievement

Financial Aid Eligible  
Banner Code: 1_CN_CSPR
Program Outcome

1. Based on the recommendations of the Association for Computing Machinery, the Computer Programming Certificate prepares students to work as entry-level programmers. Students should not expect that they will necessarily meet the lower division requirements at specific colleges or universities. Students should consult the Transfer Information section of this catalog for specific transfer information.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS A150</td>
<td>C++ Programming Language 1</td>
<td>4</td>
</tr>
<tr>
<td>CS A170</td>
<td>Java Programming 1</td>
<td>4</td>
</tr>
<tr>
<td>CS A250</td>
<td>C++ Programming Language 2</td>
<td>4</td>
</tr>
<tr>
<td>CS A200</td>
<td>Data Structures</td>
<td>3-4</td>
</tr>
<tr>
<td>or CS A262</td>
<td>Discrete Structures</td>
<td></td>
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<tr>
<td>Select one of the following:</td>
<td>4-5</td>
<td></td>
</tr>
<tr>
<td>MATH A180/ A180H</td>
<td>Calculus 1</td>
<td></td>
</tr>
<tr>
<td>MATH A182H</td>
<td>Calculus 1 and 2 Honors</td>
<td></td>
</tr>
</tbody>
</table>

Java Programming, Certificate of Specialization

Not Financial Aid Eligible

Banner Code: 1_CE_JAVA

Completion of this certificate, issued through the Business and Computing Division, will enable students to apply for entry-level positions in Java programming. In addition, students will also have the opportunity to earn industry credentials as an Oracle Certified Java Associate. A grade of “C” or better is required in all courses. All courses must be completed at Orange Coast College.

Program Outcomes

1. Program achievers will be able to write programs in Java using classes, flow-of-control and fundamental data structures. In addition, achievers will also be able to develop mobile applications using the Android framework for both tablet and phone devices.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH A185/ A185H</td>
<td>Calculus 2</td>
<td></td>
</tr>
</tbody>
</table>

Total Units 19-21

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH A180/ A180H</td>
<td>Calculus 1</td>
<td></td>
</tr>
<tr>
<td>MATH A182H</td>
<td>Calculus 1 and 2 Honors</td>
<td></td>
</tr>
</tbody>
</table>

All courses must be completed at Orange Coast College.

CS A170 Java Programming 1 4
Python Programming, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CSPY

Completion of this certificate, issued through the Business and Computing Division, will enable students to apply for entry-level positions in Python programming. All courses must be completed at Orange Coast College.

Program Outcome
1. Program completers will be able to write programs in Python using classes, flow-of-control and fundamental data structure.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course | Title | Units
--- | --- | ---
CS A272 | Java Programming 2 | 4

Total Units: 8

Information Technology

Completion of these certificates will enable students to acquire the skills needed by professionals in information and communication technologies to support and/or manage the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth. All courses must be completed at Orange Coast College for these certificates.

- Enterprise Routing, Certificate of Specialization
- Network Administration and Operations, Certificate of Specialization
- Network Administration — Linux, Certificate of Specialization
- Network Administration — Windows, Certificate of Specialization
- Network Infrastructure, Certificate of Specialization
- Network Professional, Certificate of Specialization
- Network Security, Certificate of Specialization
- Network Services and Applications, Certificate of Specialization
- Network Technician, Certificate of Specialization
- Virtualization and Cloud Computing, Certificate of Specialization
- Enterprise Routing, Certificate of Specialization (p. 113)
- Network Administration - Linux, Certificate of Specialization (p. 114)
- Network Administration - Windows, Certificate of Specialization (p. 114)
- Network Administration and Operations, Certificate of Specialization (p. 115)
- Network Infrastructure, Certificate of Specialization (p. 115)
- Network Professional, Certificate of Specialization (p. 116)
- Network Security, Certificate of Specialization (p. 116)
- Network Services and Applications, Certificate of Specialization (p. 117)
- Network Technician, Certificate of Specialization (p. 117)
- Virtualization and Cloud Computing, Certificate of Specialization (p. 118)

Enterprise Routing, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CSER

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth.

Program Outcomes
1. Students who receive the Enterprise Routing Certificate of Specialization will be able to design and implement a converged network.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CS A131</td>
<td>Python Programming I</td>
<td>4</td>
</tr>
<tr>
<td>CS A231</td>
<td>Python Programming II</td>
<td>4</td>
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</table>

Total Units: 8
1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "Z" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Network Administration - Linux, Certificate of Specialization**

Not Financial Aid Eligible

Banner Code: 1_CE_CSLX

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth.

**Program Outcomes**

1. Students who complete the Network Administration – Linux Certificate of Specialization will be capable of deploying, building, designing, optimizing, and operating a Linux environment and they will be able to make the design and technology decisions necessary to ensure successful technology implementation projects.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Course**

**Title**

**Units**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT A197</td>
<td>Introduction to Networking (Cisco 1)</td>
<td>3</td>
</tr>
<tr>
<td>IT A198</td>
<td>Routing and Switching Essentials (Cisco 2)</td>
<td>3</td>
</tr>
<tr>
<td>IT A265</td>
<td>Enterprise Router Configurations 1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
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<td>9</td>
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</table>

**Network Administration - Windows, Certificate of Specialization**

Not Financial Aid Eligible

Banner Code: 1_CE_CSAW

Completion of this certificate will enable students to acquire the skills needed in the areas of technical operations and network management. In addition, this certificate provides preparation for students seeking industry-standard certification tests from CompTIA and Microsoft.

**Program Outcomes**

1. Students who complete the Network Administration – Windows Certificate of Specialization will be capable of deploying, building, designing, optimizing, and operating a Windows Server and Desktop environment and they will be able to make the design and technology decisions necessary to ensure successful technology implementation projects.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically
awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Network Administration and Operations, Certificate of Specialization
Not Financial Aid Eligible
Banner Code: 1_CE_CSNO

Completion of this certificate will enable students to acquire the skills needed in the areas of technical operations and network management. In addition, this certificate provides preparation for students seeking industry-standard certification from CompTIA and Microsoft. A grade of "C" or better is required in all courses. All courses must be completed at Orange Coast College.

Program Outcomes
1. Students who receive the Network Administration and Operations Certificate of Specialization will be able to design and implement a small to medium network environment.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>IT A163</td>
<td>Windows Desktop Administration</td>
<td>3</td>
</tr>
<tr>
<td>IT A192</td>
<td>Network Systems Administration</td>
<td>4</td>
</tr>
<tr>
<td>IT A193</td>
<td>Network Infrastructure Administration</td>
<td>3</td>
</tr>
<tr>
<td>IT A194</td>
<td>Network Directory Services Administration</td>
<td>3</td>
</tr>
<tr>
<td>IT A196</td>
<td>Network Enterprise Administration</td>
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</thead>
<tbody>
<tr>
<td>IT A110</td>
<td>PC Concepts: A+ Certification Preparation</td>
<td>4</td>
</tr>
<tr>
<td>IT A191</td>
<td>Network and Communications Technologies</td>
<td>4</td>
</tr>
<tr>
<td>IT A192</td>
<td>Network Systems Administration</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>IT A176</td>
<td>Database Design and Data Warehousing</td>
<td></td>
</tr>
<tr>
<td>IT A177</td>
<td>Business Intelligence and Data Mining</td>
<td></td>
</tr>
<tr>
<td>IT A193</td>
<td>Network Infrastructure Administration</td>
<td></td>
</tr>
<tr>
<td>IT A194</td>
<td>Network Directory Services Administration</td>
<td></td>
</tr>
<tr>
<td>IT A196</td>
<td>Network Enterprise Administration</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
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<td>15-16</td>
</tr>
</tbody>
</table>

Network Infrastructure, Certificate of Specialization
Not Financial Aid Eligible
Banner Code: 1_CE_CSN

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth.

Program Outcomes
1. Students who receive the Network Infrastructure Certificate of Specialization will be able to design and implement a converged network.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing
his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Network Professional, Certificate of Specialization

Not Financial Aid Eligible

Banner Code: 1_CE_CSNSP

In order to receive this Certificate of Achievement, students are required to have the Information and Communications Technologies: Network Technician Certificate of Achievement.

### Program Outcomes

1. Students who receive the Network Professional Certificate of Specialization will be able to design and implement a converged network.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Required Prerequisites

#### Network Technician Certificate of Specialization

<table>
<thead>
<tr>
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<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT A197</td>
<td>Introduction to Networking (Cisco 1)</td>
<td>3</td>
</tr>
<tr>
<td>IT A198</td>
<td>Routing and Switching Essentials (Cisco 2)</td>
<td>3</td>
</tr>
<tr>
<td>IT A267</td>
<td>Scaling Networks- Cisco 3</td>
<td>3</td>
</tr>
<tr>
<td>IT A268</td>
<td>Connecting Networks - Cisco 4</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units 12

### Network Security, Certificate of Specialization

Not Financial Aid Eligible

Banner Code: 1_CE_CSNS

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth.

### Program Outcomes

1. Students who receive the Network Security Certificate of Specialization will be able to design and implement a converged network.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of
employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT A162</td>
<td>Fundamentals of Information Security</td>
<td>3</td>
</tr>
<tr>
<td>IT A282</td>
<td>Ethical Hacking and Network Defense</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units**: 6

---

**Network Services and Applications, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_CSNA

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth.

**Program Outcomes**

1. Students who receive the Network Services and Applications Certificate of Specialization will be able to design and implement a converged network.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Course** | **Title**                  | **Units** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IT A261</td>
<td>Fundamentals of Wireless Networking</td>
<td>3</td>
</tr>
<tr>
<td>IT A262</td>
<td>Fundamentals of Voice over IP Protocols</td>
<td>3</td>
</tr>
<tr>
<td>IT A263</td>
<td>Introduction to the Internet of Things</td>
<td>3</td>
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</table>

**Total Units**: 9

---

**Network Technician, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_CSNA

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth.

**Program Outcomes**

1. Students who receive the Network Technician Certificate of Specialization will be able to design and implement a converged network.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
Virtualization and Cloud Computing, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CSYC

Completion of this certificate will enable students to acquire the skills needed by professionals in information and communication technologies to support the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth.

Program Outcomes

1. Students who receive the Virtualization and Cloud Computing Certificate of Specialization will be able to design and implement a converged network.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course Title Units

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<td>IT A110</td>
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<td>IT A191</td>
<td>Network and Communications Technologies</td>
<td>4</td>
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Total Units 8

Hospitality, Food and Tourism

- Culinary Arts (p. 119)
- Culinaryology and Food Science (p. 124)
- Food Service Management - Commercial (p. 125)
- Hospitality, Travel, and Tourism (p. 127)
- Nutrition and Dietetics (p. 140)
- Professional Mariner (p. 144)

- Culinary Arts (p. 119)
  - Advanced Baking and Pastry, Associate in Science Degree (p. 119)
  - Advanced Baking and Pastry, Certificate of Achievement (p. 120)
  - Advanced Culinary Arts, Associate in Science Degree (p. 120)
  - Advanced Culinary Arts, Certificate of Achievement (p. 121)
  - Baking and Pastry-Basic, Certificate of Specialization (p. 122)
  - Culinary Arts-Basic, Certificate of Achievement (p. 123)

- Culinaryology and Food Science (p. 124)
  - Level 1 — Culinary Food Science Assistant, Certificate of Achievement (p. 124)
  - Level 2 Culinology® — Professional Level, Associate in Science Degree (p. 124)

- Food Service Management - Commercial (p. 125)
  - Catering, Certificate of Achievement (p. 125)
  - Restaurant Supervision, Certificate of Achievement (p. 126)
  - Restaurant, Associate in Science Degree (p. 127)

- Hospitality, Travel, and Tourism (p. 127)
  - Airline Travel Management, Certificate of Achievement (p. 128)
  - Flight Attendant and Airline and Travel Careers, Associate in Science Degree (p. 129)
  - Flight Attendant and Airline and Travel Careers, Certificate of Achievement (p. 130)
  - Front Office Specialist, Certificate of Achievement (p. 131)
  - Hotel Management, Associate in Science Degree (p. 131)
• Human Resource Management, Associate in Science Degree (p. 132)
• Human Resource Management, Certificate of Achievement (p. 133)
• Meeting and Event Management, Associate in Science Degree (p. 134)
• Meeting and Event Management, Certificate of Achievement (p. 134)
• Sales and Marketing Specialist, Associate in Science Degree (p. 135)
• Sales and Marketing Specialist, Certificate of Achievement (p. 136)
• Spa Management, Associate in Science Degree (p. 137)
• Spa Management, Certificate of Achievement (p. 138)
• Travel Specialist, Associate in Science Degree (p. 138)
• Travel Specialist, Certificate of Achievement (p. 139)
• Nutrition and Dietetics (p. 140)
• Dietetic Service Supervisor/Certified Dietary Manager, Certificate of Achievement (p. 140)
• Nutrition and Dietetics Technician, Associate in Science Degree (p. 141)
• Nutrition and Dietetics, Associate in Science Degree for Transfer (AS-T) (p. 142)
• Nutrition and Fitness Education, Certificate of Achievement (p. 142)
• Nutrition Education, Associate in Science Degree (p. 143)
• Nutrition Education, Certificate of Achievement (p. 144)
• Professional Mariner (p. 144)
• Professional Mariner, Certificate of Achievement (p. 145)

Culinary Arts
This program teaches culinary arts, the arts of preparation, cooking and presentation of food, usually in the form of meals. Culinarians are required to have knowledge of food or culinary science, nutrition, and diet, and are responsible for preparing meals that are as pleasing to the eye as to the palate. The Culinary Department provides students with Associate Degrees in Advanced Culinary Arts, and Advanced Baking and Pastry as well as Occupational Certificates and career and technical education. Our culinary program is accredited by the American Culinary Federation (ACF). https://www.acfchefs.org/

Department Contact Information
Bill Barber
bbarber@occ.cccd.edu
Melissa Simpson
msimpson@occ.cccd.edu

Culinary Arts Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/hospitality_professions/culinary_arts/Pages/default.aspx)

- Advanced Baking and Pastry, Associate in Science Degree (p. 119)
- Advanced Baking and Pastry, Certificate of Achievement (p. 120)
- Advanced Culinary Arts, Associate in Science Degree (p. 120)
- Advanced Culinary Arts, Certificate of Achievement (p. 121)
- Baking and Pastry-Basic, Certificate of Specialization (p. 122)
- Culinary Arts-Basic, Certificate of Achievement (p. 123)

Advanced Baking and Pastry, Associate in Science Degree
Financial Aid Eligible
Banner Code: 1_AS_ABP
Control Number: 16634

The requirements for the Certificate of Achievement in Advanced Baking and Pastry includes courses which lead to students gaining a solid foundational knowledge of the baking and pastry industry. Courses are designed for students who desire a career as an entrepreneur in the baking/pastry industry, or in the following positions found at restaurants, hotels, resorts, clubs, and bakeries; head baker, assistant pastry chef, pastry chef, and executive pastry chef.

Complete the Advanced Baking and Pastry Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome
1. Students will be prepared for employment as professional and competent bakers, pastry cooks, or pastry entrepreneurs of retail and wholesale baking and pastry establishments.

Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/hospitality-food-tourism/culinary-arts/advanced-baking-pastry-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.
### Advanced Baking and Pastry, Certificate of Achievement

**Financial Aid Eligible**  
**Banner Code:** 1_CT_ABPA  
**Control Number:** 22432

The requirements for the Certificate of Achievement in Advanced Baking and Pastry includes courses which lead to students gaining a solid foundational knowledge of the baking and pastry industry. Courses are designed for students who desire a career as an entrepreneur in the baking/pastry industry, or in the following positions found at restaurants, hotels, resorts, clubs, and bakeries; head baker, assistant pastry chef, pastry chef, and executive pastry chef.

**Program Outcome**

1. Students will be prepared for employment as professional and competent bakers, pastry cooks, or pastry entrepreneurs of retail and wholesale baking and pastry establishments.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

#### Course Requirements

<table>
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<th>Program</th>
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<th>Requirement</th>
<th>Units</th>
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<td>Fall</td>
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<td>As General Education Option 1, 2, or 3</td>
<td>Varies</td>
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<td></td>
<td></td>
<td>Transferrable electives to satisfy unit requirement</td>
<td>Varies</td>
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<tr>
<td></td>
<td></td>
<td>Total Degree Units</td>
<td>60</td>
</tr>
</tbody>
</table>

#### Program Outcomes

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

#### Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.oce.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<td>Fall</td>
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<tr>
<td>CA A100</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>CA A120</td>
<td>Culinary Principles 1</td>
<td>3</td>
</tr>
<tr>
<td>CA A124</td>
<td>Principles of Baking 1</td>
<td>2</td>
</tr>
<tr>
<td>FN A140</td>
<td>Introduction to Nutrition Concepts or Nutrition</td>
<td>2-3</td>
</tr>
<tr>
<td>FSM A160</td>
<td>Sanitation and Safety</td>
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<td>Year 2</td>
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<tr>
<td>Fall</td>
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<td></td>
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<tr>
<td>CA A226</td>
<td>Principles of Pastry Arts</td>
<td>3</td>
</tr>
<tr>
<td>CA A237</td>
<td>Directed Practice for Baking and Pastry 2</td>
<td>2</td>
</tr>
<tr>
<td>FSM A151</td>
<td>Food Production Management</td>
<td>2</td>
</tr>
<tr>
<td>FSM A250</td>
<td>Menu Planning and Purchasing</td>
<td>3</td>
</tr>
<tr>
<td>FSM A260</td>
<td>Supervision and Training Techniques</td>
<td>3</td>
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<tr>
<td></td>
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<td>13</td>
</tr>
<tr>
<td></td>
<td>Total Units</td>
<td>39-40</td>
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#### Advanced Culinary Arts, Associate in Science Degree

**Financial Aid Eligible**  
**Banner Code:** 1_AS_CAAV  
**Control Number:** 08670

This program is accredited by the American Culinary Federation Accrediting Commission. The requirements for the Certificate of Achievement in Advanced Culinary Arts include coursework covering a
solid foundational knowledge of the restaurant and hospitality industry. Students will prepare food for dining guests in the school’s Captain’s Table Restaurant. The coursework will help to prepare students who are interested in a professional career in the Culinary Arts.

Complete the Culinary Arts Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. Note: this AS degree requires 69-72 units for completion.

**Program Outcome**
1. Students will be prepared for employment as professional and competent culinarians.

**Associate in Science Degree Requirements**
1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/hospitality-food-tourism/culinary-arts/advanced-culinary-arts-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

**Required Prerequisites**
Culinary Arts (BASIC) Certificate of Achievement

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>CA A100</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
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<tr>
<td>CA A120</td>
<td>Culinary Principles 1</td>
<td>3</td>
</tr>
<tr>
<td>CA A124</td>
<td>Principles of Baking 1</td>
<td>2</td>
</tr>
<tr>
<td>CA A149</td>
<td>Pantry</td>
<td>2</td>
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<tr>
<td>FN A140</td>
<td>Introduction to Nutrition Concepts</td>
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<td>FSM A160</td>
<td>Sanitation and Safety</td>
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**Advanced Culinary Arts Suggested Electives**

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CA A226</td>
<td>Principles of Pastry Arts</td>
<td>3</td>
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<tr>
<td>CA A270</td>
<td>Ice Carving</td>
<td>1</td>
</tr>
<tr>
<td>FSM A284</td>
<td>Catering</td>
<td>3</td>
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</tbody>
</table>

**Advanced Culinary Arts, Certificate of Achievement**

Financial Aid Eligible
Banner Code: 1_CT_CAAV
Control Number: 22430

This program is accredited by the American Culinary Federation Accrediting Commission. The requirements for the Certificate of Achievement in Advanced Culinary Arts include coursework covering a solid foundational knowledge of the restaurant and hospitality industry. Students will prepare food for dining guests in the school’s Captain’s Table Restaurant. The coursework will help to prepare students who are interested in a professional career in the Culinary Arts.
Program Outcome

1. Students will be prepared for employment as professional and competent culinarians.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs of Specialization section of this catalog. Check with a counselor to determine the requirements for completion.

Required Prerequisites

Culinary Arts (BASIC) Certificate of Achievement

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<thead>
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<td>Introduction to the Hospitality Industry</td>
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<td>CA A120</td>
<td>Culinary Principles 1</td>
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<td>CA A124</td>
<td>Principles of Baking 1</td>
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<tr>
<td>CA A149</td>
<td>Pantry</td>
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<td>FN A140</td>
<td>Introduction to Nutrition Concepts</td>
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Semester 2

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<td>CA A210 or CA A170</td>
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<td>FSM A151</td>
<td>Food Production Management</td>
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<td>FSM A190</td>
<td>Dining Room Service</td>
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Subtotal: 27-30

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<td>CA A200</td>
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<td>CA A245</td>
<td>Culinary Principles 3</td>
<td>3</td>
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<tr>
<td>FSM A250</td>
<td>Menu Planning and Purchasing</td>
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<td>FSM A275</td>
<td>Bar Management</td>
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Spring

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<td>CA A215</td>
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<td>CA A255</td>
<td>Garde Manger 2</td>
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<td>CA A265</td>
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<td>FSM A285</td>
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Required Prerequisites

Culinary Arts (A-2) Certificate of Achievement

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<tr>
<th>Course</th>
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<tr>
<td>CA A226</td>
<td>Principles of Pastry Arts</td>
<td>3</td>
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<tr>
<td>CA A270</td>
<td>Ice Carving</td>
<td>1</td>
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<td>FSM A284</td>
<td>Catering</td>
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Advanced Culinary Arts Suggested Electives

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<td>3</td>
</tr>
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<td>CA A270</td>
<td>Ice Carving</td>
<td>1</td>
</tr>
<tr>
<td>FSM A284</td>
<td>Catering</td>
<td>3</td>
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</tbody>
</table>

Baking and Pastry-Basic, Certificate of Specialization

Not Financial Aid Eligible

Banner Code: 1_CE_CABP

The requirements for the Certificate of Specialization in Baking and Pastry Arts provide students with the fundamental knowledge of baking science required of bakers and pastry cooks. Students will gain hands-on knowledge of classic and contemporary patisserie and baking processes. Course work is designed for students that desire a career as a baker or pastry cook.

Program Outcome

1. Students will be prepared for entry-level employment as professional and competent bakers, pastry cooks, or pastry entrepreneurs and meet the needs of retail and wholesale baking and pastry establishments.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

### Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Required Prerequisite

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>FSM A160</td>
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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CA A124</td>
<td>Principles of Baking 1</td>
<td>2</td>
</tr>
<tr>
<td>FN A140</td>
<td>Introduction to Nutrition Concepts</td>
<td>2</td>
</tr>
<tr>
<td>or FN A170</td>
<td>Nutrition</td>
<td></td>
</tr>
<tr>
<td>FSM A240</td>
<td>Food Service Math/Accounting</td>
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<tr>
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### Spring

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</table>

### Baking and Pastry - Basic Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART A110</td>
<td>Color and Design: Two-Dimensional</td>
<td>3</td>
</tr>
<tr>
<td>ART A120</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
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</table>

### Culinary Arts-Basic, Certificate of Achievement

The Culinary Arts Department provides students with Associates Degrees in Culinary Arts, Occupational Certificates, and career and technical education. The department serves the economic and workforce development needs of the local community and is committed to student success.

#### Program Outcome

1. Students will be prepared for entry-level employment in a commercial kitchen.

#### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog. Check with a counselor to determine the requirements for completion.

### Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA A100</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>CA A120</td>
<td>Culinary Principles 1</td>
<td>3</td>
</tr>
<tr>
<td>CA A124</td>
<td>Principles of Baking 1</td>
<td>2</td>
</tr>
<tr>
<td>CA A149</td>
<td>Pantry</td>
<td>2</td>
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<tr>
<td>FN A140</td>
<td>Introduction to Nutrition Concepts</td>
<td>2</td>
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<td>FSM A160</td>
<td>Sanitation and Safety</td>
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### Semester 2

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<tr>
<td>CA A122</td>
<td>Culinary Principles 2</td>
<td>3</td>
</tr>
<tr>
<td>CA A210</td>
<td>Directed Practice for Culinary Arts 1</td>
<td>1-4</td>
</tr>
<tr>
<td>or CA A170</td>
<td>or Culinary Team Competition</td>
<td></td>
</tr>
<tr>
<td>FSM A151</td>
<td>Food Production Management</td>
<td>2</td>
</tr>
<tr>
<td>FSM A190</td>
<td>Dining Room Service</td>
<td>2</td>
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<tr>
<td>FSM A240</td>
<td>Food Service Math/Accounting</td>
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<tbody>
<tr>
<td></td>
<td>Total Units</td>
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</table>
Culinary and Food Science

Culinology®, as defined by the Research Chefs’ Association, is the blending of the culinary arts and the science of food. Students completing this certificate will have career opportunities in food manufacturing, chain restaurants, hotels, ingredient supply houses, consulting and academia, new product development, sales, marketing, manufacturing, distribution, and the media.

The corporate headquarters of several restaurant chains as well as large and small food manufacturers are located in the southern California area. Opportunities exist for persons trained in culinary arts and food science to find interesting and rewarding careers with these companies.

Department Contact Information

Beth Blake, MPH, RDN
et Blake@occ.cccd.edu
(714) 432-5835 ext. 5

Culinology® and Food Science Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/hospitality_professions/culinology/Pages/default.aspx)

• Level 1 — Culinary Food Science Assistant, Certificate of Achievement (p. 124)
• Level 2 Culinology® — Professional Level, Associate in Science Degree (p. 124)

Level 1 — Culinary Food Science Assistant, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_CULN
Control Number: 16773

Orange Coast College’s Culinary and Food Sciences Assistant program is designed for students who are interested in working as assistants in the following fields: food research and development, product development, recipe development, product duplication, quality assurance, sensory, or flavor chemistry.

Program Outcomes

1. Graduates will be competent entry-level Culinary and Food Science assistants meeting the employment needs of the community and be able to communicate and work effectively with Chefs, Food Scientist and clientele.

2. Communicate and work effectively with Chefs, Food Scientists, and clientele.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course Title Units
Required Prerequisites
FN/NC A100 Careers in Dietetics and Food Science 1
FN A170 Nutrition 3
FSM A160 Sanitation and Safety 3
Total Units 7

Course Title Units
Year 1
CA A120 Culinary Principles 1 3
CA A124 Principles of Baking 1 2
FN A195 Food Science 4
MATH/PSYC A160 Introduction to Statistics 4
Units 13

Semester 2
CA A149 Pantry 2
CHEM A130 Preparation for General Chemistry 4
FN A185 Cultural Foods 2
FN A286 Directed Practice for Culinology®/Food Science 2
Units 10
Total Units 23

Requirement Units
Total Units 30

Level 2 Culinology® — Professional Level, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_CULN
Control Number: 04013

This Culinology® Level 2 option is articulated with the Food Science and Technology, Culinology® track in the Department of Human Nutrition and Food Science at Cal Poly Pomona. The coursework has received approval from the Research Chefs’ Association. Students must complete both Level 1 and 2 and meet the Associate in Science degree requirements.
Students should certify their General Education coursework before transfer.

The Research Chefs’ Association suggests that students take additional Culinary Arts courses such as CA 255, Advanced Garde Manger and CA 265 Ala Minute Continental Cooking to enhance their culinary skills.

Program Outcomes
1. Be competent entry-level Culinary and Food Science assistants meeting the employment needs of the community.
2. Communicate and work effectively with Chefs, Food Scientists, and clientele.
3. Be able to transfer to selected colleges in Culinology®.
4. Culinology® students should obtain materials from the Transfer Center for complete details on transferable courses.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Required Prerequisite

Level 1 - Culinary Food Science Assistant Certificate of Achievement

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>FSM A160</td>
<td>Sanitation and Safety</td>
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<td>FN A170</td>
<td>Nutrition</td>
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<td>FN A100</td>
<td>Careers in Dietetics and Food Science</td>
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Course Requirements

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<tr>
<td></td>
<td>CA A120 Culinary Principles 1</td>
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<tr>
<td></td>
<td>CA A124 Principles of Baking 1</td>
<td>2</td>
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<tr>
<td></td>
<td>FN A195 Food Science</td>
<td>4</td>
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<td></td>
<td>MATH A160 Introduction to Statistics or Statistics for the Behavioral Sciences</td>
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<td></td>
<td>Units</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Semester 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CA A149 Pantry</td>
<td>2</td>
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<tr>
<td></td>
<td>CHEM A130 Preparation for General Chemistry</td>
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<td>FN A185 Cultural Foods</td>
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Subtotal 30

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<tr>
<td></td>
<td>CA A122 Culinary Principles 2</td>
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<td></td>
<td>CHEM A180 General Chemistry A</td>
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<td></td>
<td>FSM A250 Menu Planning and Purchasing</td>
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<td></td>
<td>MATH A120 Trigonometry</td>
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<td></td>
<td>BIOL A180 Introduction to Biology for Majors 1: Cell and Molecular Biology</td>
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<td>BIOL A210 General Microbiology</td>
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<td>FN A196 Food Science Quality Control</td>
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<th>Requirement</th>
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Culinology® is the registered trademark of the Research Chef’s Association.

Food Service Management - Commercial

- Catering, Certificate of Achievement (p. 125)
- Restaurant Supervision, Certificate of Achievement (p. 126)
- Restaurant, Associate in Science Degree (p. 127)

Catering, Certificate of Achievement

Not Financial Aid Eligible

Banner Code: 1_CN_FSCC

Students who complete the Catering certificate will be trained to operate a catering business, whether it is a business conducted on premises or off premises. Those enrolling in this program will learn about organization and management, menu pricing, selling, advertising and promotion, and preparing and serving food, as well as cost accountability, a most important factor in operating a catering service successfully. Students
will be employable in the catering departments of hotels and restaurants and will be knowledgeable enough to reasonably decide about opening their own catering business. Opportunities for employment in this field are excellent.

**Program Outcome**

1. The outcome of the program is to prepare students for professional positions within the industry and to provide the foundation skills for owning and operating their own catering business. Meets the needs of the local catering community.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
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<td>CA A200</td>
<td>Garde Manger 1</td>
<td>2</td>
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<tr>
<td>or FSM A151</td>
<td>Food Production Management</td>
<td></td>
</tr>
<tr>
<td>FN A140</td>
<td>Introduction to Nutrition Concepts</td>
<td>2</td>
</tr>
<tr>
<td>FSM A160</td>
<td>Sanitation and Safety</td>
<td>3</td>
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<tr>
<td>FSM A250</td>
<td>Menu Planning and Purchasing</td>
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</tr>
<tr>
<td>FSM A284</td>
<td>Catering</td>
<td>3</td>
</tr>
<tr>
<td>CA A120</td>
<td>Culinary Principles 1</td>
<td></td>
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<tr>
<td>CA A122</td>
<td>Culinary Principles 2</td>
<td></td>
</tr>
<tr>
<td>CA A149</td>
<td>Pantry</td>
<td></td>
</tr>
<tr>
<td>CA A124</td>
<td>Principles of Baking 1</td>
<td></td>
</tr>
<tr>
<td>or FSM A150</td>
<td>Principles of Quantity Food Preparation</td>
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**Total Units** 17-19

**Catering Suggested Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BUS A240</td>
<td>Entrepreneurship</td>
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<td>CA A124</td>
<td>Principles of Baking 1</td>
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<td>CA A270</td>
<td>Ice Carving</td>
<td>1</td>
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<tr>
<td>FSM A240</td>
<td>Food Service Math/Accounting</td>
<td>4</td>
</tr>
<tr>
<td>FSM A260</td>
<td>Supervision and Training Techniques</td>
<td>3</td>
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<tr>
<td>HTT A240</td>
<td>Hospitality and Toursim Marketing</td>
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</tr>
</tbody>
</table>

**Restaurant Supervision, Certificate of Achievement**

Financial Aid Eligible
Banner Code: 1_CN_FMRS
Control Number: 08663

Students completing this certificate are qualified to manage food service operations in commercial establishments, such as restaurants and hotels. Restaurant management is an attractive profession which has been described a number of ways by those who are active in it, including such accolades as glamorous, well-paying, creative, challenging, and filled with excitement. One employment estimate shows a need for more than 250,000 additional employees annually. The future of restaurant management holds promise for individuals willing to devote their talents to this lively career.

**Program Outcome**

1. Prepare students for entry-level employment as competent Food Service supervisors and meet the needs of the local hospitality/food-service industry.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

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this catalog. Check with a counselor to determine the requirements for completion.

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<thead>
<tr>
<th>Course</th>
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<tr>
<td><strong>Year 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Semester 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSM A100</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>FSM A150</td>
<td>Principles of Quantity Food Preparation</td>
<td>4</td>
</tr>
<tr>
<td>FSM A160</td>
<td>Sanitation and Safety</td>
<td>3</td>
</tr>
<tr>
<td>FSM A190</td>
<td>Dining Room Service</td>
<td>2</td>
</tr>
<tr>
<td></td>
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<td>12</td>
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<tr>
<td><strong>Semester 2</strong></td>
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<td></td>
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<tr>
<td>FSM A151</td>
<td>Food Production Management</td>
<td>2</td>
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<td>FSM A210</td>
<td>Dining Room Management</td>
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</tr>
<tr>
<td>FSM A240</td>
<td>Food Service Math/Accounting</td>
<td>4</td>
</tr>
<tr>
<td>FSM A260</td>
<td>Supervision and Training Techniques</td>
<td>3</td>
</tr>
<tr>
<td>FSM A283</td>
<td>Directed Practice in Food Service Management 1</td>
<td>2</td>
</tr>
<tr>
<td></td>
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<td>14</td>
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<tr>
<td><strong>Subtotal 26</strong></td>
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<tr>
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</table>

**Restaurant, Associate in Science Degree**

Financial Aid Eligible
Banner Code: 1_AS_FMCR
Control Number: 08664

Students completing this degree are qualified to manage food service operations in commercial establishments, such as restaurants and hotels. Restaurant management is an attractive profession which has been described a number of ways by those who are active in it, including such accolades as glamorous, well-paying, creative, challenging, and filled with excitement. One employment estimate shows a need for more than 250,000 additional employees annually. The future of restaurant management holds promise for individuals willing to devote their talents to this lively career.

**Program Outcomes**

1. Prepare students for entry-level employment as competent Food Service supervisors and meet the needs of the local hospitality/food-service industry.

**Recommended Preparation**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS A100</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
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**Required Prerequisites**

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<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
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<td><strong>Year 1</strong></td>
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<td><strong>Semester 1</strong></td>
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<tr>
<td>FSM A100</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
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<tr>
<td>FSM A150</td>
<td>Principles of Quantity Food Preparation</td>
<td>4</td>
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<tr>
<td>FSM A160</td>
<td>Sanitation and Safety</td>
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<tr>
<td>FSM A190</td>
<td>Dining Room Service</td>
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<td></td>
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<td><strong>Semester 2</strong></td>
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<tr>
<td>FSM A151</td>
<td>Food Production Management</td>
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<tr>
<td>FSM A210</td>
<td>Dining Room Management</td>
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<tr>
<td>FSM A240</td>
<td>Food Service Math/Accounting</td>
<td>4</td>
</tr>
<tr>
<td>FSM A260</td>
<td>Supervision and Training Techniques</td>
<td>3</td>
</tr>
</tbody>
</table>

**Hospitality, Travel, and Tourism**

The Hotel, Travel & Tourism programs at Orange Coast College are designed for employment or career advancement within the hospitality industry. Whether an individual is a novice or currently employed, these programs strengthen the opportunity for success within the fastest growing industries in southern California.

Career opportunities abound as growth of the hospitality industry continues throughout the United States and the world requiring trained individuals to fill the multitude of varied positions. Students may choose individual courses, certification in areas of specialization, as well as, completion of an Associate in Science Degree.

The Hotel, Travel & Tourism, and Spa Management programs at Orange Coast College use materials from the Educational Institute of the American Hotel & Lodging Association, the world leader in hospitality education and training. Students who successfully complete these courses earn globally recognized certificates from the American Hotel & Lodging Association in addition to college credits applicable toward a Certificate or Associate Degree at Orange Coast College. At least 50% of all Airline, Hotel, Spa, Meeting/Event, Travel & Tourism coursework must be completed at Orange Coast College.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>** Requirement**</td>
<td></td>
<td></td>
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<tr>
<td>Program Major Units</td>
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<td>47-48</td>
</tr>
<tr>
<td>AS General Education Option 1, 2, or 3</td>
<td>Varies</td>
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<tr>
<td>Total Degree Units</td>
<td></td>
<td>62-63</td>
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**Suggested Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS A090</td>
<td>Beginning Computer Keyboarding 1</td>
<td>1.5</td>
</tr>
<tr>
<td>EMS A100</td>
<td>Emergency Medical Responder</td>
<td>4</td>
</tr>
<tr>
<td>KIN A203</td>
<td>First Aid and CPR</td>
<td>2</td>
</tr>
</tbody>
</table>
Students are encouraged to complete the requirements for an Associate in Science degree; graduation requirements can be found in the college catalog. With additional coursework, students can prepare for a Bachelor's Degree in this field. For more department information, call 714-432-5835 x6 or visit the School of Hospitality website at www.orangecoastcollege.edu.

Note: Curriculum may be adjusted to meet the needs of students with extensive industry related experience. Evening and weekend courses are available.

**Airline Travel Careers**
- Airline Travel Management, Certificate of Achievement
- Flight Attendant and Airline and Travel Careers, Certificate of Achievement

**Flight Attendant and Airline and Travel Careers**
- Flight Attendant and Airline and Travel Careers, Certificate of Achievement
- Flight Attendant and Airline and Travel Careers, Associate in Science Degree

**Certificate Requirements**
- Spa Management, Certificate of Achievement (p. 138)
- Travel Specialist, Associate in Science Degree (p. 138)
- Travel Specialist, Certificate of Achievement (p. 139)

**Airline Travel Management, Certificate of Achievement**

Financial Aid Eligible
Banner Code: 1_CT_ATM
Control Number: 18200

This program prepares students for ground operations and airport management. Ground operations involves all aspects of aircraft handling at the airport as well as aircraft movement around the aerodrome. Managers are at the center of the airport. They are the decision-makers and policy-makers for airports. They create jobs and manage each airport department. The job is multi-faceted and vital to aviation safety. Airports are often one of the largest employers in a local area.

Corporate aviation is one of the largest growing entities within the aviation community. The corporate side of aviation has flourished, with an increased demand for larger aircraft and “Third Crew” member responsibilities and placements.

**Program Outcome**
1. The outcome for the Certificate of Achievement is to prepare students for employment in all levels of corporate and retail aviation including: flight attendant, ground operations, airport management, guest service agents, and other airline careers.

**Certificate Requirements**
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.
Complete the Flight Attendant and Airline and Travel Careers Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. Note: this AS degree requires a minimum of 61 units for completion.

Program Outcome
1. The outcome for the Certificate of Achievement is to prepare students for employment as a flight attendant or ground customer service agent with the airline industry.

Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/hospitality-food-tourism/hospitality-travel/flight-attendant-airline-travel-careers-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC p. 17) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Airline Travel Management Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST A100</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>HTT A138</td>
<td>Sharing the Travel Experience</td>
<td>3</td>
</tr>
<tr>
<td>HTT A199</td>
<td>Current Issues in Hospitality, Travel and Tourism</td>
<td>0.5-1.5</td>
</tr>
<tr>
<td>HTT A299</td>
<td>Certified Travel Associate</td>
<td>3</td>
</tr>
<tr>
<td>SPAN A180</td>
<td>Elementary Spanish 1</td>
<td>5</td>
</tr>
</tbody>
</table>

Flight Attendant and Airline and Travel Careers, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_FAAT
Control Number: 17648

This program prepares men and women of all ages for the highly competitive flight attendant, or a customer service career in the airline and travel industry. Courses include airline, airport, and travel terminology codes, hiring qualifications, communication skills, appearance and image standards, written employment skills and oral interviewing techniques and strategies to set yourself apart. Students work on campus, and with community and charity events to enhance their public contact experience considered valuable for flight attendants and careers in the travel industry.
Flight Attendant and Airline Travel Careers, Certificate of Achievement

**Course** | **Title** | **Units**
--- | --- | ---
HTT A284 | Leadership and Strategic Management | 3

**Spring**

| Course | Title | Units |
--- | --- | --- |
HTT A185 | Interviewing and Professional Development | 3
HTT A226 | Airline Internship | 4

**Total Units** | 43

**Course** | **Title** | **Units**
--- | --- | ---
SPN A180 | Elementary Spanish 1 | 5

**Flight Attendant and Airline Travel Careers**

**Suggested Electives**

| Course | Title | Units |
--- | --- | --- |
ARLN A117 | Aviation Management | 3 |
CMST A100 | Interpersonal Communication | 3 |
KIN A203 | First Aid and CPR | 2 |
HTT A138 | Sharing the Travel Experience | 3 |
HTT A199 | Current Issues in Hospitality, Travel and Tourism | 0.5-1.5 |
HTT A299 | Certified Travel Associate | 3 |

**Requirement**

| Units |
--- | --- |
Program Major Units | 43 |
AS General Education Option 1, 2, or 3 | Varies |
Transferable electives to satisfy unit requirement | Varies |
Total Minimum Degree Units | 61 |

**Flight Attendant and Airline and Travel Careers, Certificate of Achievement**

Financial Aid Eligible
Banner Code: 1_CT_FAAT
Control Number: 18201

This program prepares men and women of all ages for the highly competitive flight attendant, or a customer service career in the airline and travel industry. Courses include airline, airport, and travel terminology codes, hiring qualifications, communication skills, appearance and image standards, written employment skills and oral interviewing techniques and strategies to set yourself apart. Students work on campus, and with community and charity events to enhance their public contact experience considered valuable for flight attendants and careers in the travel industry.

**Program Outcome**

1. The outcome for the Certificate of Achievement is to prepare students for employment as a flight attendant or ground customer service agent with the airline industry.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Course** | **Title** | **Units**
--- | --- | ---
ARLN A137 | Operations, Terminology, & Safety | 3 |
HTT A130 | Cultural Tourism | 3 |
HTT A131 | Computer Reservation Systems - SABRE | 3 |
HTT A150 | Travel and Tourism Career Development | 3 |

**Units** | 12

**Spring**

| Course | Title | Units |
--- | --- | --- |
ARLN A139 | Flight Attendant Qualifications and Opportunities | 3 |
HTT A125 | Destination the Americas | 3 |
HTT A128 | Destination Africa/Pacific | 3 |
HTT A135 | Homeland Security | 3 |

**Units** | 12

**Year 2**

**Fall**

| Course | Title | Units |
--- | --- | --- |
HTT A105 | Passport to Success | 3 |
HTT A127 | Destination Eastern Europe | 3 |
HTT A180 | Enhancing Guest Service | 3 |
HTT A284 | Leadership and Strategic Management | 3 |

**Units** | 12

**Spring**

| Course | Title | Units |
--- | --- | --- |
HTT A185 | Interviewing and Professional Development | 3 |
HTT A226 | Airline Internship | 4 |

**Units** | 7

**Total Units** | 43

**Flight Attendant and Airline Travel Careers**

**Suggested Electives**

| Course | Title | Units |
--- | --- | --- |
ARLN A117 | Aviation Management | 3 |
CMST A100 | Interpersonal Communication | 3 |
KIN A203 | First Aid and CPR | 2 |
HTT A138 | Sharing the Travel Experience | 3 |
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Front Office Specialist, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_HMFO
Control Number: 16884

These courses have been recommended by industry to provide essential preparation to supervise and manage within operational areas in a hotel. Courses have been organized to provide understanding of techniques and knowledge necessary in developing effective leadership and decision-making skills and successful communication among all departments contributing to positive guest experiences. The curriculum was developed with guidance from an advisory council of hospitality professionals who rank skills and knowledge required in the hospitality industry. Upon completion of the program there are employment opportunities with competitive salary.

Program Outcome
1. The outcome for the certificate of achievement is to prepare students for employment within the front office and operational support areas of a hotel.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
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<tr>
<td>HTT A199</td>
<td>Current Issues in Hospitality, Travel and Tourism</td>
<td>0.5-1.5</td>
</tr>
<tr>
<td>HTT A299</td>
<td>Certified Travel Associate</td>
<td>3</td>
</tr>
<tr>
<td>SPAN A180</td>
<td>Elementary Spanish 1</td>
<td>5</td>
</tr>
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</table>

Front Office Specialist Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HTT A138</td>
<td>Sharing the Travel Experience</td>
<td>3</td>
</tr>
<tr>
<td>HTT A199</td>
<td>Current Issues in Hospitality, Travel and Tourism</td>
<td>0.5-1.5</td>
</tr>
<tr>
<td>HTT A299</td>
<td>Certified Travel Associate</td>
<td>3</td>
</tr>
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</table>

Hotel Management, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_HOTL
Control Number: 04016

The Hotel, Human Resource, Meeting/Event, Hospitality Marketing, and Spa Management programs at Orange Coast College are designed for employment or career advancement within the hospitality industry. Whether an individual is a novice or currently employed, these programs strengthen the opportunity for success within the fastest growing industry in Southern California. Career opportunities abound as growth of the hospitality industry continues throughout the United States and the world requiring trained individuals to fill the multitude of varied positions. Students may choose individual courses, certification in areas of specialization, as well as, completion of an Associate in Science Degree.

To earn a certificate and/or degree, complete the required coursework as listed with a “C” or better. At least 50% of all Airline, Hotel, Spa, Meeting/Event, and Travel & Tourism coursework must be completed at Orange Coast College.
Program Outcomes
1. The outcome for this degree is to prepare student for employment as a supervisor or manager within the hospitality industry and to prepare student for transfer to a four-year college.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/hospitality-food-tourism/hospitality-travel/hotel-management-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>Fall</td>
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<tr>
<td>HTT A110</td>
<td>Hotel Front Office Operations</td>
<td>3</td>
</tr>
<tr>
<td>HTT A130</td>
<td>Cultural Tourism</td>
<td>3</td>
</tr>
<tr>
<td>HTT A150</td>
<td>Travel and Tourism Career Development</td>
<td>3</td>
</tr>
<tr>
<td>HTT A180</td>
<td>Enhancing Guest Service</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Units</td>
<td>12</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HTT A135</td>
<td>Homeland Security</td>
<td>3</td>
</tr>
<tr>
<td>HTT A140</td>
<td>Revenue Management</td>
<td>3</td>
</tr>
<tr>
<td>HTT A285</td>
<td>Hospitality Operations</td>
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<td>HTT A288</td>
<td>Human Resource Management</td>
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<td>Units</td>
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<tr>
<td>Year 2</td>
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<tr>
<td>Fall</td>
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<td></td>
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<tr>
<td>HTT A105</td>
<td>Passport to Success</td>
<td>3</td>
</tr>
<tr>
<td>HTT A118</td>
<td>Hospitality Accounting</td>
<td>3</td>
</tr>
<tr>
<td>HTT A240</td>
<td>Hospitality and Tourism Marketing</td>
<td>3</td>
</tr>
<tr>
<td>HTT A284</td>
<td>Leadership and Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Units</td>
<td>12</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HTT A185</td>
<td>Interviewing and Professional Development</td>
<td>3</td>
</tr>
<tr>
<td>HTT A285</td>
<td>Hosp/Travel/Tour Law</td>
<td>3</td>
</tr>
<tr>
<td>or HTT A290</td>
<td>or California Employment Law</td>
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</tbody>
</table>

Human Resource Management, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_HMHR
Control Number: 16886

Gain insight into decision making skills, and organizational understanding for advancement or employment in a human resource role.

Complete the Human Resource Manangement Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome
1. The outcome for the certificate of achievement is to prepare students for employment within the hotel industry the area of human resources.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/hospitality-food-tourism/hospitality-travel/human-resource-management-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>Year 1</td>
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</tr>
<tr>
<td>Fall</td>
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</tr>
<tr>
<td>HTT A105</td>
<td>Passport to Success</td>
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</tr>
<tr>
<td>HTT A130</td>
<td>Cultural Tourism</td>
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</tr>
<tr>
<td>HTT A150</td>
<td>Travel and Tourism Career Development</td>
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</tr>
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<td>HTT A284</td>
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<td>HTT A180</td>
<td>Enhancing Guest Service</td>
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<td>Interviewing and Professional Development</td>
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<td>HTT A288</td>
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<td>HTT A290</td>
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<td>HTT A285</td>
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<td>HTT A286</td>
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<td>34</td>
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</table>

Human Resource Management, Certificate of Achievement

Gain insight into decision making skills, and organizational understanding for advancement or employment in a human resource role.

Program Outcome

1. The outcome for the certificate of achievement is to prepare students for employment within the hotel industry the area of human resources.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
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<tr>
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<td>HTT A105</td>
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<td>Units</td>
<td>12</td>
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<tr>
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<tr>
<td>HTT A180</td>
<td>Enhancing Guest Service</td>
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<td>Hosp/Travel/Tour Law</td>
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<td>Total Units</td>
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Human Resource Management, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_HMHR
Control Number: 18202

Human Resource Management Suggested Electives

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
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<td>HTT A138</td>
<td>Sharing the Travel Experience</td>
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</tr>
<tr>
<td>HTT A199</td>
<td>Current Issues in Hospitality, Travel and</td>
<td>0.5-1.5</td>
</tr>
<tr>
<td></td>
<td>Tourism</td>
<td></td>
</tr>
<tr>
<td>HTT A299</td>
<td>Certified Travel Associate</td>
<td>3</td>
</tr>
<tr>
<td>CMST A100</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPAN A180</td>
<td>Elementary Spanish 1</td>
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Requirement

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Program Major Units</td>
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<td>AS General Education Option 1, 2, or 3</td>
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<td>Total Degree Units</td>
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Human Resource Management Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>HTT A138</td>
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<td>Interpersonal Communication</td>
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</tr>
<tr>
<td>SPAN A180</td>
<td>Elementary Spanish 1</td>
<td>5</td>
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</table>
Meeting and Event Management, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_HTTM
Control Number: 38242

The Meeting and Event Management program focuses on the planner’s practical “need to know” tools and skills. Learn from well-known experienced industry professionals who are eager to share the practical “need to know” tools and skills essential to every successful meeting and event planner. Attain a solid understanding of the myriad details and behind-the-scenes considerations needed to assure your meeting or event is the success you and your clients hoped for.

Convenient online and weekend classes are designed to provide a dynamic learning experience with extensive interaction between students and instructors through case studies, real-life examples, group work and hands-on activities. Special features include “behind the scenes” visits to hotel meeting facilities and development of a hands-on project.

Complete the Meeting and Event Management Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome

1. The outcome for the certificate of achievement is to prepare students for employment within the hospitality, travel, and tourism industries as a meeting, convention, or event planner.

Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/hospitality-food-tourism/hospitality-travel/meeting-event-management-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Meeting and Event Management, Associate in Science Degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
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<td></td>
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<td>HTT A105</td>
<td>Passport to Success</td>
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<td>HTT A265</td>
<td>Principles of Event and Meeting Management</td>
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</tr>
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<td>HTT A266</td>
<td>Organize and Manage Events and Meetings</td>
<td>1.5</td>
</tr>
<tr>
<td>HTT A273</td>
<td>Sport Event Management</td>
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<td>Catering Design and Management</td>
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<td>HTT A284</td>
<td>Leadership and Strategic Management</td>
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<tr>
<td>HTT A158</td>
<td>Luxury, Incentive, and Corporate Travel</td>
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<td>HTT A185</td>
<td>Interviewing and Professional Development</td>
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<td>HTT A267</td>
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<td>HTT A269</td>
<td>Destination Management</td>
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<td>Meeting and Event Marketing and Sales</td>
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<td>HTT A275</td>
<td>Event Fund-Raising and Sponsorship</td>
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<td>HTT A276</td>
<td>Expo and Trade Show Management and Promotion</td>
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<td>HTT A277</td>
<td>Wedding Planning as a Business</td>
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<td>Year 2</td>
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<td>Fall</td>
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<td>HTT A138</td>
<td>Sharing the Travel Experience</td>
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<td>HTT A221</td>
<td>Meeting/Event Management Internship</td>
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<td>HTT A274</td>
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### Meeting and Event Management, Certificate of Achievement

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<td>CMST A100</td>
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<td>Current Issues in Hospitality, Travel and Tourism</td>
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<td>HTT A299</td>
<td>Certified Travel Associate</td>
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<tr>
<td>SPAN A180</td>
<td>Elementary Spanish 1</td>
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**Requirement**

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<tr>
<th>Units</th>
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<tr>
<td>Program Major Units</td>
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<tr>
<td>Transferable electives to satisfy unit requirement</td>
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<tr>
<td>Total Degree Units</td>
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</table>

Meeting and Event Management, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_HTTM
Control Number: 30921

The Meeting and Event Management program focuses on the planner’s practical “need to know” tools and skills. Learn from well-known experienced industry professionals who are eager to share the practical “need to know” tools and skills essential to every successful meeting and event planner. Attain a solid understanding of the myriad details and behind-the-scenes considerations needed to assure your meeting or event is the success you and your clients hoped for.
Convenient online and weekend classes are designed to provide a dynamic learning experience with extensive interaction between students and instructors—through case studies, real-life examples, group work and hands-on activities. Special features include “behind the scenes” visits to hotel meeting facilities and development of a hands-on project.

Program Outcome

1. The outcome for the certificate of achievement is to prepare students for employment within the hospitality, travel, and tourism industries as a meeting, convention, or event planner.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<td></td>
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<tr>
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<td>Event Fund-Raising and Sponsorship</td>
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<tr>
<td>HTT A276</td>
<td>Expo and Trade Show Management and Promotion</td>
<td>1</td>
</tr>
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</table>

Sales and Marketing Specialist, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_HMME
Control Number: 10278

Develop essential skills necessary for advancement or employment within a sales or marketing role in the hospitality, event, or meeting management industries.

Complete the Sales and Marketing Specialist Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome

1. The outcome for the certificate of achievement is to prepare students for employment within the hospitality, travel, or tourism industries in a sales or marketing capacity.

Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate...
Develop essential skills necessary for advancement or employment within a sales or marketing role in the hospitality, event, or meeting management industries.

**Program Outcome**

1. The outcome for the certificate of achievement is to prepare students for employment within the hospitality, travel, or tourism industries in a sales or marketing capacity.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.
The popularity of spas in the U.S. has increased dramatically over the past few years and shows no signs of slowing. According to a recent international Spa Association study, the spa industry generated over $12.7 billion in revenue in 2015. Each year, more spas are being opened across the country creating new jobs for spa professionals.

Orange Coast College is one of the first community college’s to offer Spa Management certification. The greater Orange County area is thriving with spas and our program is in a unique position to provide students access to numerous world-class resorts and spas – right in our own backyard.

Coursework in the program provides comprehensive business education and industry input to create a well-rounded educational experience for career success in the Spa market. You will acquire business and management strategies, desirable skills for successful day-to-day operations, combined with long-range strategies necessary for growth and profitability.

With increasing integration of spas in the hotel, resort, medical, healthcare, and tourism industries, spa management professionals are in demand. Our graduates will have the knowledge and skills needed to become leaders in the spa industry.

Complete the Spa Management Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**Program Outcome**

1. The outcome of this certificate of achievement is to prepare students for employment as a supervisor, manager, director or owner in the spa industry.

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (https://catalog.cccd.edu/orange-coast/ pathways/hospitality-food-tourism/hospitality-travel/spa-management- associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.
Spa Management, Certificate of Achievement

The popularity of spas in the U.S. has increased dramatically over the past few years and shows no signs of slowing. According to a recent international Spa Association study, the spa industry generated over $12.7 billion in revenue in 2015. Each year, more spas are being opened across the country creating new jobs for spa professionals.

Orange Coast College is one of the first community college’s to offer Spa Management certification. The greater Orange County area is thriving with spas and our program is in a unique position to provide students access to numerous world-class resorts and spas – right in our own backyard.

Coursework in the program provides comprehensive business education and industry input to create a well-rounded educational experience for career success in the Spa market. You will acquire business and management strategies, desirable skills for successful day-to-day operations, combined with long-range strategies necessary for growth and profitability.

With increasing integration of spas in the hotel, resort, medical, healthcare, and tourism industries, spa management professionals are in demand. Our graduates will have the knowledge and skills needed to become leaders in the spa industry.

Program Outcome
1. The outcome of this certificate of achievement is to prepare students for employment as a supervisor, manager, director or owner in the spa industry.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements section of this catalog. Check with a counselor to determine the requirements for completion.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z section of this catalog. Check with a counselor to determine the requirements for completion.

Spa Management Suggested Electives

Travel Specialist, Associate in Science Degree

These courses have been recommended by industry to provide essential preparation to sell, operate, supervise and manage within a travel agency or as an independent contractor of travel or home based agent. Courses have been organized to provide an understanding of techniques and knowledge necessary to develop effective leadership, decision-making skills, and successful communication among all departments contributing to positive, guest sales, and travel experiences.

Complete the Travel Specialist Certificate of Achievement and the Associate in Science graduation requirements as outlined in the...
Graduation Requirements section of the catalog. Note: this AS degree requires a minimum of 70 units for completion.

Program Outcome
1. The outcome of this certificate of achievement is to prepare students for employment with a retail or home-based agency, independent contractor, tour operator, cruise line, adventure company, receptive operator, or tourism/convention bureau.

Associate in Science Degree Requirements
1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/hospitality-food-tourism/hospitality-travel/travel-specialist-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

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<td>HTT A135</td>
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<td>HTT A138</td>
<td>Sharing the Travel Experience</td>
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<tr>
<td>HTT A240</td>
<td>Hospitality and Tourism Marketing</td>
<td>3</td>
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<td>HTT A284</td>
<td>Leadership and Strategic Management</td>
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<td>Luxury, Incentive, and Corporate Travel</td>
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Total Units | 52

Travel Specialist Suggested Electives

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<tr>
<th>Course</th>
<th>Title</th>
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Travel Specialist, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_TRAV
Control Number: 17711

These courses have been recommended by industry to provide essential preparation to sell, operate, supervise and manage within a travel agency or as an independent contractor of travel or home based agent. Courses have been organized to provide an understanding of techniques and knowledge necessary to develop effective leadership, decision-making skills, and successful communication among all departments contributing to positive, guest sales, and travel experiences.

Program Outcome
1. The outcome of this certificate of achievement is to prepare students for employment with a retail or home-based agency, independent contractor, tour operator, cruise line, adventure company, receptive operator, or tourism/convention bureau.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions...
as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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Nutrition and Dietetics

The Nutrition and Dietetics Technician Program is part of the School of Allied Health in the Consumer and Health Sciences Division at Orange Coast College. Students completing this program are prepared to join the dietetics team and participate in the nutrition care process for clients and patients that may be in the following settings: acute care, long term care, rehabilitation hospitals, and community agencies that provide education in nutrition.

Completion of the required courses, along with the Associate Degree program at Orange Coast College qualifies the student to sit for the Commission of Dietetics Registration national exam for the Nutrition and Dietetics Technician, Registered (NDTR) level.

Department Contact Information

Beth Blake, MPH, RDN
Associate Professor, Nutrition and Dietetics
Program Director
epsilon@occ.cccd.edu (epsilon@occ.cccd.edu)
Verna Grace, MS, RDN
Instructor, Nutrition and Dietetics
vgrace@occ.cccd.edu (vgrace@occ.cccd.edu)

Nutrition and Dietetics Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/dietetic%20technician/Pages/default.aspx)

- Dietetic Service Supervisor/Certified Dietary Manager, Certificate of Achievement (p. 140)
- Nutrition and Dietetics Technician, Associate in Science Degree (p. 141)
- Nutrition and Dietetics, Associate in Science Degree for Transfer (AS-T) (p. 142)
- Nutrition Education, Certificate of Achievement (p. 142)
- Nutrition Education, Associate in Science Degree (p. 143)
- Nutrition Education, Certificate of Achievement (p. 144)

Dietetic Service Supervisor/Certified Dietary Manager, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_FNDS
Control Number: 04015

Dietary Service Supervisors/Certified Dietary Managers plan and supervise employees in Food and Nutrition services at a health care facility. Responsibilities include assisting the dietitian with patient care activities, coordinating work of food production personnel, and ensuring safe and nutritionally adequate food for patients and residents.

Program Outcomes

1. The program will prepare students for successful employment as entry-level Food and Nutrition managers to meet the needs of healthcare facilities and other employers.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Course** | **Title** | **Units**
--- | --- | ---
**REQUIRED COURSES**
FN A170 | Nutrition | 3
FSM A150 | Principles of Quantity Food Preparation | 4
FSM A151 | Food Production Management | 2
FSM A160 | Sanitation and Safety | 3
FSM A250 | Menu Planning and Purchasing | 3
FSM A260 | Supervision and Training Techniques | 3
NC A175 | Health Care Field Experience | 4
NC A180 | Introduction to Medical Nutrition Therapy | 3
**TOTAL UNITS** | 25

**Nutrition and Dietetics Technician, Associate in Science Degree Requirements**

Financial Aid Eligible
Banner Code: 1_AS_NADT
Control Number: 08667

Students completing this program are prepared to join the nutrition and dietetics team in various nutritional aspects of health care. Graduates from this program are employed by acute care, long term care, and rehabilitation hospitals, as well as by community agencies that provide education in nutrition. Completion of the following courses, along with the Associate Degree program at Orange Coast College qualifies the student to sit for the Nutritional and Dietetics Technician, Registered (NDTR) exam. Students are highly encouraged to become a member of the Academy of Nutrition and Dietetics.

Upon successful completion of these courses (with grade of ‘C’ or better), the program requirements, and the General Education Requirements, students will receive a Verification Statement from the program director confirming that all requirements of the program have been met. Students will then be eligible to take the National Registration Exam administered by the Commission on Dietetic Registration.

This program has been granted full accreditation by:

The Accreditation Council for Education in Nutrition and Dietetics, of the Academy of Nutrition and Dietetics
120 S. Riverside Plaza, Suite 2190
Chicago, IL 60606-6995

800-877-1600 x5400
www.eatrightpro.org/ACEND (https://www.eatrightpro.org/acend/)

*It is recommended that the student complete at least 15-17 units of general education requirements prior to entering the program.*

**Program Outcomes**

1. Demonstrate competent entry-level skills of a Nutrition and Dietetics Technician, Registered (NDTR) in order to meet the employment needs of the community.
2. Communicate and work effectively with an interdisciplinary workforce and clientele of the community.
3. Participate in personal growth and lifelong learning activities

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite. Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/hospitality-food-tourism/nutrition-dietetics/nutrition-dietetics-technician-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

**Required Prerequisites**

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<td>FSM A160</td>
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organizations, and corporations. Such as hospitals, long-term care facilities, school districts, community

careers as a registered dietitian nutritionist (RDN). There are many

a baccalaureate degree in nutrition/dietetics to further prepare for

common core of lower division courses required to transfer and pursue

This degree provides students with the foundational knowledge and

requirements for Dietetic Service Supervisor.

These courses meet the California Department of Public Health

requirement for Dietetic Service Supervisor.


Course | Title | Units
--- | --- | ---
FSM A260 | Supervision and Training Techniques | 3
Spring
BIOL A221 | Anatomy-Physiology | 4
FSM A151 | Food Production Management | 2
NC A175 | Health Care Field Experience | 4
NC A180 | Introduction to Medical Nutrition Therapy | 3

Completion of the first year with a 'C' grade in all courses is required before beginning second year.

Year 2

Fall
FN A144 | Life Cycle Nutrition | 3
FN A171 | Applied Nutrition | 2
NC A280 | Intermediate Nutrition Care | 2
NC A281 | Supervised Practice 1 | 3

Units | 10
Spring
FSM A250 | Menu Planning and Purchasing | 3
NC A285 | Advanced Nutrition Care | 2
NC A286 | Supervised Practice 2 | 3

Units | 8

Total Units | 46.5

1 These courses meet the California Department of Public Health requirement for Dietetic Service Supervisor.

Program Outcomes

1. Evaluate scientific concepts of nutrition related to the functioning of nutrients in the basic life process.
2. Demonstrate basic food science principles and food preparation techniques.
3. Apply chemistry and biology concepts to determine the effects of nutrients on the human body.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth Option 11) OR the Intersegmental General Education Transfer Curriculum (IGETC Option 3).

Course | Title | Units
--- | --- | ---
FSM A260 | Supervision and Training Techniques | 3
Spring
BIOL A221 | Anatomy-Physiology | 4
FSM A151 | Food Production Management | 2
NC A175 | Health Care Field Experience | 4
NC A180 | Introduction to Medical Nutrition Therapy | 3

Completion of the first year with a 'C' grade in all courses is required before beginning second year.

Year 2

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FN A144 | Life Cycle Nutrition | 3
FN A171 | Applied Nutrition | 2
NC A280 | Intermediate Nutrition Care | 2
NC A281 | Supervised Practice 1 | 3

Units | 10
Spring
FSM A250 | Menu Planning and Purchasing | 3
NC A285 | Advanced Nutrition Care | 2
NC A286 | Supervised Practice 2 | 3

Units | 8

Total Units | 46.5

Nutrition and Dietetics, Associate in Science Degree for Transfer (AS-T)

Financial Aid Eligible

Banner Code: 1_AST_NUTR

Control Number: 35524

Students graduating with an Associate in Science in Nutrition and Dietetics for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Nutrition and Dietetics AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult a counselor for more information.

This degree provides students with the foundational knowledge and common core of lower division courses required to transfer and pursue a baccalaureate degree in nutrition/dietetics to further prepare for careers as a registered dietitian nutritionist (RDN). There are many career opportunities for dietitians. They work in a variety of settings such as hospitals, long-term care facilities, school districts, community organizations, and corporations.

List A

Select two of the following: 1

1. BIOL A225 Human Physiology
2. CHEM A220 Organic Chemistry A
   & A220L Organic Chemistry A Lab
3. MATH A160 Introduction to Statistics

List B

FN A180 Principles of Foods

Program Major Units

Total Units

1 In order to be better prepared for transfer, OCC Nutrition and Dietetics faculty strongly recommend that all students completing this degree use elective credits to complete all courses in List A. Note: CHEM A220 Organic Chemistry A and CHEM A220L Organic Chemistry A Lab are considered one course.

Nutrition and Fitness Education, Certificate of Achievement

Financial Aid Eligible
Students who graduate from this program are prepared for entry-level positions in the health and fitness industry, encompassing weight control clinics, sports medicine clinics, health clubs and gyms, corporate fitness and wellness centers, fitness and nutrition programs in schools, and community agencies concerned with health, fitness and nutrition education.

Students in this program will be able to advise clients on normal nutrition, weight control and improved performance by working with other nutrition professionals. The fitness industry is experiencing rapid growth and has a growing demand for trained fitness and nutrition educators.

**Program Outcome**

1. Graduates will be competent entry-level Nutrition and Fitness professionals meeting the employment needs of the community.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Most division offices prefer that students contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Nutrition Education, Associate in Science Degree**

Financial Aid Eligible

**Program Outcome**

1. Graduates will be competent entry-level Nutrition Education Assistants meeting the employment needs of the community.

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/hospitality-food-tourism/nutrition-dietetics/nutrition-education-associate-science-degree/orange-coast/general-education-patterns/associate-science-
programs designed to prepare the graduate to enter a particular field of education, and manufacturers and distributors of nutrition-related products.

Students who graduate from this program are prepared for employment in one of the fastest growing and most prolific industries in Southern California, encompassing weight control clinics, health and exercise spas and gymnasiums, community agencies concerned with nutrition education, and manufacturers and distributors of nutrition-related products.

**Program Outcome**

1. Graduates will be competent entry-level Nutrition Education Assistants meeting the employment needs of the community.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Suggested Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>FN A136</td>
<td>Nutrition, Fitness and Performance</td>
<td>3</td>
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<td>HMDV A180</td>
<td>Child Growth and Development</td>
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<table>
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<tr>
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<tr>
<td>Minimum Program Major Units</td>
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<tr>
<td>AS General Education Option 1, 2, or 3</td>
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<tr>
<td>Transferable electives to satisfy unit requirement</td>
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<td>Total Degree Units</td>
<td>60</td>
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</tbody>
</table>

**Nutrition Education, Certificate of Achievement**

Financial Aid Eligible
Banner Code: 1_CN_NCNE
Control Number: 22428

Students who graduate from this program are prepared for employment in one of the fastest growing and most prolific industries in Southern California, encompassing weight control clinics, health and exercise spas and gymnasiums, community agencies concerned with nutrition education, and manufacturers and distributors of nutrition-related products.

<table>
<thead>
<tr>
<th>Course</th>
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<th>Units</th>
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<tr>
<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
<td>4</td>
</tr>
<tr>
<td>FN/NC A100</td>
<td>Careers in Dietetics and Food Science</td>
<td>1</td>
</tr>
<tr>
<td>FN A144</td>
<td>Life Cycle Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FSM A160</td>
<td>Sanitation and Safety</td>
<td>3</td>
</tr>
<tr>
<td>FN A170</td>
<td>Nutrition</td>
<td>3</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1</td>
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<tr>
<td>Semester 2</td>
<td></td>
</tr>
<tr>
<td>Semester 3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units** 30
vessels. Land-based jobs include marine electrical work and entry level engine repair. Some graduates continue their education at a maritime academy. Internships are available to eligible students.

Department Contact Information
Karen Prioleau
kprioleau@occ.cccd.edu
Sarah Hirsch
shirsch3@occ.cccd.edu

Professional Mariner Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/professional-mariner/Pages/default.aspx)

- Professional Mariner, Associate in Science Degree (p. 145)
- Professional Mariner, Certificate of Achievement (p. 145)

Professional Mariner, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_MRPME
Control Number: 33902

The Professional Mariner degree prepares students for careers in the maritime industry in Southern California and around the world in private or commercial vessel operations: large private yachts, charter yachts, cruise ships, passenger ferries, sport fishing, commercial fishing, whale watching, dive boats, supply vessels, work boats, tug boats, and commercial shipping. These vessels must operate with qualified crew so the curriculum for the Orange Coast College Professional Mariner program was developed with guidance from an Advisory Council of maritime industry professionals who ranked skills and knowledge that they require in their deck crew. Upon completion of the program, there are employment opportunities with competitive salary.

Students must be able to swim 50 yards and tread water for 10 minutes. Previous boating experience is advantageous but not required. Facility fees will be charged.

Program Outcomes
1. Communicate verbally and in writing in a clear manner and with correct nautical protocol.
2. Identify maritime career paths along with required U.S. Coast Guard licensing requirements.
3. Demonstrate safe operation and maintenance of vessels.
4. Demonstrate prevention and safety response in First Aid, Personal Survival and Social Responsibility at sea, as well as fire prevention and response.

Associate in Science Degree

Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/hospitality-food-tourism/professional-mariner/professional-mariner-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MARA A136</td>
<td>Introduction to Sailing</td>
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</tr>
<tr>
<td>or MARA A137</td>
<td>or Intermediate Sailing - Intro to Keel Boats</td>
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</tr>
<tr>
<td>MARA A150</td>
<td>Coastal Navigation</td>
<td>3</td>
</tr>
<tr>
<td>MARA A151</td>
<td>Maritime Industry</td>
<td>2</td>
</tr>
<tr>
<td>MARA A152</td>
<td>Boat Handling and Seamanship</td>
<td>3</td>
</tr>
<tr>
<td>MARA A154</td>
<td>Yachtkeeping and Engine Maintenance</td>
<td>2</td>
</tr>
<tr>
<td>MARA A156</td>
<td>Maritime Environment</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Units</td>
<td>13</td>
</tr>
<tr>
<td>MARA A153</td>
<td>Marine Basic Safety Training</td>
<td>4</td>
</tr>
<tr>
<td>MARA A157</td>
<td>Radar Observer</td>
<td>2</td>
</tr>
<tr>
<td>MARA A200</td>
<td>Professional Mariner Internship</td>
<td>3</td>
</tr>
<tr>
<td>&amp; MARA A201</td>
<td>and Professional Mariner Internship Lecture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Units</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Total Units</td>
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1 Courses must be taken concurrently.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<tbody>
<tr>
<td>Program Major Units</td>
<td>22</td>
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<tr>
<td>AS General Education Option 1, 2, or 3</td>
<td>Varies</td>
</tr>
<tr>
<td>Transferable electives to satisfy unit requirement</td>
<td>Varies</td>
</tr>
<tr>
<td>Total Degree Units</td>
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</tbody>
</table>

Professional Mariner Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FN A185</td>
<td>Cultural Foods</td>
<td>2</td>
</tr>
<tr>
<td>MATH A170</td>
<td>Precalculus</td>
<td>4</td>
</tr>
</tbody>
</table>

Professional Mariner, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_MRPM
Control Number: 18998

Curriculum includes career path identification and job search preparation in the maritime industry, maritime environment, seamanship, marine safety, boat handling, navigation, and boat maintenance. In addition to lecture, most courses include hands-on practical exercises.

Students must be able to swim 50 yards and tread water for 10 minutes. Previous boating experience is advantageous but not required. Facility fees will be charged.

**Program Outcomes**

1. Communicate verbally and in writing in a clear manner and with correct nautical protocol.
2. Identify maritime career paths along with required U.S. Coast Guard licensing requirements.
3. Demonstrate safe operation and maintenance of vessels.
4. Demonstrate prevention and safety response in First Aid, Personal Survival and Social Responsibility at sea, as well as fire prevention and response.

**Certificate Requirements**

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2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<tr>
<td>MARA A150</td>
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<td>MARA A151</td>
<td>Maritime Industry</td>
<td>2</td>
</tr>
<tr>
<td>MARA A152</td>
<td>Boat Handling and Seamanship</td>
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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARA A153</td>
<td>Marine Basic Safety Training</td>
<td>4</td>
</tr>
<tr>
<td>MARA A154</td>
<td>Yachkeeping and Engine Maintenance</td>
<td>2</td>
</tr>
<tr>
<td>MARA A156</td>
<td>Maritime Environment</td>
<td>2</td>
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</table>

**Professional Mariner Restricted Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS A120</td>
<td>Personal Financial Success</td>
<td>3</td>
</tr>
<tr>
<td>FN A185</td>
<td>Cultural Foods</td>
<td>2</td>
</tr>
<tr>
<td>HLED/PUBH A100</td>
<td>Personal Health Education</td>
<td>3</td>
</tr>
<tr>
<td>KIN A107</td>
<td>Fitness Programs I</td>
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<tr>
<td>KIN A108</td>
<td>Strength and Conditioning</td>
<td>0.5-3</td>
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<tr>
<td>KIN A131</td>
<td>Swimming for Fitness Level 1</td>
<td>1-2</td>
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<tr>
<td>LEAD A180</td>
<td>Personal Leadership</td>
<td>3</td>
</tr>
<tr>
<td>MARA A136</td>
<td>Introduction to Sailing</td>
<td>1</td>
</tr>
<tr>
<td>MARA A137</td>
<td>Intermediate Sailing - Intro to Keel Boats</td>
<td>1</td>
</tr>
<tr>
<td>MARA A138</td>
<td>Introduction to Ocean Sailing</td>
<td>1</td>
</tr>
<tr>
<td>MARA A157</td>
<td>Radar Observer</td>
<td>2</td>
</tr>
<tr>
<td>MARA A200 &amp; MARA A201</td>
<td>Professional Mariner Internship Lecture</td>
<td>3</td>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Any Foreign Language</td>
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<tr>
<td>BUS A120</td>
<td>Personal Financial Success</td>
<td>3</td>
</tr>
<tr>
<td>FN A185</td>
<td>Cultural Foods</td>
<td>2</td>
</tr>
<tr>
<td>HLED/PUBH A100</td>
<td>Personal Health Education</td>
<td>3</td>
</tr>
<tr>
<td>KIN A107</td>
<td>Fitness Programs I</td>
<td>0.5-3</td>
</tr>
<tr>
<td>KIN A108</td>
<td>Strength and Conditioning</td>
<td>0.5-3</td>
</tr>
<tr>
<td>KIN A131</td>
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<tr>
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<td>Introduction to Ocean Sailing</td>
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</tr>
<tr>
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<tr>
<td>MARA A200 &amp; MARA A201</td>
<td>Professional Mariner Internship Lecture</td>
<td>3</td>
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</table>

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  • Master Construction Specialist, Associate in Science Degree (p. 172)
  • Master Construction Specialist, Certificate of Achievement (p. 173)
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  • Residential Construction Development First Award, Certificate of Achievement (p. 175)
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  • Electronic-Mechanical Technician, Certificate of Achievement (p. 179)
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  • Heating, Ventilation, Air Conditioning and Refrigeration, Certificate of Achievement (p. 181)
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  • Machinist, Certificate of Achievement (p. 192)
  • Tooling, Associate in Science Degree (p. 193)
  • Tooling, Certificate of Achievement (p. 193)
• Professional Mariner (p. 194)
  • Professional Mariner, Associate in Science Degree (p. 194)
  • Professional Mariner, Certificate of Achievement (p. 195)
• Welding Technology (p. 196)
  • Advanced I Welding (FCAW), Certificate of Specialization (p. 196)
  • Advanced II Welding (FCAW), Certificate of Specialization (p. 197)
  • Advanced Welding (SMAW), Certificate of Specialization (p. 197)
  • Basic Welding (SMAW), Skill Certificate (p. 198)
  • Gas Metal Arc Welding (GMAW), Certificate of Specialization (p. 198)
  • Gas Tungsten Arc Welding (GTAW), Certificate of Specialization (p. 199)
  • Intermediate Welding (SMAW), Skill Certificate (p. 199)
  • Orbital Welding, Certificate of Specialization (p. 200)
  • Pipe, Certificate of Specialization (p. 200)
  • Welding Technology, Associate in Science Degree (p. 201)
  • Welding Technology, Certificate of Achievement (p. 202)

Architectural Technology

Mission Statement

The OCC Architectural Technology Program endeavors to empower students to lead productive and creative professional lives in the context of Architecture and Environmental Design.

Program Description
The Architectural Technology Program offers courses in design, building materials, construction documents, design visualization and graphics, computer-assisted design, building information modeling and fabrication. Our comprehensive program provides students with the discipline and critical thinking skills necessary to transfer to a broad range of universities and the technical and technical skills to gain employment with the many and varied firms in Southern California that hire our graduates. Former California Architects Board President, Christine Lampert, AIA, rates our program as one of the top community college programs in the state. OCC’s Architecture program has a long history of successful graduates and our current students continue to excel as indicated by winning design awards, high transfer rates, and becoming valued members of the professional community.

Architectural Technology Design Specialization Certificates

Specialization Certificates are designed to give Architectural Technology majors a focus within their major and to give non-major students and professionals the opportunity to gain skills in one of five areas within the context of Architecture & Environmental Design.

Department Contact Information

Dean Abernathy
dabernathy@occ.cccd.edu
(714) 432-5868

Architectural Technology Department Website (http://www.orangecoastcollege.edu/academics/divisions/technology/architectural_technology/Pages/default.aspx)

- Architectural Design 1, Associate in Science Degree (p. 148)
- Architectural Design 1, Certificate of Achievement (p. 149)
- Architectural Design 2, Associate in Science Degree (p. 150)
- Architectural Design 2, Certificate of Achievement (p. 151)
- Architecture, Associate in Science Degree (p. 152)
- Design/Build, Certificate of Achievement (p. 153)
- Digital Fabrication for Architecture, Certificate of Achievement (p. 153)
- Environmental Resource Management, Certificate of Specialization (p. 154)
- FrameCAD Steel Design, Certificate of Specialization (p. 154)
- FrameCAD Steel Production, Certificate of Specialization (p. 155)
- Integrated Project Design, Certificate of Achievement (p. 155)
- Sustainable Design, Certificate of Achievement (p. 156)

Architectural Design 1, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_ARCD
Control Number: 03955

Complete the Architectural Design 1 Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

This certificate may be completed with no required textbook costs. All required courses will have at least one section each semester that has either an online textbook provided to you free of charge or no required textbook. Most of the restricted electives are also textbook cost free. You may be required to purchase other course supplies for these classes. You may also choose to purchase a print copy of any of these texts if you wish.

Program Outcome

1. An entry-level professional position at an architectural or related design office.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC.

   A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 184), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/architectural-technology/architectural-design-1-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ARCH A105</td>
<td>Architectural Drawing and Design Visualization 1</td>
<td>2</td>
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<td>ARCH A110</td>
<td>Introduction to Architecture</td>
<td>2</td>
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<tr>
<td>ARCH A155</td>
<td>BIM 1 for Architecture</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Units</td>
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</tr>
<tr>
<td>ARCH A115</td>
<td>Architectural Design and Theory 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH A180</td>
<td>Architectural Construction Documents</td>
<td>4</td>
</tr>
<tr>
<td>ARCH A205</td>
<td>Architectural Drawing and Design Visualization 2</td>
<td>3</td>
</tr>
<tr>
<td>Architectural Design Restricted Elective(s) ARCH (see list)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Units</td>
<td>13</td>
</tr>
</tbody>
</table>

Total Units: 19
### Architectural Design 1, Certificate of Achievement

**Financial Aid Eligible**

Banner Code: 1_CN_ARCD

Control Number: 22369

This certificate may be completed with no required textbook costs. All required courses will have at least one section each semester that has either an online textbook provided to you free of charge or no required textbook. Most of the restricted electives are also textbook cost free. You may be required to purchase other course supplies for these classes. You may also choose to purchase a print copy of any of these texts if you wish.

**Program Outcome**

1. An entry-level professional position at an architectural or related design office.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

---

### Table: Architectural Design 1, Certificate of Achievement - Course Title and Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<td>ARCH A101</td>
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<td>Introduction to FrameCAD Steel Framing</td>
<td>1</td>
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<td>ARCH A107</td>
<td>Tiny House Design</td>
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</tr>
<tr>
<td>ARCH A121</td>
<td>FrameCAD Studio 1</td>
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<td>ARCH A122</td>
<td>FrameCAD Studio 2</td>
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<td>BIM 2 for Architecture</td>
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<td>ARCH A160</td>
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<td>ARCH A162</td>
<td>3-D Modeling: Rhino 1</td>
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</tr>
<tr>
<td>ARCH A165</td>
<td>Presentation Graphics</td>
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<td>ARCH A167</td>
<td>Presentation Video</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A170</td>
<td>Introduction to Design Fabrication</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A171</td>
<td>Design Fabrication 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A172</td>
<td>Design Fabrication 2</td>
<td>2</td>
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<td>ARCH A201</td>
<td>Design/Build 1 for Architecture</td>
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<td>ARCH A241</td>
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<td>ARCH A243</td>
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1. Elective courses not textbook cost free.

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<th>Requirement</th>
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<tr>
<td>Minimum Program Major Units</td>
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### Table: Architectural Design 1, Certificate of Achievement - Year 1 Semester 1 Course Title and Units

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<thead>
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<th>Units</th>
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<td>ARCH A110</td>
<td>Introduction to Architecture</td>
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<td>ARCH A155</td>
<td>BIM 1 for Architecture</td>
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Year 1 Semester 2 Course Title and Units

<table>
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<td>ARCH A115</td>
<td>Architectural Design and Theory 1</td>
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<td>ARCH A180</td>
<td>Architectural Construction Documents</td>
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</tr>
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<td>ARCH A205</td>
<td>Architectural Drawing and Design Visualization 2</td>
<td>3</td>
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<tr>
<td></td>
<td>Architectural Design Restricted Elective(s) ARCH (see list)</td>
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</tr>
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<td></td>
<td><strong>Total Units</strong></td>
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### Table: Architectural Design 1 Restricted Electives - Course Title and Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ARCH A101</td>
<td>Introduction to Environmental Sustainability</td>
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</tr>
<tr>
<td>ARCH A104</td>
<td>Introduction to FrameCAD Steel Framing</td>
<td>1</td>
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<tr>
<td>ARCH A107</td>
<td>Tiny House Design</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A121</td>
<td>FrameCAD Studio 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A122</td>
<td>FrameCAD Studio 2</td>
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</tr>
<tr>
<td>ARCH A150</td>
<td>CAD 2-D for Architecture</td>
<td>2</td>
</tr>
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<td>ARCH A156</td>
<td>BIM 2 for Architecture</td>
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</tr>
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<td>ARCH A160</td>
<td>3-D Modeling: SketchUp 1</td>
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<td>3-D Modeling: Rhino 1</td>
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<td>ARCH A165</td>
<td>Presentation Graphics</td>
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<td>Presentation Video</td>
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<td>ARCH A171</td>
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<tr>
<td>ARCH A172</td>
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<td>ARCH A201</td>
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<tr>
<td>ARCH A241</td>
<td>FrameCAD Workshop 1</td>
<td>2</td>
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</table>

Architectural Design 1 Restricted Electives

No course may be applied to more than one Architectural Design award.
Architectural Design 2 Certificate of Achievement

Required Prerequisites
Architectural Design 1 Certificate of Achievement

Architectural Design 2, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_ARDD
Control Number: 16887

Complete the Architectural Design 2 Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Critical thinking, design, and visual communication for successful transfer to a university professional program in Architecture and/or related Environmental Design.
2. A junior/intermediate level drafting/design position at an architectural or related firm.

Associate in Science Degree Requirements
1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/architectural-technology/architectural-design-2-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Required Electives

**Elective courses not textbook cost free.**

### Architectural Design 1 Restricted Electives

No course may be applied to more than one Architectural Design award.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ARCH A104</td>
<td>Introduction to FrameCAD Steel Framing</td>
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<td>Tiny House Design</td>
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<td>ARCH A167</td>
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<td>ARCH A170</td>
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<td>ARCH A171</td>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
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<td>Architectural Drawing and Design Visualization 1</td>
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<td>ARCH A155</td>
<td>BIM 1 for Architecture</td>
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</tr>
<tr>
<td>ARCH A115</td>
<td>Architectural Design and Theory 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH A180</td>
<td>Architectural Construction Documents</td>
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<tr>
<td>ARCH A205</td>
<td>Architectural Drawing and Design Visualization 2</td>
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1 Elective courses not textbook cost free.
Total Units 40

Architectural Design 2 Restricted Electives

No course may be applied to more than one Architectural Design award.

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<tr>
<th>Course</th>
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<td>3-D Modeling: Rhino 1</td>
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<td>ARCH A165</td>
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<td>ARCH A167</td>
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<td>ARCH A170</td>
<td>Introduction to Design Fabrication</td>
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<tr>
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</tr>
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<td>ARCH A243</td>
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<td>2</td>
</tr>
</tbody>
</table>

¹ Elective courses not textbook cost free.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

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Required Prerequisites

Architectural Design 1 Certificate of Achievement

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<th>Course</th>
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<tr>
<td>ARCH A115</td>
<td>Architectural Design and Theory 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH A180</td>
<td>Architectural Construction Documents</td>
<td>4</td>
</tr>
<tr>
<td>ARCH A205</td>
<td>Architectural Drawing and Design Visualization 2</td>
<td>3</td>
</tr>
</tbody>
</table>

Architectural Design 1 Restricted Electives

No course may be applied to more than one Architectural Design award.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A101</td>
<td>Introduction to Environmental Sustainability</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A104</td>
<td>Introduction to FrameCAD Steel Framing</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A107</td>
<td>Tiny House Design</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A121</td>
<td>FrameCAD Studio 1</td>
<td>2</td>
</tr>
</tbody>
</table>

Architectural Design 2, Certificate of Achievement

Financial Aid Eligible

Banner Code: 1_CT_ARDD

Control Number: 22370

The 2nd year Certificate of Achievement in Architectural Design 2 prepares students in the areas of critical thinking, design, and visual communication for successful transfer to a university professional program in Architecture and/or related Environmental Design or for a junior/intermediate level drafting/design position at an architectural or related firm.

Program Outcomes

1. Critical thinking, design, and visual communication for successful transfer to a university professional program in Architecture and/or related Environmental Design.

2. A junior/intermediate level drafting/design position at an architectural or related firm.
No course may be applied to more than one Architectural Design award.

Electives
Architectural Design 2 Restricted
Total Units 40

ARCH A172
ARCH A171
ARCH A170
ARCH A167
ARCH A165
ARCH A162
ARCH A161
ARCH A160
ARCH A156
ARCH A155
ARCH A154
ARCH A153
ARCH A152
ARCH A151
ARCH A150
ARCH A149
ARCH A148
ARCH A147
ARCH A146
ARCH A145
ARCH A144
ARCH A143
ARCH A142
ARCH A141
ARCH A140
ARCH A139
ARCH A138
ARCH A137
ARCH A136
ARCH A135
ARCH A134
ARCH A133
ARCH A132
ARCH A131
ARCH A130
ARCH A129
ARCH A128
ARCH A127
ARCH A126
ARCH A125
ARCH A124
ARCH A123
ARCH A122
ARCH A121
ARCH A120
ARCH A119
ARCH A118
ARCH A117
ARCH A116
ARCH A115
ARCH A114
ARCH A113
ARCH A112
ARCH A111
ARCH A110
ARCH A109
ARCH A108
ARCH A107
ARCH A106
ARCH A105
ARCH A104
ARCH A103
ARCH A102
ARCH A101

Total Units 21

Elective courses not textbook cost free.

Architectural Design 2 Restricted Electives

No course may be applied to more than one Architectural Design award.

Course Title Units
ARCH A101 Introduction to Environmental Sustainability 1
ARCH A104 Introduction to FrameCAD Steel Framing 1
ARCH A107 Tiny House Design 1
ARCH A112 FrameCAD Studio 1 2
ARCH A122 FrameCAD Studio 2 2
ARCH A150 CAD 2-D for Architecture 1 2
ARCH A156 BIM 2 for Architecture 2
ARCH A160 3-D Modeling: SketchUp 1 2
ARCH A162 3-D Modeling: Rhino 1 2
ARCH A165 Presentation Graphics 2
ARCH A167 Presentation Video 1
ARCH A170 Introduction to Design Fabrication 1
ARCH A171 Design Fabrication 1 2
ARCH A172 Design Fabrication 2 2

Program Outcome
1. Student will be able to demonstrate critical thinking, design, and visual communication as related to architecture.

Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https:catalog.cccd.edu/orange-coast/pathways/industrial-technology/architectural-technology/architecture-associate-science-degree/orange-coast-general-education-patterns/associate-science-degree-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.
must be completed at OCC.

At least 3 units in an advanced course from the certificate programs designed to prepare the graduate to enter a particular field of employment. Orange Coast College offers two types of certificate awards in career programs. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Design/Build, Certificate of Achievement

Not Financial Aid Eligible
Banner Code: 1_CN_ATDB
Control Number: 31516

The Design/Build specialization certificate prepares students to design, develop, and construct small, sustainable projects.

Program Outcome
1. Design, develop, and construct small, sustainable projects.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A105</td>
<td>Architectural Drawing and Design Visualization 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A110</td>
<td>Introduction to Architecture</td>
<td>2</td>
</tr>
<tr>
<td>or ARCH A110H</td>
<td>Introduction to Architecture Honors</td>
<td></td>
</tr>
<tr>
<td>ARCH A115</td>
<td>Architectural Design and Theory 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH A205</td>
<td>Architectural Drawing and Design Visualization 2</td>
<td>3</td>
</tr>
<tr>
<td>ARCH A215</td>
<td>Architectural Drawing and Design Theory 2</td>
<td>4</td>
</tr>
<tr>
<td>Core Courses Subtotal</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Restricted Electives
Select at minimum of three units of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A180</td>
<td>Architectural Construction Documents</td>
</tr>
<tr>
<td>ARCH A185</td>
<td>Environmental Design Systems</td>
</tr>
<tr>
<td>ARCH A220</td>
<td>Building Materials and Systems</td>
</tr>
<tr>
<td>ARCH A230</td>
<td>Architectural Design and Theory 3</td>
</tr>
<tr>
<td>ARCH A290</td>
<td>History of Architecture 1</td>
</tr>
<tr>
<td>or ARCH A290H</td>
<td>History of Architecture 1 Honors</td>
</tr>
<tr>
<td>ARCH A296</td>
<td>History of Architecture 2</td>
</tr>
<tr>
<td>or ARCH A296H</td>
<td>History of Architecture 2 Honors</td>
</tr>
</tbody>
</table>

Restricted Electives Subtotal 3

Minimum Program Major Units 18
AS General Education Option 1, 2, or 3 Varies
Transferable electives as needed to satisfy unit requirement Varies
Total Units 60

Digital Fabrication for Architecture, Certificate of Achievement

Not Financial Aid Eligible
Banner Code: 1_CM_ATDF
Control Number: 31517

The Digital Fabrication specialization certificate prepares students to design, develop, and construct three-dimensional environmental design installations and objects using digital fabrication tools.

Program Outcome
1. Design, develop, and construct three-dimensional environmental design installations and objects using digital fabrication tools.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions.
as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Environmental Resource Management, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_ERM

The Environmental Resource Management Certification Program (ERM) is designed to provide education and training for individuals interested in working in the recycling and resource management/green jobs sector. As more cities, businesses, and institutions develop sustainability and resource management policies and programs, there is a need for people who can serve as sustainability coordinators, environmental educators, resource managers, and environmental program advocates. The ERM curriculum emphasizes an interdisciplinary approach that explores recycling and resource management from a variety of perspectives and settings. Curriculum will provide students with a general knowledge of environmental resource management emphasizing cultural, community, business, and educational applications. Courses will also include opportunities to develop environmental advocacy programs and projects as well as entry to related internships and shadowship opportunities.

Program Outcome

1. Provide students with the skills and resources needed to find jobs across all industry sectors related to environmental resource management upon completion of the program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A105</td>
<td>Architectural Drawing and Design</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Visualization 1</td>
<td></td>
</tr>
<tr>
<td>ARCH A162</td>
<td>3-D Modeling: Rhino 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A163</td>
<td>3-D Modeling: Rhino 2</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A171</td>
<td>Design Fabrication 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A172</td>
<td>Design Fabrication 2</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A201</td>
<td>Design/Build 1 for Architecture</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Units 12

FrameCAD Steel Design, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_FCSD

The FrameCAD Steel Design Certificate prepares students and working professionals for design, production drawing, and file preparation for panelized steel frame production and installation. Course projects will use FrameCAD Structure and Detailer software to design and prepare files for production on a FrameCAD F325iT machine. FrameCAD is disrupting the way buildings get made by reducing waste, transportation, and build time and by increasing strength and longevity. People with skills in this transforming industry command high salaries and will be part of a new age of design/manufacture/build.

Program Outcome

1. Successful students in this program will be able to design and produce digital files for a small structure using FrameCAD Structure and Detailer software and export the file for production in FrameCAD Factory.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A142</td>
<td>Environmental Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>ARCH A190</td>
<td>Environmental Studies Practicum</td>
<td>1.5-2.5</td>
</tr>
</tbody>
</table>

Total Units 11.5-12.5
FrameCAD Steel Production, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_FCSP

The FrameCAD Steel Production Certificate prepares students and working professionals for design file preparation, cold form steel (CFS) fabrication, CFS panel production and assembly, and preparation for project delivery. Course projects will use FrameCAD design software to produce custom projects using FrameCAD Factory software on a FrameCAD F325iT machine. Students will also be trained to maintain and operate the machine, prepare worksite documents, and learn to organize workflow safely. People with skills in this transforming industry command high salaries and will part of a new era of integrative design and construction.

Program Outcomes
1. Successful students in this program will be able to safely manufacture steel frame custom components using a FrameCAD F325iT machine and safely assemble the components into a structure.
2. Successful students will be able to operate and maintain a FrameCAD machine and be able to document projects, materials, and machine records.
3. Successful students will be able to organize and schedule project workflow to utilize the machine and workers efficiently and safely.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
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Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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Integrated Project Design, Certificate of Achievement

Not Financial Aid Eligible
Banner Code: 1_CM_ATIP

The Integrated Project Design specialization certificate prepares students to design, develop, fabricate, construct, and administrate multi-disciplinary projects using BIM and integrative digital technologies.

Program Outcome
1. The Integrated Project Design specialization certificate prepares students to design, develop, virtually construct, administrate, and prototype multi-disciplinary projects using BIM-based technology.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A104</td>
<td>Introduction to FrameCAD Steel Framing</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A121</td>
<td>FrameCAD Studio 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A122</td>
<td>FrameCAD Studio 2</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A241</td>
<td>FrameCAD Workshop 1</td>
<td>2</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A104</td>
<td>Introduction to FrameCAD Steel Framing</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A241</td>
<td>FrameCAD Workshop 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A242</td>
<td>FrameCAD Workshop 2</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A243</td>
<td>FrameCAD Workshop 3</td>
<td>2</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>
To be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Course Requirement Table

<table>
<thead>
<tr>
<th>Course Required Courses</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A155</td>
<td>BIM 1 for Architecture</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A156</td>
<td>BIM 2 for Architecture</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A157</td>
<td>BIM Multidisciplinary</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A158</td>
<td>BIM Project Integration</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A202 or ARCH A203</td>
<td>Design/Build 2 for Architecture</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total Units</td>
<td>12</td>
</tr>
</tbody>
</table>

### Sustainable Design, Certificate of Achievement

Not Financial Aid Eligible  
Banner Code: 1_CM_ATSD

The Sustainable Design specialization certificate prepares students to engage in Environmental Design as a balance of natural and man-made systems and resources and will prepare students pursuing further studies and careers in Architecture, Environmental Design, Landscape Design, Planning, and Sustainable Design.

**Program Outcome**

1. The Sustainable Design specialization certificate prepares students to design, develop, analyze, and promote sustainable environmental design practices.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course Required Courses</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A101</td>
<td>Introduction to Environmental</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sustainability</td>
<td></td>
</tr>
<tr>
<td>ARCH A102</td>
<td>Introduction to Environmental Studies</td>
<td>3</td>
</tr>
<tr>
<td>ARCH A185</td>
<td>Environmental Design Systems</td>
<td>4</td>
</tr>
<tr>
<td>ARCH A190</td>
<td>Environmental Studies Pracum</td>
<td>2</td>
</tr>
<tr>
<td>ESEC A100 or HORT A100</td>
<td>Introduction to Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Horticulture Science</td>
<td></td>
</tr>
<tr>
<td>ARCH A196 or ARCH A197</td>
<td>Green Building Codes</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>California Energy Code</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units</td>
<td>14.5</td>
</tr>
</tbody>
</table>

### Aviation Maintenance Technology

The Aviation Maintenance Technology program is divided into five areas: Airframe, Powerplant, Airframe and Powerplant, Avionics, and Helicopters.

The Aviation Maintenance Technology fields are of continuing growth and opportunity. The opportunities vary from field to field depending on the population's need for travel, business, and pleasure. Overall, the opportunities and availability outlooks are good to excellent. Each program prepares students in a specific area of aviation maintenance and will enable them to seek entry-level or higher levels of employment for positions such as: aircraft technician, aircraft inspector, aircraft mechanic, airframe and/or powerplant mechanic, airframe and/or powerplant technician, aviation mechanic, avionics technician, engine overhaul mechanic, FAA repair station technician, general aviation maintenance mechanic, and helicopter mechanic.

**Mission Statement**

The Aircraft Maintenance Technology program mission, following counsel of local community and industry leaders, is to provide quality instruction to promote student success with comprehensive training for those interested in entering the aviation maintenance profession and for professionals in the aviation maintenance field striving to improve their knowledge and skills in the areas comprising of Airframe, Powerplant, Avionics and Helicopter Maintenance.

Note: Although the courses within the department's degrees and certificates are sequenced, they may be started at any time.

- Airframe and Powerplant, Associate in Science Degree (p. 157)
- Airframe and Powerplant, Certificate of Achievement (p. 157)
- Airframe, Associate in Science Degree (p. 158)
- Airframe, Certificate of Achievement (p. 159)
- Avionics, Certificate of Specialization (p. 160)
- Helicopter Theory and Maintenance, Certificate of Specialization (p. 160)
- Powerplant, Associate in Science Degree (p. 161)
- Powerplant, Certificate of Achievement (p. 162)
Airframe and Powerplant, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_AMAP
Control Number: 03977

This program provides students with the technical skills and systems analysis necessary for entry-level positions as Airframe and Powerplant Certificated Mechanics in the aviation industry, such as airframe inspection, powerplant inspection, maintenance, and return-to-flight status of all types of U.S. Certificated aircraft.

Trained technicians are also successful in related fields of aircraft manufacturing, electronics, hydraulics, pneumatics, welding, sheet metal, quality control, civil and military defense. Additionally, students who have followed this program may earn an engineering degree at any one of several four-year institutions.

Complete the Airframe and Powerplant Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. Note: this AS degree requires 81 units for completion.

Program Outcomes
1. Have the necessary skills and training for proficiency in taking written, oral and practical exams for Airframe & Powerplant certification which may be required for employment.
2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

### Course Title Units

#### Year 1

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<tr>
<th>Year 1</th>
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<th>Units</th>
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<td>AMT A150</td>
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<td>AMT A151</td>
<td>General Electricity - FAA</td>
<td>3</td>
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<td>AMT A152</td>
<td>General Airframe &amp; Powerplant Fuel Systems - FAA</td>
<td>2</td>
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<td>AMT A153</td>
<td>General Materials, Processes &amp; Welding - FAA</td>
<td>3</td>
</tr>
<tr>
<td>AMT A154</td>
<td>General Weight &amp; Balance, Math &amp; Physics - FAA</td>
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<td>AMT A180</td>
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</tr>
<tr>
<td>AMT A161</td>
<td>Airframe Sheet Metal &amp; Composite Structural Repair - FAA</td>
<td>5.5</td>
</tr>
<tr>
<td>AMT A162</td>
<td>Airframe Assembly &amp; Rigging, Pneumatics &amp; Environmental Control Systems - FAA</td>
<td>3</td>
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<tr>
<td>AMT A181</td>
<td>Airframe Communication and Navigation Systems - FAA</td>
<td>2</td>
</tr>
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<td>AMT A155</td>
<td>General Blueprint Reading &amp; Drafting - FAA</td>
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#### Year 2

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<td>Total Units</td>
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</table>

Program approved by the Federal Aviation Administration (FAA).

Completion of the above enables the student to take the FAA Airframe & Powerplant written examinations.

### Requirement Units

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Airframe and Powerplant, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CF_AMAP
Control Number: 22392

This program provides students with the technical skills and systems analysis necessary for entry-level positions as Airframe and Powerplant Certificated Mechanics in the aviation industry, such as airframe inspection, powerplant inspection, maintenance, and return-to-flight status of all types of U.S. Certificated aircraft.
Trained technicians are also successful in related fields of aircraft manufacturing, electronics, hydraulics, pneumatics, welding, sheet metal, quality control, civil and military defense. Additionally, students who have followed this program may earn an engineering degree at any one of several four-year institutions.

**Program Outcomes**

1. Have the necessary skills and training for proficiency in taking written, oral and practical exams for Airframe & Powerplant certification which may be required for employment.
2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements section of the catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z section of the catalog. Check with a counselor to determine the requirements for completion.

**Program Outcomes**

1. Have the necessary skills and training for proficiency in taking written, oral and practical exams for AIRFRAME certification which may be required for employment.
2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<td>AMT A150</td>
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<td>AMT A151</td>
<td>General Electricity - FAA</td>
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</tr>
<tr>
<td>AMT A152</td>
<td>General Airframe &amp; Powerplant Fuel Systems - FAA</td>
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<td>AMT A153</td>
<td>General Materials, Processes &amp; Welding - FAA</td>
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<td>Airframe Sheet Metal &amp; Composite Structural Repair - FAA</td>
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<tr>
<td>AMT A162</td>
<td>Airframe Assembly &amp; Rigging, Pneumatics &amp; Environmental Control Systems - FAA</td>
<td>3</td>
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</table>
A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competency in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/aviation-maintenance-technology/airframe-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

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**Course Table**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<td>AMT A153</td>
<td>General Materials, Processes &amp; Welding - FAA</td>
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<td>AMT A154</td>
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<td>Spring</td>
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<td>AMT A160</td>
<td>Airframe &amp; Powerplant Electricity - FAA</td>
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<td>AMT A180</td>
<td>Airframe and Powerplant Instrumentation FAA</td>
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<tr>
<td>AMT A161</td>
<td>Airframe Sheet Metal &amp; Composite Structural Repair - FAA</td>
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<td>AMT A162</td>
<td>Airframe Assembly &amp; Rigging, Pneumatics &amp; Environmental Control Systems - FAA</td>
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<td>AMT A181</td>
<td>Airframe Communication and Navigation Systems - FAA</td>
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<td>AMT A155</td>
<td>General Blueprint Reading &amp; Drafting - FAA</td>
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<td>Summer</td>
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<tr>
<td>AMT A163</td>
<td>Airframe Hydraulics and Landing Gear - FAA</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>Units</td>
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Program approved by the Federal Aviation Administration (FAA).

Completion of the above enables the student to take the FAA Airframe written examination.

**Requirement**

<table>
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<th>Requirement</th>
<th>Units</th>
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</thead>
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<tr>
<td>Program Major Units</td>
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<td>AS General Education Option 1, 2, or 3</td>
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<tr>
<td>Total Degree Units</td>
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</tbody>
</table>

**Airframe, Certificate of Achievement**

Financial Aid Eligible

Banner Code: 1_CT_AMAF
Control Number: 22393

This program provides training for the student who desires to be an Airframe Technician. The training received enables the technician to return to service an airplane, related part, and appliance after performing, supervising or inspecting its maintenance or alterations. This Certificate of Achievement can be acquired in two semesters, one intersession, and one summer school session.

This certificate would enable students to achieve employment at local aircraft manufacturing and repair facilities.

**Program Outcomes**

1. Have the necessary skills and training for proficiency in taking written, oral and practical exams for AIRFRAME certification which may be required for employment.

2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.
Program approved by the Federal Aviation Administration (FAA).
Completion of the above enables the student to take the FAA Airframe written examination.

Avionics, Certificate of Specialization
Not Financial Aid Eligible
Banner Code: 1_CE_AMAV

The Avionics program is designed to prepare students for entry-level positions as installation, maintenance, and repair technicians for avionic equipment in private, corporate, and commercial aircraft.

The aircraft industry is quickly evolving its level of sophisticated navigational and communications systems to include microprocessor-based systems in all areas of the airframe. This requires a new competent work force capable in the state-of-the-art technology of the future.

This two-semester certificate program combines theory and laboratory practices with hands-on application in actual aircraft. Upon completion, the student will be ready for employment in this fast growing and exciting field.

Program Outcomes
1. Have the necessary skills and training for Avionics proficiency which may be required for employment.
2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<th>Units</th>
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<td>AMT A180</td>
<td>Airframe and Powerplant Instrumentation FAA</td>
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<td>AMT A161</td>
<td>Airframe Sheet Metal &amp; Composite Structural Repair - FAA</td>
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<td>AMT A162</td>
<td>Airframe Assembly &amp; Rigging, Pneumatics &amp; Environmental Control Systems - FAA</td>
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<td>AMT A181</td>
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<td>AMT A155</td>
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<tr>
<td>Year 2</td>
<td>Units</td>
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</tbody>
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Helicopter Theory and Maintenance, Certificate of Specialization
Not Financial Aid Eligible
Banner Code: 1_CE_AVHM

This program provides students with the general knowledge of rotary wing development, technology, construction, and a general survey of the helicopter industry. This program also provides a good understanding of the helicopter type aircraft to interested individuals, technicians, and pilots.

Program Outcomes
1. Have the necessary skills and training for Helicopter Theory proficiency which may be required for employment.
2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
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2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/paths/industrial-technology/aviation-maintenance-technology/powerplant-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Powerplant, Associate in Science Degree
Financial Aid Eligible
Banner Code: 1_AS_AMPP
Control Number: 08626

This program provides students with the technical skills and systems analysis necessary for entry-level positions as Airframe and Powerplant Certificated Mechanics in the aviation industry, such as airframe inspection, powerplant inspection, maintenance, and return-to-flight status of all types of U.S. Certificated aircraft. This certificate would enable a student to achieve employment in local powerplant and propeller overhaul facilities and repair stations.

Complete the Powerplant Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Have the necessary skills and training for proficiency in taking written, oral and practical exams for Powerplant certification which may be required for employment.

2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

Complete the above enables the student to take the FAA Powerplant written examination.
Powerplant, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_AMPP
Control Number: 22394

This program provides students with the technical skills and systems analysis necessary for entry-level positions as Airframe and Powerplant Certified Mechanics in the aviation industry, such as airframe inspection, powerplant inspection, maintenance, and return-to-flight status of all types of U.S. Certificated aircraft. This certificate would enable a student to achieve employment in local powerplant and propeller overhaul facilities and repair stations.

Program Outcomes
1. Have the necessary skills and training for proficiency in taking written, oral and practical exams for Powerplant certification which may be required for employment.
2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<tbody>
<tr>
<td>Program Major Units</td>
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<tr>
<td>AS General Education Option 1, 2, or 3</td>
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<td>Transferable electives to satisfy unit requirement</td>
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<td>Total Degree Units</td>
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<th>Requirement</th>
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<tr>
<td>Program Major Units</td>
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<td>Transferable electives to satisfy unit requirement</td>
<td>Varies</td>
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<tr>
<td>Total Degree Units</td>
<td>60</td>
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### Program Outcomes
1. Have the necessary skills and training for proficiency in taking written, oral and practical exams for Powerplant certification which may be required for employment.
2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

### Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
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### Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Course Requirements

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<thead>
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<th>Year 1</th>
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<td>General Maintenance Records - FAA</td>
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<tr>
<td></td>
<td>AMT A151</td>
<td>General Electricity - FAA</td>
<td>3</td>
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<tr>
<td></td>
<td>AMT A152</td>
<td>General Airframe &amp; Powerplant Fuel Systems - FAA</td>
<td>2</td>
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<tr>
<td></td>
<td>AMT A153</td>
<td>General Materials, Processes &amp; Welding - FAA</td>
<td>3</td>
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<td>AMT A154</td>
<td>General Weight &amp; Balance, Math &amp; Physics - FAA</td>
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<td>Airframe and Powerplant Instrumentation FAA</td>
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<td></td>
<td>AMT A155</td>
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<tr>
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<td>Powerplant Reciprocating Engines FAA</td>
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<tr>
<td></td>
<td>AMT A171</td>
<td>Powerplant Fuel Metering, Exhaust &amp; Induction Systems FAA</td>
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<td>Units</td>
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<td>Powerplant Ignition Systems - FAA</td>
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<td></td>
<td>AMT A172</td>
<td>Powerplant Propeller and Lubricating Systems FAA</td>
<td>4</td>
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<td>AMT A173</td>
<td>Powerplant Gas Turbine Engines - FAA</td>
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</tr>
<tr>
<td></td>
<td>Total Units</td>
<td>42</td>
<td></td>
</tr>
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</table>

Program approved by the Federal Aviation Administration (FAA).

Completion of the above enables the student to take the FAA Powerplant written examination.

### Aviation Science
In order to attain licensing as a pilot, students are required to satisfy aeronautical experience requirements as outlined in applicable subparts of the Federal Aviation Regulations (FAR). The majority of this experience must be accumulated in actual aircraft. Flight training is necessary for students to meet the specific requirements of FAR 61.109 (Private Pilot), FAR 61.65 (Instrument), and FAR 61.129 (Commercial) licensing.

Flight time and Instructor fees are billed separately from ground school courses. In all APT Flight Lab classes, fees are $125 per hour for primary training aircraft, $155 per hour for complex training aircraft, and flight instructor fees are $60 per hour in college-owned aircraft. Minimum cost to meet the requirements of FAR 61.109 in college-owned aircraft is approximately $5500. However, most students require training beyond the minimum hours required in FAR 61.109, which increases total cost. Aircraft and instructor fees are subject to change.

College-owned aircraft are currently being used for training under flight labs APT A120, APT A121, APT A122, APT A123, and APT A124. Total cost to meet the minimum requirements of FAR 61.65 is approximately $8000. Most students require training beyond the minimum hours required of FAR 61.65. This will increase the total cost. Fees are subject to change. The estimated cost to meet the minimum aeronautical experience requirements of FAR 61.129 is $21,000. Aircraft and instructor fees are subject to change. At the completion of APT A120, (35 hours), APT A121, (74 hours), APT A122, (120 hours), APT A123 (variable hours), and APT A124 (variable hours) students should have acquired the 250
minimum hours of total flight time required for licensing as a commercial pilot. Total program cost is approximately $34,000.

FAA Certified Advanced Aviation Training Devices (AATD) may be used to accrue aeronautical experience requirements of FAR 61.109, FAR 61.65, and FAR 61.129. Costs for students to use college-owned AATD’s will be $60 per hour and flight instructor fees are $60 per hour. Prices for AATD’s and instructor fees are subject to change. The amount of aeronautical experience the FAA will accept in AATD’s will be dependent on the airmen certificate sought. Refer to FAR 61.109, FAR 61.65, and FAR 61.129 for more information regarding the approved usage of AATD’s for aeronautical experience.

Flight training is conducted in accordance with an FAA-approved part 141 syllabus provided by the vendor. Veteran students using GI Bill Education Benefits are limited to a maximum amount of flight and ground training hours. Training expenses incurred beyond the maximum approved hours will be at the student’s expense. Refer to the program requirements as outlined in the course syllabus.

All flight lab students are required to obtain a second-class medical certificate in order to qualify for flight lab participation and program certification.

Additional costs include but are not limited to, second-class medical certificate, pilot supplies, program materials, airport badge, no show fees, and check-rides. These fees are not included in the total program cost and must be paid separately by the student. All APT courses are financial aid eligible and VA benefit eligible if the student is enrolled with Aviation Science as their declared program of study (major).

All students, including VA benefit eligible students, are responsible to complete scheduled flight times. Students that fail to “show” for a scheduled flight time assume all fees incurred with the “no show” designation and will be responsible for fees owed to the scheduled flight time provider. For additional information regarding Aviation Pilot Training courses, contact the instructor or Division Dean of Technology (714) 432-5194.

For additional information regarding Veterans Administration benefits contact the Veterans Services Office at (714) 432-0202 ext. 26376.

Professional Upgrade Certificates

The following Professional Upgrade Certificates are intended for the advanced student or the employed aerospace professional who desires advanced or recurrent training in a specific area. Certificates may be obtained from the Technology Division office by bringing in official records showing the successful completion of required courses.

- Aircraft Dispatcher, Certificate of Achievement (p. 163)
- Airline Transport Pilot, Certificate of Specialization (p. 164)
- Aviation Science, Associate in Science Degree (p. 164)
- Aviation Science, Certificate of Achievement (p. 165)
- Commercial Pilot, Certificate of Specialization (p. 166)
- Flight Operations, Certificate of Specialization (p. 167)
- Instrument Pilot, Certificate of Specialization (p. 168)
- Private Pilot, Certificate of Specialization (p. 168)
- Unmanned Aircraft Systems, Certificate of Specialization (p. 169)

Aircraft Dispatcher, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_AIRD
Control Number: 37880

In cooperation with the pilot, the flight dispatcher furnishes a flight plan that enables the aircraft to arrive at its destination on schedule with the maximum payload and the least operating cost. The flight dispatcher considers en route and destination weather, winds aloft, alternate destinations, fuel required, altitudes, and traffic flow. The dispatcher’s signature, along with that of the pilot, releases the aircraft for flight. The dispatcher maintains a constant watch on all flights dispatched, and is responsible in joint agreement with the airline captain for flight planning, route and altitude selection, fuel load requirements, aircraft legality and complying with FAA regulations. The dispatcher is the go-between for the pilot and ground service personnel, and keeps all personnel concerned with the flight informed about its status. The dispatcher must be familiar with navigation facilities over airline routes and at airports as well as with the takeoff, cruising, and landing characteristics of all aircraft operated by the airline. The flight dispatcher also must ride periodically in the cockpit with the flight crew to observe flight routes, conditions, and airports.

Program Outcomes

1. Students will develop the analytical and critical thinking skills necessary.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.
Airline Transport Pilot, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_AVTP

The Airline Transport Pilot certificate of specialization covers those areas of aeronautical knowledge required under Federal Aviation Regulation 61.155 for the FAA Airline Transport Pilot Certificate. Courses are also intended to satisfy the knowledge requirements for students who are pursuing careers as aircraft dispatchers.

Program Outcome
1. Students will develop the analytical and critical thinking skills necessary for completion of flight training and successful completion of federally administered knowledge exams for licensing as pilots.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Aviation Science, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_AVSC
Control Number: 03978

This program of study academically prepares men and women of all ages for entry into the world of commercial aviation. In addition to airline flying many positions are available worldwide for trained commercial pilots. Businesses large and small hire corporate pilots for executive transport. Government agencies, both federal and state, hire commercial pilots for law enforcement, land management, wildlife management and staff logistics. Pilots are also in demand for fire suppression, emergency medical transportation and charter.

The curriculum is designed for students with no flying experience. Courses will systematically prepare individuals academically for the certificates and ratings required to operate aircraft as a commercial pilot. In addition, flight lab courses are offered as suggested electives enabling the student to complete all aspects of their training under the auspices of the college and to accrue the flight hours necessary for licensing as a commercial pilot.

The course of study can be tailored to individual requirements. The small business owner who only needs to use an aircraft for personal transportation can end their training with the 2 and preparation for the Instrument rating. A student seeking a career as a professional pilot would progress through the curriculum to earn a Commercial Pilot Certificate of Specialization along with a Turbine Transition Skill Certificate. All training is conducted in accordance labs are offered as suggested electives enabling the student to complete all aspects of their training under the auspices of the college and to accrue the flight hours necessary for licensing as a commercial pilot.

The course of study can be tailored to individual requirements. The small business owner who only needs to use an aircraft for personal transportation can end their training with the 2 and preparation for the Instrument rating. A student seeking a career as a professional pilot would progress through the curriculum to earn a Commercial Pilot Certificate of Specialization along with a Turbine Transition Skill Certificate. All training is conducted in accordance labs are conducted in accordance with an approved FAR Part 141 syllabus.

Program Outcomes
1. Develop the analytical and critical thinking skills necessary for completion of flight training and successful completion of federally administered written examinations for licensing as pilots.

2. Develop the analytical and critical thinking skills necessary for completion of aviation ground school academic courses giving them the background knowledge necessary to enter the air transportation industry as professionals in non-flying occupations.
Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/aviation-science/aviation-science-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

**Electives**

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<th>Course</th>
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<th>Units</th>
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<td>APT A115</td>
<td>Introduction to Flight Operations</td>
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<tr>
<td>APT A120</td>
<td>Private Pilot Flight Lab</td>
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<td>APT A121</td>
<td>Instrument Pilot Flight Lab</td>
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<td>APT A122</td>
<td>Commercial Pilot Flight Lab</td>
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<td>APT A123</td>
<td>Private Pilot Advanced Flight Lab</td>
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<td>APT A124</td>
<td>Advanced Commercial Pilot Flight Lab</td>
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<td>APT A126</td>
<td>Multi-Engine Aircraft Operations Lab</td>
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<td>APT A140</td>
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<td>APT A146</td>
<td>Advanced Aircraft &amp; Engines</td>
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<td>Human Factors and Crew Resource Management</td>
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<td>ECON A175</td>
<td>Macroeconomics</td>
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**Total Units: 32**

**Aviation Science, Certificate of Achievement**

Financial Aid Eligible
Banner Code: 1_CT_AVSC
Control Number: 22436

This program of study academically prepares men and women of all ages for entry into the world of commercial aviation. In addition to airline flying many positions are available worldwide for trained commercial pilots. Businesses large and small hire corporate pilots for executive transport. Government agencies, both federal and state, hire commercial pilots for law enforcement, land management, wildlife management and staff logistics. Pilots are also in demand for fire suppression, emergency medical transportation and charter.

The curriculum is designed for students with no flying experience. Courses will systematically prepare individuals academically for the certificates and ratings required to operate aircraft as a commercial pilot. In addition, flight lab courses are offered as suggested electives enabling the student to complete all aspects of their training under the auspices of the college and to accrue the flight hours necessary for licensing as a commercial pilot.

The course of study can be tailored to individual requirements. The small business owner who only needs to use an aircraft for personal
transportation can end their training with the 2 and preparation for the Instrument rating. A student seeking a career as a professional pilot would progress through the curriculum to earn a Commercial Pilot Certificate of Specialization along with a Turbine Transition Skill Certificate. All training is conducted in accordance labs are conducted in accordance with an approved FAR Part 141 syllabus.

Program Outcomes
1. Develop the analytical and critical thinking skills necessary for completion of flight training and successful completion of federally administered written examinations for licensing as pilots.
2. Develop the analytical and critical thinking skills necessary for completion of aviation ground school academic courses giving them the background knowledge necessary to enter the air transportation industry as professionals in non-flying occupations.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
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<th>Course</th>
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<th>Units</th>
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<tbody>
<tr>
<td>APT A130</td>
<td>Private Pilot Aviation Ground School</td>
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</tr>
<tr>
<td>APT A132</td>
<td>Aviation Navigation</td>
<td>3</td>
</tr>
<tr>
<td>APT A133</td>
<td>Aviation-Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>APT A146</td>
<td>Advanced Aircraft &amp; Engines</td>
<td>3</td>
</tr>
<tr>
<td>APT A180</td>
<td>Basic Air Transportation</td>
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Tracks

**Track 1**

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<tr>
<td>APT A134</td>
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<tr>
<td>APT A138</td>
<td>Aerodynamics</td>
<td>3</td>
</tr>
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<td>APT A139</td>
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**Track 2**

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<tr>
<td>APT A115</td>
<td>Introduction to Flight Operations</td>
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</tr>
<tr>
<td>APT A145</td>
<td>Airline Transport Pilot Ground</td>
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Electives

Select six units of the following (courses above may not fulfill elective units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>APT A110</td>
<td>Introduction to Airport Operations</td>
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<td>APT A115</td>
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<tr>
<td>APT A120</td>
<td>Private Pilot Flight Lab</td>
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<td>APT A121</td>
<td>Instrument Pilot Flight Lab</td>
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<tr>
<td>APT A122</td>
<td>Commercial Pilot Flight Lab</td>
<td></td>
</tr>
<tr>
<td>APT A123</td>
<td>Private Pilot Advanced Flight Lab</td>
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<td>APT A124</td>
<td>Advanced Commercial Pilot Flight Lab</td>
<td></td>
</tr>
<tr>
<td>APT A126</td>
<td>Multi-Engine Aircraft Operations Lab</td>
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<tr>
<td>APT A140</td>
<td>Flight Instructor Ground School</td>
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</tr>
<tr>
<td>APT A145</td>
<td>Airline Transport Pilot Ground</td>
<td></td>
</tr>
<tr>
<td>APT A146</td>
<td>Advanced Aircraft &amp; Engines</td>
<td></td>
</tr>
<tr>
<td>APT A192</td>
<td>Human Factors and Crew Resource Management</td>
<td></td>
</tr>
<tr>
<td>ACCT A101</td>
<td>Financial Accounting</td>
<td></td>
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<tr>
<td>ACCT A102</td>
<td>Managerial Accounting</td>
<td></td>
</tr>
<tr>
<td>ECON A170</td>
<td>Microeconomics</td>
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<tr>
<td>ECON A175</td>
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</table>

Total Units: 32

Commercial Pilot, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_AVCP

A program of study that helps prepare a pilot, already in possession of a Private Pilot license flight instruction to meet the licensing requirements as a Commercial Pilot as well as preparing the student for the Commercial Pilot Knowledge Test. This course meets the aeronautical knowledge requirements of Federal Aviation Regulation (FAR) Part 61.125
Program Outcomes
1. Develop the analytical and critical thinking skills necessary for completion of flight training and successful completion of federally administered written examinations for licensing as pilots.
2. Develop the critical thinking and analytical thinking skills necessary for completion of academic courses giving them the knowledge necessary to enter the air transportation industry.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>APT A138</td>
<td>Aerodynamics</td>
<td>3</td>
</tr>
<tr>
<td>APT A139</td>
<td>Commercial Pilot Aviation Ground School</td>
<td>3</td>
</tr>
<tr>
<td>APT A146</td>
<td>Advanced Aircraft &amp; Engines</td>
<td>3</td>
</tr>
<tr>
<td>APT A180</td>
<td>Basic Air Transportation</td>
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</tr>
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<td><strong>Total Units</strong></td>
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</table>

**Commercial Pilot Suggested Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>APT A122</td>
<td>Commercial Pilot Flight Lab</td>
<td>1</td>
</tr>
<tr>
<td>APT A124</td>
<td>Advanced Commercial Pilot Flight Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

**Flight Operations, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_AVFO

The Flight Operations Certificate of Specialization covers basic flight theory, advanced meteorology, airport and airline economics and management, advanced aircraft systems and aircraft navigation. Courses are intended to provide knowledge in topics which will allow the student to enter the work force in the field of flight operations. Careers include aircraft dispatch, aircraft and aircrew scheduling, airport operations and Fixed Base Operations.

Program Outcome
1. Develop critical and analytical thinking skills necessary for completion of federally administered knowledge tests.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>APT A110</td>
<td>Introduction to Airport Operations</td>
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<tr>
<td>APT A115</td>
<td>Introduction to Flight Operations</td>
<td>3</td>
</tr>
<tr>
<td>APT A130</td>
<td>Private Pilot Aviation Ground School</td>
<td>5</td>
</tr>
<tr>
<td>APT A145</td>
<td>Airline Transport Pilot Ground</td>
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<td>BUS A100</td>
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**Flight Operations Suggested Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>ACCT A101</td>
<td>Financial Accounting</td>
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<td>ACCT A102</td>
<td>Managerial Accounting</td>
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<td>ECON A170</td>
<td>Microeconomics</td>
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</tr>
<tr>
<td>ECON A175</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>
Instrument Pilot, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_AVIP

A program of study that helps prepare a pilot, already in possession of a Private Pilot license flight instruction to meet the licensing requirements as an Instrument Rated Pilot. This course meets the aeronautical knowledge requirements of Federal Aviation Regulation (FAR) Part 61.65(b).

Program Outcome
1. Develop the critical and analytical thinking skills necessary for completion of instrument flight training and successful completion of federally administered practical and knowledge tests for the instrument rating.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course Title Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>APT A132</td>
<td>Aviation Navigation</td>
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<tr>
<td>APT A134</td>
<td>Instrument Pilot Aviation Ground School</td>
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<td>Total Units</td>
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Instrument Pilot Suggested Electives

Course Title Units

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<th>Title</th>
<th>Units</th>
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<td>APT A121</td>
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<td>APT A120</td>
<td>Private Pilot Flight Lab</td>
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Private Pilot, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_AVPP

Private pilot training is the entry point to the exciting world of aviation. Private pilots are licensed to fly for personal pleasure and enjoyment. This course of study meets the aeronautical knowledge requirements of Federal Aviation Regulation (FAR) Part 61.105.

Program Outcome
1. Students will develop the analytical and critical thinking skills necessary for completion of federally administered practical and knowledge tests.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course Title Units

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<td>APT A133</td>
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Private Pilot Suggested Electives

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<tr>
<td>APT A120</td>
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Unmanned Aircraft Systems, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CM_UMA
Control Number: 38209

The program curriculum allows students to explore the entirety of unmanned aircraft systems. Courses highlight specific characteristics of different aircraft, how they are built and fundamentals of control and propulsion systems. Students will explore how unmanned aircraft systems integrate into the larger aviation systems, including safety policies, regulations and automation procedures.

The program can be tailored to meet the needs of individual students without any prior unmanned aircraft systems operating experience.

Upon completion of the program students will be prepared to become commercial Unmanned Aircraft Systems pilots, technicians and programmers in various industry sectors in a broad range of applications.

Program Outcomes

1. Students who complete the Unmanned Aircraft Systems Certificate of Specialization will be capable of deploying and piloting unmanned aircraft systems, managing flight control systems, collecting and analyzing telemetry data, programming autonomous flight missions and securely communicating with a variety of different aircraft flying different types of missions.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>APT A131</td>
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<td>APT A151</td>
<td>Unmanned Aircraft Systems Lab</td>
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</tr>
<tr>
<td>CIS A160</td>
<td>Introduction to UAS Automation</td>
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<td>CIS A177</td>
<td>Business Intelligence and Data Mining</td>
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</tr>
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<td>CIS A263</td>
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Construction Technology

The Construction Technology program has courses that can be divided into two major areas of emphasis: Residential Trades and Construction Management. Due to the vast diversity of occupations and areas of specialization within the construction industry and recognizing that individual student needs will be as diverse, a Certificate of Achievement can be designed that satisfies those specific needs. Completion of a certificate program satisfies the major requirement for the Associate in Science degree. Certificates of Achievement and Specialization can be completed in one to two semesters.

- Carpentry, Certificate of Specialization (p. 169)
- Concrete & Masonry, Certificate of Specialization (p. 170)
- Construction Technology, Associate in Science Degree (p. 170)
- Construction Technology, Certificate of Achievement (p. 171)
- Fine Woodworking, Certificate of Specialization (p. 171)
- Master Construction Specialist, Associate in Science Degree (p. 172)
- Master Construction Specialist, Certificate of Achievement (p. 173)
- Plumbing, Certificate of Specialization (p. 173)
- Residential Construction Development First Award, Associate in Science Degree (p. 174)
- Residential Construction Development First Award, Certificate of Achievement (p. 175)
- Residential Construction Development Second Award, Certificate of Achievement (p. 176)
- Residential Construction Development Third Award, Certificate of Achievement (p. 177)
- Residential Electrical, Certificate of Specialization (p. 178)

Carpentry, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CARP

Labor market data shows a great need for skilled professionals with carpentry skills. Completion of this program will prepare individuals for entry-level positions in maintenance and construction fields.

Program Outcomes

1. Students who successfully complete this program will be able to install windows and doors in a building.
2. Students who successfully complete this program will be able to install interior and exterior finishes in a building.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
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<th>Title</th>
<th>Units</th>
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<td>CNST A240</td>
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<td>CNST A241</td>
<td>Finish Carpentry</td>
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<tr>
<td><strong>Total Units</strong></td>
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<td><strong>10</strong></td>
</tr>
</tbody>
</table>

**Concrete & Masonry, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_CNCM

Students may earn a Certificate of Completion in any of the subject areas specified.

**Program Outcomes**

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.

2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
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<td>CNST A195</td>
<td>Residential Code</td>
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<td>CNST A210</td>
<td>Concrete Construction</td>
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<td>CNST A260</td>
<td>Masonry Construction</td>
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<td><strong>Total Units</strong></td>
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</table>

**Construction Technology, Associate in Science Degree**

Financial Aid Eligible
Not Financial Aid Eligible
Banner Code: 1_AS_CTBP
Control Number: 03979

Construction Technology A165, Construction Safety/CAL-OSHA, is required for any first earned Certificate of Achievement. It is recommended that all beginning, full-time students enroll in the following courses leading to a Certificate of Achievement.

Complete the Construction Technology Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**Program Outcomes**

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.

2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, and hands-on skilled tradespeople.
Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/construction-technology/construction-technology-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Course Title Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST A165</td>
<td>Construction Safety/CAL OSHA</td>
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<tr>
<td>CNST A180</td>
<td>Building Construction 1</td>
<td>5</td>
</tr>
<tr>
<td>CNST A185</td>
<td>Building Construction 2</td>
<td>5</td>
</tr>
<tr>
<td>CNST A190</td>
<td>Blueprint Reading and Drafting</td>
<td>4</td>
</tr>
<tr>
<td>CNST A195</td>
<td>Residential Code</td>
<td>3</td>
</tr>
<tr>
<td>CNST A240</td>
<td>Specialty Trades</td>
<td>5</td>
</tr>
</tbody>
</table>

**Total Units**: 25

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

### Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Course Title Units

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST A165</td>
<td>Construction Safety/CAL OSHA</td>
<td>3</td>
</tr>
<tr>
<td>CNST A180</td>
<td>Building Construction 1</td>
<td>5</td>
</tr>
<tr>
<td>CNST A185</td>
<td>Building Construction 2</td>
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<td>CNST A190</td>
<td>Blueprint Reading and Drafting</td>
<td>4</td>
</tr>
<tr>
<td>CNST A195</td>
<td>Residential Code</td>
<td>3</td>
</tr>
<tr>
<td>CNST A240</td>
<td>Specialty Trades</td>
<td>5</td>
</tr>
</tbody>
</table>

**Total Units**: 25

Fine Woodworking, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CTFW

The southern California region is home to more than 100 businesses that have fine woodworking and design, construction, repair, sales and
instrument tuning as the primary focus of the business. Labor market data shows a clear need for competent new professional makers, designers, repair staff, and sales professionals to fill staffing positions created as small companies grow and medium to large companies expand.

Program Outcomes
1. Be prepared for a position or career in the fine woodworking and affiliated trade.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CNST A114</td>
<td>Cabinet Making</td>
<td>4</td>
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<tr>
<td>or CNST A116</td>
<td>Furniture Making and Design</td>
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<tr>
<td>CNST A126</td>
<td>Steel String Guitar Making and Design 1</td>
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<td>Select nine units of the following:</td>
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<td>9</td>
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<tr>
<td>ART A110</td>
<td>Color and Design: Two-Dimensional</td>
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<tr>
<td>ART A141</td>
<td>Sculpture 1</td>
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<tr>
<td>BUS A240</td>
<td>Entrepreneurship</td>
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<tr>
<td>CNST A127</td>
<td>Steel String Guitar Making and Design 2</td>
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<td>ID A105</td>
<td>Interior Design Studio 1</td>
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<td>Total Units</td>
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</table>

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/construction-technology/master-construction-specialist-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>CIS A100</td>
<td>Introduction to Computer Applications</td>
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</tr>
<tr>
<td>or CHT A100</td>
<td>Computer Use in Technology</td>
<td></td>
</tr>
<tr>
<td>CNST A114</td>
<td>Cabinet Making</td>
<td>4</td>
</tr>
<tr>
<td>CNST A165</td>
<td>Construction Safety/CAL OSHA</td>
<td>3</td>
</tr>
<tr>
<td>CNST A180</td>
<td>Building Construction 1</td>
<td>5</td>
</tr>
<tr>
<td>CNST A190</td>
<td>Blueprint Reading and Drafting</td>
<td>4</td>
</tr>
</tbody>
</table>

Banner Code: 1_AS_CTMS
Control Number: 08629

The terms “Master” and “Specialist” imply a very broad knowledge in several of the construction trades and management disciplines. Students who complete this program will have their names displayed on a perpetual “Award of Excellence” listing in the Construction Department.

Complete the Master Construction Specialist Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. Note: this AS degree requires a minimum of 77 units for completion.

Program Outcomes
1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.

2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.

Master Construction Specialist, Associate in Science Degree
Financial Aid Eligible
### Master Construction Specialist, Certificate of Achievement

**Financial Aid Eligible**  
Banner Code: 1_CT_CTMS  
Control Number: 22396

The terms “Master” and “Specialist” imply a very broad knowledge in several of the construction trades and management disciplines. Students who complete this program will have their names displayed on a perpetual “Award of Excellence” listing in the Construction Department.

**Program Outcomes**

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.

2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

### Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Course** | **Title** | **Units**
---|---|---
CNST A195 | Residential Code | 3
CNST A210 | Concrete Construction | 5
CNST A240 | Specialty Trades | 5
CNST A265 | Plumbing 1 | 4
or CNST A266 | Plumbing 2 | 4
CNST A275 | Residential Electrical Wiring | 5
CNST A285 | Light Steel Frame Construction | 2.5
CNST A185 | Building Construction 2 | 5
CNST A260 | Masonry Construction | 5

**Restricted Electives**

Select one of the following: 3

- CNST A220 | Construction Estimating | 3
- CNST A230 | Construction Inspection | 3
- CNST A250 | Construction Supervision and Project Management | 3

**Total Units** | **56.5**

**Requirement** | **Units**
---|---
Total Degree Units | 56.5
AS General Education Option 1, 2, or 3 | Varies
Total Minimum Degree Units | 74.5

### Plumbing, Certificate of Specialization

**Not Financial Aid Eligible**  
Banner Code: 1_CE_CNPL

Students may earn a Certificate of Completion in any of the subject areas specified.

**Program Outcomes**

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.
2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST A190</td>
<td>Blueprint Reading and Drafting</td>
<td>4</td>
</tr>
<tr>
<td>CNST A265</td>
<td>Plumbing 1</td>
<td>4</td>
</tr>
<tr>
<td>CNST A266</td>
<td>Plumbing 2</td>
<td>4</td>
</tr>
<tr>
<td>Total Units</td>
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<td>12</td>
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</table>

Residential Construction Development First Award, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_CTRS
Control Number: 08628

Students may select any combination of courses that total eighteen (18) or more units from the following list. Note: Construction Technology A165 and Construction Technology A195 are required for any first earned Certificate of Achievement. No course may be applied to more than one Residential Construction Development certificate.

Complete the Residential Construction Development First Award Certificate of Achievement and the Associate in Science degree as outlined in the Graduation Requirements section of the catalog.

Program Outcomes

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.
2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.

Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite. Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/construction-technology/residential-construction-development-first-award-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

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<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST A165</td>
<td>Construction Safety/CAL OSHA</td>
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</tr>
<tr>
<td>CNST A195</td>
<td>Residential Code</td>
<td>3</td>
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<td>Select 12 units of the following:</td>
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<tr>
<td>ARCH/CNST A196</td>
<td>Green Building Codes</td>
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</tr>
<tr>
<td>ARCH/CNST A197</td>
<td>California Energy Code</td>
<td></td>
</tr>
<tr>
<td>CNST A100</td>
<td>Principles of Construction</td>
<td></td>
</tr>
<tr>
<td>CNST A112</td>
<td>Stair Framing</td>
<td></td>
</tr>
<tr>
<td>CNST A114</td>
<td>Cabinet Making</td>
<td></td>
</tr>
<tr>
<td>CNST A125</td>
<td>Additions and Remodeling</td>
<td></td>
</tr>
<tr>
<td>CNST A154</td>
<td>Drywall &amp; Taping</td>
<td></td>
</tr>
<tr>
<td>CNST A170</td>
<td>Introduction to Construction</td>
<td></td>
</tr>
<tr>
<td>CNST A180</td>
<td>Building Construction 1</td>
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<tr>
<td>CNST A185</td>
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<td></td>
</tr>
<tr>
<td>CNST A190</td>
<td>Blueprint Reading and Drafting</td>
<td></td>
</tr>
</tbody>
</table>
Course	| Title	| Units
---|---|---
CNST A198	| Energy Audit	| 
CNST A209	| Concrete Flatwork	| 
CNST A210	| Concrete Construction	| 
CNST A211	| Decorative Concrete	| 
CNST A220	| Construction Estimating	| 
CNST A225	| Land and Building Development	| 
CNST A230	| Construction Inspection	| 
CNST A240	| Specialty Trades	| 
CNST A241	| Finish Carpentry	| 
CNST A250	| Construction Supervision and Project Management	| 
CNST A252	| Business Law for Contractors	| 
CNST A260	| Masonry Construction	| 
CNST A261	| Masonry Construction II	| 
CNST A265	| Plumbing 1	| 
CNST A266	| Plumbing 2	| 
CNST A270	| Contractor’s License Law	| 
CNST A275	| Residential Electrical Wiring	| 
CNST A285	| Light Steel Frame Construction	| 

Total Units 18

1 Required for First Certificate.
2 No course may be applied to more than one certificate.

| Requirement	| Units |
---|---|
Program Major Units	| 18 |
AS General Education Option 1, 2, or 3	| Varies |
Transferable electives to satisfy unit requirement	| Varies |

Total Degree Units 60

Residential Construction Development First Award, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_RCDS
Control Number: 19472

Students may select any combination of courses that total eighteen (18) or more units from the following list. Note: Construction Technology A165 and Construction Technology A195 are required for any first earned Certificate of Achievement. No course may be applied to more than one Residential Construction Development certificate.

Program Outcomes
1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.
2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

| Course	| Title	| Units |
---|---|---|
| Required Courses	| | |
| CNST A165	| Construction Safety/CAL OSHA	| 1 |
| CNST A195	| Residential Code	| 3 |
| Select 12 units of the following: 2	| | 12 |

| Course	| Title	| Units |
---|---|---|
<p>| ARCH/CNST A196	| Green Building Codes	| |
| ARCH/CNST A197	| California Energy Code	| |
| CNST A100	| Principles of Construction	| |
| CNST A112	| Stair Framing	| |
| CNST A114	| Cabinet Making	| |
| CNST A125	| Additions and Remodeling	| |
| CNST A154	| Drywall &amp;Taping	| |
| CNST A170	| Introduction to Construction	| |
| CNST A180	| Building Construction 1	| |
| CNST A185	| Building Construction 2	| |
| CNST A190	| Blueprint Reading and Drafting	| |
| CNST A198	| Energy Audit	| |
| CNST A209	| Concrete Flatwork	| |
| CNST A210	| Concrete Construction	| |
| CNST A211	| Decorative Concrete	| |
| CNST A220	| Construction Estimating	| |
| CNST A225	| Land and Building Development	| |
| CNST A230	| Construction Inspection	| |
| CNST A240	| Specialty Trades	| |
| CNST A241	| Finish Carpentry	| |
| CNST A250	| Construction Supervision and Project Management	| |
| CNST A252	| Business Law for Contractors	| |
| CNST A260	| Masonry Construction	| |</p>
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST A261</td>
<td>Masonry Construction II</td>
<td></td>
</tr>
<tr>
<td>CNST A265</td>
<td>Plumbing 1</td>
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<tr>
<td>CNST A266</td>
<td>Plumbing 2</td>
<td></td>
</tr>
<tr>
<td>CNST A270</td>
<td>Contractor’s License Law</td>
<td></td>
</tr>
<tr>
<td>CNST A275</td>
<td>Residential Electrical Wiring</td>
<td></td>
</tr>
<tr>
<td>CNST A285</td>
<td>Light Steel Frame Construction</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units:** 18

1. Required for First Certificate.
2. No course may be applied to more than one certificate.

### Residential Construction Development Second Award, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_CTRS
Control Number: 19473

Students may earn a second award of the certificate by completing eighteen (18) or more units from the following list, however, no course may be applied to more than one Residential Construction Development certificate.

### Program Outcomes

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.
2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

### Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Required Prerequisites

#### Residential Construction Development First Award Certificate of Achievement

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**Total Units:** 18

1. Required for First Certificate.
2. No course may be applied to more than one certificate.

### Subtotal 18

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Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

### Minimum Grade Requirement

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Total Units 18

Required Prerequisites 18

### Program Outcomes

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.

2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.
Residential Electrical, Certificate of Specialization

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Total Units 18

1 Required for First Certificate.
2 No course may be applied to more than one certificate.

Residential Construction Development Second Award Certificate of Achievement 18

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</table>

Required Prerequisites 36

Total Units 54

1 No course may be applied to more than one certificate.

Residential Electrical, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CTRE

This certificate prepares students for entry level employment in residential electrical related trades. The student will be able to wire
residential electrical systems, understand code requirements, and interpret electrical blueprints.

**Program Outcomes**

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.

2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

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**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” grade of “C” or better in all program-required courses.

**Electronics**

- Electronic-Mechanical Technician, Certificate of Achievement (p. 179)

**Electronic-Mechanical Technician, Certificate of Achievement**

Financial Aid Eligible

Banner Code: 1_CN_ELCH

Control Number: 22390

The entry-level electro-mechanical technician performs assembly, preventative maintenance, setup, preparation for production; operation and test of mechanical, electrical and electronic devices, components, assemblies, manual and automated systems.

This program builds a firm foundation of technical knowledge and skills upon which the student can build a career that will grow. The foundation includes electricity, electronics, computer hardware, mechanics, robotics, assembly, test instruments, and technical documentation. Training is laboratory intensive, interactive, project-based, and hands-on. The student will design, build, align, calibrate, test, components of robotics and automation systems.

Electro-mechanical technicians work closely with electrical, electronic, computer and, mechanical engineers. Industry sectors in southern California that employ electro-mechanical technicians include, but are not limited to: utilities, energy, oil, gas, water, wastewater, traffic control, computer and, mechanical engineers. Industry sectors in southern California that employ electro-mechanical technicians include, but are not limited to: utilities, energy, oil, gas, water, wastewater, traffic control, computer and, mechanical engineers. Industry sectors in southern California that employ electro-mechanical technicians include, but are not limited to: utilities, energy, oil, gas, water, wastewater, traffic control, computer and, mechanical engineers. Industry sectors in southern California that employ electro-mechanical technicians include, but are not limited to: utilities, energy, oil, gas, water, wastewater, traffic control, computer and, mechanical engineers. Industry sectors in southern California that employ electro-mechanical technicians include, but are not limited to: utilities, energy, oil, gas, water, wastewater, traffic control, computer and, mechanical engineers.

The median annual wage for electro-mechanical technicians was $57,790 in May 2018.

**Program Outcomes**

1. Demonstrate the fundamentals skills for electro-mechanical production technicians: mechanics, electronic assembly, and computer skills.

2. PC Computer design, build, configure, troubleshoot, and prepare a service manual for a desktop computer and local area network per client specifications.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

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Course | Title | Units
---|---|---
ELEC A047 | Electronic Problem Solving | 3-4
| or MATH A115 | College Algebra | 
| or MATH A120 | Trigonometry | 
ELEC A101 | Robotics 1 Mechanics & Design | 4
ELEC A146 | Computer Hardware Configuration & Diagnostics | 3
ELEC A150 | D.C. Circuits | 3
ELEC A155 | A.C. Circuits | 3
ELEC A170 | Safety, Assembly, Calibration | 1
ELEC A201 | Robotics 2 Motors, Transports & Motor Control | 4

Total Units | 21-22

Heating, Ventilation, Air Conditioning and Refrigeration (HVACR)

- Heating, Ventilation, Air Conditioning and Refrigeration, Associate in Science Degree (p. 180)
- Heating, Ventilation, Air Conditioning and Refrigeration, Certificate of Achievement (p. 181)

Heating, Ventilation, Air Conditioning and Refrigeration, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_HVAC
Control Number: 03976

The Heating, Ventilation and Air Conditioning (HVACR) option prepares students for employment as heating, ventilating and air conditioning technicians. Students will be trained to install, service and maintain air conditioning/refrigeration equipment in buildings. The program provides a background for more advanced studies in the design and installation of computerized building automation systems.

Refrigeration relates to the cooling of air or liquids, thus providing lower temperatures to preserve food, cool beverages, make ice, and for many other applications. Air conditioning includes space cooling, heating, humidification, dehumidification, air filtration, and ventilation to condition the air and improve air quality. The field of HVACR Technology is vital to our health and security, from the cryogenic (ultra-low temperatures) scientific field to the preservation of our food products to the air conditioning of hospitals and institutions.

A math competency level equivalent to Tech A040 is strongly recommended or satisfactory score on math competency examination.

Complete the Heating, Ventilation, Air Conditioning, and Refrigeration Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome
1. Prepare students for entry-level employment as an HVACR Technician and for industry certifications.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/heating-ventilation-air-conditioning-refrigeration/refrigeration-air-conditioning-refrigeration-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Course | Title |
---|---|
CHT A100 | Computer Use in Technology |
CIS A100 | Introduction to Computer Applications |
CIS A111 | Introduction to Computer Information Systems |

Select one of the following: 3
Programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

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**Minimum Grade Requirement**

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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>HVAC A100</td>
<td>Air Conditioning and Refrigeration Principles</td>
<td>3</td>
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<tr>
<td>HVAC A101</td>
<td>Basic Electrical for HVAC-R</td>
<td>3</td>
</tr>
<tr>
<td>HVAC A102</td>
<td>Refrigeration Service</td>
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<tr>
<td>HVAC A103</td>
<td>Air Conditioning Service</td>
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</tr>
<tr>
<td>HVAC A105</td>
<td>Air Conditioning and Refrigeration Controls</td>
<td>3</td>
</tr>
<tr>
<td>HVAC A110</td>
<td>Pneumatic Controls</td>
<td>3</td>
</tr>
<tr>
<td>HVAC A140</td>
<td>Building Automation</td>
<td>3</td>
</tr>
<tr>
<td>HVAC A106</td>
<td>Non-Residential Applications for HVAC</td>
<td>6</td>
</tr>
<tr>
<td>HVAC A111</td>
<td>Ice Machine Service &amp; Repair</td>
<td>3</td>
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<td>Total Units</td>
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<td>30</td>
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</table>

**Required Courses**

Select one of the following:

- CHT A100  Computer Use in Technology
- CIS A100  Introduction to Computer Applications
- CIS A111  Introduction to Computer Information Systems
- HVAC A100  Air Conditioning and Refrigeration Principles
- HVAC A101  Basic Electrical for HVAC-R
- HVAC A102  Refrigeration Service
- HVAC A103  Air Conditioning Service
- HVAC A105  Air Conditioning and Refrigeration Controls
- HVAC A110  Pneumatic Controls
- HVAC A140  Building Automation
- HVAC A104  Air Balance
- HVAC A106  Non-Residential Applications for HVAC
- HVAC A111  Ice Machine Service & Repair

**Total Units**

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<td>Varies</td>
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<tr>
<td>Transferable electives to satisfy unit requirement</td>
<td>Varies</td>
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**Heating, Ventilation, Air Conditioning and Refrigeration, Certificate of Achievement**

Financial Aid Eligible
Banner Code: 1_CT_HVAC
Control Number: 19545

The Heating, Ventilation and Air Conditioning (HVACR) option prepares students for employment as heating, ventilating and air conditioning technicians. Students will be trained to install, service and maintain air conditioning/refrigeration equipment in buildings. The program provides a background for more advanced studies in the design and installation of computerized building automation systems.

Refrigeration relates to the cooling of air or liquids, thus providing lower temperatures to preserve food, cool beverages, make ice, and for many other applications. Air conditioning includes space cooling, heating, humidification, dehumidification, air filtration, and ventilation to condition the air and improve air quality. The field of HVACR Technology is vital to our health and security, from the cryogenic (ultra-low temperatures) scientific field to the preservation of our food products to the air conditioning of hospitals and institutions.

A math competency level equivalent to Tech A040 is strongly recommended or satisfactory score on math competency examination.

**Program Outcome**

1. Prepare students for entry-level employment as an HVACR Technician and for industry certifications.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of...
is an introduction to natural beauty. The courses have been designed both for full-time students planning to enter the horticulture field and for those people working in one of the many interesting areas of horticulture who wish to expand their horticultural knowledge. Most classes are conducted during convenient evening hours to allow working students to study for a new career and those with jobs in the field of Horticulture to upgrade their skills.

The Horticulture Department boasts excellent facilities, including a well-equipped classroom building set in beautifully landscaped grounds. The grounds themselves have been planted with a large collection of trees, shrubs, ground covers, and vines, and they serve as a laboratory for many of the classes. A nursery with over 6,000 square feet of greenhouse space and 4,000 square feet of shade structures round out this marvelous facility on the Orange Coast College campus.

- Advanced Landscape Design and Landscape Specialist, Certificate of Specialization (p. 182)
- Basic Landscape Design, Certificate of Specialization (p. 182)
- Horticulture, Associate in Science Degree (p. 183)
- Horticulture, Certificate of Achievement (p. 184)
- Intermediate Landscape Design and Landscape Specialist, Certificate of Specialization (p. 185)
- Landscape Site Design Elements, Certificate of Specialization (p. 186)
- Retrofitting California Urban Gardens, Certificate of Specialization (p. 186)
- The Professional Practice of a Landscape Design & Construction Business, Certificate of Specialization (p. 187)

**Advanced Landscape Design and Landscape Specialist, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_ALSC

Successful work in landscape design requires a comprehensive, multidisciplinary education in aspects of horticulture, design, and more. Without requiring prior background, the Landscape Design Certificate program provides entry-level skills for those seeking employment in the landscaping field or continuing education for landscapers, florists/nursery growers, architects, contractors, and anyone interested in a broader range of knowledge in this area.

The courses enable you to develop aesthetic sensitivity and environmental awareness, a thorough knowledge of historical precedent, a definable and defensible design methodology, the technical knowledge and skills necessary to compete effectively for jobs, and a comprehensive portfolio.

**Program Outcome**

1. Solve landscape challenges through the design/build process that provides basic human comfort and livability, and meet client functional and financial needs.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, but printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HORT A109</td>
<td>Knowing Your Soils</td>
<td>3</td>
</tr>
<tr>
<td>HORT A181</td>
<td>Ornamental Trees</td>
<td>3</td>
</tr>
<tr>
<td>HORT A182</td>
<td>Ornamental Shrubs</td>
<td>3</td>
</tr>
<tr>
<td>HORT A284</td>
<td>Portfolio Development</td>
<td>1.5</td>
</tr>
<tr>
<td>HORT A288</td>
<td>Sprinkler Irrigation Systems Design</td>
<td>2</td>
</tr>
<tr>
<td>HORT A289</td>
<td>Installation of Residential Irrigation Systems</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Units** 13.5

**Basic Landscape Design, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_BLSC

The Basic Landscape Horticulture certificate program is intended for those students who are limited by time constraints to a one-year program. Graduates with this certificate can find employment at the basic or entry level in grounds maintenance or as a park worker, gardener, or landscape designer.

**Program Outcome**

1. Communicate basic horticulture concepts to clients, contractors, and public agencies.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of
employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**
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**Course** | **Title** | **Units**
--- | --- | ---
HORT A111 | Landscape Drafting Techniques | 1
HORT A115 | Landscape Graphics | 3
HORT A285 | Introduction to Landscape Design | 3
HORT A287 | Planting Design | 2

**Total Units** 9

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### Horticulture, Associate in Science Degree

Financial Aid Eligible  
Banner Code: 1_AS_OH  
Control Number: 03954

Upon completion of the Horticulture Program students will have the knowledge, skills and experience to work with plant material in multiple applications and multiple fields in the Landscaping and Nursery industries. Students will be qualified for careers in Landscape Design, Landscape Contracting, Landscape Maintenance, Arboriculture, Nursery practices, and Irrigation and Water Management.

Complete the Horticulture Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**Program Outcomes**

1. Use knowledge of various plant materials to better design and maintain outdoor garden or landscape.
2. Describe man’s relationship with plants for food and environmental enhancement.
3. Describe current sustainability issues in Southern California and how good horticultural practices will improve long term sustainability.
4. Use knowledge of a particular chosen plant, greenhouse systems and propagation practices to successfully produce a healthy crop by a target date.
5. Use knowledge of site conditions, drafting skills, client needs, and various plant and building materials to solve a design problem.

### Associate in Arts Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/horticulture/horticulture-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOL A183</td>
<td>Botany ¹</td>
<td>3</td>
</tr>
<tr>
<td>or HORT A105</td>
<td>Botany for Gardeners</td>
<td></td>
</tr>
<tr>
<td>HORT A109</td>
<td>Knowing Your Soils</td>
<td>3</td>
</tr>
<tr>
<td>HORT A181</td>
<td>Ornamental Trees</td>
<td>3</td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>
Horticulture, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_OH
Control Number: 22368

Upon completion of the Horticulture Program students will have the knowledge, skills and experience to work with plant material in multiple applications and multiple fields in the Landscaping and Nursery industries. Students will be qualified for careers in Landscape Design, Landscape Contracting, Landscape Maintenance, Arboriculture, Nursery practices, and Irrigation and Water Management.

Program Outcomes

1. Use knowledge of various plant materials to better design and maintain an outdoor garden or landscape.
2. Describe man’s relationship with plants for food and environmental enhancement.
3. Describe current sustainability issues in Southern California and how good horticultural practices will improve long term sustainability.
4. Use knowledge of a particular chosen plant, greenhouse systems and propagation practices to successfully produce a healthy crop by a target date.
5. Use knowledge of site conditions, drafting skills, client needs, and various plant and building materials to solve a design problem.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Spring</td>
<td></td>
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<tr>
<td>HORT A182</td>
<td>Ornamental Shrubs</td>
<td>3</td>
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<tr>
<td>Fall</td>
<td></td>
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<tr>
<td>Select 12 units of the following:</td>
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<td></td>
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<tr>
<td>HORT A111</td>
<td>Landscape Drafting Techniques</td>
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</tr>
<tr>
<td>HORT A151</td>
<td>Introduction to Tree Care</td>
<td></td>
</tr>
<tr>
<td>HORT A170</td>
<td>Pest Control Applicators and Gardeners P.C.O.</td>
<td></td>
</tr>
<tr>
<td>HORT A184</td>
<td>Greenhouse and Nursery Science</td>
<td></td>
</tr>
<tr>
<td>HORT A185</td>
<td>Plant Diseases</td>
<td></td>
</tr>
<tr>
<td>HORT A187</td>
<td>Interior Plantscaping</td>
<td></td>
</tr>
<tr>
<td>HORT A200</td>
<td>Chronicles of Garden Design through the Ages 2</td>
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</tr>
<tr>
<td>HORT A231</td>
<td>Business of Landscape Design and Construction</td>
<td></td>
</tr>
<tr>
<td>HORT A284</td>
<td>Portfolio Development 2</td>
<td></td>
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<tr>
<td>HORT A290</td>
<td>Low-Voltage Landscape Lighting</td>
<td></td>
</tr>
<tr>
<td>HORT A285</td>
<td>Introduction to Landscape Design 2</td>
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</tr>
<tr>
<td>HORT A297</td>
<td>Garden Pools, Fountains and Waterfalls in the Landscape</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select 12 units of the following:</td>
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<tr>
<td>HORT A115</td>
<td>Landscape Graphics</td>
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<tr>
<td>HORT A116</td>
<td>Digital Design</td>
<td></td>
</tr>
<tr>
<td>HORT A150</td>
<td>Landscape Maintenance</td>
<td></td>
</tr>
<tr>
<td>HORT A183</td>
<td>Plant Propagation</td>
<td></td>
</tr>
<tr>
<td>HORT A186</td>
<td>Pests of Ornamentals</td>
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<tr>
<td>HORT A189</td>
<td>Weeds and Their Control</td>
<td></td>
</tr>
<tr>
<td>HORT A190</td>
<td>California Friendly Landscape</td>
<td></td>
</tr>
<tr>
<td>HORT A191</td>
<td>Cacti and Succulents</td>
<td></td>
</tr>
<tr>
<td>HORT A200</td>
<td>Chronicles of Garden Design through the Ages 2</td>
<td></td>
</tr>
<tr>
<td>HORT A230</td>
<td>Calculations for Horticulture and Landscape Professionals</td>
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</tr>
<tr>
<td>HORT A284</td>
<td>Portfolio Development 2</td>
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</tr>
<tr>
<td>HORT A285</td>
<td>Introduction to Landscape Design 2</td>
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<td>HORT A283</td>
<td>Therapeutic Gardens: Design for Healing Spaces</td>
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<td>HORT A286</td>
<td>Landscape Design Elements</td>
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<td>HORT A287</td>
<td>Planting Design</td>
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<td>HORT A288</td>
<td>Sprinkler Irrigation Systems Design</td>
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<tr>
<td>HORT A289</td>
<td>Installation of Residential Irrigation Systems</td>
<td></td>
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<tr>
<td>Business Elective (any OCC Business course 100 or higher)</td>
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<tr>
<td>HORT A296</td>
<td>Grading and Drainage for Landscape Design</td>
<td></td>
</tr>
</tbody>
</table>

1 Transfer students should also take BIOL A183L Botany Lab.
2 HORT A200 Chronicles of Garden Design through the Ages, HORT A284 Portfolio Development, HORT A285 Introduction to Landscape Design taken in Fall term may not be repeated in Spring term.
### Course Title

#### Year 1

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>BIOL A183 or HORT A105</td>
<td>Botany 1 or Botany for Gardeners</td>
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<td>HORT A109</td>
<td>Knowing Your Soils</td>
<td>3</td>
</tr>
<tr>
<td>HORT A181</td>
<td>Ornamental Trees</td>
<td>3</td>
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</table>

**Spring**

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HORT A182</td>
<td>Ornamental Shrubs</td>
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**Year 2**

**Fall**

Select 12 units of the following:

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<td>Landscape Drafting Techniques</td>
<td>2</td>
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<tr>
<td>HORT A151</td>
<td>Introduction to Tree Care</td>
<td>2</td>
</tr>
<tr>
<td>HORT A170</td>
<td>Pest Control Applicators and Gardeners P.C.O.</td>
<td>2</td>
</tr>
<tr>
<td>HORT A184</td>
<td>Greenhouse and Nursery Science</td>
<td>2</td>
</tr>
<tr>
<td>HORT A185</td>
<td>Plant Diseases</td>
<td>2</td>
</tr>
<tr>
<td>HORT A187</td>
<td>Interior Plantscaping</td>
<td>2</td>
</tr>
<tr>
<td>HORT A200</td>
<td>Chronicles of Garden Design through the Ages 2</td>
<td>2</td>
</tr>
<tr>
<td>HORT A231</td>
<td>Business of Landscape Design and Construction</td>
<td>2</td>
</tr>
<tr>
<td>HORT A284</td>
<td>Portfolio Development 2</td>
<td>2</td>
</tr>
<tr>
<td>HORT A290</td>
<td>Low-Voltage Landscape Lighting</td>
<td>2</td>
</tr>
<tr>
<td>HORT A285</td>
<td>Introduction to Landscape Design 2</td>
<td>2</td>
</tr>
<tr>
<td>HORT A297</td>
<td>Garden Pools, Fountains and Waterfalls in the Landscape</td>
<td>2</td>
</tr>
</tbody>
</table>

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<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
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<td>HORT A115</td>
<td>Landscape Graphics</td>
<td>2</td>
</tr>
<tr>
<td>HORT A116</td>
<td>Digital Design</td>
<td>2</td>
</tr>
<tr>
<td>HORT A150</td>
<td>Landscape Maintenance</td>
<td>2</td>
</tr>
<tr>
<td>HORT A183</td>
<td>Plant Propagation</td>
<td>2</td>
</tr>
<tr>
<td>HORT A186</td>
<td>Pests of Ornamentals</td>
<td>2</td>
</tr>
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<td>HORT A189</td>
<td>Weeds and Their Control</td>
<td>2</td>
</tr>
<tr>
<td>HORT A190</td>
<td>California Friendly Landscape</td>
<td>2</td>
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<td>Cacti and Succulents</td>
<td>2</td>
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<td>HORT A200</td>
<td>Chronicles of Garden Design through the Ages 2</td>
<td>2</td>
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<td>HORT A230</td>
<td>Calculations for Horticulture and Landscape Professionals</td>
<td>2</td>
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<td>HORT A284</td>
<td>Portfolio Development 2</td>
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<td>HORT A285</td>
<td>Introduction to Landscape Design 2</td>
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<tr>
<td>HORT A286</td>
<td>Therapeutic Gardens: Design for Healing Spaces</td>
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<tr>
<td>HORT A286</td>
<td>Landscape Design Elements</td>
<td>2</td>
</tr>
<tr>
<td>HORT A287</td>
<td>Planting Design</td>
<td>2</td>
</tr>
<tr>
<td>HORT A288</td>
<td>Sprinkler Irrigation Systems Design</td>
<td>2</td>
</tr>
<tr>
<td>HORT A289</td>
<td>Installation of Residential Irrigation Systems</td>
<td>2</td>
</tr>
<tr>
<td>Business Elective (any OCC Business course 100 or higher)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>HORT A296</td>
<td>Grading and Drainage for Landscape Design</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Units: 24

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1. Transfer students should also take BIOL A183L Botany Lab.
2. HORT A200 Chronicles of Garden Design through the Ages, HORT A284 Portfolio Development, HORT A285 Introduction to Landscape Design taken in Fall term may not be repeated in Spring term.

### Intermediate Landscape Design and Landscape Specialist, Certificate of Specialization

Not Financial Aid Eligible

Banner Code: 1_CE_ILSC

The Intermediate Landscape Design and Construction certificate program trains students to work in the field of landscape design/build. The curriculum provides studies in design, construction, history, basic horticulture, topics that help a student obtain employment in the field, and provide foundational training towards becoming licensed landscape contractors and related specialties.

#### Program Outcome

1. Solve landscape challenges through the design/build process that provides basic human comfort and livability, and meet client functional and financial needs.

#### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

#### Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.
**Landscape Site Design Elements, Certificate of Specialization**

Not Financial Aid Eligible  
Banner Code: 1_CE_LSCP

This program will prepare students for the complex task of developing residential landscapes with grading, drainage, materials, structures, lighting and other complex components that require a deeper knowledge base.

**Program Outcome**

1. Students will be able to demonstrate fundamental skills in landscape design elements, process and techniques.
2. Apply their understanding of sustainable aspects to the development of landscape site design to promote green living environments.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded.
   A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<td>Urban Container Planting</td>
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<td>HORT A286</td>
<td>Landscape Design Elements</td>
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<tr>
<td>HORT A290</td>
<td>Low-Voltage Landscape Lighting</td>
<td>1.5</td>
</tr>
<tr>
<td>HORT A296</td>
<td>Grading and Drainage for Landscape Design</td>
<td>3</td>
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</table>

**Total Units**: 13

---

**Retrofitting California Urban Gardens, Certificate of Specialization**

Not Financial Aid Eligible  
Banner Code: 1_CE_RCUUG

The Retrofitting California Urban Gardens Certificate of Specialization is designed to provide formal training for individuals interested in transforming the landscape into a water-wise sustainable garden. This program provides students with entry-level working knowledge of the skills and resources they will need to design various sustainable landscapes upon completion of the certificate.

**Program Outcome**

1. Students will demonstrate areas of critical thinking, design, and visual communication for entry-level employment as a landscape/garden designer that will have a strong background in sustainability as well as the ability to pursue industry certifications.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded.
   A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<td>HORT A190</td>
<td>California Friendly Landscape</td>
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</table>
The Professional Practice of a Landscape Design & Construction Business, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_LDSN

Prepares students for self-employment and work within small businesses in the landscape industry. Builds on their industry education in landscape design and construction. Expands their education in entrepreneurship and small business management. Contributes to the student's financial independence, career success, and the world's economy. Prepares them to work for others and after passing the state contractor's examination, to own their own landscape construction business. The program is aligned with the California State License Board and completion of this program will help prepare students for the state exam.

Program Outcomes
1. Certificate students will be able to understand the theory and practice of managing a landscape business, including knowledge of legalities, finance, operations, planning, safety, estimating, bidding, decision making and the application leadership and managerial skills in various organizational environments.
2. Certificate students will be able to develop and implement a business plan by conducting research in the appropriate specialty area and identify the target market, competition, industry standards, and financial projections.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<td>Calculations for Horticulture and Landscape Professionals</td>
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<td>Business of Landscape Design and Construction</td>
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Manufacturing Technology

OCC's Manufacturing Technology program is designed to train students for entry-level positions as machine operators. Additionally, both beginning students and working machinists can build on their skill and knowledge by completing the requirements for one of the advanced certificates.

The Manufacturing Technology program is divided into four areas: Machinist, Computer Numerical Control (CNC) Operator, CNC Programmer, and Tool Maker. All four programs follow sequential plans which spin off from the core machinist program. After completing the machinist program in two semesters, the student can take the classes required for one of the more advanced certificates.

The student who completes the machinist program also satisfies the major requirements for the Associate in Science degree.

- CNC Machine Operator, Associate in Science Degree (p. 187)
- CNC Machine Operator, Certificate of Achievement (p. 188)
- CNC Machine Programmer, Associate in Science Degree (p. 189)
- CNC Machine Programmer, Certificate of Achievement (p. 190)
- CNC Operator, Certificate of Specialization (p. 191)
- CNC Programmer, Certificate of Specialization (p. 191)
- Machinist, Associate in Science Degree (p. 192)
- Machinist, Certificate of Achievement (p. 192)
- Tooling, Associate in Science Degree (p. 193)
- Tooling, Certificate of Achievement (p. 193)

CNC Machine Operator, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_MTMO
Control Number: 08634

The CNC Machine Operator certificate enhances the skills of students who have earned the Machinist certificate by providing that student with CNC machine operating skills and manual programming skills. The
courses required for earning this certificate are designed to make the machine operator capable of setting up and manually programming a CNC machine tool. The CNC Machine Operator Professional Upgrade Certificate is specifically for the returning student with on-the-job machining experience.

Complete the CNC Machine Operator Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome
1. Set-up and operate CNC Lathes and Milling Machines.

Associate in Science Degree Requirements
1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/manufacturing-technology/cnc-machine-operator-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-2/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Required Prerequisites

<table>
<thead>
<tr>
<th>Machinist Certificate of Achievement</th>
</tr>
</thead>
</table>

<table>
<thead>
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<th>Course</th>
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</thead>
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<tr>
<td>MACH A100</td>
<td>Introduction to Machine Shop</td>
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<tr>
<td>MACH A105</td>
<td>Lathe</td>
<td>5</td>
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<tr>
<td>MACH A120</td>
<td>Measurement and Blueprint Reading</td>
<td>3</td>
</tr>
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<td>MACH A121</td>
<td>Computations for Machinists</td>
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<td>Units</td>
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<td>Spring</td>
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<tr>
<td>MACH A110</td>
<td>Milling Machine</td>
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</tr>
<tr>
<td>MACH A115</td>
<td>Production Machining Techniques</td>
<td>2</td>
</tr>
</tbody>
</table>

CNC Machine Operator, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_MTMO
Control Number: 19542

The CNC Machine Operator certificate enhances the skills of students who have earned the Machinist certificate by providing that student with CNC machine operating skills and manual programming skills. The courses required for earning this certificate are designed to make the machine operator capable of setting up and manually programming a CNC machine tool. The CNC Machine Operator Professional Upgrade Certificate is specifically for the returning student with on-the-job machining experience.

Program Outcome
1. Set-up and operate CNC Lathes and Milling Machines.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there
is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Required Prerequisites
Machinist Certificate of Achievement

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<th>Course</th>
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<th>Units</th>
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<td>Fall</td>
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<td>MACH A100</td>
<td>Introduction to Machine Shop</td>
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<td>Measurement and Blueprint Reading</td>
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<td>Spring</td>
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<tr>
<td>MACH A110</td>
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<td>MACH A115</td>
<td>Production Machining Techniques</td>
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<td>MACH A130</td>
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<tr>
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CNC Machine Programmer, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_MTMP
Control Number: 08635

The CNC Machine Programmer certificate includes courses designed to upgrade the skills and knowledge of the machinist or the CNC machine operator to the level of the CNC machine programmer. If you are a machinist and have minimal experience with CNC machines or machine language programming, you will first want to complete the CNC Machine Operator Professional Upgrade Certificate. If you have both machining experience and CNC experience, the software used for the Machine Technology A133 and A134 courses provides excellent experiences in computer-assisted CNC programming. All of our programming courses require the use of a personal-type computer. If you have no computer experience, we strongly suggest you enroll in a basic computer use type course first (Computer & High Technology A100 or Computer Information Systems A100).

Complete the CNC Machine Programmer Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome
1. Write part machine programs for controlling CNC lathes and milling machines.

Complete the CNC Machine Programmer Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/manufacturing-technology/cnc-machine-programmer-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Required Prerequisites
Machinist Certificate of Achievement

<table>
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<td>MACH A105</td>
<td>Lathe</td>
<td>5</td>
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<tr>
<td>MACH A120</td>
<td>Measurement and Blueprint Reading</td>
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</table>
The CNC Machine Programmer certificate includes courses designed to upgrade the skills and knowledge of the machinist or the CNC machine operator to the level of the CNC machine programmer. If you are a machinist and have minimal experience with CNC machines or machine language programming, you will first want to complete the CNC Machine Operator Professional Upgrade Certificate. If you have both machining experience and CNC experience, the software used for the Machine Technology A133 and A134 courses provides excellent experiences in computer-assisted CNC programming. All of our programming courses require the use of a personal-type computer. If you have no computer experience, we strongly suggest you enroll in a basic computer use type course first (Computer & High Technology A100 or Computer Information Systems A100).

Program Outcome
1. Write part machine programs for controlling CNC lathes and milling machines.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Required Prerequisites
Machinist Certificate of Achievement

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Subtotal 24

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Total Units 35.5

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<td>AS General Education Option 1, 2, or 3</td>
<td>Varies</td>
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<td>60</td>
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</tbody>
</table>

CNC Machine Programmer, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_MTMP
Control Number: 19543

The CNC Machine Programmer certificate includes courses designed to upgrade the skills and knowledge of the machinist or the CNC machine operator to the level of the CNC machine programmer. If you are a machinist and have minimal experience with CNC machines or machine language programming, you will first want to complete the CNC Machine Operator Professional Upgrade Certificate. If you have both machining experience and CNC experience, the software used for the Machine Technology A133 and A134 courses provides excellent experiences in computer-assisted CNC programming. All of our programming courses require the use of a personal-type computer. If you have no computer experience, we strongly suggest you enroll in a basic computer use type course first (Computer & High Technology A100 or Computer Information Systems A100).
Orange Coast College 2020-2021 Catalog

CNC Operator, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_MTCO

This Professional Upgrade Certificate is designed for students who are already machinists. Before starting on this plan you should be able to set up and operate both conventional lathes and mills. You should be able to read blueprints and use all common machine shop measuring tools. If you have a deficiency in these areas, please refer back to the basic machining courses found in the Machinist certificate.

Program Outcome
1. Set-up and operate CNC Lathes and Milling Machines.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
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<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2</td>
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</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MACH A134</td>
<td>CNC Programming-Mastercam 2</td>
<td>3</td>
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<tr>
<td>MACH A141</td>
<td>Mastercam Lathe</td>
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<td></td>
<td>Total Units</td>
<td>11.5</td>
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</table>

Total Units 35.5

CNC Programmer, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_MTCP

This Professional Upgrade Certificate is designed to upgrade the skills and knowledge of the machinist or the CNC machine operator to the level of the CNC machine programmer. If you are a machinist and have minimal experience with CNC machines or machine language programming, you will first want to complete the CNC operator upgrade certificate. If you have both machining experience and CNC experience, the software used for the Machine Technology A133 and A134 courses provide excellent experiences in computer-assisted CNC programming. All of our programming courses require the use of a personal computer. If you have no computer experience, we strongly suggest you enroll in a basic computer use course first (Computer & High Technology A100 or Computer Information Systems A100).

Program Outcome
1. Write part machine programs for controlling CNC lathes and milling machines.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog.
Machinist, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_MTMC
Control Number: 03981

The Machinist certificate program trains students for positions as entry-level operators, which often are the first manufacturing jobs for industrial employees. This certificate program provides the skill and knowledge necessary for job candidates to become successful wage earners. This program also comprises the core courses for the more advanced certificates.

Complete the Machinist Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes

1. Machine precision manufactured parts using conventional lathes and milling machines and perform necessary measurements.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite. Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/manufacturing-technology/machinist-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Machinist, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_MTMC
Control Number: 19541

The Machinist certificate program trains students for positions as entry-level operators, which often are the first manufacturing jobs for industrial employees. This certificate program provides the skill and knowledge necessary for job candidates to become successful wage earners. This program also comprises the core courses for the more advanced certificates.

Program Outcomes

1. Machine precision manufactured parts using conventional lathes and milling machines and perform necessary measurements.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions.
as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Tooling, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_MTTL
Control Number: 08633

Earning the Tooling certificate upgrades the skills of the machinist to the point required for profitable employment as an entry-level tool maker, a die maker, or a mold maker. As well as other subjects that must be learned by the beginning tool maker, the Tooling certificate program includes courses in metallurgy, tool and cutter grinding, and welding tooling.

Complete the Tooling Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome
1. Manufacture precision tooling for Dies, Molds, and Prototype tooling.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/manufacturing-technology/tooling-associate-science-degree/orange-coast-general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>MACH A100</td>
<td>Introduction to Machine Shop</td>
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<tr>
<td>MACH A105</td>
<td>Lathe</td>
<td>5</td>
</tr>
<tr>
<td>MACH A120</td>
<td>Measurement and Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>MACH A121</td>
<td>Computations for Machinists</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
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<tr>
<td>MACH A110</td>
<td>Milling Machine</td>
<td>5</td>
</tr>
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<td>MACH A115</td>
<td>Production Machining Techniques</td>
<td>2</td>
</tr>
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<td>MACH A130</td>
<td>Introduction to CNC and Manual Programming</td>
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<td>MACH A115</td>
<td>Production Machining Techniques</td>
<td>2</td>
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<td>MACH A120</td>
<td>Measurement and Blueprint Reading</td>
<td>3</td>
</tr>
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<td>MACH A121</td>
<td>Computations for Machinists</td>
<td>3</td>
</tr>
<tr>
<td>MACH A125</td>
<td>CNC Machine Operation 1</td>
<td>3</td>
</tr>
<tr>
<td>MACH A130</td>
<td>Introduction to CNC and Manual Programming</td>
<td>3</td>
</tr>
<tr>
<td>MACH A175</td>
<td>Dimensioning and Tolerancing</td>
<td>3</td>
</tr>
<tr>
<td>MACH A190</td>
<td>Elementary Metallurgy</td>
<td>2</td>
</tr>
<tr>
<td>MACH A200</td>
<td>Tooling</td>
<td>2.5</td>
</tr>
<tr>
<td>WELD A100</td>
<td>Arc &amp; Oxy-acetylene Welding</td>
<td>3</td>
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<td>Total Degree Units</td>
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Tooling, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_MTTL
Control Number: 19544

Earning the Tooling certificate upgrades the skills of the machinist to the point required for profitable employment as an entry-level tool maker, a die maker, or a mold maker. As well as other subjects that must be learned by the beginning tool maker, the Tooling certificate program includes courses in metallurgy, tool and cutter grinding, and welding tooling.

Program Outcome
1. Manufacture precision tooling for Dies, Molds, and Prototype tooling.
Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z section of this catalog. Check with a counselor to determine the requirements for completion.

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<td>Introduction to Machine Shop</td>
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<td>MACH A105</td>
<td>Lathe</td>
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<tr>
<td>MACH A110</td>
<td>Milling Machine</td>
<td>5</td>
</tr>
<tr>
<td>MACH A115</td>
<td>Production Machining Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MACH A120</td>
<td>Measurement and Blueprint Reading</td>
<td>3</td>
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<tr>
<td>MACH A121</td>
<td>Computations for Machinists</td>
<td>3</td>
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<tr>
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<td>CNC Machine Operation 1</td>
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<tr>
<td>MACH A175</td>
<td>Dimensioning and Tolerancing</td>
<td>3</td>
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<tr>
<td>MACH A190</td>
<td>Elementary Metallurgy</td>
<td>2</td>
</tr>
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<td>MACH A200</td>
<td>Tooling</td>
<td>2.5</td>
</tr>
<tr>
<td>WELD A100</td>
<td>Arc &amp; Oxy-acetylene Welding</td>
<td>3</td>
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<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>37.5</strong></td>
</tr>
</tbody>
</table>

Professional Mariner

The maritime industry offers exciting and dynamic careers including opportunities to travel. Successful students will receive US Coast Guard recognized certificates which are important for many jobs. Graduates work on supply boats, ferries, tugs, barges, cruise ships, and private vessels. Land-based jobs include marine electrical work and entry level engine repair. Some graduates continue their education at a maritime academy. Internships are available to eligible students.

**Department Contact Information**

Karen Prioleau  
kprioleau@occ.cccd.edu

Sarah Hirsch  
shirsch3@occ.cccd.edu

Professional Mariner Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/professional-mariner/Pages/default.aspx)

- Professional Mariner, Associate in Science Degree (p. 194)
- Professional Mariner, Certificate of Achievement (p. 195)

**Professional Mariner, Associate in Science Degree**

Financial Aid Eligible  
Banner Code: 1_AS_MRPM  
Control Number: 33902

The Professional Mariner degree prepares students for careers in the maritime industry in Southern California and around the world in private or commercial vessel operations: large private yachts, charter yachts, cruise ships, passenger ferries, sport fishing, commercial fishing, whale watching, dive boats, supply vessels, work boats, tug boats, and commercial shipping. These vessels must operate with qualified crew so the curriculum for the Orange Coast College Professional Mariner program was developed with guidance from an Advisory Council of maritime industry professionals who ranked skills and knowledge that they require in their deck crew. Upon completion of the program, there are employment opportunities with competitive salary.

Students must be able to swim 50 yards and tread water for 10 minutes. Previous boating experience is advantageous but not required. Facility fees will be charged.

**Program Outcomes**

1. Communicate verbally and in writing in a clear manner and with correct nautical protocol.
2. Identify maritime career paths along with required U.S. Coast Guard licensing requirements.
3. Demonstrate safe operation and maintenance of vessels.
4. Demonstrate prevention and safety response in First Aid, Personal Survival and Social Responsibility at sea, as well as fire prevention and response.

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/professional-mariner/professional-mariner-associate-science-degrees/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 1</strong></td>
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<tr>
<td><strong>Semester 1</strong></td>
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<td>MARA A136</td>
<td>Introduction to Sailing</td>
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<tr>
<td>or MARA A137</td>
<td>or Intermediate Sailing - Intro to Keel Boats</td>
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</tr>
<tr>
<td>MARA A150</td>
<td>Coastal Navigation</td>
<td>3</td>
</tr>
<tr>
<td>MARA A151</td>
<td>Maritime Industry</td>
<td>2</td>
</tr>
<tr>
<td>MARA A152</td>
<td>Boat Handling and Seamanship</td>
<td>3</td>
</tr>
<tr>
<td>MARA A154</td>
<td>Yachtkeeping and Engine Maintenance</td>
<td>2</td>
</tr>
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<td>MARA A156</td>
<td>Maritime Environment</td>
<td>2</td>
</tr>
<tr>
<td><strong>Units</strong></td>
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<tr>
<td><strong>Semester 2</strong></td>
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<tr>
<td>MARA A153</td>
<td>Marine Basic Safety Training</td>
<td>4</td>
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<tr>
<td>MARA A157</td>
<td>Radar Observer</td>
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<tr>
<td>MARA A200</td>
<td>Professional Mariner Internship</td>
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<td>&amp; MARA A201</td>
<td>and Professional Mariner Internship Lecture</td>
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</table>

1 Courses must be taken concurrently.

**Professional Mariner Suggested Electives**

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<tr>
<th>Course</th>
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<tbody>
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<td>FN A185</td>
<td>Cultural Foods</td>
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</tr>
<tr>
<td>MATH A170</td>
<td>Precalculus</td>
<td>4</td>
</tr>
</tbody>
</table>

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

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<tr>
<td><strong>Year 1</strong></td>
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<tr>
<td><strong>Semester 1</strong></td>
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<tr>
<td>MARA A150</td>
<td>Coastal Navigation</td>
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</tr>
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</tr>
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<td>MARA A152</td>
<td>Boat Handling and Seamanship</td>
<td>3</td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td><strong>Semester 2</strong></td>
<td></td>
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<tr>
<td>MARA A153</td>
<td>Marine Basic Safety Training</td>
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</tr>
<tr>
<td>MARA A154</td>
<td>Yachtkeeping and Engine Maintenance</td>
<td>2</td>
</tr>
<tr>
<td>MARA A156</td>
<td>Maritime Environment</td>
<td>2</td>
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Professional Mariner Restricted Electives

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<thead>
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<th>Title</th>
<th>Units</th>
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<tr>
<td>Any Foreign Language</td>
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<td>4-5</td>
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<tr>
<td>BUS A120</td>
<td>Personal Financial Success</td>
<td>3</td>
</tr>
<tr>
<td>FN A185</td>
<td>Cultural Foods</td>
<td>2</td>
</tr>
<tr>
<td>HLED/PUBH A100</td>
<td>Personal Health Education</td>
<td>3</td>
</tr>
<tr>
<td>KIN A107</td>
<td>Fitness Programs I</td>
<td>0.5-3</td>
</tr>
<tr>
<td>KIN A108</td>
<td>Strength and Conditioning</td>
<td>0.5-3</td>
</tr>
<tr>
<td>KIN A131</td>
<td>Swimming for Fitness Level 1</td>
<td>1-2</td>
</tr>
<tr>
<td>LEAD A180</td>
<td>Personal Leadership</td>
<td>3</td>
</tr>
<tr>
<td>MARA A136</td>
<td>Introduction to Sailing</td>
<td>1</td>
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<tr>
<td>MARA A137</td>
<td>Intermediate Sailing - Intro to Keel Boats</td>
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<tr>
<td>MARA A138</td>
<td>Introduction to Ocean Sailing</td>
<td>1</td>
</tr>
<tr>
<td>MARA A157</td>
<td>Radar Observer</td>
<td>2</td>
</tr>
<tr>
<td>MARA A200</td>
<td>Professional Mariner Internship</td>
<td>3</td>
</tr>
<tr>
<td>&amp; MARA A201</td>
<td>and Professional Mariner Internship Lecture</td>
<td></td>
</tr>
<tr>
<td>Any Marine Science</td>
<td></td>
<td>1-3</td>
</tr>
<tr>
<td>MATH A170</td>
<td>Precalculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH A180</td>
<td>Calculus I</td>
<td>4</td>
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</tbody>
</table>

Welding Technology

Welding Technology is the application of the art and science of joining metals. Welders and fabricators have important roles in the construction of buildings, nuclear and fossil fuel power plants, heavy equipment, agricultural machinery, petro-chemical plants, bridges, floating and underwater vessels, automobiles, aircraft, appliances, and projects for national security. Specifically anything involving metals, from miniature electronic devices to sophisticated space projects, will require the skills of the expert welders. These highly skilled members of the technological team apply practical working knowledge of welding processes, welding metallurgy and welding code standards in solving problems of welding design and production. The OCC Welding Technology Department is licensed to qualify (certify) welders to code standards.

Weld Testing Certificates

The Weld Testing Certificates of Specialization will be awarded upon successful completion of a proficiency test for each identified level (e.g., Level I, II, etc.) within a category of welding (i.e., SMAW, FCAW, GTAW, GMAW or Pipe). The indicated Weld Testing class must be repeated for each type of certificate received. Higher levels of certification will potentially lead to better paying jobs within the industry.

- Basic Welding (SMAW), Skill Certificate
- Intermediate Welding (SMAW), Skill Certificate
- Advanced Welding (SMAW), Certificate of Specialization
- Advanced I Welding (FCAW), Certificate of Specialization
- Advanced II Welding (FCAW), Certificate of Specialization
- Gas Metal Arc Welding (GMAW), Certificate of Specialization
- Gas Tungsten Arc Welding (GTAW), Certificate of Specialization
- Orbital Welding, Certificate of Specialization
- Pipe, Certificate of Specialization

Department Contact Information

Michael Lannom
mlannom@occ.cccd.edu
714-432-5820

Welding department website (http://www.orangecoastcollege.edu/academics/divisions/technology/welding_technology/Pages/default.aspx)

- Advanced I Welding (FCAW), Certificate of Specialization (p. 196)
- Advanced II Welding (FCAW), Certificate of Specialization (p. 197)
- Advanced Welding (SMAW), Certificate of Specialization (p. 197)
- Basic Welding (SMAW), Skill Certificate (p. 198)
- Gas Metal Arc Welding (GMAW), Certificate of Specialization (p. 198)
- Gas Tungsten Arc Welding (GTAW), Certificate of Specialization (p. 199)
- Intermediate Welding (SMAW), Skill Certificate (p. 199)
- Orbital Welding, Certificate of Specialization (p. 200)
- Pipe, Certificate of Specialization (p. 200)
- Welding Technology, Associate in Science Degree (p. 201)
- Welding Technology, Certificate of Achievement (p. 202)

Advanced I Welding (FCAW), Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_FCAWA

This Certificate of Specialization certifies mastery of first level advanced welding in Flux-Cored Arc Welding (FCAW) Levels I, II, & or IV.

Program Outcomes

1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation.

Please
Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z section of this catalog. Check with a counselor to determine the requirements for completion.

Course | Title | Units
---|---|---
WELD A100 | Arc & Oxy-acetylene Welding | 3-4
or WELD A101 | Arc & Oxy-acetylene Welding | 3-4
WELD A108 | Weld Testing Advanced 2 | 0.5
WELD A115 | Arc and Oxy-acetylene Welding Practice Level 1 | 1-2
or WELD A215 | Advanced Arc and Oxy-Acetylene Level 1 | 1-2
WELD A200 | Advanced Welding | 3-4
or WELD A201 | Advanced Welding | 3-4
Total Units | 7.5-10.5

Advanced II Welding (FCAW), Certificate of Specialization

Students are required to obtain a grade of “C” or better in all required courses.

Program Outcomes
1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z section of this catalog. Check with a counselor to determine the requirements for completion.

Course | Title | Units
---|---|---
WELD A100 | Arc & Oxy-acetylene Welding | 3-4
or WELD A101 | Arc & Oxy-acetylene Welding | 3-4
WELD A109 | Weld Testing FCAW 1 | 0.5
or WELD A110 | Weld Testing FCAW 2 | 0.5
WELD A115 | Arc and Oxy-acetylene Welding Practice Level 1 | 1-2
or WELD A215 | Advanced Arc and Oxy-Acetylene Level 1 | 1-2
WELD A200 | Advanced Welding | 3-4
or WELD A201 | Advanced Welding | 3-4
Total Units | 7.5-10.5

Advanced Welding (SMAW), Certificate of Specialization

This Certificate of Specialization certifies mastery of first level advanced welding in Shielded Metal Arc Welding (SMAW) Levels VII, VIII and IX.

Program Outcomes
1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing
his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD A100</td>
<td>Arc &amp; Oxy-acetylene Welding</td>
<td>3-4</td>
</tr>
<tr>
<td>or WELD A101</td>
<td>Arc &amp; Oxy-acetylene Welding</td>
<td></td>
</tr>
<tr>
<td>WELD A107</td>
<td>Weld Testing Advanced 1</td>
<td>0.5</td>
</tr>
<tr>
<td>WELD A115</td>
<td>Arc and Oxy-acetylene Welding Practice Level 1</td>
<td>1-2</td>
</tr>
<tr>
<td>or WELD A215</td>
<td>Advanced Arc and Oxy-Acetylene Level 1</td>
<td></td>
</tr>
<tr>
<td>WELD A200</td>
<td>Advanced Welding</td>
<td>3-4</td>
</tr>
<tr>
<td>or WELD A201</td>
<td>Advanced Welding</td>
<td></td>
</tr>
</tbody>
</table>

Total Units 7.5-10.5

Gas Metal Arc Welding (GMAW), Certificate of Specialization
Not Financial Aid Eligible
Banner Code: 1_CE_GMAW

This Certificate of Specialization certifies mastery of skills necessary for Gas Metal Arc Welding (GMAW) Levels I, II, III, IV or V.

Program Outcomes
1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that...
students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD A100</td>
<td>Arc &amp; Oxy-acetylene Welding</td>
<td>3-4</td>
</tr>
<tr>
<td>or WELD A101</td>
<td>Arc &amp; Oxy-acetylene Welding</td>
<td>3-4</td>
</tr>
<tr>
<td>WELD A102</td>
<td>Weld Testing GMAW 1</td>
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<tr>
<td>or WELD A103</td>
<td>Weld Test GMAW 2</td>
<td>0.5</td>
</tr>
<tr>
<td>WELD A200</td>
<td>Advanced Welding</td>
<td>3-4</td>
</tr>
<tr>
<td>or WELD A201</td>
<td>Advanced Welding</td>
<td>3-4</td>
</tr>
<tr>
<td>WELD A211</td>
<td>Gas Metal Arc Welding Training Level 1</td>
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</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>7.5-9.5</strong></td>
</tr>
</tbody>
</table>

**Gas Tungsten Arc Welding (GTAW), Certificate of Specialization**
Not Financial Aid Eligible
Banner Code: 1_CE_GTAW
This Certificate of Specialization certifies mastery of skills necessary for Gas Tungsten Arc Welding (GTAW) Level I.

**Program Outcomes**
1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

**Certificate Requirements**
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<tr>
<th>Course</th>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>WELD A100</td>
<td>Arc &amp; Oxy-acetylene Welding</td>
<td>3-4</td>
</tr>
<tr>
<td>or WELD A101</td>
<td>Arc &amp; Oxy-acetylene Welding</td>
<td>3-4</td>
</tr>
<tr>
<td>WELD A104</td>
<td>Weld Test GTAW</td>
<td>0.5</td>
</tr>
<tr>
<td>WELD A130</td>
<td>Gas Tungsten Arc Welding Level 1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>6.5-7.5</strong></td>
</tr>
</tbody>
</table>

**Intermediate Welding (SMAW), Skill Certificate**
Not Financial Aid Eligible
Banner Code: 1_CO_SMAW
This program certifies mastery of intermediate Shielded Metal Arc Welding (SMAW) Levels V or VI.

**Program Outcome**
1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required.

**Certificate Requirements**
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<thead>
<tr>
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<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>WELD A100</td>
<td>Arc &amp; Oxy-acetylene Welding</td>
<td>3-4</td>
</tr>
<tr>
<td>or WELD A101</td>
<td>Arc &amp; Oxy-acetylene Welding</td>
<td>3-4</td>
</tr>
<tr>
<td>WELD A104</td>
<td>Weld Test GTAW</td>
<td>0.5</td>
</tr>
<tr>
<td>WELD A130</td>
<td>Gas Tungsten Arc Welding Level 1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>6.5-7.5</strong></td>
</tr>
</tbody>
</table>
Orbital Welding, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_ORBW

Students completing the Certificate of Specialization in Orbital Welding will be prepared for entry-level employment in the piping industry.

Program Outcome

1. Perform welds on pipe or tubing using orbital welding equipment to the standards of AWS and ASME Code.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Orbital Welding, Certificate of Specialization

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD A100</td>
<td>Arc &amp; Oxy-acetylene Welding</td>
<td>3-4</td>
</tr>
<tr>
<td>or WELD A101</td>
<td>Arc &amp; Oxy-acetylene Welding</td>
<td></td>
</tr>
<tr>
<td>WELD A106</td>
<td>Weld Testing Intermediate</td>
<td>0.5</td>
</tr>
<tr>
<td>WELD A115</td>
<td>Arc and Oxy-acetylene Welding Practice Level 1</td>
<td>1-2</td>
</tr>
</tbody>
</table>

Total Units: 4.5-6.5

### Orbital Welding Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>WELD A130</td>
<td>Gas Tungsten Arc Welding Level 1</td>
<td>3</td>
</tr>
<tr>
<td>WELD A131</td>
<td>Gas Tungsten Arc Welding Level 2</td>
<td>3</td>
</tr>
</tbody>
</table>

### Pipe, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_PIPE

This Certificate of Specialization certifies mastery of skills necessary or Pipe Levels I and/or II.

Program Outcomes

1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or...
Welding Technology, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1 AS WELD
Control Number: 03982

The Certificate of Achievement program in Welding Technology is for those who desire advanced knowledge of welding for employment as welding technicians.

Welding inspectors, welding engineers, welding supervisors, and advanced welders. Students also completing the required general education requirements and electives may earn the Associate in Science degree. In addition, many OCC welding courses are transferable and can be used by those students who are interested in the welding engineering degree program at Ohio State University. Whatever the case, a person’s chances for the job of their choice are much higher when they have the technical background as evidenced by earning our Certificate of Achievement in welding.

Complete the Welding Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of this catalog.

Program Outcomes
1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/industrial-technology/welding-technology/welding-technology-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC) (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Welding Technology Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>WELD A115</td>
<td>Arc and Oxy-acetylene Welding Practice Level 1</td>
<td>1-2</td>
</tr>
<tr>
<td>WELD A215</td>
<td>Advanced Arc and Oxy-Acetylene Level 1</td>
<td>1-2</td>
</tr>
<tr>
<td>WELD A255</td>
<td>Orbital Welding Level 1</td>
<td>3</td>
</tr>
</tbody>
</table>
Welding Technology, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_WELD
Control Number: 22400

The Certificate of Achievement program in Welding Technology is for those who desire advanced knowledge of welding for employment as welding technicians.

Welding inspectors, welding engineers, welding supervisors, and advanced welders. Students also completing the required general education requirements and electives may earn the Associate in Science degree. In addition, many OCC welding courses are transferable and can be used by those students who are interested in the welding engineering degree program at Ohio State University. Whatever the case, a person’s chances for the job of their choice are much higher when they have the technical background as evidenced by earning our Certificate of Achievement in welding.

Program Outcomes
1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>Fall</td>
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<tr>
<td>ENGL A100</td>
<td>Freshman Composition</td>
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<tr>
<td>or WELD A100</td>
<td>or WELD A101</td>
<td>3-4</td>
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<tr>
<td>WELD A120</td>
<td>Mathematics &amp; Fabrication Layout for Welders</td>
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<td>Units</td>
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<tr>
<td>Spring</td>
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<tr>
<td>WELD A200</td>
<td>Advanced Welding</td>
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<tr>
<td>or WELD A201</td>
<td>or Advanced Welding</td>
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<td>WELD A230</td>
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<td>Units</td>
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<tr>
<td>Year 2</td>
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<td>Fall</td>
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<tr>
<td>WELD A220</td>
<td>Welding Specifications and Codes</td>
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<td>WELD A131</td>
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<tr>
<td></td>
<td>WELD A250</td>
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<tr>
<td></td>
<td>WELD A251</td>
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<tr>
<td></td>
<td>WELD A253</td>
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<td></td>
<td>Units</td>
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<td>Spring</td>
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<tr>
<td>WELD A210</td>
<td>Welding Inspection and Testing</td>
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<tr>
<td>Summer</td>
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<tr>
<td>MACH A120</td>
<td>Measurement and Blueprint Reading</td>
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</tr>
<tr>
<td>or WELD A180</td>
<td>or Blueprint Reading</td>
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</tr>
<tr>
<td></td>
<td>Units</td>
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<td>Total Units</td>
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Welding Technology Suggested Electives

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>WELD A115</td>
<td>Arc and Oxy-acetylene Welding Practice</td>
<td>1-2</td>
</tr>
<tr>
<td>Level 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WELD A215</td>
<td>Advanced Arc and Oxy-Acetylene Level 1</td>
<td>1-2</td>
</tr>
<tr>
<td>WELD A255</td>
<td>Orbital Welding Level 1</td>
<td>3</td>
</tr>
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</table>

Kinesiology, Fitness and Wellness, Sports and Athletic Performance

- Athletics (p. 203)
- Dance (p. 205)
- Kinesiology (p. 211)
- Public Health (p. 215)

- Athletics (p. 203)
  - Athletics, Certificate of Achievement (p. 203)
- Dance (p. 205)
  - Dance Instructor, Certificate of Achievement (p. 205)
  - Dance, Associate in Arts Degree (p. 206)
  - Pilates Instructor, Certificate of Achievement (p. 208)
• World Dance Instructor, Associate in Arts Degree (p. 208)
• World Dance Instructor, Certificate of Achievement (p. 210)
• Kinesiology (p. 211)
• Athletic Training Level 1, Certificate of Achievement (p. 211)
• Fitness Specialist, Associate in Science Degree (p. 212)
• Fitness Specialist, Certificate of Achievement (p. 212)
• Kinesiology, Associate in Arts Degree for Transfer (AA-T) (p. 213)
• Yoga Instructor Training, Certificate of Specialization (p. 214)
• Public Health (p. 215)
• Public Health - General Studies, Associate in Arts Degree (p. 215)
• Public Health Science, Associate in Science Degree for Transfer (AS-T) (p. 216)
• Public Health, Certificate of Achievement (p. 217)

Athletics
• Athletics, Certificate of Achievement (p. 203)

Athletics, Certificate of Achievement
Financial Aid Eligible
Banner Code: 1_CN_ATHL
Control Number: 33518

This Certificate of Achievement is designed for students who wish to participate in intercollegiate athletics at Orange Coast College and works towards completing lower division general education. It provides student athletes the opportunity to develop skills related to leadership, teamwork, collaboration, and personal responsibility within a team environment. Students who complete this certificate will have demonstrated excellence in lower division general education coursework and in intercollegiate athletic courses.

Program Outcomes
1. Make progress towards completing general education to be eligible to transfer to a four-year institution.
2. Gain transferable life skills related to teamwork, collaboration, dedication, and completion.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<td>Select 3 of the following:</td>
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<td>ATHL A235</td>
<td>Basketball Team - Women's</td>
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<tr>
<td>ATHL A236</td>
<td>Cross Country Team - Women's</td>
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<tr>
<td>ATHL A238</td>
<td>Crew Team - Women's</td>
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</tr>
<tr>
<td>ATHL A239</td>
<td>Golf Team - Women's</td>
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<tr>
<td>ATHL A240</td>
<td>Soccer Team - Women's</td>
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<td>ATHL A241</td>
<td>Fastpitch Team</td>
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<td>ATHL A242</td>
<td>Swimming Team - Women's</td>
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<td>ATHL A243</td>
<td>Tennis Team - Women's</td>
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<tr>
<td>ATHL A244</td>
<td>Track and Field Team - Women's</td>
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<tr>
<td>ATHL A245</td>
<td>Volleyball Team - Women's</td>
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<tr>
<td>ATHL A246</td>
<td>Water Polo Team - Women's</td>
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<td>ATHL A247</td>
<td>Sand Volleyball Team-Women's</td>
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<tr>
<td>ATHL A250</td>
<td>Baseball Team</td>
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<tr>
<td>ATHL A251</td>
<td>Basketball Team - Men's</td>
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<tr>
<td>ATHL A252</td>
<td>Crew Team - Men's</td>
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<tr>
<td>ATHL A253</td>
<td>Cross Country Team - Men's</td>
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<tr>
<td>ATHL A254</td>
<td>Football Team</td>
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<tr>
<td>ATHL A255</td>
<td>Golf Team - Men's</td>
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<tr>
<td>ATHL A257</td>
<td>Soccer Team - Men's</td>
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<td>ATHL A258</td>
<td>Swimming Team - Men's</td>
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<td>ATHL A259</td>
<td>Tennis Team - Men's</td>
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<tr>
<td>ATHL A260</td>
<td>Track and Field Team - Men's</td>
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<tr>
<td>ATHL A261</td>
<td>Volleyball Team - Men's</td>
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<td>ATHL A263</td>
<td>Water Polo Team - Men's</td>
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Team Conditioning Courses
Select 3 units of the following:

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ATHL A109</td>
<td>Sports Conditioning</td>
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<tr>
<td>ATHL A119</td>
<td>Athletic Team Training</td>
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<tr>
<td>ATHL A129</td>
<td>Fitness for Performance</td>
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<tr>
<td>KIN A105</td>
<td>Cardiovascular Fitness</td>
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<tr>
<td>KIN A106</td>
<td>Weight Training Level 1</td>
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<tr>
<td>KIN A107</td>
<td>Fitness Programs I</td>
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<tr>
<td>KIN A108</td>
<td>Strength and Conditioning</td>
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<tr>
<td>KIN A207</td>
<td>Fitness Programs II</td>
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<tr>
<td>KIN A208</td>
<td>Strength and Conditioning Level 3</td>
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Restricted Electives
Select 12 units of the following:

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<th>Course</th>
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<tr>
<td>Course</td>
<td>Title</td>
<td>Units</td>
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<tr>
<td>--------------</td>
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<tr>
<td>ANTH A100/A100H</td>
<td>Cultural Anthropology</td>
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<td>ANTH A190</td>
<td>Introduction to Linguistic Anthropology</td>
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<tr>
<td>ASTR A100/A100H</td>
<td>Introduction to Astronomy</td>
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<tr>
<td>ASTR A100L</td>
<td>Introduction to Astronomy Laboratory</td>
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<tr>
<td>ART A100/A100H</td>
<td>Survey of Western Art from Prehistory</td>
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<tr>
<td>ART A101/A101H</td>
<td>Survey of Western Art from Renaissance to Modern</td>
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<tr>
<td>ART A102</td>
<td>Survey of Modern and Contemporary Art History</td>
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<td>ART A107</td>
<td>Introduction To Art</td>
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<tr>
<td>BIOL A100/A100H</td>
<td>Introduction to Biology</td>
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<td>BIOL A125</td>
<td>Human Biology</td>
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<tr>
<td>BIOL A180</td>
<td>Introduction to Biology for Majors 1: Cell and Molecular Biology</td>
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<td>BIOL A210</td>
<td>General Microbiology</td>
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<tr>
<td>BIOL A220</td>
<td>Human Anatomy</td>
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<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
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<td>BIOL A225</td>
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<td>CHEM A100</td>
<td>Principles of Chemistry</td>
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<td>CHEM A110</td>
<td>Introduction to Chemistry</td>
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<td>CHEM A130</td>
<td>Preparation for General Chemistry</td>
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<td>CMST A100</td>
<td>Interpersonal Communication</td>
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<td>CMST A110</td>
<td>Public Speaking</td>
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<td>CMST A180</td>
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<td>COUN A104</td>
<td>Career &amp; Life Planning: A Holistic Approach</td>
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<td>COUN A105</td>
<td>Strategies for College Success</td>
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<td>ENGL A101/A101H</td>
<td>Critical Reasoning: Fiction</td>
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<td>Ethnic Groups in the U.S.: Their Histories</td>
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<td>FILM A100</td>
<td>History and Appreciation of the Cinema</td>
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<td>History of Radio &amp; Television</td>
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<td>FN A136</td>
<td>Nutrition, Fitness and Performance</td>
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<td>FN A170</td>
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<td>GEOG A100/A100H</td>
<td>World Regional Geography</td>
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<td>GEOL A105/A105H</td>
<td>General Geology</td>
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<td>GEOL A105L</td>
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<td>HIST A161/A161H</td>
<td>World History 1</td>
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<td>HIST A180/A180H</td>
<td>Western Civilization 1</td>
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<td>History of the United States to 1876</td>
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<td>HIST A175/A175H</td>
<td>History of the United States Since 1876</td>
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<td>HLED/PUBH A100</td>
<td>Personal Health Education</td>
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<td>HMDV A180</td>
<td>Child Growth and Development</td>
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<td>HORT A100</td>
<td>Horticulture Science</td>
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<td>HUM A100</td>
<td>Introduction to the Humanities</td>
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<td>KIN A202</td>
<td>Introduction to Kinesiology</td>
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<tr>
<td>KIN A203</td>
<td>First Aid and CPR</td>
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<tr>
<td>KIN A270</td>
<td>Fitness and Health</td>
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<td>KIN A271</td>
<td>Drugs &amp; Sports</td>
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<td>KIN A272</td>
<td>Movement Analysis</td>
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<td>KIN A280</td>
<td>Strength Conditioning/Theory</td>
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<td>KIN A282</td>
<td>Introduction to Exercise Physiology</td>
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<td>KIN A283</td>
<td>Nutrition, Fitness, and Performance</td>
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<td>MRSC A185</td>
<td>Coastal Oceanography</td>
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<td>MRSC A185L</td>
<td>Coastal Oceanography Lab</td>
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<tr>
<td>MRSC A100/A100H</td>
<td>Oceanography</td>
<td></td>
</tr>
<tr>
<td>MUS A100</td>
<td>History and Appreciation of Western Classical Music</td>
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<tr>
<td>MUS A105</td>
<td>Music from Bach Up to Rock</td>
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<tr>
<td>MUS A115</td>
<td>Fundamentals of Music</td>
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<tr>
<td>MUS A139</td>
<td>History of Rock Music</td>
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<td>MATH A100</td>
<td>Liberal Arts Mathematics</td>
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<tr>
<td>MATH A115</td>
<td>College Algebra</td>
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<tr>
<td>MATH A120</td>
<td>Trigonometry</td>
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<tr>
<td>MATH A155</td>
<td>Finite Mathematics with Applications</td>
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<tr>
<td>MATH A170</td>
<td>Precalculus</td>
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<td>MATH A180/A180H</td>
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<td>MATH/PSYC A160</td>
<td>Introduction to Statistics</td>
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<td>PHIL A100</td>
<td>Introduction to Philosophy</td>
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<td>PHIL A120</td>
<td>Ethics</td>
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<tr>
<td>PHIL A150</td>
<td>Critical Reasoning &amp; Writing</td>
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<td>PHOT A120</td>
<td>Introduction to Photography</td>
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<tr>
<td>PHOT A130</td>
<td>History and Aesthetics of Still Photography</td>
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<tr>
<td>PSCI A180/A180H</td>
<td>American Government</td>
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<tr>
<td>PSYC A100/A100H</td>
<td>Introduction to Psychology</td>
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<td>PSYC A165</td>
<td>Principles of Human Sexuality 1</td>
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<tr>
<td>PSYC A220</td>
<td>Psychology of Personality</td>
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<td>PSYC A260</td>
<td>Social Psychology</td>
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<td>RLST A100</td>
<td>Introduction to Religious Studies</td>
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<tr>
<td>RLST A110</td>
<td>World Religion</td>
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<tr>
<td>SOC A100/A100H</td>
<td>Introduction to Sociology</td>
<td></td>
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<tr>
<td>SOC A110</td>
<td>Introduction to Dating, Relationships, and Marriage</td>
<td></td>
</tr>
<tr>
<td>SOC A150</td>
<td>Introduction to Race and Ethnicity</td>
<td></td>
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<tr>
<td>SOC A185/A185H</td>
<td>Analysis of Social Problems</td>
<td></td>
</tr>
<tr>
<td>THEA A100</td>
<td>Introduction to Theatre</td>
<td></td>
</tr>
<tr>
<td>THEA A101</td>
<td>Introduction to History and Literature of the Theatre</td>
<td></td>
</tr>
</tbody>
</table>
Instruction will utilize both classroom work, using a variety of instructional methods (lecture, lab/demonstration, independent and group projects) and internship experiences in business/industry to prepare the student for job requirements.

**Program Outcomes**

1. Communicate proper dance technique effectively through movement demonstration and verbal cueing, using appropriate corresponding terminology.
2. Successfully teach a dance class in a particular style: modern dance, ballet, tap, jazz, hip hop or contemporary dance.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Dance Instructor, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_DNDI
Control Number: 22407

The Dance certificate program trains students for positions in the commercial and artistic areas of dance. Graduates of the program would be qualified as instructors with an emphasis in one of the following: ballet, modern, jazz, tap and world dance forms in private studios, recreation or other community dance programs. The Dance Department also recommends that students complete their General Education Requirements for an Associate Degree. Students are able to apply principles of movement and creativity to all forms of dance, demonstrate skills of instructing dance to communicate through movement and words, and apply information learned in other disciplines to the art form of dance.

### Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC A119</td>
<td>Kinesiology For Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC A152</td>
<td>Pilates Apparatus &amp; Mat Work Level 1</td>
<td>1-2</td>
</tr>
<tr>
<td>or DANC A153</td>
<td>Pilates Apparatus &amp; Mat Work Level 2</td>
<td></td>
</tr>
<tr>
<td>DANC A150</td>
<td>Dance Improvisation I</td>
<td>1</td>
</tr>
<tr>
<td>or DANC A250</td>
<td>Dance Improvisation II</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
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<tr>
<td>DANC A160</td>
<td>Dance Composition/Choreography I</td>
<td></td>
</tr>
<tr>
<td>DANC A162</td>
<td>Dance Composition/Choreography II</td>
<td></td>
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<tr>
<td>DANC A262</td>
<td>Dance Composition/Choreography III</td>
<td></td>
</tr>
<tr>
<td>DANC A170</td>
<td>Music for Dancers</td>
<td>2</td>
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<tr>
<td>DANC A180</td>
<td>Dance Wellness and Injury Prevention</td>
<td>3</td>
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<tr>
<td>DANC A200</td>
<td>Appreciation Of Dance</td>
<td>3</td>
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<tr>
<td>DANC A201</td>
<td>Rehearsal and Performance I</td>
<td>1</td>
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Course | Title | Units
--- | --- | ---
DANC A205 | Dance as a Profession Seminar | 2
DANC A210 | Dance Methodology | 3
DANC A211 | Repertoire I | 1-4
or DANC A212 | Repertoire II | 1
DANC A220 | Dance Internship I | 1
DANC A221 | Dance Internship II | 1
Select one of the following: 2
DANC A143 | Jazz Dance III | 
DANC A243 | Jazz IV | 
DANC A253 | Preparation for Audition - Jazz | 
Select one of the following: 2
DANC A144 | Ballet III | 
DANC A244 | Ballet IV | 
DANC A254 | Preparation for Audition - Ballet | 
Select one of the following: 2
DANC A145 | Modern Dance III | 
DANC A245 | Modern IV | 
DANC A255 | Preparation for Audition - Modern | 
Select one of the following: 0.5-2
DANC A125 | Tap 1 | 
DANC A126 | Tap 2 | 
DANC A146 | Tap III | 
DANC A246 | Tap IV | 
DANC A256 | Preparation for Audition - Tap | 
Select three units of dance techniques from at least two different dance styles: 3
DANC A138 | African Dance and Drumming I | 
DANC A158 | African Dance and Drumming II | 
DANC A168 | African Dance and Drumming III | 
DANC A137 | Classical Danc of India | 
DANC A154 | Contemporary Commercial Dance | 
DANC A135 | Flamenco Dance 1 | 
DANC A147 | Flamenco Dance 2 | 
DANC A247 | Flamenco Dance 3 | 
DANC A267 | Flamenco Dance 4 | 
DANC A149 | Hip-Hop Dance I | 
DANC A159 | Hip-Hop Dance II | 
DANC A169 | Hip-Hop Dance III | 
DANC A269 | Hip Hop 4 | 
DANC A133 | Intro To World Dance | 
DANC A116 | Latin Dance Styles I | 
DANC A155 | Latin Dance Styles II | 
DANC A165 | Latin Dance Styles III | 
DANC A130 | Mid-Eastern Dance 1 | 
DANC A148 | Mid-Eastern Dance 2 | 
DANC A248 | Mid-Eastern Dance 3 | 
DANC A264 | Mid-Eastern Dance 4 | 
DANC A156 | Polynesian Dance | 

Total Units: 34.5-40

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Dance Instructor Suggested Electives

Course | Title | Units
--- | --- | ---
BIOL A221 | Anatomy-Physiology | 4
BUS A100 | Introduction to Business | 3
BUS A120 | Personal Financial Success | 3
CMST A100 | Interpersonal Communication | 3
DANC A129 | Pilates Methodology | 3
EC A131 | Creativity for Children | 3
HLED/PUBH A100 | Personal Health Education | 3
HLED/KIN A270 | Fitness and Health | 3
HMDV A180 | Child Growth and Development | 3
PSYC A100 | Introduction to Psychology | 3

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Dance, Associate in Arts Degree

Financial Aid Eligible
Banner Code: 1_AA_DANC
Control Number: 03993

The degree provides students with a foundation in the theory, technique, and the aesthetics of the art of dance. This is fulfilled through a comprehensive program of dance study in areas of core techniques, contemporary and commercial styles, choreography, performance, and world dance forms. Students will demonstrate proficiency through accurate technical execution, performance skills, research papers, essays, and choreographic works. Program assessment is measured by public performances, program completion, transferability, and periodic program review. Students qualify to pursue a variety of dance-related careers and advanced degree options.

Program Outcome

1. Develop an understanding and appreciation of the art of dance and its relevance to the multicultural world we live in.
2. Acquire the dance technical skills necessary to transfer to a university program or similar advanced dance study program.
3. Implement critical thinking skills and kinesthetic awareness in their observation, analysis, and interpretation of dance performances on stage or in media.
4. Develop dance composition and performance skills necessary to successfully transfer to a university program or similar advanced dance study program.

Associate in Arts Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or
by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/kinesiology-fitness-wellness-sports-athletic-performance/dance/dance-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>DANC A150</td>
<td>Dance Improvisation I</td>
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<td>DANC A250</td>
<td>Dance Improvisation II</td>
<td>1</td>
</tr>
<tr>
<td>DANC A170</td>
<td>Music for Dancers</td>
<td>2</td>
</tr>
<tr>
<td>DANC A143</td>
<td>Jazz Dance III</td>
<td>2</td>
</tr>
<tr>
<td>DANC A243</td>
<td>Jazz IV</td>
<td></td>
</tr>
<tr>
<td>DANC A253</td>
<td>Preparation for Audition - Jazz</td>
<td></td>
</tr>
<tr>
<td>DANC A144</td>
<td>Ballet III</td>
<td>2</td>
</tr>
<tr>
<td>DANC A244</td>
<td>Ballet IV</td>
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<tr>
<td>DANC A254</td>
<td>Preparation for Audition - Ballet</td>
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<tr>
<td>DANC A145</td>
<td>Modern Dance III</td>
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<td>DANC A245</td>
<td>Modern IV</td>
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<td>DANC A255</td>
<td>Preparation for Audition - Modern</td>
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<tr>
<td>DANC A160</td>
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<td>DANC A262</td>
<td>Dance Composition/Choreography III</td>
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<td>DANC A201</td>
<td>Rehearsal and Performance I</td>
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<td>DANC A202</td>
<td>Rehearsal and Performance II</td>
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<td>DANC A204</td>
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<td>DANC A213</td>
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<tr>
<td>DANC A214</td>
<td>Repertoire IV</td>
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**Restricted Electives**

Select four units of the following:

- DANC A101 Modern Dance 1
- DANC A102 Modern 2
- DANC A110 Ballet 1
- DANC A111 Ballet 2
- DANC A113 Pointe Work
- DANC A115 Yoga For Dancers
- DANC A116 Latin Dance Styles I
- DANC A117 American Social Dance Styles
- DANC A119 Kinesiology For Dance
- DANC A120 Jazz Dance 1
- DANC A121 Jazz Dance 2
- DANC A125 Tap 1
- DANC A126 Tap 2
- DANC A130 Mid-Eastern Dance 1
- DANC A135 Flamenco Dance 1
- DANC A137 Classical Danc of India
- DANC A138 African Dance and Drumming I
- DANC A146 Tap III
- DANC A147 Flamenco Dance 2
- DANC A148 Mid-Eastern Dance 2
- DANC A149 Hip-Hop Dance I
- DANC A152 Pilates Apparatus & Mat Work Level 1
- DANC A153 Pilates Apparatus & Mat Work Level 2
- DANC A154 Contemporary Commercial Dance
- DANC A155 Latin Dance Styles II
- DANC A156 Polynesian Dance
- DANC A158 African Dance and Drumming II
- DANC A159 Hip-Hop Dance II
- DANC A165 Latin Dance Styles III
- DANC A168 African Dance and Drumming III
- DANC A169 Hip-Hop Dance III
  or DANC A269 Hip Hop 4
- DANC A171 Modern Dance Basics
- DANC A172 Ballet Dance Basics
- DANC A173 Jazz Dance Basics
- DANC A174 Tap Dance Basics
- DANC A180 Dance Wellness and Injury Prevention
- DANC A191 Classical Technique and Variation Workshop
- DANC A200 Appreciation Of Dance
- DANC A203 Performing Dance Ensemble I
- DANC A205 Dance as a Profession Seminar
- DANC A210 Dance Methodology
- DANC A223 Performing Dance Ensemble II
- DANC A230 World Dance and Culture
Pilates Instructor, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_PILA
Control Number: 33763

The Pilates/Dance Conditioning Instructor Certificate of Achievement prepares the student to teach in a privately owned dance, fitness or Pilates studio, recreational facility, or health club. The student takes theory and technique courses on Pilates apparatus taught by Pilates certified specialists and learns methods to determine appropriate conditioning programs for people of all ages and physical conditions. To prepare the student for employment, instruction uses both classroom work with a variety of instructional methods (lecture, lab/demonstration, independent and group projects), and internship experiences in dance and fitness facilities.

Program Outcomes
1. Successfully teach a Pilates mat and apparatus class with appropriate modifications.
2. Communicate effectively through clear demonstration and verbal cueing using appropriate terminology.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Recommended Prior to Internship 2

Current First Aid/CPR Certification

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<th>Units</th>
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<td>DANC A106</td>
<td>Strength and Stretch</td>
<td>3</td>
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<tr>
<td>DANC A107</td>
<td>Conditioning for Dance</td>
<td>3</td>
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<tr>
<td>DANC A115</td>
<td>Yoga For Dancers</td>
<td>3</td>
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<tr>
<td>DANC A118</td>
<td>Movement for Longevity</td>
<td>3</td>
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</table>

Total Units 18.5

World Dance Instructor, Associate in Arts Degree

Financial Aid Eligible
Banner Code: 1_AA_DNWD
Control Number: 08647

The Dance certificate program trains students for positions in the commercial and artistic areas of dance. Graduates of the program would be qualified as instructors in private studios, recreation or other community dance programs, and act as consultants, lecturers, or performers with an emphasis on the world dance forms, primarily Mid-Eastern, Flamenco, Spanish Classical, East Indian, or African. The Dance Department also recommends that students complete their General Education Requirements for an Associate Degree.

Students are able to apply principles of movement and creativity to all forms of dance, demonstrate skills of instructing dance to communicate through movement and words, and apply information learned in other disciplines to the art form of dance.

Instruction will utilize both classroom work, using a variety of instructional methods (lecture, lab/demonstration, independent and
group projects) and internship experiences in business/industry to prepare the student for job requirements.

Complete the World Dance Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

**Program Outcomes**

1. Successfully teach and perform in one or more of the following styles: African, American Social Dance, Classical Indian, Flamenco, Folklorico, Latin Dance Styles, Middle Eastern or Polynesian.

2. Communicate how to dance through movement demonstration and verbal cueing using appropriate dance terminology.

**Associate in Arts Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 2 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/kinesiology-fitness-wellness-sports-athletic-performance/dance/world-dance-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


<table>
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<tr>
<th>Course</th>
<th>Title</th>
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<td>DANC A148</td>
<td>Mid-Eastern Dance 2</td>
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<td>DANC A116</td>
<td>Latin Dance Styles I</td>
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<td>DANC A155</td>
<td>Latin Dance Styles II</td>
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<td>DANC A138</td>
<td>African Dance and Drumming I</td>
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<td>DANC A158</td>
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<td>DANC A135</td>
<td>Flamenco Dance 1</td>
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<td>DANC A147</td>
<td>Flamenco Dance 2</td>
<td>1-2</td>
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<tr>
<td>DANC A156</td>
<td>Polynesian Dance</td>
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<tr>
<td>DANC A170</td>
<td>Music for Dancers</td>
<td>2</td>
</tr>
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<td>DANC A205</td>
<td>Dance as a Profession Seminar</td>
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<tr>
<td>DANC A210</td>
<td>Dance Methodology</td>
<td>3</td>
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<td>DANC A218</td>
<td>World Dance Internship I</td>
<td>1</td>
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<td>DANC A219</td>
<td>World Dance Internship II</td>
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<td>ANTH A100</td>
<td>Cultural Anthropology</td>
<td>3</td>
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<tr>
<td>or RLST A110</td>
<td>World Religion</td>
<td></td>
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<tr>
<td>or DANC A230</td>
<td>World Dance and Culture</td>
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Select one course 3

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<td>&amp; DANC A211</td>
<td>and Repertoire I</td>
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<tr>
<td>or DANC A203</td>
<td>Performing Dance Ensemble I</td>
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Select four (4) units from at least two (2) different dance styles 4

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<tr>
<th>Course</th>
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<td>&amp; DANC A264</td>
<td>and Mid-Eastern Dance 4</td>
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<td>DANC A247</td>
<td>Flamenco Dance 3</td>
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</tr>
<tr>
<td>&amp; DANC A267</td>
<td>and Flamenco Dance 4</td>
<td></td>
</tr>
<tr>
<td>DANC A165</td>
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</tr>
<tr>
<td>DANC A168</td>
<td>African Dance and Drumming III</td>
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</tbody>
</table>

Orange Coast College 2020-2021 Catalog 209
World Dance Instructor, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_DNWD
Control Number: 18205

The Dance certificate program trains students for positions in the commercial and artistic areas of dance. Graduates of the program would be qualified as instructors in private studios, recreation or other community dance programs, and act as consultants, lecturers, or performers with an emphasis on the ethnic dance forms, primarily Mid-Eastern, Flamenco, Spanish Classical, East Indian, or African (Nigeria/Ghana).

Students are able to apply principles of movement and creativity to all forms of dance, demonstrate skills of instructing dance to communicate through movement and words, and apply information learned in other disciplines to the art form of dance.

Instruction will utilize both classroom work, using a variety of instructional methods (lecture, lab/demonstration, independent and group projects) and internship experiences in business/industry to prepare the student for job requirements.

Program Outcomes
1. Successfully teach and perform in one or more of the following styles: African, American Social Dance, Classical Indian, Flamenco, Folklorico, Latin Dance Styles, Middle Eastern or Polynesian.
2. Communicate how to dance through movement demonstration and verbal cueing using appropriate dance terminology.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAN C A130</td>
<td>Mid-Eastern Dance 1</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DAN C A148</td>
<td>Mid-Eastern Dance 2</td>
<td>1-2</td>
</tr>
<tr>
<td>DAN C A116</td>
<td>Latin Dance Styles I</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DAN C A155</td>
<td>Latin Dance Styles II</td>
<td>1</td>
</tr>
<tr>
<td>DAN C A138</td>
<td>African Dance and Drumming I</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DAN C A158</td>
<td>African Dance and Drumming II</td>
<td>1</td>
</tr>
<tr>
<td>DAN C A135</td>
<td>Flamenco Dance 1</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DAN C A147</td>
<td>Flamenco Dance 2</td>
<td>1-2</td>
</tr>
<tr>
<td>DAN C A156</td>
<td>Polynesian Dance</td>
<td>1</td>
</tr>
<tr>
<td>DAN C A170</td>
<td>Music for Dancers</td>
<td>2</td>
</tr>
<tr>
<td>DAN C A205</td>
<td>Dance as a Profession Seminar</td>
<td>2</td>
</tr>
<tr>
<td>DAN C A210</td>
<td>Dance Methodology</td>
<td>3</td>
</tr>
<tr>
<td>DAN C A218</td>
<td>World Dance Internship I</td>
<td>1</td>
</tr>
<tr>
<td>DAN C A219</td>
<td>World Dance Internship II</td>
<td>1</td>
</tr>
<tr>
<td>ANTH A100</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>or RLST A110</td>
<td>World Religion</td>
<td></td>
</tr>
<tr>
<td>or DAN C A230</td>
<td>World Dance and Culture</td>
<td></td>
</tr>
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</table>

Select the pair 2-4

DANC A201 & DANC A211 & DANC A203
Rehearsal and Performance I and Repertoire I
Performing Dance Ensemble I

Select one course 3

DANC A223  Performing Dance Ensemble II
DANC A233  Performing Dance Ensemble III
DANC A263  Performing Dance Ensemble IV

Subtotal 23-35

Restricted Electives
Select from the following 1-2

DANC A248 & DANC A264 Mid-Eastern Dance 3 and Mid-Eastern Dance 4
DANC A247 & DANC A267 Flamenco Dance 3 and Flamenco Dance 4
DANC A165 Latin Dance Styles III
DANC A168 African Dance and Drumming III

Select four (4) units from at least two (2) different dance styles 4

DANC A165 Latin Dance Styles III
DANC A133 Intro To World Dance
DANC A137 Classical Danc of India
Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN A203</td>
<td>First Aid and CPR</td>
<td>2</td>
</tr>
<tr>
<td>KIN A273</td>
<td>Sports Medicine</td>
<td>3</td>
</tr>
<tr>
<td>KIN A274</td>
<td>Athletic Taping and Modalities</td>
<td>3</td>
</tr>
<tr>
<td>KIN A275</td>
<td>Sports Medicine Practicum Level 1</td>
<td>2-4</td>
</tr>
<tr>
<td>KIN A276</td>
<td>Sports Medicine Practicum Level 2</td>
<td>2-4</td>
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</table>

Athletics Training Restricted Electives

Select two of the following: 6-10

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A100</td>
<td>Introduction to Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL A220</td>
<td>Human Anatomy</td>
<td></td>
</tr>
<tr>
<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
<td></td>
</tr>
<tr>
<td>BIOL A225</td>
<td>Human Physiology</td>
<td></td>
</tr>
<tr>
<td>CHEM A100</td>
<td>Principles of Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM A110</td>
<td>Introduction to Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM A130</td>
<td>Preparation for General Chemistry</td>
<td></td>
</tr>
<tr>
<td>FN A170</td>
<td>Nutrition</td>
<td></td>
</tr>
<tr>
<td>HLED/PUBH A100</td>
<td>Personal Health Education</td>
<td></td>
</tr>
<tr>
<td>KIN A202</td>
<td>Introduction to Kinesiology</td>
<td></td>
</tr>
<tr>
<td>KIN A272</td>
<td>Movement Analysis</td>
<td></td>
</tr>
<tr>
<td>KIN A283</td>
<td>Nutrition, Fitness, and Performance</td>
<td></td>
</tr>
<tr>
<td>MATH A115</td>
<td>College Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH A160</td>
<td>Introduction to Statistics</td>
<td></td>
</tr>
<tr>
<td>PHYS A110</td>
<td>Conceptual Physics</td>
<td></td>
</tr>
<tr>
<td>PSYC A100</td>
<td>Introduction to Psychology</td>
<td></td>
</tr>
</tbody>
</table>

Kinesiology

- Athletic Training Level 1, Certificate of Achievement (p. 211)
- Fitness Specialist, Associate in Science Degree (p. 212)
- Fitness Specialist, Certificate of Achievement (p. 212)
- Kinesiology, Associate in Arts Degree for Transfer (AA-T) (p. 213)
- Yoga Instructor Training, Certificate of Specialization (p. 214)

Athletic Training Level 1, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_KINAT
Control Number: 33363

The Athletic Training Certificate provides an educational and practical foundation for students interested in athletic training, physical therapy, physical therapy assistant and physical therapy aide. The Athletic Training Certificate objective is to enable students to develop a strong foundation in the Kinesiology and athletic training. The theoretical knowledge, laboratory, and clinical experience skills acquired by students in this program will also enhance their general understanding in the fitness and physical therapy industry. The required courses are a cross section of required courses in nearby athletic training curricula.

Since curriculum requirements may vary amongst institutions, it is imperative that students entering OCC's certificate in Athletic Training meet with a counselor at the start of their academic career.

Program Outcome

1. Students will have the knowledge, skills and experience necessary to be well qualified applicants undergraduate athletic training programs.
Fitness Specialist, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_PEPT
Control Number: 03970

This program provides students with theory necessary to be effective in the health fitness industry (health clubs, corporate fitness, etc.). Students in this program will learn scientific principles of exercise and physical conditioning, techniques for the measurement of human performance, and methods for establishing healthy nutritional patterns.

Program Outcomes
1. Students will have the knowledge, skills & experience necessary to assess an individual’s level of physical fitness and design appropriate exercise programming to improve physical fitness.
2. Students will be qualified for careers as fitness instructors, exercise testing technicians, strength coaches, or personal fitness trainers.
3. Develops a strong understanding of the business aspects of personal training, including effective practices, professional ethics, marketing, record keeping, and communication.

Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/kinesiology-fitness-wellness-sports-athletic-performance/kinesiology/fitness-specialist-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Restricted Electives
Select a minimum of three (3) units from the following in either semester:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOL A220</td>
<td>Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
<td></td>
</tr>
<tr>
<td>BIOL A225</td>
<td>Human Physiology</td>
<td></td>
</tr>
<tr>
<td>FN A136/ KIN A283</td>
<td>Nutrition, Fitness and Performance</td>
<td></td>
</tr>
<tr>
<td>KIN A202</td>
<td>Introduction to Kinesiology</td>
<td></td>
</tr>
<tr>
<td>KIN A271</td>
<td>Drugs &amp; Sports</td>
<td></td>
</tr>
<tr>
<td>KIN A272</td>
<td>Movement Analysis</td>
<td></td>
</tr>
<tr>
<td>KIN A273</td>
<td>Sports Medicine</td>
<td></td>
</tr>
<tr>
<td>KIN A279</td>
<td>Sports Management</td>
<td></td>
</tr>
<tr>
<td>Any Kinesiology active participation course KIN A105-A156, A205-256</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Units - 3-5

Total Units - 19-22

Fitness Specialist, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_PEPT
Control Number: 22389

This program provides students with theory necessary to be effective in the health fitness industry (health clubs, corporate fitness, etc.). Students in this program will learn scientific principles of exercise and physical conditioning, techniques for the measurement of human performance, and methods for establishing healthy nutritional patterns.

Program Outcomes
1. Students will have the knowledge, skills & experience necessary to assess an individual’s level of physical fitness and design appropriate exercise programming to improve physical fitness.
2. Students will be qualified for careers as fitness instructors, exercise testing technicians, strength coaches, or personal fitness trainers.

3. Develops a strong understanding of the business aspects of personal training, including effective practices, professional ethics, marketing, record keeping, and communication.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>KIN A270</td>
<td>Fitness and Health</td>
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</tr>
<tr>
<td>KIN A280</td>
<td>Strength Conditioning/Theory</td>
<td>3</td>
</tr>
<tr>
<td>KIN A297</td>
<td>Fitness Specialist Practicum</td>
<td>2</td>
</tr>
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<table>
<thead>
<tr>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>8</td>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>KIN A282</td>
<td>Introduction to Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td>KIN A296</td>
<td>Personal Trainer</td>
<td>3</td>
</tr>
<tr>
<td>KIN A298</td>
<td>Fitness Specialist Internship</td>
<td>2-3</td>
</tr>
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<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-9</td>
</tr>
</tbody>
</table>

Total Units - 16-17

Kinesiology, Associate in Arts Degree for Transfer (AA-T)

Financial Aid Eligible
Banner Code: 1_AAT_KIN
Control Number: 31334

Students graduating with an Associate in Arts in Kinesiology for Transfer Degree are well positioned to complete a Bachelor’s Degree in Kinesiology within the CSU system with 60 units of upper-division coursework. Students who complete the Kinesiology AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

Program Outcomes
1. Identify and describe major concepts, theoretical principles, empirical findings, and historical trends in Kinesiology.
2. Know, comprehend, and apply scientific principles to movement, exercise, and sport, including the demonstration of knowledge and skill in fitness activities, aquatics, combatives, individual sports, and/ or team sports.
3. Analyze and evaluate how anatomical and physiological systems impact human movement.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements
The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).
Yoga Instructor Training, Certificate of Specialization

<table>
<thead>
<tr>
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<tr>
<td>BIOL A220</td>
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</tr>
<tr>
<td>BIOL A225</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>KIN A202</td>
<td>Introduction to Kinesiology</td>
<td>3</td>
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**Movement-Based Courses (see list)**

<table>
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<th>Course</th>
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<tr>
<td>CHEM A110</td>
<td>Introduction to Chemistry</td>
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<tr>
<td>or CHEM A180</td>
<td>General Chemistry A</td>
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<tr>
<td>MATH A160</td>
<td>Introduction to Statistics</td>
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<tr>
<td>or PSYC A160</td>
<td>Statistics for the Behavioral Sciences</td>
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<tr>
<td>PHYS A120</td>
<td>Algebra Based Physics: Mechanics</td>
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<tr>
<td>or PHYS A185</td>
<td>Calculus Based Physics: Mechanics</td>
<td></td>
</tr>
</tbody>
</table>

**Kinesiology AA-T Movement-Based Course List**

Select one (1) course from three (3) separate areas for a total of three (3) units:

**Area 1-Aquatics**

- KIN A130 | Aqua Fitness |
- KIN A131 | Swimming for Fitness Level 1 |
- KIN A132 | Swimming Level 1 |
- KIN A140 | Outrigger Canoeing |
- KIN A141 | Surfing and Ocean Safety Level 1 |

**Area 2-Combatives**

- KIN A126 | Aikido |
- KIN A127 | Karate |
- KIN A129 | T’ai Chi Chih |

**Area 3-Fitness**

- KIN A105 | Cardiovascular Fitness |
- KIN A106 | Weight Training Level 1 |
- KIN A107 | Fitness Programs I |
- KIN A108 | Strength and Conditioning |
- KIN A110 | Walking for Fitness Level 1 |
- KIN A111 | Step Cardio & Core Level 1 |
- KIN A116 | Triathlon Techniques |

**Area 4-Individual Sports**

- KIN A128 | Hatha Yoga Level I |
- KIN A129 | T’ai Chi Chih |
- KIN A141 | Surfing and Ocean Safety Level 1 |
- KIN A146 | Tennis Level 1 |
- KIN A155 | Bowling Level 1 |
- KIN A153 | Golf Level 1 |
- KIN A156 | Rock Climbing Level 1 |

**Program Outcome**

1. Properly instruct a yoga class for all levels and abilities including the use of prop, utilizing themes and yoga philosophy to enhance classes.
2. Understand the history and evolution of yoga.
3. Satisfy the 200 hour requirement to qualify for the Yoga Alliance 200-Hour certification.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements section of this catalog.

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**Minimum Grade Requirement**
Public Health - General Studies, Associate in Arts Degree

This program will introduce students to health, including personal health and public health. Students can choose from a variety of courses that will increase their knowledge and understanding of the biopsychosocial model of health to be able to make personal choices that reduce their risk of disease. Students will also understand health from a public health view and be able to analyze global health issue and the impact of the environment, socio-economics, politics, and culture on health and health systems. Though not a transfer degree, this option will prepare students for transfer to CSU Fullerton. Students should see a counselor for questions related to the requirements of specific CSUs.

Program Outcomes
1. Students will be able to analyze disparity in health outcomes across populations using evidence-based methods and identify effective intervention strategies.
2. Students will be able to advocate for policy and structural change as supported by their ability to identify the impact of environment, socioeconomics, politics, and culture on health and health systems.
3. Student will prepare for transfer to local CSUs, ie., CSU Fullerton.

Associate in Arts Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/kinesiology-fitness-wellness-sports-athletic-performance/public-health/public-health-general-studies-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Public Health

The Public Health program introduces students to the fields of public health and health science. “Public health is the science of protecting and improving the health of people and their communities. This work is achieved by promoting healthy lifestyles, researching disease and injury prevention, and detecting, preventing, and responding to infectious diseases” (CDC, 2020).

Public health is about prevention. Through the investigation of health problems, public health professionals figure out the what, where, how, who, and why of illness and injury. They then develop and deliver interventions to reduce the incidence of disease and promote healthy lifestyles.

Examples of public health professions include health educator, epidemiologist, public health nurse, environmental scientist, emergency management, data analyst, biostatistician, health communications – any job that promotes health within a community. There are three awards available: Associate in Science for Transfer, Public Health Science; Associate in Arts, Public Health, General Studies; and, Certificate of Achievement, Public Health.

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Public Health Department Website (http://www.orangecoastcollege.edu/academics/divisions/kinesiology-athletics/degrees-certificates/Pages/Public-Health.aspx)

Degrees and Certificates
- Public Health - General Studies, Associate in Arts Degree (p. 215)
- Public Health Science, Associate in Science Degree for Transfer (AS-T) (p. 216)
- Public Health, Certificate of Achievement (p. 217)

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH A100</td>
<td>Personal Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A200</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>CMST A100</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>or CMST A110</td>
<td>Public Speaking</td>
<td>3</td>
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Subtotal 9

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<tr>
<th>Social Science</th>
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<tr>
<td>PSYC A100</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
<td>or PSYC A100H</td>
<td>Introduction to Psychology Honors</td>
</tr>
<tr>
<td>or SOC A100</td>
<td>Introduction to Sociology</td>
</tr>
<tr>
<td>or SOC A100H</td>
<td>Introduction to Sociology Honors</td>
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**Biology** 8-9

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>BIOL A100</td>
<td>Introduction to Biology</td>
<td>3</td>
</tr>
<tr>
<td>or BIOL A100H</td>
<td>Introduction to Biology Honors</td>
<td>3</td>
</tr>
<tr>
<td>BIOL A220</td>
<td>Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>or BIOL A221</td>
<td>Anatomy-Physiology</td>
<td>3</td>
</tr>
<tr>
<td>or BIOL A225</td>
<td>Human Physiology</td>
<td>3</td>
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</table>

Select a minimum of 6 units from the following: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH A202</td>
<td>Drugs, Health, and Society</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A203</td>
<td>Health and Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A230</td>
<td>Assessing and Analyzing Health Information</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A160</td>
<td>Peer Health Education Level 1</td>
<td>2</td>
</tr>
<tr>
<td>PUBH A210</td>
<td>Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs</td>
<td>3</td>
</tr>
<tr>
<td>or INHL A210</td>
<td>Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A260</td>
<td>Peer Health Education Level 2</td>
<td>2</td>
</tr>
<tr>
<td>INHL A225</td>
<td>Introduction to Complementary and Alternative Medicine</td>
<td>3</td>
</tr>
<tr>
<td>GEOG A190</td>
<td>Digital Mapping: Introduction to GIS</td>
<td>3</td>
</tr>
<tr>
<td>ETHS A150</td>
<td>Ethnic Groups in the U.S.: Their Histories</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A220</td>
<td>Techniques and Topics in Health Education</td>
<td>3</td>
</tr>
<tr>
<td>or INHL A220</td>
<td>Techniques and Topics in Health Education</td>
<td>3</td>
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</table>

**Total Units** 60

---

**Public Health Science, Associate in Science Degree for Transfer (AS-T)**

Financial Aid Eligible
Banner Code: 1_AST_HLTH
Control Number: 35503

Students graduating with an Associate in Science in Public Health Science for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Public Health Science AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate in Science in Public Health Science for Transfer focuses on an understanding of the health of populations. This degree is designed to prepare students in the study of public health science and provide comprehensive preparation for upper-division work. Students choosing this degree program will study a range of topics related to human health and disease including: core functions and disciplines of public health; human anatomy and physiology; diseases and their causes, including risk factor; distributions of diseases; primary prevention strategies; and behavior-change theory and application. Students will be gain understanding of the biopsychosocial basis for health and healthy populations. Further they will be able to understand and assess the burden of disease on the health of populations, including the impact of environmental exposures; use of data to support evidence based practices; develop and deliver health programs and interventions that are based on behavior frameworks; and evaluate health programs and initiatives for effectiveness. Public Health Science bridges the gap between scientific discoveries and the application of this knowledge to improve the quality of life.

**Program Outcomes**

1. Students will be able to assess the burden of disease on the health of populations, including the impact of environmental exposures and use data to support evidence based practices.
2. Students will be able to develop and deliver health programs and interventions that are based on behavior frameworks, and evaluate health programs and initiatives for effectiveness.
3. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

**Associate Degree for Transfer Requirements**

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework.
   While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
Public Health, Certificate of Achievement

Not Financial Aid Eligible
Banner Code: 1_CN_PUBH
Control Number: 39515

This program will introduce students to health science, including personal health and public health. Students can choose from a variety of courses that will increase their knowledge and understanding of the biopsychosocial model of health, the determinants of health, and how to work towards reducing health disparities across communities. Students will be able to evaluate the burden of disease for a population and analyze global health issues for a social justice perspective. The impact of the environment, socioeconomics, politics, and culture on health and health systems are also explored.

Program Outcomes
1. Students will be able to analyze disparity in health outcomes across populations using evidence-based methods and identify effective intervention strategies.
2. Students will be able to analyze global health issues and identify the impact of environment, socioeconomics, politics, and culture on health and health systems.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
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<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH A100</td>
<td>Personal Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A200</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A203</td>
<td>Health and Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A220</td>
<td>Techniques and Topics in Health Education</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A230</td>
<td>Assessing and Analyzing Health Information</td>
<td>3</td>
</tr>
</tbody>
</table>

Restricted Electives
Select a minimum of 9 units.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH A202</td>
<td>Drugs, Health, and Society</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A203</td>
<td>Health and Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A160</td>
<td>Peer Health Education Level 1</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A210</td>
<td>Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs</td>
<td>3</td>
</tr>
<tr>
<td>or INHL A210</td>
<td>Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A220</td>
<td>Techniques and Topics in Health Education</td>
<td>3</td>
</tr>
<tr>
<td>or INHL A220</td>
<td>Techniques and Topics in Health Education</td>
<td>3</td>
</tr>
<tr>
<td>PUBH A230</td>
<td>Assessing and Analyzing Health Information</td>
<td>3</td>
</tr>
</tbody>
</table>
Language and Communication

**Course** | **Title** | **Units**
--- | --- | ---
PUBH A260 | Peer Health Education Level 2 | 3
INHL A225 | Introduction to Complementary and Alternative Medicine | 3
ETHS A150 | Ethnic Groups in the U.S.: Their Histories | 3
GEOG A190 | Digital Mapping: Introduction to GIS | 3
BIOL A100 or BIOL A100H | Introduction to Biology or Introduction to Biology Honors | 3
BIOL A210 | General Microbiology | 3

**Social Science** | 3 | 3
Select one course.
PSYC A100 | Introduction to Psychology | 3
PSYC A100H | Introduction to Psychology Honors | 3
SOC A100 | Introduction to Sociology | 3
SOC A100H | Introduction to Sociology Honors | 3

**Total Units** | 18-19

**Communication Studies**

- Communications Studies, Associate in Arts Degree for Transfer (AA-T) (p. 218)
- Mass Communications/Media Studies, Associate in Arts Degree (p. 219)
- Social Media Strategist, Certificate of Achievement (p. 220)

**Communications Studies, Associate in Arts Degree for Transfer (AA-T)**

Financial Aid Eligible
Banner Code: 1_AAT_CMST
Control Number: 30642

Students graduating with an Associate in Arts in Communications for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Communications Studies AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Orange Coast College Associate in Arts in Communication Studies for transfer program provides students with communication skills that they can apply in personal, professional and global contexts. In these courses students will learn to improve their oral and written communication skills in the areas of critical thinking, organization, analysis, argumentation and presentation of information. Students will learn to improve their verbal and non-verbal interpersonal communication skills in the areas of listening, perception, self-concept, conflict resolution, intercultural and gender communication. These skills are developed in:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST A100</td>
<td>Interpersonal Communication</td>
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</tr>
<tr>
<td>CMST A105</td>
<td>Intrapersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>CMST A110</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CMST A150</td>
<td>Forensics Workshop</td>
<td>1-4</td>
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<tr>
<td>CMST A155</td>
<td>Intercultural Communications</td>
<td>3</td>
</tr>
<tr>
<td>CMST A165</td>
<td>Men, Women, and Communication</td>
<td>3</td>
</tr>
<tr>
<td>CMST A170</td>
<td>Nonverbal Communication</td>
<td>3</td>
</tr>
<tr>
<td>CMST A180</td>
<td>Introduction to Mass Communications</td>
<td>3</td>
</tr>
<tr>
<td>CMST A220</td>
<td>Essentials of Argumentation</td>
<td>3</td>
</tr>
<tr>
<td>CMST A240</td>
<td>Media Literacy</td>
<td>3</td>
</tr>
</tbody>
</table>
Program Outcomes

1. Provide students with communication skills that they can apply in personal, professional, and global contexts.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td><strong>Required Courses</strong></td>
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<tr>
<td>Core Courses</td>
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<td>Public Speaking</td>
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<td>CMST A100</td>
<td>Interpersonal Communication</td>
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<tr>
<td>CMST A220</td>
<td>Essentials of Argumentation</td>
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<td>List A</td>
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<tr>
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<td>CMST A120</td>
<td>Reader’s Theater and Oral Interpretation</td>
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<tr>
<td>CMST A150</td>
<td>Forensics Workshop</td>
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<tr>
<td>CMST A155</td>
<td>Intercultural Communications</td>
<td></td>
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<tr>
<td>CMST A180</td>
<td>Introduction to Mass Communications</td>
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<tr>
<td>List B</td>
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<td>CMST A105</td>
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<td>CMST/GNDR</td>
<td>Men, Women, and Communication A165</td>
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<td>CMST A170</td>
<td>Nonverbal Communication</td>
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<td>CMST A240</td>
<td>Media Literacy</td>
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</tr>
<tr>
<td>JOUR A110</td>
<td>News Writing and Reporting</td>
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<td><strong>Total Major Units</strong></td>
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<tr>
<td>CSU or IGETC for CSU</td>
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<td>37-39</td>
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<td><strong>Transferable electives as needed to satisfy unit requirement</strong></td>
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<td>Varies</td>
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<td><strong>Total Units</strong></td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

1. Complete three (3) units by choosing from a course not yet chosen from the above category or by choosing from the courses below.

Mass Communications/Media Studies, Associate in Arts Degree

Financial Aid Eligible
Banner Code: 1_AA_MCOM

Control Number: 03966

The Orange Coast College Associate in Arts in Mass Communication/Media Studies provides students with skills to understand the role of media institutions, analyze and create media texts, and evaluate the mass media landscape from a cultural, economic, and rhetorical perspective.

Program Outcomes

1. Students will be able to access, analyze, evaluate and create media texts.
2. Students will be able to understand the historical, economic, cultural, and aesthetic influences on media industries and media institutions.

Associate in Arts Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/language-communication-communication-studies/mass-communications-media-studies-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.
Contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Social Media Strategist, Certificate of Achievement

**Financial Aid Eligible**

**Banner Code:** _1_CN_CMSM_

**Control Number:** 38208

The Social Media Strategist Certificate of Achievement is intended to prepare students for careers in which they will use social media to promote products, individuals, and organizations. Courses emphasize the skills and tools necessary to analyze, create, implement and evaluate social media. A “C” or better is required.

#### Program Outcomes

1. Students will be able to function effectively in an entry-level social media strategist position using the skills, principles, and tools acquired.

#### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement -** 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization -** 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

#### Course Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
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</tr>
<tr>
<td>CMST A180</td>
<td>Introduction to Mass Communications</td>
<td>3</td>
</tr>
<tr>
<td>CMST A240</td>
<td>Media Literacy</td>
<td>3</td>
</tr>
<tr>
<td>JOUR A110</td>
<td>News Writing and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>Restricted Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select three of the following: 9-10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS/CMST A185</td>
<td>Public Relations</td>
<td></td>
</tr>
<tr>
<td>ENGL A148/ A148H</td>
<td>Film As Literature</td>
<td></td>
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<tr>
<td>JOUR A115</td>
<td>Newspaper Production Level 1</td>
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<tr>
<td>JOUR A116</td>
<td>Multi-Media Reporting and Producing</td>
<td></td>
</tr>
<tr>
<td>JOUR A185</td>
<td>Photojournalism</td>
<td></td>
</tr>
<tr>
<td>MKTG A130</td>
<td>Principles of Advertising</td>
<td></td>
</tr>
<tr>
<td>PHOT A120/ A120H</td>
<td>Introduction to Photography</td>
<td></td>
</tr>
<tr>
<td>PHOT A123</td>
<td>Introduction to Digital Photography</td>
<td></td>
</tr>
<tr>
<td>Program Major Units</td>
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<tr>
<td>AA General Education Option 1, 2, or 3</td>
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<td></td>
</tr>
<tr>
<td>Transferable electives as needed to satisfy unit requirement</td>
<td>Varies</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

### English

Students interested in imaginative forms like literature and film; the intersection of language and power; the historical, political, and cultural contexts and narratives that produce our understandings of race, gender, sexuality, and more; the intricacies of storytelling and creative expression; and the craft of argumentation will find an intellectual home in the English major. To study English is to achieve freedom of expression. By exposing you to the many ways people have written and talked, the English major can free you to read and write and think beyond what is normally asked of you. Inviting students to read across genres and media, historical periods, national and cultural traditions, and theoretical perspectives, all courses within the major introduce students to British, American, and Anglophone literature and cultural production, as well as world literature in translation, and offer extensive practice in the interconnected skills of close and careful reading, sustained and rigorous analysis and interpretation, and clear and convincing written communication. The English major thereby serves as a foundation for transfer-level study of literature and culture, rhetoric, and creative writing while also preparing students for a variety of post-graduate and career opportunities in:

- the arts (as writers, editors, producers, and archivists in film, television, and music),
- journalism (as writers, investigative reporters, proofreaders, and editors for print and online magazines and newspapers),
- publishing (as editors, agents, and book representatives),
- education (for further study of literature at the graduate level, K-12 or college teaching, curriculum development),
- law (as lawyers, paralegals, and investigators), medicine (as doctors, nurses, and clinicians),
- psychology (as psychiatrists, psychologists, or social workers),
• the sciences (as technical writers and editors),
• the video game industry (as writers, editors, and marketers),
• and business and advertising (as researchers, copywriters, high-level assistants, public relations specialists, and more).

Department Contact Information
Laura Wagner
lwagner12@occc.cccd.edu (%E2%80%8Blwagner12@occc.cccd.edu)

English department website (http://www.orangecoastcollege.edu/academics/divisions/lit_lang/english/Pages/default.aspx)

• English, Associate in Arts Degree (p. 221)
• English, Associate in Arts Degree for Transfer (AA-T) (p. 222)

English, Associate in Arts Degree

Financial Aid Eligible
Banner Code: 1_AA_ENGL
Control Number: 04017

Complete eighteen (18) units from the following and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan

Program Outcomes
1. Students will analyze, evaluate, and create their own fiction and/or non-fiction texts.
2. Students will critically analyze and compare literature from various cultures demonstrating an understanding of how life functions in the literary, social, and moral worlds

Associate in Arts Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/language-communication/english/english-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement.

See the General Education Patterns section of this catalog for more information.


<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A101/A101H</td>
<td>Critical Reasoning: Fiction</td>
<td>4</td>
</tr>
<tr>
<td>Select two of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL A150/ A150H</td>
<td>American Literature Before the 20th Century</td>
<td></td>
</tr>
<tr>
<td>ENGL A151/ A151H</td>
<td>American Literature in the 20th Century</td>
<td></td>
</tr>
<tr>
<td>ENGL A160/ A160H</td>
<td>World Literature Through Renaissance</td>
<td></td>
</tr>
<tr>
<td>ENGL A161/ A161H</td>
<td>World Literature Since Renaissance</td>
<td></td>
</tr>
<tr>
<td>ENGL A270/ A270H</td>
<td>Survey of British Literature Before 1800</td>
<td></td>
</tr>
<tr>
<td>ENGL A275/ A275H</td>
<td>Survey of British Literature After 1800</td>
<td></td>
</tr>
</tbody>
</table>

Restricted Electives
Select a minimum of nine units: 9

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A117</td>
<td>Narrative Journalism</td>
</tr>
<tr>
<td>ENGL A119</td>
<td>Introduction to Creative Writing</td>
</tr>
<tr>
<td>ENGL A121</td>
<td>Short Story Workshop</td>
</tr>
<tr>
<td>ENGL A141/ A141H</td>
<td>The Bible As Literature</td>
</tr>
<tr>
<td>ENGL A143/ A143H</td>
<td>Children's Literature</td>
</tr>
<tr>
<td>ENGL A147/ A147H</td>
<td>Introduction to Science Fiction</td>
</tr>
<tr>
<td>ENGL A148/ A148H</td>
<td>Film As Literature</td>
</tr>
<tr>
<td>ENGL A152/ A152H</td>
<td>Race, Culture, and Identity in Literature</td>
</tr>
<tr>
<td>ENGL A156/ A156H</td>
<td>California Literature</td>
</tr>
<tr>
<td>ENGL A165</td>
<td>Introduction to Irish Literature</td>
</tr>
<tr>
<td>ENGL A168</td>
<td>Popular Fiction</td>
</tr>
<tr>
<td>ENGL A170/ A170H</td>
<td>Contemporary Literature</td>
</tr>
<tr>
<td>ENGL A173/ A173H</td>
<td>Women Writers</td>
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English, Associate in Arts Degree for Transfer (AA-T)

Financial Aid Eligible
Banner Code: 1_AAT_ENGL
Control Number: 32189

Students graduating with an Associate in Arts in English for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the English AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The English program provides a core curriculum that instills critical thinking tools (including literary theories and terminology) for both practicing and studying writing, knowledge of historical and aesthetic contexts, and appreciation of geographic and cultural diversity. This background serves all English majors whether their emphasis at the CSU level will ultimately be the study of literature, rhetoric and non-fiction writing, or creative writing. The English program recognizes that all these areas of the major inform one another.

All the required courses in the program foster strong writing skills and are crucial in developing the proficiency and knowledge necessary for students who will ultimately use the major for teaching at the K-12 or community college level, literary scholarship at the graduate level, entering the legal professions, for creative writing, or for non-fiction essay writing in literary, business, and scientific journals.

Program Outcome
1. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements
The following is required for all AA-T or AS-T degrees:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A101/A101H</td>
<td>Critical Reasoning: Fiction</td>
<td>4</td>
</tr>
<tr>
<td>ENGL A150/A150</td>
<td>American Literature Before the 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A160/A160H</td>
<td>World Literature Through Renaissance</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A161/A161H</td>
<td>World Literature Since Renaissance</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A270/A270H</td>
<td>Survey of British Literature Before 1800</td>
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</tr>
<tr>
<td>ENGL A275/A275H</td>
<td>Survey of British Literature After 1800</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A119</td>
<td>Introduction to Creative Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A141/A141H</td>
<td>The Bible As Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A143/A143H</td>
<td>Children's Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A152/A152H</td>
<td>Race, Culture, and Identity in Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A173/A173H</td>
<td>Women Writers</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A176/A176H</td>
<td>World Mythology</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A181/A181H</td>
<td>Shakespeare</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A121</td>
<td>Short Story Workshop</td>
<td>3</td>
</tr>
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<td>ENGL A122</td>
<td>Novel Writing I</td>
<td>3</td>
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<tr>
<td>ENGL A127</td>
<td>Scriptwriting I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A147/A147H</td>
<td>Introduction to Science Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A148/A148H</td>
<td>Film As Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A156/A156H</td>
<td>California Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferrable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).
The Associate in Arts in Foreign Languages Degree is an excellent way to develop communicative skills in multiple languages other than English as well as global and critical thinking. It can provide a basis for understanding cultures, and therefore, prepare graduates for many careers in a multicultural world. The ability to communicate and interact with others is more and more vital with growing global interdependence and technological connectivity. Students in the Associate in Arts in Foreign Language Degree can develop careers in areas such as: education, diplomatic services, anthropology, business, economics, fashion, political science, literature, sociology, and linguistics. While teaching has traditionally been the principal area of employment, other careers, such as interpreting, translating, research, public relations, international commerce, tourism, and publishing are possible.

The department offers courses from the beginning to intermediate levels. All courses are designed to develop the student's listening comprehension, speaking, reading and writing skills, as well as to provide a general overview of non-English speaking civilizations and cultures.

### Program Outcomes

1. Recognize and produce the target language(s) in the four primary areas of communication: listening, speaking, reading, and writing.
2. Demonstrate a better understanding and appreciation of the cultures related to the target language(s) by comparing and contrasting them with the student's own culture(s).
3. Use current technologies to further develop language and cultural competencies.

### Associate in Arts Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/language-communication/foreign-languages/foreign-languages-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Spanish, Associate in Arts Degree for Transfer (AA-T)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>FREN A180</td>
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</tr>
<tr>
<td>FREN A185</td>
<td>Elementary French 2</td>
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<tr>
<td>FREN A280</td>
<td>Intermediate French 1</td>
<td></td>
</tr>
<tr>
<td>FREN A285</td>
<td>Intermediate French 2</td>
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**German**

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<tr>
<th>Course</th>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>GRMN A180</td>
<td>Elementary German 1</td>
<td></td>
</tr>
<tr>
<td>GRMN A185</td>
<td>Elementary German 2</td>
<td></td>
</tr>
<tr>
<td>GRMN A280</td>
<td>Intermediate German 1</td>
<td></td>
</tr>
<tr>
<td>GRMN A285</td>
<td>Intermediate German 2</td>
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**Italian**

<table>
<thead>
<tr>
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<tr>
<td>ITAL A185</td>
<td>Elementary Italian 2</td>
<td></td>
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<tr>
<td>ITAL A280</td>
<td>Intermediate Italian 1</td>
<td></td>
</tr>
<tr>
<td>ITAL A285</td>
<td>Intermediate Italian 2</td>
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**Japanese**

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<td>JAPN A180</td>
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<tr>
<td>JAPN A185</td>
<td>Elementary Japanese 2</td>
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<td>JAPN A280</td>
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</tr>
<tr>
<td>JAPN A285</td>
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**Vietnamese**

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<tr>
<td>VIET A185</td>
<td>Elementary Vietnamese 2</td>
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Select at least one of the following:  

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<tbody>
<tr>
<td>CHIN A180</td>
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<tr>
<td>CHIN A185</td>
<td>Elementary Chinese 2</td>
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</tr>
<tr>
<td>PORT A180</td>
<td>Elementary Portuguese 1</td>
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<td>Elementary Portuguese 2</td>
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</tr>
<tr>
<td>SPAN A180/A180H</td>
<td>Elementary Spanish 1</td>
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<tr>
<td>SPAN A185/A185H</td>
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<td>SPAN A280/A280H</td>
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<tr>
<td>SPAN A285</td>
<td>Intermediate Spanish 2</td>
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</tbody>
</table>

**Program Major Units**  
21-25

**AA General Education Option 1, 2, or 3**  
Varies

**Transferable electives as needed to satisfy unit requirement**  
Varies

**Total Units**  
60

1. Students may choose from the list below or from a language not used to complete the core courses above.

---

### Foreign Languages AA Degree Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ANTH A190</td>
<td>Introduction to Linguistic Anthropology</td>
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<tr>
<td>BUS A118/A118H</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>CMST A185</td>
<td>Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>FASH A177</td>
<td>Fashion Merchandising Concepts</td>
<td>3</td>
</tr>
<tr>
<td>HTT A125</td>
<td>Destination the Americas</td>
<td>3</td>
</tr>
<tr>
<td>HTT A127</td>
<td>Destination Eastern Europe</td>
<td>3</td>
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<table>
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<tr>
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<th>Units</th>
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</thead>
<tbody>
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<td>HTT A132</td>
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<td>1.5</td>
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<tr>
<td>PSCI A110</td>
<td>International Relations</td>
<td>3</td>
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### Spanish, Associate in Arts Degree for Transfer (AA-T)

Financial Aid Eligible

Banner Code: 1_AAT_SPAN

Control Number: 32737

Students graduating with an Associate in Arts in Spanish for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Spanish AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate in Arts in Spanish for Transfer degree is an excellent way to develop communicative skills as well as analytical and critical thinking. It can provide a basis for understanding culture, and therefore, prepare graduates for many careers in a multicultural world. The ability to communicate and interact with others is more and more vital with growing global interdependence and technological connectivity. Students in the Associate in Arts in Spanish for Transfer Degree (AA-T) can develop careers in areas such as: education, diplomatic services, anthropology, economics, political science, literature, sociology, and linguistics. While teaching has traditionally been the principal area of employment, other careers, such as interpreting, translating, research, public relations, international commerce, tourism, and publishing are possible.

The department offers courses from the beginning to intermediate levels. All courses are designed to develop the student’s listening comprehension, speaking, reading and writing skills, as well as to provide a general overview of Spanish-speaking civilizations and cultures.

### Program Outcomes

1. Recognize and produce the Spanish language in the four primary areas of communication: listening, speaking, reading and writing.
2. Demonstrate a better understanding and appreciation of the cultures related to the Spanish language by comparing and contrasting them with the student’s own culture(s).
3. Use current technologies to further develop language and cultural competencies.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

### Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.

4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

### Associate in Arts Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/language-communication/journalism/journalism-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


### Program Outcomes

1. The student will be able to write a balanced news article on deadline in traditional journalistic style incorporating interviewing skills, analyzing information and presenting a complete, balanced story.

2. Students will demonstrate an ability to write, edit and produce all aspects of the bi-weekly campus newspaper Coast Report, including an understanding of design, photography use and editing peer’s articles.

3. Students will be able to evaluate online media and distinguish between mainstream, traditional media and news promoting a philosophy or one-sided agenda. They will also be able to evaluate blogs and social media.

4. Students will demonstrate the ability to use visual journalism to tell a story.
Journalism, Associate in Arts Degree for Transfer (AA-T)

Financial Aid Eligible  
Banner Code: 1_AAT_JOUR  
Control Number: 32179

Students graduating with an Associate in Arts in Journalism for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the CSU system with 60 units of upper-division coursework. Students who complete the Journalism AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Department of Journalism at Orange Coast College is a comprehensive program with offerings ranging from beginning journalism instruction to state-of-the-art multimedia production. Our mission is to use theory and practice to help how journalists report and write for America. We strive to help students achieve an AA or AS or transfer to other institutions of higher learning and be prepared for the opportunities that may exist. The department also operates a weekly student newspaper, the Coast Report, the website www.coastreportonline.com, and regularly posts a variety of multimedia productions. Classes are open to students of all majors.

The Journalism AA-T degree directly aligns with many of the department's goals and objectives: achieving an AA and transferring to an institution of higher education. It is also designed to give students a broad perspective on the options they might select at the 4-year level and help prepare them for their transfer goals. They will also be prepared to work on any campus publication or website with journalistic confidence and experience.

Program Outcomes

1. Analyze a complete newspaper and understand why stories were chosen for inclusion.
2. Find and pitch both news and feature stories.
3. Conduct numerous interviews to obtain factual information.
4. Write a complete story using proper structure, style and grammar, and have the story published in the newspaper or online.
5. Assess their own strengths, weaknesses, and omissions in writing news and feature stories or taking photographs for publication and be able to adjust future performance in light of their self-assessments.
6. Collaborate in developing, designing, and completing a multi-media project and post it to the web.
7. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI A180/A180H</td>
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</tr>
<tr>
<td>Minimum Program Major Units</td>
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<td>18</td>
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<td>AA General Education Option 1, 2, or 3</td>
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<table>
<thead>
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<tr>
<td>CMST A180</td>
<td>Introduction to Mass Communications</td>
<td>3</td>
</tr>
<tr>
<td>JOUR A110</td>
<td>News Writing and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JOUR A115</td>
<td>Newspaper Production Level 1</td>
<td>4</td>
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<tr>
<td>List A</td>
<td></td>
<td>3</td>
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<tr>
<td>BUS/CMST A185</td>
<td>Public Relations</td>
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<tr>
<td>JOUR A116</td>
<td>Multi-Media Reporting and Producing</td>
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<td>JOUR A117</td>
<td>Narrative Journalism</td>
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<tr>
<td>JOUR A185</td>
<td>Photojournalism</td>
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<td>List B</td>
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<td>CMST A220</td>
<td>Essentials of Argumentation</td>
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<tr>
<td>ECON A170</td>
<td>Microeconomics</td>
<td></td>
</tr>
<tr>
<td>or ECON A175</td>
<td>Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>ENGL A101/ A101H</td>
<td>Critical Reasoning: Fiction</td>
<td></td>
</tr>
<tr>
<td>ENGL A102/ A102H</td>
<td>Critical Reasoning: Nonfiction</td>
<td></td>
</tr>
<tr>
<td>JOUR A117</td>
<td>Narrative Journalism</td>
<td>1</td>
</tr>
<tr>
<td>JOUR A185</td>
<td>Photojournalism</td>
<td>1</td>
</tr>
<tr>
<td>MATH A160</td>
<td>Introduction to Statistics</td>
<td></td>
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<tr>
<td>PHOT A120/ A120H</td>
<td>Introduction to Photography</td>
<td></td>
</tr>
<tr>
<td>PSCI A180/A180H</td>
<td>American Government</td>
<td></td>
</tr>
<tr>
<td>PSCI A185</td>
<td>Comparative Politics</td>
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<td>PHIL A150</td>
<td>Critical Reasoning &amp; Writing</td>
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<td>Total Major Units</td>
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<td>Varies</td>
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<td>Total Units</td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

1 Course may not be used to fulfill List B requirement if already used to fulfill List A requirement.
Film & Television

- Film & Television, Associate in Arts Degree (p. 227)
- Film & Television, Certificate of Achievement (p. 228)
- Film, Television and Electronic Media, Associate in Science Degree for Transfer (AS-T) (p. 229)
- Immersive Media (VR/AR), Certificate of Achievement (p. 230)
- Media Arts and Creative Entertainment, Certificate of Achievement (p. 230)

Film & Television, Associate in Arts Degree

Financial Aid Eligible
Banner Code: 1_AA_FTV
Control Number: 03967

The Film & Television program at OCC is designed to give the student two years of extensive theory and technical experience training in the basic skills required for employment in the film & television industries.

Complete the Film & Television Certificate of Achievement and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome

1. The Film & Television program offers a Certificate of Achievement that, when completed, gives the student the basic skills required for entry-level employment in the film, video, television, multi-media and entertainment industries in the areas of producing, directing, camera operation, lighting, sound and editing.

Associate in Arts Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/language-communication/film-television/film-television-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement.

See the General Education Patterns section of this catalog for more information.


<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FILM A110</td>
<td>Film Production 1</td>
<td>3</td>
</tr>
<tr>
<td>FILM A194</td>
<td>Editing 1</td>
<td>3</td>
</tr>
<tr>
<td>Semester 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FILM A155</td>
<td>Television Production 1</td>
<td>3</td>
</tr>
<tr>
<td>FILM A240</td>
<td>Film Production 2</td>
<td>3</td>
</tr>
<tr>
<td>Year 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FILM A100</td>
<td>History and Appreciation of the Cinema 1</td>
<td>3</td>
</tr>
<tr>
<td>or FILM A150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FILM A265</td>
<td>Documentary Production 1</td>
<td>4</td>
</tr>
<tr>
<td>or FILM A270</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

1 May fulfill restricted elective credit if the alternative course has been taken as a required course.

Restricted Electives - 10
Total Units - 29

Film & Television Restricted Electives

Select ten units of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRCT A105</td>
<td>Broadcast Journalism</td>
<td>10</td>
</tr>
<tr>
<td>BRCT A205</td>
<td>Remote Broadcasting</td>
<td></td>
</tr>
<tr>
<td>DMAD A263</td>
<td>Motion Graphics and Video Compositing</td>
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<tr>
<td>ENGL A127</td>
<td>Scriptwriting I</td>
<td></td>
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<tr>
<td>ENGL A148</td>
<td>Film As Literature</td>
<td></td>
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<tr>
<td>FILM A100</td>
<td>History and Appreciation of the Cinema 1</td>
<td></td>
</tr>
<tr>
<td>FILM A102</td>
<td>The Business of Film &amp; Television</td>
<td></td>
</tr>
<tr>
<td>FILM A104</td>
<td>The Great Directors of the Cinema</td>
<td></td>
</tr>
<tr>
<td>FILM A106</td>
<td>Introduction to Media Writing</td>
<td></td>
</tr>
<tr>
<td>FILM A107</td>
<td>History of Video Games</td>
<td></td>
</tr>
<tr>
<td>FILM A109</td>
<td>Science Fiction Film</td>
<td></td>
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<tr>
<td>FILM A109H</td>
<td>Science Fiction Film Honors</td>
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</table>
Film & Television, Certificate of Achievement

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>FILM A112</td>
<td>Project Development and the Pitch</td>
<td></td>
</tr>
<tr>
<td>FILM A120</td>
<td>Event Productions</td>
<td></td>
</tr>
<tr>
<td>FILM A150</td>
<td>History of Radio &amp; Television ¹</td>
<td></td>
</tr>
<tr>
<td>FILM A193</td>
<td>Sound Design for Film &amp; TV</td>
<td></td>
</tr>
<tr>
<td>FILM A196</td>
<td>Introduction to Visual Effects</td>
<td></td>
</tr>
<tr>
<td>FILM A205</td>
<td>Remote Broadcasting</td>
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<tr>
<td>FILM A210</td>
<td>Production Management</td>
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<tr>
<td>FILM A215</td>
<td>Social Media Marketing</td>
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</tr>
<tr>
<td>FILM A219</td>
<td>Editing 2</td>
<td></td>
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<tr>
<td>FILM A220</td>
<td>Introduction to Virtual Reality (VR)</td>
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<tr>
<td>FILM A253</td>
<td>Directing Theory</td>
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</tr>
<tr>
<td>FILM A255</td>
<td>Television Production 2</td>
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<tr>
<td>FILM A258</td>
<td>Post production Finishing</td>
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<tr>
<td>FILM A260</td>
<td>Special Projects</td>
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<tr>
<td>FILM A261</td>
<td>Television Studio Operations</td>
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<td>FILM A262</td>
<td>Cinematography</td>
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<td>FILM A264</td>
<td>Editing 3</td>
<td></td>
</tr>
<tr>
<td>FILM A265</td>
<td>Documentary Production ¹</td>
<td></td>
</tr>
<tr>
<td>FILM A270</td>
<td>Film Production 3 ¹</td>
<td></td>
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<tr>
<td>FILM A271</td>
<td>Portfolio Development</td>
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<tr>
<td>PHOT A120</td>
<td>Introduction to Photography</td>
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<td>PHOT A123</td>
<td>Introduction to Digital Photography</td>
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<tr>
<td>THEA A275</td>
<td>Directing</td>
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</table>

Subtotal: 10

¹ May fulfill restricted elective credit if the alternative course has been taken as a required course.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Requirement

<table>
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<tr>
<th>Requirement</th>
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<tr>
<td>Minimum Program Major Units</td>
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<td>Transferable electives to satisfy unit requirement</td>
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<td>Total Degree Units</td>
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Financial Aid Eligible

Banner Code: 1_CN_FTV
Control Number: 22383

The Film & Television program at OCC is designed to give the student two years of extensive theory and technical experience training in the basic skills required for employment in the film & television industries.

Program Outcome

1. The Film & Television program offers a Certificate of Achievement that, when completed, gives the student the basic skills required for entry-level employment in the film, video, television, multi-media and entertainment industries in the areas of producing, directing, camera operation, lighting, sound and editing.

Restrict Electives - 10

Total Units - 29

Film & Television Restricted Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRCT A105</td>
<td>Broadcast Journalism</td>
<td>10</td>
</tr>
</tbody>
</table>

¹ May fulfill restricted elective credit if the alternative course has been taken as a required course.
The Film, Television, and Electronic Media Associate in Science Degree for Transfer (AS-T), is designed to give the student extensive theory and technical experience training in the basic skills required to enter a baccalaureate degree program in a similar major within the California State University system.

Students graduating with an Associate in Science in Film, Television and Electronic Media for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Film, Television and Electronic Media AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

Program Outcomes
1. Students will have the skills and knowledge necessary for film, video, and television production, direction, camera operation, lighting, sound, and editing.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements
The following is required for all AA-T or AS-T degrees:
1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

Financial Aid Eligible
Banner Code: 1_AST_FILM
Control Number: 35498

The Film, Television, and Electronic Media Associate in Science Degree for Transfer (AS-T), is designed to give the student extensive theory and technical experience training in the basic skills required to enter a baccalaureate degree program in a similar major within the California State University system.

Students graduating with an Associate in Science in Film, Television and Electronic Media for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Film, Television and Electronic Media AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

Program Outcomes
1. Students will have the skills and knowledge necessary for film, video, and television production, direction, camera operation, lighting, sound, and editing.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements
The following is required for all AA-T or AS-T degrees:
1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

Financial Aid Eligible
Banner Code: 1_AST_FILM
Control Number: 35498

The Film, Television, and Electronic Media Associate in Science Degree for Transfer (AS-T), is designed to give the student extensive theory and technical experience training in the basic skills required to enter a baccalaureate degree program in a similar major within the California State University system.

Students graduating with an Associate in Science in Film, Television and Electronic Media for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Film, Television and Electronic Media AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

Program Outcomes
1. Students will have the skills and knowledge necessary for film, video, and television production, direction, camera operation, lighting, sound, and editing.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements
The following is required for all AA-T or AS-T degrees:
1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

Financial Aid Eligible
Banner Code: 1_AST_FILM
Control Number: 35498

The Film, Television, and Electronic Media Associate in Science Degree for Transfer (AS-T), is designed to give the student extensive theory and technical experience training in the basic skills required to enter a baccalaureate degree program in a similar major within the California State University system.

Students graduating with an Associate in Science in Film, Television and Electronic Media for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Film, Television and Electronic Media AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Immersive Media (VR/AR), Certificate of Achievement

**Financial Aid Eligible**  
**Banner Code:** 1_CT_VRAR  
**Control Number:** 38324

This certificate is designed to be a comprehensive 2-year study in both Virtual and Augmented Reality within the growing field of Immersive Media, including targeted courses in the related specializations necessary for a well-rounded base of knowledge and practice. Transitioning from simple 360-degree video and audio capture through computer graphic-based 3D Modeling and Video Game Development principles will gradually add higher level skill and increased immersion into the course content. An Advanced Development Lab will be offered at the summit to allow students ample access to the specialized technology needed to create portfolio-level VR and AR projects with the intent of using these works to obtain gainful employment and/or internships in this rapidly growing field.

#### Program Outcomes

1. The Immersive Media program offers a Certificate of Achievement that, when completed, gives the student the basic skills required for entry-level employment and/or internships in Virtual Reality (VR), Augmented Reality (AR), Multimedia and Game-related industries in the areas of 360 video, 360 Audio, VR/AR Development & Content Creation, Immersive Game Design & 3D Modeling, and Drone Imagery for Immersive Media.

#### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

### Media Arts and Creative Entertainment, Certificate of Achievement

**Financial Aid Eligible**  
**Banner Code:** 1_CN_MACE  
**Control Number:** 39134

The Media Arts and Creative Entertainment Certificate program is a Career Technical Education specialty, designed for the student who wants a concentrated course of study in the field of acting/directing coupled with film and television production. It has been designed to introduce students to the skills necessary to create their own recorded media projects or prepare students for entry-level employment in the entertainment industry. Completion of this certificate will foster an understanding and appreciation of the various artistic and technical aspects of camera and narrative production. Students will be educated in performing, directing, storytelling, camera operation, event
documentation, lighting, sound, post-production, and business practices. The required 12 units give the student a strong foundation, while the 5 elective units allow students to concentrate on their particular area of interest within this collaborative field.

Program Outcomes
1. Students will be able to demonstrate competence as directors, performers, actors and technicians and possess a critical understanding of visual storytelling coupled with current and effective performance and directing techniques.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILM A110</td>
<td>Film Production 1</td>
<td>3</td>
</tr>
<tr>
<td>THEA A106 or THEA A115</td>
<td>Acting Fundamentals or Acting for Camera and Stage</td>
<td>3</td>
</tr>
<tr>
<td>FILM A240</td>
<td>Film Production 2</td>
<td>3</td>
</tr>
<tr>
<td>THEA A275</td>
<td>Directing</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Select five units of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRCT A105</td>
<td>Broadcast Journalism</td>
<td>5</td>
</tr>
<tr>
<td>FILM A102</td>
<td>The Business of Film &amp; Television</td>
<td></td>
</tr>
<tr>
<td>FILM A155</td>
<td>Television Production 1</td>
<td></td>
</tr>
<tr>
<td>FILM A194</td>
<td>Editing 1</td>
<td></td>
</tr>
</tbody>
</table>

Photography
- Digital SLR Photography and Videography Technician, Certificate of Achievement (p. 231)
- Photography Digital Technician, Certificate of Achievement (p. 232)
- Photography-Still, Associate in Science Degree (p. 233)
- Photography-Still, Certificate of Achievement (p. 233)

Digital SLR Photography and Videography Technician, Certificate of Achievement
Financial Aid Eligible
Banner Code: 1_CN_DSLR
Control Number: 32791

The Digital SLR Photography and Videography Certificate program is a Career Technical Ed specialty, designed for the student who wants a concentrated course of study in the field of photography coupled with video production. It has been designed to prepare students for entry-level employment as both a photographer and videographer. Students will be educated in the use of DSLR cameras, storytelling, event documentation, lighting, sound, post-production and business practices. The first 19 units give the student a strong foundation, while the 6 elective units allow students to “customize” the certificate to their unique needs.

Program Outcome
1. Students will be able to demonstrate competence as both a photographer and a videographer, and show a critical understanding of visual language.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing...
his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FILM A110</td>
<td>Film Production 1</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A123</td>
<td>Introduction to Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A125</td>
<td>Imaging with Photoshop 1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Units</td>
<td>9</td>
</tr>
<tr>
<td>Semester 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FILM A194</td>
<td>Editing 1</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A180</td>
<td>Introduction to Professional Photography</td>
<td>4</td>
</tr>
<tr>
<td>FILM A262</td>
<td>Cinematography</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Units</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Total Units</td>
<td>19</td>
</tr>
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</table>

Electives

Complete an additional six elective units, in either semester of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS A110</td>
<td>Computers in Music 1</td>
<td>3</td>
</tr>
<tr>
<td>FILM A102</td>
<td>The Business of Film &amp; Television</td>
<td>3</td>
</tr>
<tr>
<td>FILM A215</td>
<td>Social Media Marketing</td>
<td>3</td>
</tr>
<tr>
<td>FILM A265</td>
<td>Documentary Production</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A188</td>
<td>Commercial Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A200</td>
<td>Documentary Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A225</td>
<td>Professional Digital Workflow and Color Management</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A280</td>
<td>Professional Digital Techniques</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Subtotal</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total Units</td>
<td>25</td>
</tr>
</tbody>
</table>

Photography Digital Technician, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_PHDT
Control Number: 32791

This program offers training in areas such as digital photography, digital workflow, large format digital capture and studio photography techniques. It is intended to prepare students for digital tech and photo assisting jobs in the professional photography community.

Program Outcome

1. Students will be able to demonstrate competence in the digital skills of photography and display skills in professional practices.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHOT A180</td>
<td>Introduction to Professional Photography</td>
<td>4</td>
</tr>
<tr>
<td>PHOT A188</td>
<td>Commercial Photography</td>
<td>5</td>
</tr>
<tr>
<td>PHOT A225</td>
<td>Professional Digital Workflow and Color Management</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A280</td>
<td>Professional Digital Techniques</td>
<td>3</td>
</tr>
<tr>
<td>Select any &quot;A200&quot; level PHOT course, three units minimum</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

Photography Digital Technician Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT A241</td>
<td>Business Practices for Photographers</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: PHOT A123 Introduction to Digital Photography (3 units) is a prerequisite to PHOT A180 Introduction to Professional Photography
and PHOT A125 Imaging with Photoshop 1 (3 units) is a prerequisite to PHOT A225 Professional Digital Workflow and Color Management.

### Photography-Still, Associate in Science Degree

Financial Aid Eligible  
Banner Code: 1_AS_PHST  
Control Number: 03995

Anyone with an interest in photography, whether beginner, advanced amateur or professional, will find a course or program within the photography program that will teach them new skills and/or prepare them for a career in photography.

The OCC Photography program is intended to prepare students for employment in a number of specialization areas within the field of professional photography. The student, after completing the first year foundation courses, may elect to take advanced courses in art, commercial, advertising illustration, portraiture, architectural, fashion, or documentary photography, color management, digital work flow, and business practices for photographers.

In addition to courses intended to train photographers, the program also includes several black and white and digital classes for professional photographers who wish to learn new skills and/or for those who are interested in careers as photographic digital technicians.

Complete the Photography - Still Certificate of Achievement and Associate in Science general education requirements as outlined in the Graduation Requirements section of the catalog.

### Program Outcomes
1. Demonstrate competence in the technical skills of photography.
2. Demonstrate the ability to evaluate photographic aesthetic strategies.
3. Create photographs that illustrate a critical understanding of visual language.

### Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/language-communication/photography/photography-still-associate-science-degree/orange-coast/general-education-patterns/associate-science-degree-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

#### Course Title Units

| Year 1 | Semester 1 |  |  |  |  |
|--------|------------|  |  |  |  |
|  | Select one of the following: |  |  |  |  |
|  | ART A101/A101H | Survey of Western Art from Renaissance to Modern | 3 |  |  |
|  | ART A102 | Survey of Modern and Contemporary Art History |  |  |  |
|  | PHOT A101 | Photography and Society |  |  |  |
|  | PHOT A123 | Introduction to Digital Photography | 3 |  |  |
|  | PHOT A130 | History and Aesthetics of Still Photography | 3 |  |  |
|  |  | Units | 9 |  |  |
|  | Semester 2 |  |  |  |  |
|  | PHOT A125 | Imaging with Photoshop 1 | 3 |  |  |
|  | PHOT A127 | Darkroom For Photography Majors | 2 |  |  |
|  | PHOT A180 | Introduction to Professional Photography | 4 |  |  |
|  |  | Units | 9 |  |  |
|  | Semester 3 |  |  |  |  |
|  | PHOT A188 | Commercial Photography | 5 |  |  |
|  | PHOT A225 | Professional Digital Workflow and Color Management | 3 |  |  |
|  | Select three units of “A200” level PHOT courses 1 | 3 |  |  |  |
|  |  | Units | 11 |  |  |
|  | Semester 4 |  |  |  |  |
|  | PHOT A241 | Business Practices for Photographers | 3 |  |  |
|  | PHOT A280 | Professional Digital Techniques | 3 |  |  |
|  | PHOT A283 | Art Photography | 4 |  |  |
|  | Select two units of “A200” level PHOT courses 2 | 2 |  |  |  |
|  |  | Units | 12 |  |  |
|  |  | Total Units | 41 |  |  |

1. (Excluding PHOT A260 Art Portfolio Development 1-PHOT A267 Marketing and Self Promotion 2).

2. (Including PHOT A260 Art Portfolio Development 1-PHOT A267 Marketing and Self Promotion 2).

### Photography - Still Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A100</td>
<td>Freshman Composition</td>
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<th>Requirement</th>
<th>Units</th>
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<tr>
<td>Minimum Program Major Units</td>
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<tr>
<td>AS General Education Option 1, 2, or 3</td>
<td>Varies</td>
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<td>Transferable electives to satisfy unit requirement</td>
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<tr>
<td>Total Degree Units</td>
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</tbody>
</table>

### Photography-Still, Certificate of Achievement

Financial Aid Eligible  
Banner Code: 1_CT_PHST  
Control Number: 22408
Anyone with an interest in photography, whether beginner, advanced amateur or professional, will find a course or program within the photography program that will teach them new skills and/or prepare them for a career in photography.

The OCC Photography program is intended to prepare students for employment in a number of specialization areas within the field of professional photography. The student, after completing the first year foundation courses, may elect to take advanced courses in art, commercial, advertising illustration, portraiture, architectural, fashion, or documentary photography, color management, digital work flow, and business practices for photographers.

In addition to courses intended to train photographers, the program also includes several black and white and digital classes for professional photographers who wish to learn new skills and/or for those who are interested in careers as photographic digital technicians.

**Program Outcomes**
1. Demonstrate competence in the technical skills of photography.
2. Demonstrate the ability to evaluate photographic aesthetic strategies.
3. Create photographs that illustrate a critical understanding of visual language.

**Certificate Requirements**
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z [section of this catalog](https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT A101</td>
<td>Photography and Society</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A123</td>
<td>Introduction to Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A130</td>
<td>History and Aesthetics of Still Photography</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Units</strong></td>
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</tr>
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<table>
<thead>
<tr>
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<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>PHOT A125</td>
<td>Imaging with Photoshop 1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHOT A127</td>
<td>Darkroom For Photography Majors</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PHOT A180</td>
<td>Introduction to Professional Photography</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Units</strong></td>
<td><strong>9</strong></td>
</tr>
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</table>

<table>
<thead>
<tr>
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<th>Course</th>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>PHOT A188</td>
<td>Commercial Photography</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>PHOT A225</td>
<td>Professional Digital Workflow and Color Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select three units of “A200” level PHOT courses</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Units</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 4</th>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PHOT A241</td>
<td>Business Practices for Photographers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHOT A280</td>
<td>Professional Digital Techniques</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHOT A283</td>
<td>Art Photography</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select two units of “A200” level PHOT courses</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Units</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Units</strong></td>
<td><strong>41</strong></td>
</tr>
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</table>

1 (Excluding PHOT A260 Art Portfolio Development 1-PHOT A267 Marketing and Self Promotion 2).
2 (Including PHOT A260 Art Portfolio Development 1-PHOT A267 Marketing and Self Promotion 2).

**Photography - Still Suggested Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A100</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

**Theatre Arts**

- Theatre Arts, Associate in Arts Degree (p. 234)
- Theatre Arts, Associate in Arts Degree for Transfer (AA-T) (p. 235)

**Theatre Arts, Associate in Arts Degree**

Financial Aid Eligible
Banner Code: 1_AA_THEA
Control Number: 03991

Complete eighteen (18) units from the following and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan must be developed with a counselor and placed on file prior to petitioning for graduation.

**Program Outcome**
1. Understand and demonstrate the fundamental performance and technical production processes for the theatre arts.
2. Demonstrate knowledge of the historical and cultural dimensions of theatre, including the works of leading playwrights, actors, directors and designers, past and present.
3. Develop a clear understanding of the interaction between script, actor, and audience and the areas of scenery, lighting, sound and costume.
Associate in Arts Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite. Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/language-communication/theatre-arts/theatre-arts-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA A100</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>or THEA A101</td>
<td>Introduction to History and Literature of the Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA A106</td>
<td>Acting Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>or THEA A129</td>
<td>Technical Theatre Practicum</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>THEA A120</td>
<td>Drama Rehearsal and Performance - Beginning</td>
<td></td>
</tr>
<tr>
<td>THEA A126</td>
<td>Musical Theatre Rehearsal and Performance - Beginning</td>
<td></td>
</tr>
<tr>
<td>THEA A123</td>
<td>Comedy Rehearsal and Performance - Beginning</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>THEA A172</td>
<td>Elizabethan Play Workshop and Production</td>
<td></td>
</tr>
</tbody>
</table>

Restricted Electives

Select a minimum of nine units of the following: 9-10

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>THEA A106</td>
<td>Acting Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>THEA A107</td>
<td>Acting</td>
<td></td>
</tr>
<tr>
<td>THEA A110</td>
<td>Theatre Laboratory Level 1</td>
<td></td>
</tr>
<tr>
<td>THEA A111</td>
<td>Theatre Laboratory Level 2</td>
<td></td>
</tr>
<tr>
<td>THEA A112</td>
<td>Theatre Laboratory Level 3</td>
<td></td>
</tr>
<tr>
<td>THEA A113</td>
<td>Theatre Laboratory Level 4</td>
<td></td>
</tr>
<tr>
<td>THEA A115</td>
<td>Acting for Camera and Stage</td>
<td></td>
</tr>
<tr>
<td>THEA A120</td>
<td>Drama Rehearsal and Performance - Beginning</td>
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<td>THEA A123</td>
<td>Comedy Rehearsal and Performance - Beginning</td>
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</tr>
<tr>
<td>THEA A126</td>
<td>Musical Theatre Rehearsal and Performance - Beginning</td>
<td></td>
</tr>
<tr>
<td>THEA A129</td>
<td>Technical Theatre Practicum</td>
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</tr>
<tr>
<td>THEA A131</td>
<td>OCC Theatre Repertory 1</td>
<td></td>
</tr>
<tr>
<td>THEA A132</td>
<td>OCC Theatre Repertory 2</td>
<td></td>
</tr>
<tr>
<td>THEA A133</td>
<td>OCC Theatre Repertory 3</td>
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</tr>
<tr>
<td>THEA A134</td>
<td>OCC Theatre Repertory 4</td>
<td></td>
</tr>
<tr>
<td>THEA A175</td>
<td>Stage Scenery</td>
<td></td>
</tr>
<tr>
<td>THEA A176</td>
<td>Stage Lighting</td>
<td></td>
</tr>
<tr>
<td>THEA A177</td>
<td>Make-Up</td>
<td></td>
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<tr>
<td>THEA A178</td>
<td>Stage Costuming</td>
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<tr>
<td>THEA A182</td>
<td>Advanced Make-Up</td>
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</tr>
<tr>
<td>THEA A188</td>
<td>Body Movement for the Actor</td>
<td></td>
</tr>
<tr>
<td>THEA A189</td>
<td>Stage Combat</td>
<td></td>
</tr>
<tr>
<td>THEA A200</td>
<td>Voice and Articulation</td>
<td></td>
</tr>
<tr>
<td>THEA A206</td>
<td>Acting 3</td>
<td></td>
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<td>THEA A207</td>
<td>Acting 4</td>
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<tr>
<td>THEA A215</td>
<td>Rehearsal and Performance 1</td>
<td></td>
</tr>
<tr>
<td>THEA A275</td>
<td>Directing</td>
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<tr>
<td>THEA A285</td>
<td>Advanced Directing</td>
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Total Units 60

Program Major Units 18-19

AA General Education Option 1, 2, or 3 Varies

Transferable electives as needed to satisfy unit requirement Varies

Financial Aid Eligible

Banner Code: 1_AAT_THEA

Control Number: 32081

Students graduating with an Associate in Arts in Theatre Arts for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Theatre Arts AA-T degree are guaranteed admission to the CSU system, but not to a
The following is required for all AA-T or AS-T degrees:

1. Understand and demonstrate the fundamental performance and technical production processes for the theatre arts.
2. Demonstrate knowledge of the historical and cultural dimensions of theatre, including the works of leading playwrights, actors, directors, and designers, develop a clear understanding of the interaction between script, actor, and audience and the areas of scenery, lighting, sound and costume.
3. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Program Outcomes
1. Demonstrate knowledge of the historical and cultural dimensions of theatre, including the works of leading playwrights, actors, directors, and designers, develop a clear understanding of the interaction between script, actor, and audience and the areas of scenery, lighting, sound and costume.

Associate Degree for Transfer Requirements
The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA A101</td>
<td>Introduction to History and Literature of the Theatre</td>
<td>3</td>
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<tr>
<td>THEA A106</td>
<td>Acting Fundamentals</td>
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<tr>
<td>THEA A120</td>
<td>Drama Rehearsal and Performance - Beginning</td>
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</tr>
<tr>
<td>THEA A123</td>
<td>Comedy Rehearsal and Performance - Beginning</td>
<td></td>
</tr>
<tr>
<td>THEA A126</td>
<td>Musical Theatre Rehearsal and Performance - Beginning</td>
<td></td>
</tr>
<tr>
<td>THEA A129</td>
<td>Technical Theatre Practicum</td>
<td></td>
</tr>
<tr>
<td>List A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select three courses from above core courses not yet taken or of the following:</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>THEA A107</td>
<td>Acting 2</td>
<td></td>
</tr>
<tr>
<td>THEA A110</td>
<td>Theatre Laboratory Level 1</td>
<td></td>
</tr>
<tr>
<td>THEA A175</td>
<td>Stage Scenery</td>
<td></td>
</tr>
<tr>
<td>THEA A176</td>
<td>Stage Lighting</td>
<td></td>
</tr>
<tr>
<td>THEA A177</td>
<td>Make-Up</td>
<td></td>
</tr>
<tr>
<td>THEA A178</td>
<td>Stage Costuming</td>
<td></td>
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<td>Program Major Units</td>
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Course | Title | Units |
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<thead>
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<th></th>
<th></th>
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</tr>
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<tr>
<td>CSU or IGETC for CSU</td>
<td>Transferable electives as needed to satisfy unit requirement</td>
<td>Varies</td>
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<tr>
<td>Total Units</td>
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<td>60</td>
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</table>

Math, Science and Engineering
- Anthropology (p. 237)
- Astronomy (p. 239)
- Biology (p. 240)
- Chemistry (p. 241)
- Culinology and Food Science (p. 242)
- Engineering (p. 244)
- Geography (p. 245)
- Geology (p. 247)
- Horticulture (p. 249)
- Marine Science (p. 254)
- Mathematics (p. 256)
- Natural Science (p. 257)
- Physics (p. 258)
- Anthropology, Associate in Arts Degree (p. 237)
- Anthropology, Associate in Arts Degree for Transfer (AA-T) (p. 238)
- Astronomy, Associate in Science Degree (p. 239)
- Astronomy, Associate in Science Degree for Transfer (AS-T) (p. 241)
- Biology, Associate in Science Degree (p. 240)
- Biology, Associate in Science Degree for Transfer (AS-T) (p. 241)
- Chemistry, Associate in Science Degree (p. 242)
- Culinology and Food Science (p. 242)
- Level 1 - Culinary Food Science Assistant, Certificate of Achievement (p. 242)
- Level 2 Culinology - Professional Level, Associate in Science Degree (p. 243)
- Engineering, Associate in Science Degree (p. 244)
- Geography, Associate in Arts Degree (p. 246)
- Geography, Associate in Arts Degree for Transfer (AA-T) (p. 246)
- Geology, Associate in Science Degree for Transfer (AS-T) (p. 248)
- Horticulture, Associate in Science Degree (p. 249)
- Horticulture, Certificate of Specialization (p. 249)
- Basic Landscape Design, Certificate of Specialization (p. 250)
- Horticulture, Associate in Science Degree (p. 250)
- Horticulture, Certificate of Achievement (p. 251)
- Intermediate Landscape Design and Landscape Specialist, Certificate of Specialization (p. 252)
• Landscape Site Design Elements, Certificate of Specialization (p. 253)
• Retrofiting California Urban Gardens, Certificate of Specialization (p. 253)
• The Professional Practice of a Landscape Design & Construction Business, Certificate of Specialization (p. 254)
• Marine Science (p. 254)
• Aquarium Science, Certificate of Achievement (p. 254)
• Marine Science, Associate in Science Degree (p. 255)
• Mathematics (p. 256)
• Mathematics, Associate in Science Degree for Transfer (AS-T) (p. 256)
• Natural Science (p. 257)
• Natural Science, Associate in Science Degree (p. 257)
• Physics (p. 258)
• Physics, Associate in Science Degree for Transfer (AS-T) (p. 258)

### Anthropology

Anthropology offers students an opportunity to learn about and gain an appreciation for past and present human cultural and biological variation. Completion of the AAT or AA degree requirements allows for the exploration of the four subfields of Anthropology, participation in specialty courses for a deeper understanding, and to select general education courses that provide a strong foundation for transfer to four-year degree programs.

**Department Contact Information**

Ulrike Green
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Meredith Montagne
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**Anthropology Department Website** (http://www.orangecoastcollege.edu/academics/divisions/social_behavioral/anthropology/Pages/default.aspx)

• Anthropology, Associate in Arts Degree (p. 237)
• Anthropology, Associate in Arts Degree for Transfer (AA-T) (p. 238)

### Anthropology, Associate in Arts Degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH A100</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH A100H</td>
<td>Cultural Anthropology Honors</td>
<td></td>
</tr>
<tr>
<td>ANTH A185</td>
<td>Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH A185H</td>
<td>Physical Anthropology Honors</td>
<td></td>
</tr>
<tr>
<td>ANTH A185L</td>
<td>Phys Anthropology Lab</td>
<td>1</td>
</tr>
<tr>
<td>ANTH A280</td>
<td>Introduction to Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>Core Courses Subtotal</td>
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<td>10</td>
</tr>
<tr>
<td><strong>Restricted Electives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select a minimum of nine units of the following:</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>ANTH A102</td>
<td>Native American</td>
<td></td>
</tr>
<tr>
<td>ANTH A105</td>
<td>Anthropology of Nonverbal Behavior</td>
<td></td>
</tr>
<tr>
<td>ANTH A187</td>
<td>Introduction to Primate Studies</td>
<td></td>
</tr>
</tbody>
</table>

### Program Outcome

1. Gain an understanding of and an appreciation for human diversity across time and space.
Course | Title | Units
--- | --- | ---
ANTH A190 | Introduction to Linguistic Anthropology | 
ANTH A220 | Magic, Witchcraft, and Religion | 
ANTH A285 | World Ethnology | 
GEOG A100 | World Regional Geography | 
GEOG A180 | Physical Geography | or GEOG A180H Physical Geography Honors
GEOG A180L | Physical Geography Lab | 
GEOG A185 | Cultural Geography | 
HIST A161 | World History 1 | or HIST A161H World History 1 Honors
HIST A162 | World History 2 | or HIST A162H World History 2 Honors
HIST A180 | Western Civilization 1 | or HIST A180H Western Civilization 1 Honors
HIST A185 | Western Civilization 2 | or HIST A185H Western Civilization 2 Honors
HMDV A180 | Child Growth and Development | 
PSYC A130 | Life Span Developmental Psychology | 
PSYC A165 | Principles of Human Sexuality 1 | 
SOC A100 | Introduction to Sociology | or SOC A100H Introduction to Sociology Honors
SOC A110 | Introduction to Dating, Relationships, and Marriage | 

Subtotal | 9
Minimum Program Major Units | 19
AA General Education Option 1, 2, or 3 | Varies
Transferable electives as needed to satisfy unit requirement | Varies
Total Units | 60

**Associate Degree for Transfer Requirements**

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

**Course | Title | Units**
--- | --- | ---
Core Courses | | |
ANTH A100 | Cultural Anthropology | 3
or ANTH A100H Cultural Anthropology Honors | |
ANTH A185 | Physical Anthropology | 3
or ANTH A185H Physical Anthropology Honors | |
ANTH A185L | Phys Anthropology Lab | 1
ANTH A280 | Introduction to Archaeology | 3
Restricted Electives | | |
Select a minimum of nine units of the following: | 9
ANTH A102 | Native American | |
ANTH A105 | Anthropology of Nonverbal Behavior | |
ANTH A187 | Introduction to Primate Studies | |
ANTH A190 | Introduction to Linguistic Anthropology | |
ANTH A220 | Magic, Witchcraft, and Religion | |
ANTH A285 | World Ethnology | |
GEOG A100 | World Regional Geography | |
GEOG A180 | Physical Geography | or GEOG A180H Physical Geography Honors |
GEOG A180L | Physical Geography Lab | |
GEOG A185 | Cultural Geography | |
HIST A161 | World History 1 | or HIST A161H World History 1 Honors |
HIST A162 | World History 2 | or HIST A162H World History 2 Honors |
HIST A180 | Western Civilization 1 | or HIST A180H Western Civilization 1 Honors |
HIST A185 | Western Civilization 2 | or HIST A185H Western Civilization 2 Honors |
HMDV A180 | Child Growth and Development | |
PSYC A130 | Life Span Developmental Psychology | |
PSYC A165 | Principles of Human Sexuality 1 | |
SOC A100 | Introduction to Sociology | or SOC A100H Introduction to Sociology Honors |
SOC A110 | Introduction to Dating, Relationships, and Marriage | |

**Anthropology, Associate in Arts Degree for Transfer (AA-T)**

Financial Aid Eligible
Banner Code: 1_AAT_ANTH
Control Number: 32488

Students graduating with an Associate in Arts in Anthropology for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Anthropology AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

**Program Outcomes**

1. Gain an understanding of and an appreciation for human diversity across time and space.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.
Program Outcomes

1. Describe the constituents of the Universe and the relevant physical processes underlying their behavior.
2. Become familiar with the methods of observational astronomy and the analysis of data.
3. Develop the necessary knowledge and skills to analyze evidence and evaluate claims as related to astronomy.

Astronomy

The Astronomy department provides students the opportunity to gain a better perspective about the night sky, the solar system, stars, galaxies, and the universe. We offer a wide range of courses as well as an Associate in Science degree in Astronomy. Many of our students go on and transfer to four-year programs in astronomy, astrophysics, or physics, and then continue on to graduate school.

Department Contact Information

Jerome Fang
jfang5@occ.cccd.edu (%E2%80%8Bjfang5@occ.cccd.edu)

Astronomy Department Website (http://www.orangecoastcollege.edu/academics/divisions/math_science/astronomy/Pages/default.aspx)

- Astronomy, Associate in Science Degree (p. 239)

Astronomy, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_ASTR
Control Number: 35182

Upon completion of the requirements for the Associate in Science Degree in Astronomy, students will be prepared to transfer to CSU/UC and obtain a baccalaureate degree in astronomy, astrophysics, or physics. This degree is also a stepping stone toward research internships, entry-level opportunities within the field, e.g., observatory and planetarium operations, and provides a solid foundation for pursuing an advanced degree.

The department strongly recommends that all declared Astronomy majors complete the following courses prior to transfer:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS A131</td>
<td>Python Programming I</td>
<td>4</td>
</tr>
<tr>
<td>MATH A185/A185H</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH A280/A280H</td>
<td>Calculus 3</td>
<td>4</td>
</tr>
<tr>
<td>MATH A285/A285H</td>
<td>Introduction to Linear Algebra and Differential Equations</td>
<td>4</td>
</tr>
</tbody>
</table>

Course Outcomes

1. Be prepared for admission to California State University/University of California schools in astronomy/astrophysics.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/math-science-engineering/astronomy/astronomy-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Required Courses

- ASTR A100/A100H Introduction to Astronomy 3
- ASTR A100L/A100M Introduction to Astronomy Laboratory 1
- ASTR A200 Introduction to Astrophysics 4

Astronomy Electives

Select one of the following: 3

- ASTR A101 Planetary Astronomy
- ASTR A102 Stellar Astronomy
- ASTR A103 Cosmology
- ASTR A104 Galactic Astronomy

Math/Physics Required Courses

Select three of the following: 13-16

- MATH A180/A180H Calculus 1
- MATH A185/A185H Calculus 2

or

- MATH A182H Calculus 1 and 2 Honors
- PHYS A185/A185H Calculus Based Physics: Mechanics

and

- MATH A180/A180H Calculus 1
- MATH A185/A185H Calculus 2

Transferable electives as needed to satisfy unit requirement

AA General Education Option 1, 2, or 3

Varies

Minimum Program Major Units

19

Subtotal

9

Transferable electives as needed to satisfy unit requirement

Varies

Total Units

60
Course | Title | Units
---|---|---
PHYS A280 | Calculus Based Physics: Electricity/Magnetism | 4-7
or PHYS A285 | Calculus Based Physics: Modern | 4-7

**Program Major Units**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOL A210</td>
<td>Introduction to Biology for Majors 1: Cell and Molecular Biology</td>
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</tr>
<tr>
<td>BIOL A211</td>
<td>Introduction to Biology for Majors 2: Ecology, Evolution, Diversity, and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL A212</td>
<td>Introduction to Biology for Majors 3: Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL A213</td>
<td>Introduction to Biology for Majors 4: Molecular Biology</td>
<td>5</td>
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</tbody>
</table>

**Transferable electives as needed to satisfy unit requirement**

**Total Units**

60

**Biology, Associate in Science Degree**

The Biological Associate of Science degree is intended to instill a desire in our students to learn more about the biological sciences, encourage critical thinking about how life functions in the natural world, and help students become scientifically literate citizens who can make informed decisions about biologically related issues.

**Department Contact Information**

Farah Sogo
fsogo@occ.cccd.edu

**Biology Department Website**

http://www.orangecoastcollege.edu/academics/divisions/math_science/biological_sciences/Pages/BiologyDepartmentWebsite.aspx

**Control Number**: 03957

**Banner Code**: 1_AS_BIOL

**Financial Aid Eligible**: Yes

**Required Courses**

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<th>Course</th>
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<th>Units</th>
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<tbody>
<tr>
<td>BIOL A180</td>
<td>Introduction to Biology for Majors 1: Cell and Molecular Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL A185</td>
<td>Introduction to Biology for Majors 2: Ecology, Evolution, Diversity, and Physiology</td>
<td>5</td>
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**Core Courses-List A**

Select one option of the following:

<table>
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<tr>
<th>Option 1</th>
<th>Option 2</th>
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<tbody>
<tr>
<td>BIOL A180</td>
<td>Introduction to Biology for Majors 1: Cell and Molecular Biology</td>
</tr>
<tr>
<td>BIOL A182</td>
<td>Zoology</td>
</tr>
<tr>
<td>BIOL A182L</td>
<td>Zoology Lab</td>
</tr>
<tr>
<td>BIOL A183</td>
<td>Botany</td>
</tr>
<tr>
<td>BIOL A183L</td>
<td>Botany Lab</td>
</tr>
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</table>

**Core Courses-List B**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOL A210</td>
<td>General Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL A220</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
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</tr>
<tr>
<td>BIOL A225</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL A280</td>
<td>Evolutionary Ecology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL A281</td>
<td>Biochemistry</td>
<td>5</td>
</tr>
<tr>
<td>BIOL A282</td>
<td>Molecular Biology</td>
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<tr>
<td>BIOL A283</td>
<td>Genetics</td>
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**Restricted Electives**

Select a minimum of five units of Chemistry and four units of Math:

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHEM A180</td>
<td>General Chemistry A</td>
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</tr>
<tr>
<td>CHEM A185</td>
<td>General Chemistry B</td>
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</tr>
<tr>
<td>CHEM A220</td>
<td>Organic Chemistry A</td>
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</tr>
<tr>
<td>CHEM A220L</td>
<td>Organic Chemistry A Lab</td>
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</tbody>
</table>

**UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

**Program Outcomes**

1. Use the scientific method to design, carry out, summarize & evaluate tests of biological hypotheses using modern laboratory equipment.
2. Describe the biological processes that occur within or among organisms (e.g., protein synthesis, cell-to-cell communication, genetic transmission, digestion, reproduction, and nutrient flow through an ecosystem).
3. Describe the variations observed in organisms and explain how populations have evolved through time.

**Associate in Science Degree Requirements**

**1. UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

**2. MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

**3. MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

**4. GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/math-science-engineering/biology/biology-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.
**Program Outcomes**

1. Use the scientific method to design, carry out, summarize, and evaluate tests of biological hypotheses using modern laboratory equipment.
2. Describe the biological processes that occur within or among organisms (e.g., protein synthesis, cell-to-cell communication, genetic transmission, digestion, reproduction, nutrient flow through an ecosystem).
3. Describe the variations observed in organisms and explain how populations have evolved through time.

**Biology, Associate in Science Degree for Transfer (AS-T)**

Financial Aid Eligible  
Banner Code: 1_AST_BIOL  
Control Number: 35918

Students graduating with an Associate in Science in Biology for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Biology AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

This curriculum is designed to allow students to study a range of biological topics in cell and molecular biology, survey the diversity of organisms on our planet, and receive additional STEM preparation. The coursework prepares students to employ the scientific method, think critically and apply reasoning skills to analyze real world situations. All coursework prepares students to employ the scientific method, think critically and apply reasoning skills to analyze real world situations. All coursework prepares students to employ the scientific method, think critically and apply reasoning skills to analyze real world situations.

**Associate Degree for Transfer Requirements**

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) or the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

**Chemistry**

Our mission is to provide students with chemistry courses that teach concepts, problem-solving skills, laboratory and safety skills, and to assist students in the development of higher-level reasoning skills, such as synthesis and analysis.

**Department Contact Information**

Arlene Vieau  
avieau@occ.cccd.edu  
Chemistry Department Website (http://www.orangecoastcollege.edu/academics/divisions/math_science/chemistry/Pages/default.aspx)
Chemistry, Associate in Science Degree

The Chemistry Associate of Science degree is intended to instill a desire in our students to learn more about chemistry through scientific study, encourage critical thinking about how chemistry impacts the natural world, and help students become scientifically literate citizens who can make informed decisions about chemistry-related issues.

Program Outcomes
1. Students will be able to understand and apply the Scientific Method, including the abilities to demonstrate critical thinking skills, and to draw sound conclusions from collected data and observations.
2. Students will demonstrate content knowledge about chemistry, including knowledge of basic chemical terminology and an understanding of fundamental concepts in chemistry.
3. Students will be able to use appropriate laboratory techniques, equipment, and instruments proficiently. Skills to be mastered shall be determined by the chemistry faculty.

Associate in Science Degree Requirements
1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/math-science-engineering/chemistry/chemistry-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Culinology and Food Science

Level 1 - Culinary Food Science Assistant, Certificate of Achievement

Orange Coast College's Culinary and Food Sciences Assistant program is designed for students who are interested in working as assistants in the following fields: food research and development, product development, recipe development, product duplication, quality assurance, sensory, or flavor chemistry.

Program Outcomes
1. Graduates will be competent entry-level Culinary and Food Science assistants meeting the employment needs of the community and be able to communicate and work effectively with Chefs, Food Scientist and clientele.
2. Communicate and work effectively with Chefs, Food Scientists, and clientele.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions.
as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Program Outcomes
1. Be competent entry-level Culinary and Food Science assistants meeting the employment needs of the community.
2. Communicate and work effectively with Chefs, Food Scientists, and clientele.
3. Be able to transfer to selected colleges in Culinology®.
4. Culinology® students should obtain materials from the Transfer Center for complete details on transferable courses.

### Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/math-science-engineering/culinology-food-science/level-2-culinology-professional-level-associate-science-degree/orange-coast/general-education-paths/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Required Prerequisite

### Level 2 Culinology - Professional Level, Associate in Science Degree

**Financial Aid Eligible**
Banner Code: 1_AS_CULN
Control Number: 04013

This Culinology® Level 2 option is articulated with the Food Science and Technology, Culinology® track in the Department of Human Nutrition and Food Science at Cal Poly Pomona. The coursework has received approval from the Research Chefs’ Association. Students must complete both Level 1 and 2 and meet the Associate in Science degree requirements. Students should certify their General Education coursework before transfer.

The Research Chefs’ Association suggests that students take additional Culinary Arts courses such as CA 255, Advanced Garde Manger and CA 265 Ala Minute Continental Cooking to enhance their culinary skills.
junior-level coursework. The Associate of Science Degree in Engineering is designed for students planning to pursue a Bachelor of Science Degree in Engineering or enter the workforce as Engineering Technicians. Orange Coast College offers 8 core courses (ENGR-A110, ENGR-A180, CHEM-A180, FSM-A250, MATH-A120, MATH-A160, MATH-A280, MATH-A285) and 2 elective courses, Engineering students will earn an Associate of Science degree is meant to provide students with a strong foundation of engineering and design skills. Theoretical concepts are combined with practical experiences to expose students to real-world engineering problems.

While the core courses are necessary to develop and strengthen the necessary mathematics and physics knowledge an engineer must possess, the elective courses allow for different routes, ranging from additional transferable courses in several engineering majors, to hands-on courses that confer readily employable skills as engineering technicians.

**Engineering, Associate in Science Degree**

Financial Aid Eligible
Banner Code: 1_AS_ENGR
Control Number: 03974

Engineers apply mathematics and scientific laws to invent and design products and services that are used in everyday life. This Engineering Associate of Science degree is meant to provide students with a strong foundation of engineering and design skills. Theoretical concepts are combined with practical experiences to expose students to real-world engineering problems.

The world of engineering is interesting, challenging, innovative, and helps engineers apply mathematics and scientific laws to invent and design products and services that are used in everyday life. This Engineering Associate of Science degree is meant to provide students with a strong foundation of engineering and design skills. Theoretical concepts are combined with practical experiences to expose students to real-world engineering problems.

While the core courses are necessary to develop and strengthen the necessary mathematics and physics knowledge an engineer must possess, the elective courses allow for different routes, ranging from additional transferable courses in several engineering majors, to hands-on courses that confer readily employable skills as engineering technicians.

**Engineering Program Outcomes**

1. An ability to apply engineering, science and mathematics knowledge utilizing the critical thinking and the problem solving skills to find solutions to problems of engineering nature and design.
2. Skills to use the state of the art laboratory equipment and simulation tools for engineering and engineering related practices and research.
3. An understanding of the ethical and professional role and responsibility as a member of the society in finding the ways for the betterment of the environment and all humanity and life.
4. Knowledge and skills to explain the response of systems and changes in the behavior and properties of the systems and materials due to external influences and stimuli.

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no
credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/math-science-engineering/engineering/engineering/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Course Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ENGR A110</td>
<td>Introduction to Engineering and Design</td>
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<tr>
<td>or ENGR A110H</td>
<td>Introduction to Engineering and Design Honors</td>
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<tr>
<td>ENGR A180</td>
<td>Engineering Graphics</td>
<td>4</td>
</tr>
<tr>
<td>ENGR A280</td>
<td>Statics</td>
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<tr>
<td>PHYS A185</td>
<td>Calculus Based Physics: Mechanics</td>
<td>4</td>
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<tr>
<td>or PHYS A185H</td>
<td>Calculus-Based Physics: Mechanics Honors</td>
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<tr>
<td>PHYS A280</td>
<td>Calculus Based Physics: Electricity/Magnetism</td>
<td>4</td>
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<tr>
<td>MATH A185</td>
<td>Calculus 2</td>
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<tr>
<td>or MATH A185H</td>
<td>Calculus 2 Honors</td>
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<tr>
<td>MATH A280</td>
<td>Calculus 3</td>
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<td>or MATH A280H</td>
<td>Calculus 3 Honors</td>
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<tr>
<td>MATH A285</td>
<td>Introduction to Linear Algebra and Differential Equations</td>
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<tr>
<td>or MATH A285H</td>
<td>Introduction to Linear Algebra and Differential Equations Honors</td>
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</table>

Select two of the following: 6-10

- AMT A151 | General Electricity - FAA |
- AMT A152 | General Airframe & Powerplant Fuel Systems - FAA |
- APT A131 | Introduction to Unmanned Aircraft Systems |
- ARCH A171 | Design Fabrication 1 |
- ARCH A172 | Design Fabrication 2 |
- ASTR A200 | Introduction to Astrophysics |
- BIOL A100 | Introduction to Biology |
- BIOL A114 | Basic Microbiology |
- BIOL A125 | Human Biology |
- BIOL A281 | Biochemistry |
- CHEM C180 | General Chemistry A |
- CHEM C185 | General Chemistry B |
- CHEM C220 | Organic Chemistry A |
- CHEM C225 | Organic Chemistry B |

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CNST A116</td>
<td>Furniture Making and Design</td>
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<tr>
<td>CNST A155</td>
<td>Intro to Home Automation</td>
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<tr>
<td>CNST A157</td>
<td>Photovoltaic System Installation</td>
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<tr>
<td>CS A150</td>
<td>C++ Programming Language 1</td>
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<tr>
<td>CS A170</td>
<td>Java Programming 1</td>
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<tr>
<td>CS A200</td>
<td>Data Structures</td>
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<tr>
<td>CS A220</td>
<td>Software Engineering</td>
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<td>ELEC A150</td>
<td>D.C. Circuits</td>
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<td>ENGR A210</td>
<td>Engineering Materials</td>
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<td>ENGR A220</td>
<td>Programming and Problem-Solving in MATLAB</td>
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<td>ENGR A230</td>
<td>Dynamics</td>
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<tr>
<td>ENGR A240</td>
<td>Mechanics of Materials</td>
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<tr>
<td>ENGR A285</td>
<td>Engineering Circuits</td>
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<tr>
<td>GEOL A105</td>
<td>General Geology</td>
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<td>GEOL A110</td>
<td>Physical Geology</td>
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<tr>
<td>HVAC A100</td>
<td>Air Conditioning and Refrigeration Principles</td>
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<tr>
<td>MACH A100</td>
<td>Introduction to Machine Shop</td>
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<tr>
<td>WELD A100</td>
<td>Arc &amp; Oxy-acetylene Welding</td>
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</tr>
</tbody>
</table>

Program Major Units 36-42

AS General Education Option 1, 2, or 3 Varies

Transferable electives as needed to satisfy unit requirement Varies

Total Degree Units 60

### Geography

Geography is the study of the earth as the home of humanity - including both its human and physical characteristics. In their quest to understand the earth and its processes, geographers first ask where things are located, but more importantly, they seek to answer why these distributions occur.

Whether you take the World Regional, Physical, Cultural, GIS, or any of the other Geography classes that we offer at Orange Coast College, your coursework will incorporate the five themes of Geography:

1. **Location** – Where is it located?
2. **Place** – What is it like there?
3. **Human / Environment Interactions**
   a. Human adaptations, modifications, dependence on the environment
4. **Movement** – How did it get there? Where is it going? Why did it move?
   a. Diffusion of people, goods and ideas
5. **Regions** – Classification of areas that are based on similar characteristics
   a. Formal, functional, vernacular

### Department Contact Information

Irene Naesse
inaesse@occ.cccd.edu

Chris Quinn
cquinn@occ.cccd.edu
Geography, Associate in Arts Degree

Financial Aid Eligible
Banner Code: 1_AA_GEOG
Control Number: 04035

Complete eighteen (18) units from the following and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan must be developed with a counselor and placed on file prior to petitioning for graduation.

Associate in Arts Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/math-science-engineering/geography/geography-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


Course | Title | Units
--- | --- | ---
ANTH A100/ A100H | Cultural Anthropology | 18
GEOG A100/ A100H | World Regional Geography | 18
GEOG A130 | Introduction to Weather & Climate | 3
GEOG A150 | California Geography | 3
GEOG A180/ A180H | Physical Geography | 3
GEOG A180L | Physical Geography Lab | 3
GEOG A185 | Cultural Geography | 3
GEOG A190 | Digital Mapping: Introduction to GIS | 3
GEOG A198 | Regional Field Studies in Geography | 3
GEOL A110 | Physical Geology | 3

Minimum Program Major Units 18
AA General Education Option 1, 2, or 3 Varies
Transferable electives as needed to satisfy unit requirement Varies
Total Units 60

Geography, Associate in Arts Degree for Transfer (AA-T)

Financial Aid Eligible
Banner Code: 1_AAT_GEOG
Control Number: 32205

Students graduating with an Associate in Arts in Geography for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Geography AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Geography Department at Orange Coast College is a comprehensive program that facilitates the success of general education students and geography majors by offering lower-division geography courses. The Geography Program offers students a variety of courses in physical, cultural, regional and applied geography. Students gain the ability to analyze geographical issues, read and interpret maps, and develop the skills to communicate local, national, and international geographic phenomena to others.

Program Outcome

1. Prepare students to understand the world geographically, acquire a geographic framework for the contemporary world, and utilize and unique spatial perspective.

2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.
### Geology

Geology courses at Orange Coast College cover a variety of topics within this exciting field. While the General Geology course is very popular, other courses, both lectures and labs, discuss areas of interest including natural disasters and petrology. Students may even enroll in a class specializing on the geology of Orange County, enabling them to connect what they learn to their everyday lives, providing additional relevance to the field of Geology.

#### Department Contact Information

Erick Bender  
ebender@occ.cccd.edu (%E2%80%8Bebender@occ.cccd.edu)

Geology Department Website (http://www.orangecoastcollege.edu/academics/divisions/math_science/geology/Pages/default.aspx)

- Earth Science, Associate in Science Degree (p. 247)
- Geology, Associate in Science Degree for Transfer (AS-T) (p. 248)

### Earth Science, Associate in Science Degree

Financial Aid Eligible  
Banner Code: 1_AS_ERTH  
Control Number: 36517

This Associate in Sciences Degree is designed to introduce the student to the multidisciplinary field of Earth Science. Students who complete this degree will be prepared for further study in Earth Science or related disciplines, for transfer to B.A./B.S. programs in Earth Science, or as preparation to teach Earth Science at a primary or secondary grade level. This degree requires a total of 24 units of which 16 units are in required courses. An additional 8 units must be chosen from the list of restricted electives. A student must be enrolled at the time of application for graduation. An additional 8 units must be chosen from the list of restricted electives. At least 12 of the units must be earned at OCC, with an advanced course from the program must be completed at OCC. A minimum of one course taken for a letter grade. The minimum grade required is 2.0 with a higher GPA. Consult with a counselor for more information.

### Program Outcomes

1. Students will be able to demonstrate an understanding of how the scientific method is used to explore topics in earth science and geology.
2. Students will be able to apply earth science/geology concepts to better understand current issues of environmental and/or geologic concern.
3. Students will be able to relate their course work to their everyday lives, providing additional relevance to the field of Geology.

### Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C"

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### Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. **Minimum of 60 CSU-transferable semester units.**
2. **Minimum GPA of at least 2.0 in all CSU transferable coursework.**  
   While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. **Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog.** All courses in the major must be completed with a grade of C or better.
4. **Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).**

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td><strong>Core Courses</strong></td>
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<tr>
<td>GEOG A180/A180H</td>
<td>Physical Geography</td>
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<td>GEOG A180L</td>
<td>Physical Geography Lab</td>
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<tr>
<td>GEOG A185</td>
<td>Cultural Geography</td>
<td>3</td>
</tr>
<tr>
<td><strong>List A</strong></td>
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<td></td>
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<tr>
<td>Select at least six units of the following (if not already used above):</td>
<td>6-8</td>
<td></td>
</tr>
<tr>
<td>GEOG A100/ A100H</td>
<td>World Regional Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG A130</td>
<td>Introduction to Weather &amp; Climate</td>
<td></td>
</tr>
<tr>
<td>GEOG A150</td>
<td>California Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG A190</td>
<td>Digital Mapping: Introduction to GIS</td>
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</tr>
<tr>
<td>GEOG A198</td>
<td>Regional Field Studies in Geography</td>
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<td>BIOL A100</td>
<td>Introduction to Biology</td>
<td></td>
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<tr>
<td>CHEM A180</td>
<td>General Chemistry A</td>
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<tr>
<td>CS A170</td>
<td>Java Programming 1</td>
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<td>GEOG A100/ A100H</td>
<td>World Regional Geography</td>
<td></td>
</tr>
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<td>Introduction to Weather &amp; Climate</td>
<td></td>
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<td>GEOG A150</td>
<td>California Geography</td>
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<tr>
<td>GEOG A190</td>
<td>Digital Mapping: Introduction to GIS</td>
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</tr>
<tr>
<td>GEOG A198</td>
<td>Regional Field Studies in Geography</td>
<td></td>
</tr>
<tr>
<td>GEOL A110</td>
<td>Physical Geology</td>
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</tr>
<tr>
<td>MATH A160</td>
<td>Introduction to Statistics</td>
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<td>MATH A180/ A180H</td>
<td>Calculus 1</td>
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<td>PSCI A180/A180H</td>
<td>American Government</td>
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**Program Major Units**  

| Program Major Units | 19-24 |
| CSU or IGETC for CSU | 37-39 |
| Transferable electives as needed to satisfy unit requirement | Varies |
| **Total Units** | 60 |
or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/math-science-engineering/geology/earth-science-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ASTR A100/A100H</td>
<td>Introduction to Astronomy</td>
<td>3</td>
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<td>ASTR A100L/A100M</td>
<td>Introduction to Astronomy Laboratory</td>
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<tr>
<td>GEOL A105/A105H</td>
<td>General Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A105L/A105M</td>
<td>General Geology Laboratory</td>
<td>1</td>
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<tr>
<td>GEOL A185/A185H</td>
<td>Evolution of the Earth</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A185L/A185M</td>
<td>Evolution of the Earth Lab</td>
<td>1</td>
</tr>
<tr>
<td>MRSC A100/A100H</td>
<td>Oceanography</td>
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</tr>
<tr>
<td>MRSC A100L/A100M</td>
<td>Oceanography Laboratory</td>
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Restricted Electives

Select at least eight units of the following: 8

<table>
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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ESEC A100</td>
<td>Introduction to Environmental Science</td>
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<tr>
<td>ESEC A210</td>
<td>Wetlands Ecology and Management</td>
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<td>GEOL A115</td>
<td>California Geology</td>
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<td>GEOL A131</td>
<td>Weather and Climate</td>
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</tr>
<tr>
<td>GEOL A132</td>
<td>Geologic Field Studies - Death Valley</td>
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<tr>
<td>GEOL A133</td>
<td>Geologic Field Studies - Colorado Plateau</td>
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</tr>
<tr>
<td>GEOL A134</td>
<td>Geologic Field Studies - Cascade Range</td>
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<tr>
<td>GEOL A135</td>
<td>Geology of the Natural Parks and Monuments</td>
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<tr>
<td>GEOL A136</td>
<td>Geologic Field Studies - San Andreas Fault</td>
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<td>GEOL A137</td>
<td>Introductory Field Geology</td>
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<tr>
<td>GEOL A138</td>
<td>Geologic Field Studies - Yosemite National Park</td>
<td></td>
</tr>
<tr>
<td>GEOL A139</td>
<td>Geologic Field Studies - Eastern Sierra Nevada</td>
<td></td>
</tr>
<tr>
<td>GEOL A141</td>
<td>Geologic Field Studies - Mojave Desert</td>
<td></td>
</tr>
<tr>
<td>GEOL A142</td>
<td>Geologic Field Studies - Hawaii Volcanology</td>
<td></td>
</tr>
<tr>
<td>GEOL A160</td>
<td>Environmental Geology</td>
<td></td>
</tr>
<tr>
<td>GEOL A165</td>
<td>Natural Disasters</td>
<td></td>
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<tr>
<td>GEOL A280</td>
<td>Introduction to Mineralogy</td>
<td></td>
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<tr>
<td>GEOL A285</td>
<td>Petrology</td>
<td></td>
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<tr>
<td>MRSC A185</td>
<td>Coastal Oceanography</td>
<td></td>
</tr>
<tr>
<td>MRSC A185L</td>
<td>Coastal Oceanography Lab</td>
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</table>

Program Major Units 24

| AS General Education Option 1, 2, or 3 | Varies |

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Transferable electives as needed to satisfy unit requirement</td>
<td>Varies</td>
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</tbody>
</table>

Total Units 60

---

Geology, Associate in Science Degree for Transfer (AS-T)

Financial Aid Eligible
Banner Code: 1_AST_GEOL
Control Number: 33569

Students graduating with an Associate in Science in Geology for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Geology AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate in Science in Geology for transfer Degree focuses on an understanding of internal processes responsible for the formation of the Earth from a scientific perspective. Students choosing this degree program will study a range of natural science concepts including plate tectonics, climate change, and the evolution of the dynamic planet Earth. This degree employs the scientific method to understand the formation of the Earth, including how volcanoes and mountain building events change the geography and ecosystems of the Earth. Students will explore geologic time as it relates to the origins, and evolution of life through the fossil record.

An understanding of the formation of economically important mineral and fossil fuel resources is an important aspect of the degree program. Portions of the course work will focus on the diverse California geologic setting and coastal development. Completion of the Associate in Science in Geology for transfer Degree will provide students with a well-rounded understanding of human impacts on the globe and the ways geologic hazards such as earthquakes, floods, and landslides impact human development.

The coursework prepares students to think critically and apply reasoning skills to analyze real world situations. It is strongly recommended that all geology majors take courses in physics and biology in addition to the degree requirements, but this cannot be included as a requirement due to unit limitations.

Program Outcomes

1. Apply the scientific method to solve geological problems.
2. Summarize geologic time, explain the geologic time scale and its scientific basis, recount the milestone events in Earth history, and understand the basics of common dating methods.
3. Express the role of the geology in everyday life, appreciate the extent of human impact on Earth systems and environments, and understand the processes that create natural hazards, and the strategies that minimize their impact on society.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.
Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferrable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

<table>
<thead>
<tr>
<th>Course</th>
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<th>Units</th>
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<tbody>
<tr>
<td>GEOL A110</td>
<td>Physical Geology</td>
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</tr>
<tr>
<td>GEOL A185</td>
<td>Evolution of the Earth</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A185L</td>
<td>Evolution of the Earth Lab</td>
<td>1</td>
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<tr>
<td>CHEM A180</td>
<td>General Chemistry A</td>
<td>5</td>
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<td>CHEM A185</td>
<td>General Chemistry B</td>
<td>5</td>
</tr>
<tr>
<td>MATH A180/A180H</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH A185/A185H</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
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Program Major Units 26

Total Units

Horticulture

- Advanced Landscape Design and Landscape Specialist, Certificate of Specialization (p. 249)
- Basic Landscape Design, Certificate of Specialization (p. 250)
- Horticulture, Associate in Science Degree (p. 250)
- Horticulture, Certificate of Achievement (p. 251)
- Intermediate Landscape Design and Landscape Specialist, Certificate of Specialization (p. 252)
- Landscape Site Design Elements, Certificate of Specialization (p. 253)
- Retrofitting California Urban Gardens, Certificate of Specialization (p. 253)
- The Professional Practice of a Landscape Design & Construction Business, Certificate of Specialization (p. 254)

Advanced Landscape Design and Landscape Specialist, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_ALSC

Successful work in landscape design requires a comprehensive, multidisciplinary education in aspects of horticulture, design, and more. Without requiring prior background, the Landscape Design Certificate program provides entry-level skills for those seeking employment in the landscaping field or continuing education for landscapers, florists/nursery growers, architects, contractors, and anyone interested in a broader range of knowledge in this area.

The courses enable you to develop aesthetic sensitivity and environmental awareness; a thorough knowledge of historical precedent, a definable and defensible design methodology, the technical knowledge and skills necessary to compete effectively for jobs, and a comprehensive portfolio.

Program Outcome

1. Solve landscape challenges through the design/build process.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HORT A109</td>
<td>Knowing Your Soils</td>
<td>3</td>
</tr>
<tr>
<td>HORT A181</td>
<td>Ornamental Trees</td>
<td>3</td>
</tr>
<tr>
<td>HORT A182</td>
<td>Ornamental Shrubs</td>
<td>3</td>
</tr>
<tr>
<td>HORT A284</td>
<td>Portfolio Development</td>
<td>1.5</td>
</tr>
<tr>
<td>HORT A288</td>
<td>Sprinkler Irrigation Systems Design</td>
<td>2</td>
</tr>
<tr>
<td>HORT A289</td>
<td>Installation of Residential Irrigation Systems</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units 13.5
Basic Landscape Design, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_BLSC

The Basic Landscape Horticulture certificate program is intended for those students who are limited by time constraints to a one-year program. Graduates with this certificate can find employment at the basic or entry level in grounds maintenance or as a park worker, gardener, or landscape designer.

Program Outcome

1. Communicate basic horticulture concepts to clients, contractors, and public agencies.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>HORT A111</td>
<td>Landscape Drafting Techniques</td>
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<tr>
<td>HORT A115</td>
<td>Landscape Graphics</td>
<td>3</td>
</tr>
<tr>
<td>HORT A285</td>
<td>Introduction to Landscape Design</td>
<td>3</td>
</tr>
<tr>
<td>HORT A287</td>
<td>Planting Design</td>
<td>2</td>
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<td><strong>Total Units</strong></td>
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</table>

Horticulture, Associate in Science Degree

Financial Aid Eligible

Banner Code: 1_AS_OH
Control Number: 03954

Upon completion of the Horticulture Program students will have the knowledge, skills and experience to work with plant material in multiple applications and multiple fields in the Landscaping and Nursery industries. Students will be qualified for careers in Landscape Design, Landscape Contracting, Landscape Maintenance, Arboriculture, Nursery practices, and Irrigation and Water Management.

Complete the Horticulture Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes

1. Use knowledge of various plant materials to better design and maintain an outdoor garden or landscape.

2. Describe man's relationship with plants for food and environmental enhancement.

3. Describe current sustainability issues in Southern California and how good horticultural practices will improve long term sustainability.

4. Use knowledge of a particular chosen plant, greenhouse systems and propagation practices to successfully produce a healthy crop by a target date.

5. Use knowledge of site conditions, drafting skills, client needs, and various plant and building materials to solve a design problem.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/math-science-engineering/horticulture/horticulture-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.
AS General Education Option 1, 2, or 3

Minimum Program Major Units

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<th>Requirement</th>
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<td>AS General Education Option 1, 2, or 3</td>
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**Course Title**

**Year 1**

**Fall**

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<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>BIOL A183 or HORT A105</td>
<td>Botany 1 or Botany for Gardeners</td>
<td>3</td>
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<tr>
<td>HORT A109</td>
<td>Knowing Your Soils</td>
<td>3</td>
</tr>
<tr>
<td>HORT A181</td>
<td>Ornamental Trees</td>
<td>3</td>
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**Spring**

<table>
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<tr>
<td>HORT A182</td>
<td>Ornamental Shrubs</td>
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**Year 2**

**Fall**

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<td>HORT A111</td>
<td>Landscape Drafting Techniques</td>
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<tr>
<td>HORT A151</td>
<td>Introduction to Tree Care</td>
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</tr>
<tr>
<td>HORT A170</td>
<td>Pest Control Applicators and Gardeners P.C.O. Certification</td>
<td></td>
</tr>
<tr>
<td>HORT A184</td>
<td>Greenhouse and Nursery Science</td>
<td></td>
</tr>
<tr>
<td>HORT A185</td>
<td>Plant Diseases</td>
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<tr>
<td>HORT A187</td>
<td>Interior Plantscaping</td>
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</tr>
<tr>
<td>HORT A200</td>
<td>Chronicles of Garden Design through the Ages 2</td>
<td></td>
</tr>
<tr>
<td>HORT A201</td>
<td>Business of Landscape Design and Construction</td>
<td></td>
</tr>
<tr>
<td>HORT A284</td>
<td>Portfolio Development 2</td>
<td></td>
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<tr>
<td>HORT A290</td>
<td>Low-Voltage Landscape Lighting</td>
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</tr>
<tr>
<td>HORT A285</td>
<td>Introduction to Landscape Design 2</td>
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<tr>
<td>HORT A297</td>
<td>Garden Pools, Fountains and Waterfalls in the Landscape</td>
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**Spring**

Select 12 units of the following:

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<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>HORT A115</td>
<td>Landscape Graphics</td>
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<tr>
<td>HORT A116</td>
<td>Digital Design</td>
<td></td>
</tr>
<tr>
<td>HORT A150</td>
<td>Landscape Maintenance</td>
<td></td>
</tr>
<tr>
<td>HORT A183</td>
<td>Plant Propagation</td>
<td></td>
</tr>
<tr>
<td>HORT A186</td>
<td>Pests of Ornamentals</td>
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</tr>
<tr>
<td>HORT A189</td>
<td>Weeds and Their Control</td>
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<tr>
<td>HORT A190</td>
<td>California Friendly Landscape</td>
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<tr>
<td>HORT A191</td>
<td>Cacti and Succulents</td>
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<tr>
<td>HORT A200</td>
<td>Chronicles of Garden Design through the Ages 2</td>
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<tr>
<td>HORT A230</td>
<td>Calculations for Horticulture and Landscape Professionals</td>
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<tr>
<td>HORT A284</td>
<td>Portfolio Development 2</td>
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</tr>
<tr>
<td>HORT A285</td>
<td>Introduction to Landscape Design 2</td>
<td></td>
</tr>
<tr>
<td>HORT A283</td>
<td>Therapeutic Gardens: Design for Healing Spaces</td>
<td></td>
</tr>
<tr>
<td>HORT A286</td>
<td>Landscape Design Elements</td>
<td></td>
</tr>
<tr>
<td>HORT A287</td>
<td>Planting Design</td>
<td></td>
</tr>
<tr>
<td>HORT A288</td>
<td>Sprinkler Irrigation Systems Design</td>
<td></td>
</tr>
<tr>
<td>HORT A289</td>
<td>Installation of Residential Irrigation Systems</td>
<td></td>
</tr>
<tr>
<td>Business Elective (any OCC Business course 100 or higher)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HORT A296</td>
<td>Grading and Drainage for Landscape Design</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units** 24

**Horticulture, Certificate of Achievement**

Financial Aid Eligible

Banner Code: 1_CN_OH

Control Number: 22368

Upon completion of the Horticulture Program students will have the knowledge, skills and experience to work with plant material in multiple applications and multiple fields in the Landscaping and Nursery industries. Students will be qualified for careers in Landscape Design, Landscape Contracting, Landscape Maintenance, Arboriculture, Nursery practices, and Irrigation and Water Management.

**Program Outcomes**

1. Use knowledge of various plant materials to better design and maintain an outdoor garden or landscape.
2. Describe man’s relationship with plants for food and environmental enhancement.
3. Describe current sustainability issues in Southern California and how good horticultural practices will improve long term sustainability.
4. Use knowledge of a particular chosen plant, greenhouse systems and propagation practices to successfully produce a healthy crop by a target date.
5. Use knowledge of site conditions, drafting skills, client needs, and various plant and building materials to solve a design problem.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of
Intermediate Landscape Design and Landscape Specialist, Certificate of Specialization

This program trains students to work in the field of landscape design/build. The curriculum provides studies in design, construction, history, basic horticulture, topics that help a student obtain employment in the field, and provide foundational training towards becoming licensed landscape contractors and related specialties.

Program Outcome

1. Solve landscape challenges through the design/build process that provides basic human comfort and livability, and meet client functional and financial needs.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate program must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

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Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT A105</td>
<td>Botany for Gardeners</td>
<td>3</td>
</tr>
<tr>
<td>HORT A116</td>
<td>Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>HORT A190</td>
<td>California Friendly Landscape</td>
<td>2</td>
</tr>
<tr>
<td>HORT A200</td>
<td>Chronicles of Garden Design through the Ages</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Transfer students should also take BIOL A183L Botany Lab.

2 HORT A200 Chronicles of Garden Design through the Ages, HORT A284 Portfolio Development, HORT A285 Introduction to Landscape Design taken in Fall term may not be repeated in Spring term.

Intermediate Landscape Design and Landscape Specialist, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_ILSC

This catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A183</td>
<td>Botany 1 or Botany for Gardeners</td>
<td>3</td>
</tr>
<tr>
<td>HORT A109</td>
<td>Knowing Your Soils</td>
<td>3</td>
</tr>
<tr>
<td>HORT A181</td>
<td>Ornamental Trees</td>
<td>3</td>
</tr>
<tr>
<td></td>
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<tr>
<td>HORT A182</td>
<td>Ornamental Shrub</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Units</td>
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</tr>
</tbody>
</table>

Year 2

Fall

Select 12 units of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT A111</td>
<td>Landscape Drafting Techniques</td>
<td>12</td>
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<tr>
<td>HORT A151</td>
<td>Introduction to Tree Care</td>
<td></td>
</tr>
<tr>
<td>HORT A170</td>
<td>Pest Control Applicators and Gardeners P.C.O. Certification</td>
<td></td>
</tr>
<tr>
<td>HORT A184</td>
<td>Greenhouse and Nursery Science</td>
<td></td>
</tr>
<tr>
<td>HORT A185</td>
<td>Plant Diseases</td>
<td></td>
</tr>
<tr>
<td>HORT A187</td>
<td>Interior Plantscaping</td>
<td></td>
</tr>
<tr>
<td>HORT A200</td>
<td>Chronicles of Garden Design through the Ages 2</td>
<td></td>
</tr>
<tr>
<td>HORT A231</td>
<td>Business of Landscape Design and Construction</td>
<td></td>
</tr>
<tr>
<td>HORT A284</td>
<td>Portfolio Development 2</td>
<td></td>
</tr>
<tr>
<td>HORT A290</td>
<td>Low-Voltage Landscape Lighting</td>
<td></td>
</tr>
<tr>
<td>HORT A285</td>
<td>Introduction to Landscape Design 2</td>
<td></td>
</tr>
<tr>
<td>HORT A297</td>
<td>Garden Pools, Fountains and Waterfalls in the Landscape</td>
<td></td>
</tr>
</tbody>
</table>

Spring

Select 12 units of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HORT A115</td>
<td>Landscape Graphics</td>
<td></td>
</tr>
<tr>
<td>HORT A116</td>
<td>Digital Design</td>
<td></td>
</tr>
<tr>
<td>HORT A150</td>
<td>Landscape Maintenance</td>
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</tr>
<tr>
<td>HORT A183</td>
<td>Plant Propagation</td>
<td></td>
</tr>
<tr>
<td>HORT A186</td>
<td>Pests of Ornamentals</td>
<td></td>
</tr>
<tr>
<td>HORT A189</td>
<td>Weeds and Their Control</td>
<td></td>
</tr>
<tr>
<td>HORT A190</td>
<td>California Friendly Landscape</td>
<td></td>
</tr>
<tr>
<td>HORT A191</td>
<td>Cacti and Succulents</td>
<td></td>
</tr>
<tr>
<td>HORT A200</td>
<td>Chronicles of Garden Design through the Ages 2</td>
<td></td>
</tr>
<tr>
<td>HORT A230</td>
<td>Calculations for Horticulture and Landscape Professionals</td>
<td></td>
</tr>
<tr>
<td>HORT A284</td>
<td>Portfolio Development 2</td>
<td></td>
</tr>
<tr>
<td>HORT A285</td>
<td>Introduction to Landscape Design 2</td>
<td></td>
</tr>
<tr>
<td>HORT A283</td>
<td>Therapeutic Gardens: Design for Healing Spaces</td>
<td></td>
</tr>
<tr>
<td>HORT A286</td>
<td>Landscape Design Elements</td>
<td></td>
</tr>
<tr>
<td>HORT A287</td>
<td>Planting Design</td>
<td></td>
</tr>
<tr>
<td>HORT A288</td>
<td>Sprinkler Irrigation Systems Design</td>
<td></td>
</tr>
<tr>
<td>HORT A289</td>
<td>Installation of Residential Irrigation Systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Business Elective(any OCC Business course 100 or higher)</td>
<td></td>
</tr>
<tr>
<td>HORT A296</td>
<td>Grading and Drainage for Landscape Design</td>
<td></td>
</tr>
</tbody>
</table>

Total Units 24

1 Transfer students should also take BIOL A183L Botany Lab.

2 HORT A200 Chronicles of Garden Design through the Ages, HORT A284 Portfolio Development, HORT A285 Introduction to Landscape Design taken in Fall term may not be repeated in Spring term.
Landscape Site Design Elements, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_LSCP

This program will prepare students for the complex task of developing residential landscapes with grading, drainage, materials, structures, lighting and other complex components that require a deeper knowledge base.

Program Outcome
1. Students will be able to demonstrate fundamental skills in landscape design elements, process and techniques.
2. Apply their understanding of sustainable aspects to the development of landscape site design to promote green living environments.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT A286</td>
<td>Landscape Design Elements</td>
<td>2</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

Retrofitting California Urban Gardens, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_RCUG

The Retrofitting California Urban Gardens Certificate of Specialization is designed to provide formal training for individuals interested in transforming the landscape into a water-wise sustainable garden. This program provides students with entry-level working knowledge of the skills and resources they will need to design various sustainable landscapes upon completion of the certificate.

Program Outcome
1. Students will demonstrate areas of critical thinking, design, and visual communication for entry-level employment as a landscape/garden designer that will have a strong background in sustainability as well as the ability to pursue industry certifications.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT A192</td>
<td>Urban Container Planting</td>
<td>1</td>
</tr>
<tr>
<td>HORT A286</td>
<td>Landscape Design Elements</td>
<td>2</td>
</tr>
<tr>
<td>HORT A290</td>
<td>Low-Voltage Landscape Lighting</td>
<td>1.5</td>
</tr>
<tr>
<td>HORT A296</td>
<td>Grading and Drainage for Landscape Design</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>9.5</td>
</tr>
</tbody>
</table>

Orange Coast College 2020-2021 Catalog 253
The Professional Practice of a Landscape Design & Construction Business, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_LDSN

Prepares students for self-employment and work within small businesses in the landscape industry. Builds on their industry education in landscape design and construction. Expands their education in entrepreneurship and small business management. Contributes to the student's financial independence, career success, and the world's economy. Prepares them to work for others and after passing the state contractor's examination, to own their own landscape construction business. The program is aligned with the California State License Board and completion of this program will help prepare students for the state exam.

Program Outcomes
1. Certificate students will be able to understand the theory and practice of managing a landscape business, including knowledge of legalities, finance, operations, planning, safety, estimating, bidding, decision making and the application leadership and managerial skills in various organizational environments.
2. Certificate students will be able to develop and implement a business plan by conducting research in the appropriate specialty area and identify the target market, competition, industry standards, and financial projections.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT A285</td>
<td>Introduction to Landscape Design</td>
<td>3</td>
</tr>
<tr>
<td>HORT A286</td>
<td>Installation of Residential Irrigation Systems</td>
<td>1</td>
</tr>
<tr>
<td>HORT A287</td>
<td>Sprinkler Irrigation Systems Design</td>
<td>2</td>
</tr>
<tr>
<td>HORT A288</td>
<td>Cacti and Succulents</td>
<td>1.5</td>
</tr>
<tr>
<td>BUS A240</td>
<td>Calculations for Horticulture and Landscape Professionals</td>
<td>2</td>
</tr>
<tr>
<td>HORT A231</td>
<td>Business of Landscape Design and Construction</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Units: 10.5

Marine Science

While at O.C.C. Marine Science majors have the opportunity to explore this fascinating career area and test their sea legs. Students will trawl the ocean bed, take bottom samples with oceanic probes, collect water samples for analysis, interpret oceanic weather information, learn how to care for marine organisms, and learn the fundamentals of marine navigation. The future beckons!

Karen Baker
kbaker@occ.cccd.edu (%E2%80%8Bkbaker@occ.cccd.edu)

Marine Science Department Website (http://www.orangecoastcollege.edu/academics/divisions/math_science/marine_science/Pages/default.aspx)

- Aquarium Science, Certificate of Achievement (p. 254)
- Marine Science, Associate in Science Degree (p. 255)

Aquarium Science, Certificate of Achievement

Not Financial Aid Eligible
Banner Code: 1_CM_AQUA
Control Number: 37713

Aquarium Science is an applied, interdisciplinary science that combines aspects of animal husbandry, community ecology, water chemistry, system design and construction, critical thinking, problem-solving, and group management. This certificate is designed to prepare students interested in gaining experience with aquarium systems and living organism care for a variety of potential future goals. These goals may include working for zoo and aquarium facilities, local aquarium retailers, wholesale supply companies, private maintenance companies, as part of a hands-on experience for an advanced degree in Marine Sciences, organizations/agencies working on water filtration and water quality, stock restoration and conservation projects, research involving keeping aquatic living organisms, and/or the recreational hobby of aquarium-keeping. Students will gain a wide variety of hands-on experience in a
number of different skills working in one of the largest and most diverse student-run aquariums in the region.

Program Outcomes
1. Describe how a properly designed aquarium environment (habitat, water parameters, filtration components, and microbial populations) influences the health of aquatic organisms.
2. Identify commonly kept aquatic organisms and explain what critical aspects of their anatomy, physiology and life history a well-trained aquarist must know to be successful with their growth and potential reproduction.
3. Demonstrate the ability to design, set-up, operate, maintain and trouble-shoot aquarium life support equipment including biological filtration, mechanical filtration, chemical filtration, centrifugal pumps, and quarantine life support systems.
4. Demonstrate the ability to manage aquarium facilities including preparation of equipment and supply ordering lists, proper documentation, and restocking of facility.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
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Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>MRSC A21</td>
<td>Practical Experience in Aquarium Science</td>
<td>1</td>
</tr>
<tr>
<td>MRSC A120</td>
<td>Marine Aquarium Science</td>
<td>1</td>
</tr>
<tr>
<td>MRSC A130</td>
<td>Husbandry of Aquatic Organisms</td>
<td>1</td>
</tr>
<tr>
<td>MRSC A140</td>
<td>Aquarium Life Support Operation and Maintenance</td>
<td>1</td>
</tr>
<tr>
<td>MRSC A180</td>
<td>Marine Biology</td>
<td>3</td>
</tr>
<tr>
<td>MRSC A180L</td>
<td>Marine Biology Lab</td>
<td>1</td>
</tr>
<tr>
<td>MRSC A220</td>
<td>Practical Experience in Aquarium Science and Management</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units 9

Marine Science, Associate in Science Degree
Financial Aid Eligible
Banner Code: 1_AS_MRSC
Control Number: 36732

Upon completion of the requirements for the Associate in Science Degree in Marine Science, students will have a broad introduction to the academic study of marine science and will have a strong background for upper division work in marine science or related fields, such as earth and environmental sciences.

The Marine Science major requires completion of a minimum of 18 program major units, 11 of which are required core units. The additional 7 units must be taken from additional marine science courses and a list of restricted related electives. The department strongly recommends that all declared Marine Science majors work with counseling to select electives that will best prepare them for their intended transfer institution.

Program Outcomes
1. Describe how the ocean influences and is influenced by terrestrial, atmospheric, geological and biological processes.
2. Describe how the physical and chemical properties of water molecules affect the way that the ocean is structured and how the large scale movement of this water in waves, currents and tides influences oceanographic processes.
3. Describe the diversity of life in the ocean.
4. Identify how humans have influenced the ocean (chemically, physically and biologically) and explain the potential challenges associated with those changes.

Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/math-science-engineering/marine-science/marine-science-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Course | Title | Units
--- | --- | ---
**Required Courses**

**Core Courses**
MRSC A100/A100H | Oceanography | 3
MRSC A100L/A100M | Oceanography Laboratory | 1
MRSC A180 | Marine Biology | 3
MRSC A180L | Marine Biology Lab | 1
MRSC A185 | Coastal Oceanography | 3

**Marine Science Restricted Electives**
Select at least three units of the following: 3
- ESEC/MRSC A121 | Marine Intertidal Ecology |
- ESEC/MRSC A124 | Ecology of the Gray Whale |
- MRSC A120 | Marine Aquarium Science |
- MRSC A130 | Husbandry of Aquatic Organisms |
- MRSC A140 | Aquarium Life Support Operation and Maintenance |
- MRSC A185L | Coastal Oceanography Lab |
- MRSC A187 | Marine Mammals |
- MRSC A188 | Marine Mammal Field Studies |
- MRSC A220 | Practical Experience in Aquarium Science and Management 1 |
- MRSC A221 | Practical Experience in Aquarium Science and Management 2 |
- MRSC A222 | Practical Experience in Aquarium Science and Management 3 |
- MRSC A223 | Practical Experience in Aquarium Science and Management 4 |
- MRSC A291/A291H | Directed Studies (as approved by the Marine Science department) |
- MRSC A292/A292H | Directed Studies (as approved by the Marine Science department) |

**Related Fields Restricted Electives**
Select at least four units of the following: 4
- ASTR A101 | Planetary Astronomy |
- BIOL A180 | Introduction to Biology for Majors 1: Cell and Molecular Biology |
- BIOL A182 & A182L | Zoology and Zoology Lab |
- BIOL A185 | Introduction to Biology for Majors 2: Ecology, Evolution, Diversity, and Physiology |
- BIOL A210 | General Microbiology |
- BIOL A280 | Evolutionary Ecology |
- BIOL A281 | Biochemistry |
- BIOL A282 | Molecular Biology |
- BIOL A283 | Genetics |

**Mathematics**

The Mathematics department of Orange Coast College is a leader in community college mathematics education, and features a diverse curriculum, innovative classes, outstanding faculty, a highly respected honors program, and a high rate of university transfer and success.

Doug Lloyd
dlloyd@occ.cccd.edu (%E2%80%8Bdlloyd@occ.cccd.edu)

Mathematics Program Website (http://www.orangecoastcollege.edu/academics/divisions/math_science/mathematics/Pages/default.aspx)
- Mathematics, Associate in Science Degree for Transfer (AS-T) (p. 256)

**Mathematics, Associate in Science Degree for Transfer (AS-T)**

Financial Aid Eligible
Banner Code: 1_AST_MATH
Control Number: 32235

Students graduating with an Associate in Science in Mathematics for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Mathematics AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

**Program Outcomes**

1. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

**Associate Degree for Transfer Requirements**

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

### Course Title Units

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<td>MATH A185</td>
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<td>MATH A280</td>
<td>Calculus 3</td>
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<td>Calculus 3 Honors</td>
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<td>MATH A235</td>
<td>Applied Linear Algebra</td>
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<td>or MATH A285</td>
<td>Introduction to Linear Algebra and Differential Equations</td>
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<td>or MATH A285H</td>
<td>Introduction to Linear Algebra and Differential Equations Honors</td>
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<td><strong>List B</strong></td>
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<tr>
<td>CS A150</td>
<td>C++ Programming Language 1</td>
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<td>CS A170</td>
<td>Java Programming 1</td>
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<td>MATH A160</td>
<td>Introduction to Statistics</td>
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<td>MATH A230</td>
<td>Introduction to Discrete Mathematics</td>
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<td>PHYS A185</td>
<td>Calculus Based Physics: Mechanics</td>
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</tr>
<tr>
<td>or PHYS A185H</td>
<td>Calculus-Based Physics: Mechanics Honors</td>
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</table>

**Natural Science, Associate in Science Degree**

Financial Aid Eligible
Banner Code: 1_AS_NS
Control Number: 14412

Complete eighteen (18) units from the following and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan must be developed with a counselor and placed on file prior to petitioning for graduation.

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/math-science-engineering/natural-science/natural-science-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

<table>
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<tr>
<th>Course</th>
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<td>Astronomy</td>
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<td>Biology</td>
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<td>Chemistry</td>
<td></td>
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<td>Environmental Science and Ecology</td>
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<tr>
<td>Geology</td>
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<td>Marine Science</td>
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<td>Natural Science</td>
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<tr>
<td>Physics</td>
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<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Natural Science**

- Natural Science, Associate in Science Degree (p. 257)
The following is required for all AA-T or AS-T degrees:

### Program Outcomes

1. Identify and describe major concepts and theoretical principles as applied to physics.
2. Apply appropriate physical laws and mathematical techniques to analyze various physical situations.
3. Perform various scientific experiments and to analyze data to check agreement with theoretical predictions.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

### Social Science and Humanities

- Anthropology (p. 259)
- Dance (p. 261)
- Economics (p. 264)
- English (p. 265)
- Foreign Languages (p. 267)
- Geography (p. 269)
- Global Studies (p. 271)
- History (p. 272)
- Philosophy (p. 273)
- Political Science (p. 274)
- Psychology (p. 274)
- Religious Studies (p. 275)
- Sociology (p. 276)

### Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.

3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.

4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

### course and requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transferable electives to satisfy unit requirement</td>
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<td>Total Degree Units</td>
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Anthropology

Anthropology offers students an opportunity to learn about and gain an appreciation for past and present human cultural and biological variation. Completion of the AAT or AA degree requirements allows for the exploration of the four subfields of Anthropology, participation in specialty courses for a deeper understanding, and to select general education courses that provide a strong foundation for transfer to four-year degree programs.

Department Contact Information

Ulrike Green
green@occc.ccdd.edu

Meredith Montagne
mmontagne1@occc.ccdd.edu

Anthropology Department Website (http://www.orangecoastcollege.edu/academics/divisions/social_behavioral/anthropology/Pages/default.aspx)

- Anthropology, Associate in Arts Degree (p. 259)
- Anthropology, Associate in Arts Degree for Transfer (AA-T) (p. 260)

Anthropology, Associate in Arts Degree

Financial Aid Eligible
Banner Code: 1_AA_ANTH
Control Number: 04032

The Anthropology Program is a comprehensive program with opportunities to experience all four of the primary fields of research within the discipline. Our objective is to apply theory and offer hands-on experience to enable the student to gain a broad perspective of the diversity of interests that can be acquired by pursuing a degree in Anthropology.

Program Outcome

1. Gain an understanding of and an appreciation for human diversity across time and space.

Associate in Arts Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/social-science-humanities/anthropology/anthropology-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>Core Courses</td>
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<tr>
<td>ANTH A100</td>
<td>Cultural Anthropology</td>
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<tr>
<td>or ANTH A100H</td>
<td>Cultural Anthropology Honors</td>
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<tr>
<td>ANTH A185</td>
<td>Physical Anthropology</td>
<td>3</td>
</tr>
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<td>or ANTH A185H</td>
<td>Physical Anthropology Honors</td>
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<tr>
<td>ANTH A185L</td>
<td>Phys Anthro Lab</td>
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</table>
While a minimum of 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

**Program Outcomes**

1. Gain an understanding of and an appreciation for human diversity across time and space.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

**Associate in Arts Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC.
   A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

   - **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

   - **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

   - **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/social-science-humanities/anthropology/anthropology-associate-arts-degree-transfer-aat/orange-coast/general-education-patterns/associate-science-general-education-patterns/option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


   **Transferable electives as needed to satisfy unit requirement**

**Anthropology, Associate in Arts Degree for Transfer (AA-T)**

<table>
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<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>ANTH A280</td>
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**Restricted Electives**

Select a minimum of nine units of the following: 9

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<th>Course</th>
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<tr>
<td>ANTH A102</td>
<td>Native American</td>
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<tr>
<td>ANTH A105</td>
<td>Anthropology of Nonverbal Behavior</td>
<td></td>
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<tr>
<td>ANTH A187</td>
<td>Introduction to Primate Studies</td>
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<tr>
<td>ANTH A190</td>
<td>Introduction to Linguistic Anthropology</td>
<td></td>
</tr>
<tr>
<td>ANTH A220</td>
<td>Magic, Witchcraft, and Religion</td>
<td></td>
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<tr>
<td>ANTH A285</td>
<td>World Ethnology</td>
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<td>GEOG A100</td>
<td>World Regional Geography</td>
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<td>GEOG A180</td>
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<td>HIST A180</td>
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<td>HIST A185</td>
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<td>HIST A185H</td>
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<td>HMDV A180</td>
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<td>PSYC A130</td>
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<td>SOC A100</td>
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**Minimum Program Major Units**

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**AA General Education Option 1, 2, or 3**

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**Transferable electives as needed to satisfy unit requirement**

<table>
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<th>Units</th>
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<tbody>
<tr>
<td>Varies</td>
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**Total Units**

60

**Anthropology, Associate in Arts Degree for Transfer (AA-T)**

Financial Aid Eligible

Banner Code: 1_AAT_ANTH

Control Number: 32488

Students graduating with an Associate in Arts in Anthropology for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Anthropology AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

**Associate Degree for Transfer Requirements**

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework.
   While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.

4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td><strong>Core Courses</strong></td>
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<tr>
<td>ANTH A100</td>
<td>Cultural Anthropology</td>
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<td>or ANTH A100H</td>
<td>Cultural Anthropology Honors</td>
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<td>ANTH A185</td>
<td>Physical Anthropology</td>
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<td>ANTH A280</td>
<td>Introduction to Archaeology</td>
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<td><strong>Core Courses Subtotal</strong></td>
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<td><strong>List A</strong></td>
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<tr>
<td>Select three to five units of the following:</td>
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<td>ANTH A185L</td>
<td>Phys Anthropology Lab</td>
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<td>ANTH A190</td>
<td>Introduction to Linguistic Anthropology</td>
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<td>MATH A160</td>
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<td>Statistics for the Behavioral Sciences</td>
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<td><strong>List B</strong></td>
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<td>BIOL A220</td>
<td>Human Anatomy</td>
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<td>GEOG A190</td>
<td>Digital Mapping: Introduction to GIS</td>
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<td>GEOL A105 &amp; A105L</td>
<td>General Geology and General Geology Laboratory</td>
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<td>General Geology Honors and General Geology Laboratory Honors</td>
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<td>GEOL A185 &amp; A185L</td>
<td>Evolution of the Earth and Evolution of the Earth Lab</td>
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<td>or PSYC A280</td>
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<tr>
<td>ANTH A102</td>
<td>Native American</td>
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<td>Anthropology of Nonverbal Behavior</td>
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<td>ANTH A187</td>
<td>Introduction to Primate Studies</td>
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<td>ANTH A220</td>
<td>Magic, Witchcraft, and Religion</td>
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<td>ANTH A285</td>
<td>World Ethnology</td>
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<td>CMST A155</td>
<td>Intercultural Communications</td>
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<td>GEOG A185</td>
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<td>HIST A150</td>
<td>Ethnic Groups of the United States: Their Histories</td>
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<tr>
<td>SOC A100 &amp; SOC A100H</td>
<td>Introduction to Sociology and Introduction to Sociology Honors</td>
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</tbody>
</table>

**Program Major Units** 18-22
**CSU or IGETC for CSU** 37-39
**Transferable electives as needed to satisfy unit requirement** Varies
**Total Degree Units** 60

---

1. Or any course not taken from List A.
2. Lecture and applicable lab course must both be taken to fulfill area credit.
3. Or any course not taken from List A or B.

**Dance**

The OCC Dance Department provides a foundation in the theory, technique, and aesthetics of the art of dance. Faculty guide those seeking to become professional, and the recreational dancer, to master strength, flexibility, and musicality within a particular dance form while also developing insight, perception, understanding, and evaluative skills. Students explore their own creative potential and have opportunities to perform in the Robert B. Moore Theatre.

Courses are available in Modern Dance, Ballet, Jazz, Contemporary, Tap, Pilates, Conditioning, World Dance (African, Flamenco, Spanish, East Indian, Middle Eastern and Polynesian), music, methodology and choreography. Transfer arrangements have been articulated with CSULB, UCI, UCLA, CSUF, and Cornish School of the Arts.

We offer an Associate in Arts Degree in Dance and three certificates of achievement: Dance Instructor, Pilates Instructor, and World Dance Instructor. These unique vocational programs prepare students for a variety of job opportunities.

**Department Contact Information**

Rachel Berman  
rberman3@occ.cccd.edu

Jose Costas  
jcostas@occ.cccd.edu

Dance department website (http://www.orangecoastcollege.edu/academics/divisions/visual_arts/Dance/Pages/default.aspx)

- World Dance Instructor, Associate in Arts Degree (p. 261)
- World Dance Instructor, Certificate of Achievement (p. 263)

**World Dance Instructor, Associate in Arts Degree**

Financial Aid Eligible  
Banner Code: 1_AA_DNWD  
Control Number: 08647

The Dance certificate program trains students for positions in the commercial and artistic areas of dance. Graduates of the program would be qualified as instructors in private studios, recreation or other community dance programs, and act as consultants, lecturers, or performers with an emphasis on the world dance forms, primarily Mid-Eastern, Flamenco, Spanish Classical, East Indian, or African. The Dance Department also recommends that students complete their General Education Requirements for an Associate Degree.

Students are able to apply principles of movement and creativity to all forms of dance, demonstrate skills of instructing dance to communicate through movement and words, and apply information learned in other disciplines to the art form of dance.

Instruction will utilize both classroom work, using a variety of instructional methods (lecture, lab/demonstration, independent and
group projects) and internship experiences in business/industry to prepare the student for job requirements.

Complete the World Dance Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

**Program Outcomes**

1. Successfully teach and perform in one or more of the following styles: African, American Social Dance, Classical Indian, Flamenco, Folklorico, Latin Dance Styles, Middle Eastern or Polynesian.

2. Communicate how to dance through movement demonstration and verbal cueing using appropriate dance terminology.

**Associate in Arts Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/social-science-humanities/dance/world-dance-associate-arts-degree/orangecost/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

5. **GLOBAL AND MULTICULTURAL REQUIREMENT** (Required for AA degree only) Some of the courses listed in this requirement can also be used to meet General Education Requirements. Courses that are repeatable for credit can only be used once in this area.

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**Course**

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<td>DANC A116</td>
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<td>DANC A138</td>
<td>African Dance and Drumming I</td>
<td>0.5-2</td>
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<td>African Dance and Drumming II</td>
<td>1</td>
</tr>
<tr>
<td>DANC A135</td>
<td>Flamenco Dance 1</td>
<td>0.5-2</td>
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<td>Flamenco Dance 2</td>
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<td>DANC A170</td>
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<td>DANC A205</td>
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<td>DANC A210</td>
<td>Dance Methodology</td>
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<tr>
<td>DANC A218</td>
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<td>DANC A219</td>
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<td>ANTH A100</td>
<td>Cultural Anthropology</td>
<td>3</td>
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<tr>
<td></td>
<td>or RLST A110*, World Religion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or DANC A230, World Dance and Culture</td>
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Select the pair

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<td>or DANC A203</td>
<td>and Repertoire I</td>
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<td>&amp; Performing Dance Ensemble I</td>
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Select one course

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<tr>
<td>DANC A233</td>
<td>Performing Dance Ensemble III</td>
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</tr>
<tr>
<td>DANC A263</td>
<td>Performing Dance Ensemble IV</td>
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Subtotal: 23-35

**Restricted Electives**

Select from the following

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<th>Units</th>
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<tbody>
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<td>DANC A248</td>
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<td>&amp; DANC A264</td>
<td>and Mid-Eastern Dance 4</td>
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<td>DANC A247</td>
<td>Flamenco Dance 3</td>
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<tr>
<td>&amp; DANC A267</td>
<td>and Flamenco Dance 4</td>
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<tr>
<td>DANC A165</td>
<td>Latin Dance Styles III</td>
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<tr>
<td>DANC A168</td>
<td>African Dance and Drumming III</td>
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Select four (4) units from at least two (2) different dance styles

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<td>Classical Danc of India</td>
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<td>DANC A142</td>
<td>Folk Dance</td>
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<tr>
<td>DANC A110</td>
<td>Ballet 1</td>
<td></td>
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<tr>
<td>DANC A111</td>
<td>Ballet 2</td>
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<tr>
<td>DANC A144</td>
<td>Ballet III</td>
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<td>DANC A125</td>
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<td>DANC A126</td>
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<td>DANC A102</td>
<td>Modern 2</td>
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<td>DANC A145</td>
<td>Modern Dance III</td>
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<tr>
<td>DANC A120</td>
<td>Jazz Dance 1</td>
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</table>
World Dance Instructor, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_DNWD
Control Number: 18205

The Dance certificate program trains students for positions in the commercial and artistic areas of dance. Graduates of the program would be qualified as instructors in private studios, recreation or other community dance programs, and act as consultants, lecturers, or performers with an emphasis on the ethnic dance forms, primarily Mid-Eastern, Flamenco, Spanish Classical, East Indian, or African (Nigeria/Ghana).

Students are able to apply principles of movement and creativity to all forms of dance, demonstrate skills of instructing dance to communicate through movement and words, and apply information learned in other disciplines to the art form of dance.

Instruction will utilize both classroom work, using a variety of instructional methods (lecture, lab/demonstration, independent and group projects) and internship experiences in business/industry to prepare the student for job requirements.

Program Outcomes
1. Successfully teach and perform in one or more of the following styles: African, American Social Dance, Classical Indian, Flamenco, Folklorico, Latin Dance Styles, Middle Eastern or Polynesian.
2. Communicate how to dance through movement demonstration and verbal cueing using appropriate dance terminology.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<thead>
<tr>
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<td>DANC A154</td>
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<td>Transferable electives to satisfy unit requirement</td>
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Select four (4) units from at least two (2) different dance styles

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<td>DANC A148</td>
<td>Mid-Eastern Dance 2</td>
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<td>DANC A116</td>
<td>Latin Dance Styles I</td>
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<td>DANC A155</td>
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<td>DANC A138</td>
<td>African Dance and Drumming I</td>
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<td>DANC A147</td>
<td>Flamenco Dance 2</td>
<td>1-2</td>
</tr>
<tr>
<td>DANC A156</td>
<td>Polynesian Dance</td>
<td>1</td>
</tr>
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<td>DANC A170</td>
<td>Music for Dancers</td>
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<td>DANC A205</td>
<td>Dance as a Profession Seminar</td>
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<td>DANC A210</td>
<td>Dance Methodology</td>
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<td>DANC A218</td>
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<td>DANC A219</td>
<td>World Dance Internship II</td>
<td>1</td>
</tr>
<tr>
<td>ANTH A100</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>or RLST A110</td>
<td>World Religion</td>
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<tr>
<td>or DANC A230</td>
<td>World Dance and Culture</td>
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</tr>
<tr>
<td>Select the pair</td>
<td>2-4</td>
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<tr>
<td>DANC A201</td>
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<td>&amp; DANC A211</td>
<td>and Repertoire I</td>
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</tr>
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<td>or DANC A203</td>
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<td>DANC A263</td>
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Restricted Electives

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<td>and Mid-Eastern Dance 4</td>
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<td>DANC A247</td>
<td>Flamenco Dance 3</td>
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<td>&amp; DANC A267</td>
<td>and Flamenco Dance 4</td>
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<td>DANC A165</td>
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<td>DANC A168</td>
<td>African Dance and Drumming III</td>
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Select four (4) units from at least two (2) different dance styles

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<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
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<tr>
<td>DANC A165</td>
<td>Latin Dance Styles III</td>
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<tr>
<td>DANC A133</td>
<td>Intro To World Dance</td>
<td></td>
</tr>
<tr>
<td>DANC A137</td>
<td>Classical Danc of India</td>
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</tr>
</tbody>
</table>
The primary mission of the economics department is to provide a transfer education curriculum in economics for students majoring in business, social sciences, and other fields. Additionally, classes provide students a chance to explore the basic principles, thought, problems, and history of the American and international economies. The economics curriculum increases consumer skills and the awareness of individuals regarding consumer problems in the economy.

Students who study and major in economics often go on to pursue careers in finance, banking, consulting, and business. In addition, economics students often find careers in the public sector in various government agencies.

Department Contact Information

Daniel Kuo
dkuo@occ.cccd.edu

Jennifer Savage
jmsavage@occ.cccd.edu

Economics Department Website (http://www.orangecoastcollege.edu/academics/divisions/social_behavioral/economics/Pages/default.aspx)

- Economics, Associate in Arts Degree for Transfer (p. 264)

### Economics, Associate in Arts Degree for Transfer

Financial Aid Eligible
Banner Code: 1_AAT_ECON
Control Number: 33283

Students graduating with an Associate in Arts in Economics for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Economics AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate Arts in Economics for Transfer (AA-T) focuses on fundamental principles and models in both microeconomics and macroeconomics. In Microeconomics, students examine the nature of optimal producer and consumer decisions, the structure of markets, and the application of optimal decision making to classic problems in microeconomics. This may include tax incidence, market failures, international trade, price controls, and market efficiency. In Macroeconomics, students examine economic concepts and principles as applied to markets, national income, unemployment, inflation, economic growth, fiscal and monetary policy, banking, the Federal Reserve System, and international economics. Additionally, students who choose the Associate in Arts in Economics for Transfer (AA-T) degree become literate in the language of economics: calculus and statistics. Crucial concepts of differentiation, integration, optimization, probability, and statistical inference are learned. These mathematical tools serve as the foundation for upper division economic analysis.

### Program Outcomes

1. Explain the concepts of scarcity, opportunity cost, rational behavior, and economic efficiency.
2. Use economic models to evaluate situations in the micro and macro economy, to evaluate government policies, and to explain the responses of consumers and producers to changes in market conditions.
3. Develop the foundational skills in quantitative and computing methods to be eligible for admission (SB 1440 and Education Code 66746) to California State University system schools with similar degrees.

### Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth – Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC – Option 3 (p. 17)).

### Course Required Courses

<table>
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<td>ECON A170</td>
<td>Microeconomics</td>
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<td>ECON A175</td>
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<td>MATH A160</td>
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<tr>
<td>or PSYC A160</td>
<td>Statistics for the Behavioral Sciences</td>
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</table>
opportunities in: while also preparing students for a variety of post-graduate and career
transfer-level study of literature and culture, rhetoric, and creative writing
communication. The English major thereby serves as a foundation for
rigorous analysis and interpretation, and clear and convincing written
expression. By exposing you to the many ways people have written
gender, sexuality, and more; the intricacies of storytelling and creative
contexts and narratives that produce our understandings of race,
intersection of language and power; the historical, political, and cultural
Students interested in imaginative forms like literature and film; the
intersection of language and power; the historical, political, and cultural
contexts and narratives that produce our understandings of race, gender, sexuality, and more; the intricacies of storytelling and creative
expression; and the craft of argumentation will find an intellectual
home in the English major. To study English is to achieve freedom of
expression. By exposing you to the many ways people have written and
talked, the English major can free you to read and write and think
beyond what is normally asked of you. Inviting students to read across
genders, and even itself; stories of racial, ethnic, and cultural
authenticity; and the ways in which narratives shape and are shaped by
the world around us. By exploring the multiple perspectives and
traditions represented in British, American, and Anglophone literature
and cultural production, theoretical perspectives, all courses within the major introduce students
to the past and present, engaging them with the
relevance of literary analysis and interpretation in contemporary
society. As a result, students will gain a deeper understanding of the
human experience across time and place, and develop the critical
thinking skills necessary for success in a variety of fields.

## English, Associate in Arts Degree

### Program Outcomes

1. Students will analyze, evaluate, and create their own fiction and/or non-fiction texts.
2. Students will critically analyze and compare literature from various cultures demonstrating an understanding of how life functions in the literary, social, and moral worlds.

### Associate in Arts Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "Pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/social-science-humanities/english/english-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement.

See the General Education Patterns section of this catalog for more information.

### Course Selections

**Required Core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A101/A101H</td>
<td>Critical Reasoning: Fiction</td>
<td>4</td>
</tr>
</tbody>
</table>

Select two of the following: 6 units

- ENGL A150/A150H  American Literature Before the 20th Century
- ENGL A151/A151H  American Literature in the 20th Century
- ENGL A160/A160H  World Literature Through Renaissance
- ENGL A161/A161H  World Literature Since Renaissance
- ENGL A270/A270H  Survey of British Literature Before 1800
- ENGL A275/A275H  Survey of British Literature After 1800

**Restricted Electives**

Select a minimum of nine units: 9 units

- ENGL A117  Narrative Journalism
- ENGL A119  Introduction to Creative Writing
- ENGL A121  Short Story Workshop
- ENGL A141/A141H  The Bible As Literature
- ENGL A143/A143H  Children's Literature
- ENGL A147/A147H  Introduction to Science Fiction
- ENGL A148/A148H  Film As Literature
- ENGL A152/A152H  Race, Culture, and Identity in Literature
- ENGL A156/A156H  California Literature
- ENGL A158/A158H  Introduction to Irish Literature
- ENGL A168  Popular Fiction
- ENGL A170/A170H  Contemporary Literature
- ENGL A173/A173H  Women Writers
- ENGL A176/A176H  World Mythology

**Course**  
**Title**  
**Units**  

| ENGL A181/A181H | Shakespeare |  
| ENGL A187/A187H | Introduction to Literary Theory |  

**Minimum Program Major Units**  

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
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</table>

**AA General Education Option 1, 2, or 3**  

<table>
<thead>
<tr>
<th>Units</th>
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<td>Varies</td>
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**Transferable electives as needed to satisfy unit requirement**  

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varies</td>
</tr>
</tbody>
</table>

**Total Units**  

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
</tr>
</tbody>
</table>

1. Complete a minimum of nine (9) units from Required Core courses not already used or from the following list.

**English, Associate in Arts Degree for Transfer (AA-T)**

Financial Aid Eligible  
Banner Code: 1_AAT_ENGL  
Control Number: 32189

Students graduating with an Associate in Arts in English for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the English AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The English program provides a core curriculum that instills critical thinking tools (including literary theories and terminology) for both practicing and studying writing, knowledge of historical and aesthetic contexts, and appreciation of geographic and cultural diversity. This background serves all English majors whether their emphasis at the CSU level will ultimately be the study of literature, rhetoric and non-fiction writing, or creative writing. The English program recognizes that all these areas of the major inform one another.

All the required courses in the program foster strong writing skills and are crucial in developing the proficiency and knowledge necessary for students who will ultimately use the major for teaching at the K-12 or community college level, literary scholarship at the graduate level, entering the legal professions, for creative writing, or for non-fiction essay writing in literary, business, and scientific journals.

**Program Outcome**

1. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

**Associate Degree for Transfer Requirements**

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.

4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL A101/A101H</td>
<td>Critical Reasoning: Fiction</td>
<td>4</td>
</tr>
<tr>
<td><strong>List A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select two of the following:</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>ENGL A150/A150</td>
<td>American Literature Before the 20th Century</td>
<td></td>
</tr>
<tr>
<td>ENGL A151/A151H</td>
<td>American Literature in the 20th Century</td>
<td></td>
</tr>
<tr>
<td>ENGL A160/A160H</td>
<td>World Literature Through Renaissance</td>
<td></td>
</tr>
<tr>
<td>ENGL A161/A161H</td>
<td>World Literature Since Renaissance</td>
<td></td>
</tr>
<tr>
<td>ENGL A270/A270H</td>
<td>Survey of British Literature Before 1800</td>
<td></td>
</tr>
<tr>
<td>ENGL A275/A275H</td>
<td>Survey of British Literature After 1800</td>
<td></td>
</tr>
<tr>
<td><strong>List B</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select two of the following:</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>ENGL A119</td>
<td>Introduction to Creative Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL A141/A141H</td>
<td>The Bible As Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL A143/A143H</td>
<td>Children's Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL A152/A152H</td>
<td>Race, Culture, and Identity in Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL A173/A173H</td>
<td>Women Writers</td>
<td></td>
</tr>
<tr>
<td>ENGL A176/A176H</td>
<td>World Mythology</td>
<td></td>
</tr>
<tr>
<td>ENGL A181/A181H</td>
<td>Shakespeare</td>
<td></td>
</tr>
<tr>
<td><strong>List C</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENGL A121</td>
<td>Short Story Workshop</td>
<td></td>
</tr>
<tr>
<td>ENGL A122</td>
<td>Novel Writing I</td>
<td></td>
</tr>
<tr>
<td>ENGL A127</td>
<td>Scriptwriting I</td>
<td></td>
</tr>
<tr>
<td>ENGL A147/A147H</td>
<td>Introduction to Science Fiction</td>
<td></td>
</tr>
<tr>
<td>ENGL A148/A148H</td>
<td>Film As Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL A156/A156H</td>
<td>California Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL A165</td>
<td>Introduction to Irish Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL A170/A170H</td>
<td>Contemporary Literature</td>
<td></td>
</tr>
</tbody>
</table>

**Program Major Units**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A187/A187H</td>
<td>Introduction to Literary Theory</td>
<td></td>
</tr>
<tr>
<td>ENGL A179/A179H</td>
<td>Gender and Sexuality in Literature and Film</td>
<td></td>
</tr>
<tr>
<td>ENGL A172</td>
<td>Unique Topics in Literature</td>
<td></td>
</tr>
</tbody>
</table>
| **Program Major Units**

- Complete six (6) units from List A not already used, or choose from the following list.
- Complete three (3) units from List A or B not already used, or choose from the following list.

**Total Units**

- 60

**Foreign Languages, Associate in Arts Degree**

- Foreign Languages, Associate in Arts Degree (p. 267)
- Spanish, Associate in Arts Degree for Transfer (AA-T) (p. 268)

The Associate in Arts in Foreign Languages Degree is an excellent way to develop communicative skills in multiple languages other than English as well as global and critical thinking. It can provide a basis for understanding cultures, and therefore, prepare graduates for many careers in a multicultural world. The ability to communicate and interact with others is more and more vital with growing global interdependence and technological connectivity. Students in the Associate in Arts in Foreign Language Degree can develop careers in areas such as: education, diplomatic services, anthropology, business, economics, fashion, political science, literature, sociology, and linguistics. While teaching has traditionally been the principal area of employment, other careers, such as interpreting, translating, research, public relations, international commerce, tourism, and publishing are possible.

The department offers courses from the beginning to intermediate levels. All courses are designed to develop the student’s listening comprehension, speaking, reading and writing skills, as well as to provide a general overview of non-English speaking civilizations and cultures.

**Program Outcomes**

1. Recognize and produce the target language(s) in the four primary areas of communication: listening, speaking, reading, and writing.
2. Demonstrate a better understanding and appreciation of the cultures related to the target language(s) by comparing and contrasting them with the student’s own culture(s).
3. Use current technologies to further develop language and cultural competencies.
Associate in Arts Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/social-science-humanities/foreign-languages/foreign-languages-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


**Course** | **Title** | **Units**
--- | --- | ---
ITAL A185 | Elementary Italian 2 | 3
ITAL A280 | Intermediate Italian 1 | 3
ITAL A285 | Intermediate Italian 2 | 3

**Japanese**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
</table>
| JAPN A180 | Elementary Japanese 1 | 3
| JAPN A185 | Elementary Japanese 2 | 3
| JAPN A280 | Intermediate Japanese 1 | 3
| JAPN A285 | Intermediate Japanese 2 | 3

**Vietnamese**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
</table>
| VIET A180 | Elementary Vietnamese 1 | 3
| VIET A185 | Elementary Vietnamese 2 | 3

Select at least one of the following: 1 3-5

1. Students may choose from the list below or from a language not used to complete the core courses above.

**Foreign Languages AA Degree Suggested Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
</table>
| ANTH A190 | Introduction to Linguistic Anthropology | 3
| BUS A118/A118H | Introduction to International Business | 3
| CMST A185 | Public Relations | 3
| FASH A177 | Fashion Merchandising Concepts | 3
| HTT A125 | Destination the Americas | 3
| HTT A127 | Destination Eastern Europe | 3
| HTT A132 | Cultural Awareness | 1.5
| PSCI A110 | International Relations | 3

**Spanish, Associate in Arts Degree for Transfer (AA-T)**

Financial Aid Eligible
Banner Code: 1_AAT_SPAN
Control Number: 32737

Students graduating with an Associate in Arts in Spanish for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-
division coursework. Students who complete the Spanish AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate in Arts in Spanish for Transfer degree is an excellent way to develop communicative skills as well as analytical and critical thinking. It can provide a basis for understanding culture, and therefore, prepare graduates for many careers in a multicultural world. The ability to communicate and interact with others is more and more vital with growing global interdependence and technological connectivity. Students in the Associate in Arts in Spanish for Transfer Degree (AA-T) can develop careers in areas such as: education, diplomatic services, anthropology, economics, political science, literature, sociology, and linguistics. While teaching has traditionally been the principal area of employment, other careers, such as interpreting, translating, research, public relations, international commerce, tourism, and publishing are possible.

The department offers courses from the beginning to intermediate levels. All courses are designed to develop the student's listening comprehension, speaking, reading and writing skills, as well as to provide a general overview of Spanish-speaking civilizations and cultures.

### Program Outcomes

1. Recognize and produce the Spanish language in the four primary areas of communication: listening, speaking, reading and writing.
2. Demonstrate a better understanding and appreciation of the cultures related to the Spanish language by comparing and contrasting them with the student's own culture(s).
3. Use current technologies to further develop language and cultural competencies.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

### Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth – Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC – Option 3 (p. 17)).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN A180/A180H</td>
<td>Elementary Spanish 1</td>
<td>5</td>
</tr>
<tr>
<td>SPAN A185/A185H</td>
<td>Elementary Spanish 2</td>
<td>5</td>
</tr>
<tr>
<td>SPAN A280/A280H</td>
<td>Intermediate Spanish 1</td>
<td>5</td>
</tr>
<tr>
<td>SPAN A285</td>
<td>Intermediate Spanish 2</td>
<td>5</td>
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</table>

### Course

#### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST A145</td>
<td>History of Mexico</td>
<td></td>
</tr>
<tr>
<td>FREN A180</td>
<td>Elementary French 1</td>
<td></td>
</tr>
<tr>
<td>ITAL A180</td>
<td>Elementary Italian 1</td>
<td></td>
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### Program Major Units

<table>
<thead>
<tr>
<th>Type</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSU or IGETC for CSU</td>
<td>23-25</td>
</tr>
<tr>
<td>Transferable electives as needed to satisfy unit requirement</td>
<td>Varies</td>
</tr>
</tbody>
</table>

Total Units: 60

### Geography

Geography is the study of the earth as the home of humanity - including both its human and physical characteristics. In their quest to understand the earth and its processes, geographers first ask where things are located, but more importantly, they seek to answer why these distributions occur.

Whether you take the World Regional, Physical, Cultural, GIS, or any of the other Geography classes that we offer at Orange Coast College, your coursework will incorporate the five themes of Geography:

1. Location – Where is it located?
2. Place – What is it like there?
3. Human / Environment Interactions
   a. Human adaptations, modifications, dependence on the environment
4. Movement – How did it get there? Where is it going? Why did it move?
   a. Diffusion of people, goods and ideas
5. Regions – Classification of areas that are based on similar characteristics
   a. Formal, functional, vernacular

### Department Contact Information

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inaesse@occ.cccd.edu

Chris Quinn
cquinn@occ.cccd.edu

Jaime Speed Rossiter
jrossiter@occ.cccd.edu

Geography Department Website (http://www.orangecoastcollege.edu/academics/divisions/social_behavioral/Geography/Pages/default.aspx)

• Geography, Associate in Arts Degree (p. 269)
• Geography, Associate in Arts Degree for Transfer (AA-T) (p. 270)

### Geography, Associate in Arts Degree

Financial Aid Eligible
Banner Code: 1_AA_GEOG
Control Number: 04035

Complete eighteen (18) units from the following and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan
must be developed with a counselor and placed on file prior to petitioning for graduation.

### Associate in Arts Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/social-sciences-humanities/geography/history/associate-arts-degree/orange-coast/general-education-patterns/associate-sciences-general-education-option-1/) or Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ANTH A100/</td>
<td>Cultural Anthropology</td>
<td>18</td>
</tr>
<tr>
<td>A100H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG A100/</td>
<td>World Regional Geography</td>
<td></td>
</tr>
<tr>
<td>A100H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG A130</td>
<td>Introduction to Weather &amp; Climate</td>
<td></td>
</tr>
<tr>
<td>GEOG A150</td>
<td>California Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG A180/</td>
<td>Physical Geography</td>
<td></td>
</tr>
<tr>
<td>A180H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG A180L</td>
<td>Physical Geography Lab</td>
<td></td>
</tr>
<tr>
<td>GEOG A185</td>
<td>Cultural Geography</td>
<td></td>
</tr>
</tbody>
</table>

### Geography, Associate in Arts Degree for Transfer (AA-T)

**Financial Aid Eligible**  
Banner Code: 1_AAT_GEOG  
Control Number: 32205

Students graduating with an Associate in Arts in Geography for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Geography AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Geography Department at Orange Coast College is a comprehensive program that facilitates the success of general education students and geography majors by offering lower-division geography courses. The Geography Program offers students a variety of courses in physical, cultural, regional and applied geography. Students gain the ability to analyze geographical issues, read and interpret maps, and develop the skills to communicate local, national, and international geographic phenomena to others.

### Program Outcome

1. Prepare students to understand the world geographically, acquire a geographic framework for the contemporary world, and utilize and unique spatial perspective.

2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

### Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth – Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC – Option 3 (p. 17)).
Global Studies

Global Studies, Associate in Arts Degree for Transfer (AA-T) (p. 271)

Global Studies, Associate in Arts Degree for Transfer (AA-T)

Financial Aid Eligible
Banner Code: 1_AAT_GLST
Control Number: 36032

Students graduating with an Associate in Arts in Global Studies for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Global Studies AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

Global Studies is an interdisciplinary course of study that provides students with an understanding of political, cultural, environmental and economic processes and their implications. The program introduces students to the study of global issues and perspectives while providing methodological tools and techniques for analyzing them at multiple scales (local, regional and global). Students will develop the skills for analyzing the impacts of globalization by applying diverse perspectives to current global issues.

By critically analyzing a variety of case studies, students will be prepared to participate in an interconnected environment and continue their studies in a variety of fields.

Program Outcomes

1. Students will demonstrate knowledge of the historical evolution of globalization, the interconnectedness of economic, political and environmental processes and its positive and negative consequences.
2. Students will apply knowledge to propose policies to address an issue of globalization.
3. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

Course Title Units
GLST A101 Introduction to Global Studies 3
GLST A102 Introduction to Global Issues 3

List A
Select five courses from at least four of the following areas for a minimum of 15 units:

Culture and Society Area

ANTH A100 Cultural Anthropology
& A100H and Cultural Anthropology Honors
ANTH A190 Introduction to Linguistic Anthropology
HIST A161/A161H World History 1
HIST A162/A162H World History 2
RLST A110 World Religion
History

• History, Associate in Arts Degree for Transfer (AA-T) (p. 272)

History, Associate in Arts Degree for Transfer (AA-T)

Financial Aid Eligible
Banner Code: 1_AAT_HIST
Control Number: 32218

Students graduating with an Associate in Arts in History for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the History AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

Course
Geography Area
Title
Units
GEOG A100/A100H World Regional Geography
GEOG A180/A180H Physical Geography
GEOG A185 Cultural Geography
Economics Area
ECON A170/A170H Microeconomics
ECON A175/A175H Macroeconomics
Politics Area
PSCI A110 International Relations
PSCI A180 American Government
& A180H and American Government Honors
PSCI A185 Comparative Politics
Humanities Area
ENGL A160/A160H World Literature Through Renaissance
ENGL A161/A161H World Literature Since Renaissance
FREN A280 Intermediate French 1
FREN A285 Intermediate French 2
GRMN A280 Intermediate German 1
GRMN A285 Intermediate German 2
JAPN A280 Intermediate Japanese 1
JAPN A285 Intermediate Japanese 2
SPAN A280 Intermediate Spanish 1
SPAN A285 Intermediate Spanish 2

Program Major Units 21-25
CSU or IGETC for CSU 37-39
Transferable electives as needed to satisfy unit requirement Varies
Total Units 60

Lower-division history courses taken at Orange Coast College will introduce students to the broad sweep of historical events both within the United States and across the world and help them better understand the role of cause and effect and the interaction of continuity and change in the unfolding of history. Students will refine their ability to read and analyze historical courses and to use them appropriately in developing valid historical arguments. The most obvious application of a bachelor’s degree in history is to prepare individuals to teach, pursue historical research, or work in museums. In addition, the insights into the human experience and the skills gained through the study of history - to think clearly and analytically and to communicate effectively both in writing and orally - are excellent preparation for careers in many fields including law, public service, and business.

Program Outcome

1. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

Course
Title
Units
Required Courses
Core Courses
HIST A170/A170H History of the United States to 1876 3
HIST A175/A175H History of the United States Since 1876 3
List A
Select one of the following: 6
HIST A161/A161H World History 1
or HIST A180/A180H Western Civilization 1
HIST A162/A162H World History 2
or HIST A185/A185H Western Civilization 2
List B (Area 1)
Select one of the following: 3
HIST A101 Afro-American History
HIST A145 History of Mexico
HIST A150 Ethnic Groups of the United States: Their Histories
HIST A161/A161H World History 1 1
HIST A162/A162H World History 2 1
HIST A187 Women in History
List B (Area 2)
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST A195</td>
<td>History of England and Greater Britain</td>
<td>3</td>
</tr>
</tbody>
</table>

Any course not taken from above

Program Major Units 18

CSU or IGETC for CSU 37-39

Transferable electives as needed to satisfy unit requirement Varies

Total Units 60

1 Courses may not be used to fulfill List B (Area 1) if already used to fulfill List A.

**Philosophy**

Some philosophy graduates go on to further study in philosophy. Related areas of interest include politics, literature, ethics, law, religion, and sociology. For careers in law, lecturing and teaching, you’ll need further qualifications. In areas such as journalism and advertising, you may find a postgraduate qualification useful, but relevant work experience is essential. Research the careers that interest you to find out if you’ll need further study.

**Department Contact Information**

Charles Otwell
cotwell@occ.cccd.edu

Phillip Simkin
psimpkin@occ.cccd.edu

Philosophy department website (http://www.orangecoastcollege.edu/academics/divisions/social_behavioral/philosophy/Pages/default.aspx)

- Philosophy, Associate in Arts Degree for Transfer (AA-T) (p. 273)

**Philosophy, Associate in Arts Degree for Transfer (AA-T)**

Financial Aid Eligible

Banner Code: 1_AAT_PHIL

Control Number: 32804

Students graduating with an Associate in Arts in Philosophy for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Philosophy AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate in Arts in Philosophy for Transfer degree focuses on a critical analysis of philosophical history, ideas, and concepts as well the development of analytical, critical thinking, writing, and reading skills. Students choosing this major will study a range of Philosophical subjects including metaphysics, epistemology, logic, and ethics. In addition, students will learn how to identify philosophical principles and concepts, critically analyze texts, and generate proper arguments. Completion of this major will provide students with a well-rounded understanding of Philosophy and equip them with the skills of a philosopher.

**Course** | **Title** | **Units**
---|---|---
**Required Courses**
PHIL A100 | Introduction to Philosophy | 3
or PHIL A120 | Ethics |
PHIL A155 | Introduction to Logic | 3
or PHIL A220 | Introduction to Symbolic Logic |

**List A**

Select one course from the Core not yet taken or of the following:

- PHIL A125 | History of Ancient Philosophy |
- PHIL A150 | Critical Reasoning & Writing |

**List B**

Select two courses from List A not yet taken or of the following:

- HIST A180/A180H | Western Civilization 1 |
- HIST A185/A185 | Western Civilization 2 |
- PHIL A115 | Philosophy of Religion |

**List C**

Select two courses from List A or B not yet taken or of the following:

- ENGL A101/A101H | Critical Reasoning: Fiction |
- HUM A100 | Introduction to the Humanities |
- PHIL A118 | Aesthetics/Philosophy of Art |
- PHIL A165 | The Theory of Knowledge |
- PHIL A185 | Contemporary Philosophy |

Program Major units 18-22

CSU or IGETC for CSU 37-39

Transferable electives as needed to satisfy unit requirement Varies

Total Units 60
Political Science

- Political Science, Associate in Arts Degree for Transfer (AA-T) (p. 274)

Political Science, Associate in Arts Degree for Transfer (AA-T)

Financial Aid Eligible
Banner Code: 1_AAT_PSCI
Control Number: 31439

Students graduating with an Associate in Arts in Political Science for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Political Science AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Political Science Department facilitates the success of general education students and political science majors by offering lower division courses in each of the sub-fields: American government, international relations, comparative politics, public law, and political theory. Political Science classes emphasize the importance of an informed citizenry, seek to instill the ability to analyze political phenomena in a critical way, and develop the communication skills to convey those analyses to others.

Program Outcomes

1. Students will demonstrate an increased awareness of their rights and responsibilities to themselves and to their communities--local, regional, national and global.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI A180/A180H</td>
<td>American Government</td>
<td>3</td>
</tr>
</tbody>
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List A

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH/PSYC A160</td>
<td>Introduction to Statistics</td>
<td>9-10</td>
</tr>
<tr>
<td>PSCI A201</td>
<td>Introduction to Political Science Research Methods</td>
<td></td>
</tr>
<tr>
<td>PSCI A110</td>
<td>International Relations</td>
<td></td>
</tr>
<tr>
<td>PSCI A185</td>
<td>Comparative Politics</td>
<td></td>
</tr>
<tr>
<td>PSCI A188</td>
<td>Introduction to Political Theory</td>
<td></td>
</tr>
<tr>
<td>PSCI A200</td>
<td>Introduction to Political Science</td>
<td></td>
</tr>
</tbody>
</table>

List B

Select two courses from List A not yet taken or of the following: 6-7

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON A170</td>
<td>Microeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON A175</td>
<td>Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>GNDR A130</td>
<td>Women, Politics, and Inequality</td>
<td></td>
</tr>
<tr>
<td>HIST A170</td>
<td>History of the United States to 1876</td>
<td></td>
</tr>
<tr>
<td>HIST A175</td>
<td>History of the United States Since 1876</td>
<td></td>
</tr>
<tr>
<td>PSCI A101</td>
<td>Survey of Current Issues</td>
<td></td>
</tr>
<tr>
<td>PSCI A190</td>
<td>Introduction to American Legal System</td>
<td></td>
</tr>
</tbody>
</table>

Total Units 60

Psychology

The field of psychology addresses the scientific study of behavior and mental processes of humans and animals. Learning more about human behavior through scientific research methods is the focus of many psychologists, while other psychologists apply principles of psychology in areas such as psychotherapy, applied behavioral analysis, and industrial/organizational psychology.

The psychology program offers a comprehensive view of the field by offering a variety of courses that will support transfer in the major. The program provides an essential foundational understanding of the discipline of psychology, the methods psychologists use to learn about behavior, and applications of psychological information to the world around us. The program offers classes that introduce students to the field of psychology and develop an essential understanding of research methods and statistical tools used in psychology, biological bases of behavior, human development, personality, abnormal psychology, social psychology, learning, and other opportunities to learn about the psychology.

Department Contact Information

Hannah Kang, Ph.D., Psychology Department Co-Chairperson
hkang14@occ.cccd.edu

James Smolin, Ph.D., Psychology Department Co-Chairperson
jsmolin@occ.cccd.edu

Psychology department website (http://www.orangecoastcollege.edu/academics/divisions/social_behavioral/psychology/Pages/default.aspx)

- Psychology, Associate in Arts Degree for Transfer (AA-T) (p. 275)
Psychology, Associate in Arts Degree for Transfer (AA-T)

Financial Aid Eligible
Banner Code: 1_AAT_PSYC
Control Number: 30596

Students graduating with an Associate in Arts in Psychology for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Psychology AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The field of psychology addresses the scientific study of behavior and mental processes of humans and animals. Learning more about human behavior through scientific research methods is the focus of many psychologists, while other psychologists apply principles of psychology in areas such as psychotherapy, applied behavioral analysis, and industrial/organizational psychology.

This psychology program offers a comprehensive view of psychology by offering a variety of courses that will support transfer in psychology, while providing a foundational understanding of the discipline of psychology, the methods psychologists use to learn about behavior, and applications of psychological information to the world around us.

Program Outcomes
1. Identify and describe major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

Course Title Units

<table>
<thead>
<tr>
<th>List A</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC A250</td>
<td>Psychobiology</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List B</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC A130</td>
<td>Life Span Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC A185</td>
<td>Principles of Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC A190/A190H</td>
<td>Cross-Cultural Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC A260</td>
<td>Social Psychology</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List C</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one course from above not yet taken or of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSYC A220</td>
<td>Psychology of Personality</td>
<td></td>
</tr>
<tr>
<td>PSYC A255</td>
<td>Abnormal Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC A270</td>
<td>Psychology of Learning</td>
<td></td>
</tr>
</tbody>
</table>

Program Major Units 20

CSU or IGETC for CSU 37-39

Transferable electives as needed to satisfy unit requirement Varies

Total Units 60

Religious Studies

- Religious Studies, Associate in Arts Degree (p. 275)

Religious Studies, Associate in Arts Degree

Financial Aid Eligible
Banner Code: 1_AA_RLST
Control Number: 04022

The Religious Studies program at Orange Coast College is designed to provide students with a broad introduction to the academic study of religion. Students transferring to Religious Studies programs at four-year colleges will have a strong background for upper division work in the major. Non-majors will find most Religious Studies fulfill area requirements for AA and transfer degrees.

Program Outcome
1. Students will be able to analyze dimensions of various religions utilizing methodologies appropriate to the academic study of religion.

Associate in Arts Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “Pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or
by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/social-sciences-humanities/religious-studies/religious-studies-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


### Sociology, Associate in Arts Degree for Transfer (AA-T)

**Financial Aid Eligible**

### Program Outcomes

1. Use one of the three main sociological perspectives to explain the development of a social inequality.
2. Describe the advantages and disadvantages of various sociological methods.
3. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

#### Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

### Sociology, Associate in Arts Degree for Transfer (AA-T)

**General Education Requirements**

- Sociology, Associate in Arts Degree for Transfer (AA-T) (p. 276)

**Sociology, Associate in Arts Degree for Transfer (AA-T)**

Financial Aid Eligible
Teaching and Education

- Dance (p. 277)
- Education (p. 279)
- Integrative Health (p. 287)
- Kinesiology (p. 289)
- Speech-Language Pathology Assistant (p. 291)

   - Dance (p. 277)
     - Dance Instructor, Certificate of Achievement (p. 277)
     - Pilates Instructor, Certificate of Achievement (p. 278)

- Education (p. 279)
  - Associate Preschool Teacher, Certificate of Achievement (p. 280)
  - Early Childhood Administration, Associate in Science Degree (p. 280)
  - Early Childhood Administration, Certificate of Achievement (p. 282)
  - Early Childhood Education, Associate in Science Degree for Transfer (AS-T) (p. 283)
  - Elementary Teacher Education, Associate in Arts Degree for Transfer (AA-T) (p. 283)
  - Infant and Toddler Teacher, Associate in Science Degree (p. 284)
  - Infant and Toddler Teacher, Certificate of Achievement (p. 285)
  - Preschool Teacher, Associate in Science Degree (p. 286)
  - Preschool Teacher, Certificate of Achievement (p. 286)

- Integrative Health (p. 287)
  - Integrative Health Coach, Associate in Science Degree (p. 287)
  - Integrative Health Coach, Certificate of Achievement (p. 288)

- Kinesiology (p. 289)

- Fitness Specialist, Associate in Science Degree (p. 289)
- Fitness Specialist, Certificate of Achievement (p. 290)
- Yoga Instructor Training, Certificate of Specialization (p. 291)
- Speech-Language Pathology Assistant (p. 291)
- Speech-Language Pathology Assistant, Associate in Science Degree (p. 291)

Dance Instructor, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_DNDI
Control Number: 22407

The Dance certificate program trains students for positions in the commercial and artistic areas of dance. Graduates of the program would be qualified as instructors with an emphasis in one of the following: ballet, modern, jazz, tap and world dance forms in private studios, recreation or other community dance programs. The Dance Department also recommends that students complete their General Education Requirements for an Associate Degree. Students are able to apply principles of movement and creativity to all forms of dance, demonstrate skills of instructing dance to communicate through movement and words, and apply information learned in other disciplines to the art form of dance.

Instruction will utilize both classroom work, using a variety of instructional methods (lecture, lab/demonstration, independent and group projects) and internship experiences in business/industry to prepare the student for job requirements.

Program Outcomes
1. Communicate proper dance technique effectively through movement demonstration and verbal cueing, using appropriate corresponding terminology.
2. Successfully teach a dance class in a particular style: modern dance, ballet, tap, jazz, hip hop or contemporary dance.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions...
as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAN C119</td>
<td>Kinesiology For Dance</td>
<td>3</td>
</tr>
<tr>
<td>DAN C152</td>
<td>Pilates Apparatus &amp; Mat Work Level 1</td>
<td>1-2</td>
</tr>
<tr>
<td>or DAN C153</td>
<td>Pilates Apparatus &amp; Mat Work Level 2</td>
<td></td>
</tr>
<tr>
<td>DAN C150</td>
<td>Dance Improvisation I</td>
<td>1</td>
</tr>
<tr>
<td>or DAN C250</td>
<td>Dance Improvisation II</td>
<td></td>
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<tr>
<td>Select one of the following:</td>
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<td>3</td>
</tr>
<tr>
<td>DAN C160</td>
<td>Dance Composition/Choreography I</td>
<td></td>
</tr>
<tr>
<td>DAN C162</td>
<td>Dance Composition/Choreography II</td>
<td></td>
</tr>
<tr>
<td>DAN C262</td>
<td>Dance Composition/Choreography III</td>
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</tr>
<tr>
<td>DAN C170</td>
<td>Music for Dancers</td>
<td>2</td>
</tr>
<tr>
<td>DAN C180</td>
<td>Dance Wellness and Injury Prevention</td>
<td>3</td>
</tr>
<tr>
<td>DAN C200</td>
<td>Appreciation Of Dance</td>
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<tr>
<td>DAN C201</td>
<td>Rehearsal and Performance I</td>
<td>1</td>
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<tr>
<td>or DAN C202</td>
<td>Rehearsal and Performance II</td>
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<tr>
<td>DAN C205</td>
<td>Dance as a Profession Seminar</td>
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<tr>
<td>DAN C210</td>
<td>Dance Methodology</td>
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</tr>
<tr>
<td>DAN C211</td>
<td>Repertoire I</td>
<td>1-4</td>
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<tr>
<td>or DAN C212</td>
<td>Repertoire II</td>
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<tr>
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<td>Dance Internship I</td>
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<tr>
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<tr>
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<td>Jazz Dance III</td>
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<tr>
<td>DAN C243</td>
<td>Jazz IV</td>
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<tr>
<td>DAN C144</td>
<td>Ballet III</td>
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</tr>
<tr>
<td>DAN C244</td>
<td>Ballet IV</td>
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<tr>
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<tr>
<td>DAN C145</td>
<td>Modern Dance III</td>
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<tr>
<td>DAN C245</td>
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<td>DAN C125</td>
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<tr>
<td>DAN C126</td>
<td>Tap 2</td>
<td></td>
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<tr>
<td>DAN C146</td>
<td>Tap III</td>
<td></td>
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<tr>
<td>DAN C246</td>
<td>Tap IV</td>
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</tr>
<tr>
<td>DAN C256</td>
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**Total Units**: 34.5-40

**Dance Instructor Suggested Electives**

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<th>Units</th>
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<tr>
<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BUS A100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS A120</td>
<td>Personal Financial Success</td>
<td>3</td>
</tr>
<tr>
<td>CMST A100</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>DAN C129</td>
<td>Pilates Methodology</td>
<td>3</td>
</tr>
<tr>
<td>EC A131</td>
<td>Creativity for Children</td>
<td>3</td>
</tr>
<tr>
<td>HLED/PUBH A100</td>
<td>Personal Health Education</td>
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<tr>
<td>HLED/KIN A270</td>
<td>Fitness and Health</td>
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<td>HMDV A180</td>
<td>Child Growth and Development</td>
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</tr>
<tr>
<td>PSYC A100</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
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</table>

**Pilates Instructor, Certificate of Achievement**

Financial Aid Eligible
Banner Code: 1_CN_PILA
Control Number: 33763

The Pilates/Dance Conditioning Instructor Certificate of Achievement prepares the student to teach in a privately owned dance, fitness or Pilates studio, recreational facility, or health club. The student takes theory and technique courses on Pilates apparatus taught by Pilates certified specialists and learns methods to determine appropriate conditioning programs for people of all ages and physical conditions. To prepare the student for employment, instruction uses both classroom
work with a variety of instructional methods (lecture, lab/demonstration, independent and group projects), and internship experiences in dance and fitness facilities.

Program Outcomes
1. Successfully teach a Pilates mat and apparatus class with appropriate modifications.
2. Communicate effectively through clear demonstration and verbal cueing using appropriate terminology.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Recommended Prior to Internship 2

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<thead>
<tr>
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<td>DANC A108</td>
<td>Pilates Mat Work</td>
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<tr>
<td>DANC A119</td>
<td>Kinesiology For Dance</td>
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</tr>
<tr>
<td>DANC A129</td>
<td>Pilates Methodology</td>
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</tr>
<tr>
<td>DANC A151</td>
<td>Pilates as a Profession</td>
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<tr>
<td>DANC A152</td>
<td>Pilates Apparatus &amp; Mat Work Level 1</td>
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</tr>
<tr>
<td>DANC A153</td>
<td>Pilates Apparatus &amp; Mat Work Level 2</td>
<td>2</td>
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<tr>
<td>DANC A208</td>
<td>Pilates 3-4</td>
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<td>DANC A215</td>
<td>Pilates Internship I</td>
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<td>Strength and Stretch</td>
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</table>

Education

Early Childhood Education and Administration

coursework in the Early Childhood Education Department emphasizes the theoretical and practical knowledge needed for working with culturally diverse children birth through age eight. The department offers a variety of certificates and degrees depending on age groups and needs of children. The various certificate and degree programs provide developmentally-based courses designed to teach students how to provide competent care and interactions for children.

College students in our Early Childhood Education program will experience a comprehensive program that prepares them to work with young children, birth to age 6. Our courses reflect the idea that children build knowledge through the experience of play. We emphasize the importance of understanding how children develop at different ages and of the cultural, linguistic, and social influences that shape them. At the core of working with young children and their families is a positive and reciprocal relationship. Within that relationship, we come to see the child as a unique individual with unique needs and interests which is the foundation of an effective early childhood professional.

Throughout the program students will learn about developmentally appropriate practices, plan open-ended creative experiences, observe and document children’s play, and implement a whole curriculum based on the interests and needs of the children with whom they work. Another important aspect of working effectively with children and families is the practice of anti-bias curriculum. Students will learn specific practices to ensure inclusiveness for all children and their families.

Our college classes require a high level of rigor which prepares students to enter the workforce and collaborate with colleagues. The faculty works closely with students, and mentors them throughout the program.

Careers related to Early Childhood Education
The following are possible careers which relate to working with young children and supporting families:

- Infant toddler or Preschool teacher, Nanny
- Transitional Kindergarten or Elementary school teacher
- Special needs aide/paraprofessional in a preschool
- Behavior Interventionist
- Preschool Program Director
- Department of Education – Quality Start OC
- Zero to Three – Field Specialist provides training and assistance to Head Start/Early Head Start programs
- Child Life Specialist – works with children in a hospital setting
- College Instructor
- Leader in recreation programs
- Before and After school care
- Education Coordinator
- Parent Educator and/or Parent-Child Educator
• Children’s Home Society – Resource and referral specialist
• Community Care Licensing Analyst
• Behavior Interventionist
• Speech & Language Pathologist

Department Contact Information
Laurie Campbell, Professor and Program Coordinator for Early Childhood Education
lcampbell@occ.cccd.edu (lcampbell@occ.cccd.edu)

Jenny Chaiyakal, Professor of Early Childhood Education
Jchaiyakal@occ.cccd.edu (Jchaiyakal@occ.cccd.edu)

Jeanette Ellis, Professor of Early Childhood Education
jellis@occ.cccd.edu (jellis@occ.cccd.edu)

Early Childhood department website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/family_consumer_science/early_childhood_education/Pages/default.aspx)

• Associate Preschool Teacher, Certificate of Achievement (p. 280)
• Early Childhood Administration, Associate in Science Degree (p. 280)
• Early Childhood Administration, Certificate of Achievement (p. 282)
• Early Childhood Education, Associate in Science Degree for Transfer (AS-T) (p. 283)
• Elementary Teacher Education, Associate in Arts Degree for Transfer (AA-T) (p. 283)
• Infant and Toddler Teacher, Certificate of Achievement (p. 284)
• Infant and Toddler Teacher, Associate in Science Degree (p. 285)
• Preschool Teacher, Associate in Science Degree (p. 286)
• Preschool Teacher, Certificate of Achievement (p. 286)

Associate Preschool Teacher, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_ECAP
Control Number: 37914

A certificate is earned by students who have developed skills necessary to work as associate teachers of preschool children in early childhood settings. Courses emphasize strong theoretical and practical skills needed to work with children 2-5 years. Courses fulfill Title 22 licensing requirements and Title 5 early childhood education course requirements for the Child Development Permit at the teacher level.

Program Outcome
1. The successful student in the program will be able to be employed as a professional and competent Associate Preschool Teacher.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements section of this catalog. 

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC A131</td>
<td>Creativity for Children</td>
<td>3</td>
</tr>
<tr>
<td>EC A155</td>
<td>Principles &amp; Practices of Teaching Young Children</td>
<td>3</td>
</tr>
<tr>
<td>EC A156</td>
<td>Early Childhood Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>EC A157</td>
<td>Guidance for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>EC A199</td>
<td>Current Issues in Early Childhood</td>
<td>0.5-2</td>
</tr>
<tr>
<td>EC A200</td>
<td>Early Childhood Programs-The Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>HMDV A180</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>HMDV A190</td>
<td>Family, School, and Community Partnerships</td>
<td>3</td>
</tr>
<tr>
<td>EC A130 or EC A132</td>
<td>Language Arts for Children or Science and Math for Young Children</td>
<td>3</td>
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</tbody>
</table>

Total Units: 23.5-25

Early Childhood Administration, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_ECAD
Control Number: 08661

Students who already have Early Childhood certificates may qualify to become directors or administrators of early childhood centers by earning this Early Childhood Administration certificate.

Complete the Early Childhood Administration Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. Note: this AS degree requires 63-67.5 units for completion.
Program Outcome
1. The objective of the program is to meet the needs of the local child care programs by preparing students for entry-level employment as a professional and competent child care director.

Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/teaching-education/education/early-childhood-administration-associate-science-degree/orange-coast/education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Required Prerequisites
Early Childhood Education Certificate of Achievement Infant/Toddler Teacher

Course | Title | Units
--- | --- | ---
EC A126 | Teaching in a Diverse Society | 3
or EC A127 | Health, Safety, and Nutrition | 3
EC A130 | Language Arts for Children | 3
or EC A131 | Creativity for Children | 3
EC A155 | Principles & Practices of Teaching Young Children | 3
EC A156 | Early Childhood Laboratory | 2
EC A157 | Guidance for Young Children | 3
EC A165 | Observing and Recording Child Behavior | 3
EC A220 | Infant/Toddler Programs | 3
EC A221 | Infant/Toddler Field Experience | 3
HMDV A180 | Child Growth and Development | 3
HMDV A184 | Infant Development and Relationships | 3
HMDV A190 | Family, School, and Community Partnerships | 3

Select one of the following:

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>EC A261</td>
<td>Learning Title 22</td>
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<tr>
<td>EC A262</td>
<td>Disaster Preparedness for Child Care</td>
<td></td>
</tr>
<tr>
<td>EC A263</td>
<td>Child Abuse I.D. and Referral</td>
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</tr>
<tr>
<td>EMS A145</td>
<td>Emergency Medical Care - Pediatrics</td>
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</table>

Total Units 32.5-34

Or

Early Childhood Education Certificate of Achievement Preschool Teacher

Course | Title | Units
--- | --- | ---
EC A130 | Language Arts for Children | 3
EC A131 | Creativity for Children | 3
EC A132 | Science and Math for Young Children | 3
EC A155 | Principles & Practices of Teaching Young Children | 3
EC A156 | Early Childhood Laboratory | 2
EC A157 | Guidance for Young Children | 3
EC A165 | Observing and Recording Child Behavior | 3
EC A200 | Early Childhood Programs-The Curriculum | 3
EC A201 | Early Childhood Practicum - Field Experience | 3
HMDV A180 | Child Growth and Development | 3
HMDV A190 | Family, School, and Community Partnerships | 3

Select one of the following:

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<th>Course</th>
<th>Title</th>
<th>Units</th>
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<td>EC A126</td>
<td>Teaching in a Diverse Society</td>
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<tr>
<td>EC A127</td>
<td>Health, Safety, and Nutrition</td>
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<td>HMDV A210</td>
<td>Introduction to the Exceptional Child</td>
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<td>EC A262</td>
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<td>EC A263</td>
<td>Child Abuse I.D. and Referral</td>
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<tr>
<td>EC A277</td>
<td>Adult Supervision in Early Childhood Programs</td>
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Total Units 36-37.5

Subtotal 32.5-37

Course | Title | Units
--- | --- | ---
EC A126 | Teaching in a Diverse Society | 3
EC A127 | Health, Safety, and Nutrition | 3
EC A275 | Early Childhood Administration-Program | 3
EC A276 | Early Childhood Management | 3
EC A277 | Adult Supervision in Early Childhood Programs | 2-3
or MGMT A115 | Human Relations and Supervision | |

Select a minimum of 1.5 units of the following:

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<th>Title</th>
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<tbody>
<tr>
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<td>Current Issues in Early Childhood</td>
<td>1.5</td>
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such as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing this Early Childhood Administration certificate.

**Program Outcome**

1. The objective of the program is to meet the needs of the local child care programs by preparing students for entry-level employment as a professional and competent child care director.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Required Prerequisites

**Early Childhood Education Certificate of Achievement Infant/Toddler Teacher**

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</tr>
<tr>
<td>or EC A127</td>
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</tr>
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<td>EC A130</td>
<td>Language Arts for Children</td>
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</tr>
<tr>
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<tr>
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<td>Early Childhood Laboratory</td>
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<td>EC A157</td>
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<tr>
<td>EC A165</td>
<td>Observing and Recording Child Behavior</td>
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<td>EC A220</td>
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<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>HMDV A184</td>
<td>Infant Development and Relationships</td>
<td>3</td>
</tr>
<tr>
<td>HMDV A190</td>
<td>Family, School, and Community</td>
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Select one of the following: 0.5-2

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<td>Current Issues in Early Childhood</td>
<td></td>
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<tr>
<td>EMS A145</td>
<td>Emergency Medical Care - Pediatrics</td>
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Total Units: 32.5-34

Or

**Early Childhood Education Certificate of Achievement Preschool Teacher**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC A130</td>
<td>Language Arts for Children</td>
<td>3</td>
</tr>
<tr>
<td>EC A131</td>
<td>Creativity for Children</td>
<td>3</td>
</tr>
<tr>
<td>EC A132</td>
<td>Science and Math for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>EC A155</td>
<td>Principles &amp; Practices of Teaching Young Children</td>
<td>3</td>
</tr>
<tr>
<td>EC A156</td>
<td>Early Childhood Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>EC A157</td>
<td>Guidance for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>EC A165</td>
<td>Observing and Recording Child Behavior</td>
<td>3</td>
</tr>
<tr>
<td>EC A200</td>
<td>Early Childhood Programs-The Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>EC A201</td>
<td>Early Childhood Practicum - Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>HMDV A180</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>HMDV A190</td>
<td>Family, School, and Community</td>
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<thead>
<tr>
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<tbody>
<tr>
<td>EC A126</td>
<td>Teaching in a Diverse Society</td>
<td></td>
</tr>
<tr>
<td>EC A127</td>
<td>Health, Safety, and Nutrition</td>
<td></td>
</tr>
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Table:

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<tr>
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<td>HMDV A210</td>
<td>Introduction to the Exceptional Child</td>
<td>1-2.5</td>
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<table>
<thead>
<tr>
<th>EC A199</th>
<th>Current Issues in Early Childhood</th>
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<tbody>
<tr>
<td>EC A261</td>
<td>Learning Title 22</td>
<td></td>
</tr>
<tr>
<td>EC A262</td>
<td>Disaster Preparedness for Child Care</td>
<td></td>
</tr>
<tr>
<td>EC A263</td>
<td>Child Abuse I.D. and Referral</td>
<td></td>
</tr>
<tr>
<td>EC A277</td>
<td>Adult Supervision in Early Childhood Programs</td>
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Total Units: 36-37.5

Subtotal: 32.5-37

Table:

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<tr>
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<th>Units</th>
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<td>EC A127</td>
<td>Health, Safety, and Nutrition</td>
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<td>EC A275</td>
<td>Early Childhood Administration-Program</td>
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<td>EC A276</td>
<td>Early Childhood Management</td>
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<td>EC A277</td>
<td>Adult Supervision in Early Childhood Programs</td>
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<tr>
<td>or MGMT A115</td>
<td>Human Relations and Supervision</td>
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Select a minimum of 1.5 units of the following: 1.5

<table>
<thead>
<tr>
<th>EC A199</th>
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<tbody>
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<td></td>
</tr>
<tr>
<td>EC A262</td>
<td>Disaster Preparedness for Child Care</td>
<td></td>
</tr>
<tr>
<td>EC A263</td>
<td>Child Abuse I.D. and Referral</td>
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</tr>
<tr>
<td>EMS A145</td>
<td>Emergency Medical Care - Pediatrics</td>
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</table>

Total Units: 15.5-16.5

Total Units - 48-52.5

Program Outcome

1. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework.
   While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

Table:

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<th>Units</th>
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<td>EC A127</td>
<td>Health, Safety, and Nutrition</td>
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<td>EC A155</td>
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<td>3</td>
</tr>
<tr>
<td>EC A165</td>
<td>Observing and Recording Child Behavior</td>
<td>3</td>
</tr>
<tr>
<td>EC A200</td>
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<td>HMDV A180</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>HMDV A190</td>
<td>Family, School, and Community Partnerships</td>
<td>3</td>
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</tbody>
</table>

Program Major Units 24

CSU or IGETC for CSU 37-39

Transferable electives as needed to satisfy unit requirement Varies

Total Degree Units 60

Elementary Teacher Education, Associate in Arts Degree for Transfer (AA-T)

Financial Aid Eligible
Banner Code: 1_AAT_ETE
Control Number: 32202

Students graduating with an Associate in Arts in Elementary Teacher Education for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Elementary Teacher Education AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Mission of this program is to grant students an AS-T degree in Early Childhood Education with 24 units in the major and prepares students to transfer to a CSU. This degree gives students priority admission to a local CSU campus, in a similar major, with junior status. Students are encouraged to also complete additional units to earn an ECE Certificate of Achievement.
The Associate in Arts degree for Transfer (AA-T) in Elementary Teacher Education is designed for prospective California State University (CSU) transfer students who are preparing for careers as Elementary School Teachers. Completion of a Bachelor's degree in Liberal Studies prepares students to apply to approved teacher education programs leading to a credential to teach in elementary, self-contained classrooms. The Liberal Studies major and aligned AA-T Elementary Teacher Education curriculum provides depth and breadth of subject matter content typically taught in Kindergarten through sixth grade classroom settings in California. Students who plan to enter a California Commission on Teacher Credentialing (CCTC) approved program leading to a preliminary Multiple Subject Credential are required to demonstrate subject matter competency.

Program Outcome
1. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements
The following is required for all AA-T or AS-T degrees:
1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) or the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A100</td>
<td>Introduction to Biology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM A110</td>
<td>Introduction to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>PHYS A110</td>
<td>Conceptual Physics</td>
<td>4</td>
</tr>
<tr>
<td>&amp; PHYS A111</td>
<td>and Introductory Physics Laboratory</td>
<td></td>
</tr>
<tr>
<td>CMST A110</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>EDUC A200</td>
<td>The Teaching Profession</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A100</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A101/A101H</td>
<td>Critical Reasoning: Fiction</td>
<td>4</td>
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<tr>
<td>GEOG A100/A100H</td>
<td>World Regional Geography</td>
<td>3</td>
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<tr>
<td>GEOL A105/A105H</td>
<td>General Geology</td>
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<td>GEOL A105L/A105M</td>
<td>General Geology Laboratory</td>
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<tr>
<td>HIST A161/A161H</td>
<td>World History 1</td>
<td>3</td>
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<tr>
<td>HIST A170/A170H</td>
<td>History of the United States to 1876</td>
<td>3</td>
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<tr>
<td>HMDV A180</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>MATH A104</td>
<td>Mathematics for Elementary Teachers</td>
<td>3</td>
</tr>
<tr>
<td>PSCI A180/A180H</td>
<td>American Government</td>
<td>3</td>
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<td>List A</td>
<td>Select one of the following:</td>
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<td>CMST A220</td>
<td>Essentials of Argumentation</td>
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Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ENGL A102/A102H</td>
<td>Critical Reasoning: Nonfiction</td>
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</tr>
<tr>
<td>PHIL A150</td>
<td>Critical Reasoning &amp; Writing</td>
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</tbody>
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List B
Select one of the following:

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ART A100/A100H</td>
<td>Survey of Western Art from Prehistory Through Gothic</td>
<td></td>
</tr>
<tr>
<td>DANC A200</td>
<td>Appreciation Of Dance</td>
<td></td>
</tr>
<tr>
<td>HUM A100</td>
<td>Introduction to the Humanities</td>
<td></td>
</tr>
<tr>
<td>MUS A100</td>
<td>History and Appreciation of Western Classical Music</td>
<td></td>
</tr>
<tr>
<td>THEA A100</td>
<td>Introduction to Theatre</td>
<td></td>
</tr>
</tbody>
</table>

Total Degree Units

| Program Major Units | CSU or IGETC for CSU | Transferable electives as needed to satisfy unit requirement | Varies | 60 |

Infant and Toddler Teacher, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_ECIT
Control Number: 04030

A certificate is earned by students who have developed skills necessary to work as teachers of infants and toddlers in early childhood settings. Courses emphasize strong theoretical and practical skills needed to work with children birth to 2 years. Courses fulfill Title 22 licensing requirements and Title 5 early childhood education course requirements for the Child Development Permit at the teacher level.

Complete the Infant and Toddler Teacher Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome
1. The objective of the program is to meet the needs of the local child care programs by preparing students for entry-level employment as a professional and competent infant/toddler teacher.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework; or
by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/teaching-education/education infant-toddler-teacher-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Infant and Toddler Teacher, Certificate of Achievement**

Financial Aid Eligible

Banner Code: 1_CT_ECIT

Control Number: 22425

A certificate is earned by students who have developed skills necessary to work as teachers of infants and toddlers in early childhood settings. Courses emphasize strong theoretical and practical skills needed to work with children birth to 2 years. Courses fulfill Title 22 licensing requirements and Title 5 early childhood education course requirements for the Child Development Permit at the teacher level.

**Program Outcome**

1. The objective of the program is to meet the needs of the local child care programs by preparing students for entry-level employment as a professional and competent infant/toddler teacher.

**Course Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses</td>
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<tr>
<td>EC A126 or EC A127</td>
<td>Teaching in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>EC A130 or EC A131</td>
<td>Language Arts for Children</td>
<td>3</td>
</tr>
<tr>
<td>EC A155</td>
<td>Principles &amp; Practices of Teaching Young Children</td>
<td>3</td>
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<tr>
<td>EC A156</td>
<td>Early Childhood Laboratory</td>
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<td>EC A157</td>
<td>Guidance for Young Children</td>
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</tr>
<tr>
<td>EC A165</td>
<td>Observing and Recording Child Behavior</td>
<td>3</td>
</tr>
<tr>
<td>EC A220</td>
<td>Infant/Toddler Programs</td>
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<td>EC A221</td>
<td>Infant/Toddler Field Experience</td>
<td>3</td>
</tr>
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<td>HMDV A180</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>HMDV A184</td>
<td>Infant Development and Relationships</td>
<td>3</td>
</tr>
<tr>
<td>HMDV A190</td>
<td>Family, School, and Community Partnerships</td>
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<td>Select one of the following:</td>
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<tr>
<td>EC A199</td>
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<tr>
<td>EMS A145</td>
<td>Emergency Medical Care - Pediatrics</td>
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**Total Units** | 32.5-34

**Course** | **Title** | **Units** |
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<th></th>
<th></th>
<th></th>
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<tbody>
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<td>0.5-2</td>
</tr>
<tr>
<td>EC A199</td>
<td>Current Issues in Early Childhood</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Information**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.
Preschool Teacher, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_ECPT
Control Number: 11641

A certificate is earned by students who have developed skills necessary to work as teachers of preschool children in early childhood settings. Courses emphasize strong theoretical and practical skills needed to work with children 2-5 years. Courses fulfill Title 22 licensing requirements and Title 5 early childhood education course requirements for the Child Development Permit at the teacher level.

Complete the Preschool Teacher Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome
1. The objective of the program is to meet the needs of the local child care programs by preparing students for entry level employment as a professional and competent preschool teacher.

Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course or at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/teaching-education/education/preschool-teacher-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement.

See the General Education Patterns section of this catalog for more information.

Preschool Teacher, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_ECPT
Control Number: 22423

A certificate is earned by students who have developed skills necessary to work as teachers of preschool children in early childhood settings. Courses emphasize strong theoretical and practical skills needed to work with children 2-5 years. Courses fulfill Title 22 licensing requirements and Title 5 early childhood education course requirements for the Child Development Permit at the teacher level.
Program Outcome

1. The objective of the program is to meet the needs of the local child care programs by preparing students for entry level employment as a professional and competent preschool teacher.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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### Integrative Health

- **Integrative Health Coach, Associate in Science Degree** (p. 287)
- **Integrative Health Coach, Certificate of Achievement** (p. 288)

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### Integrative Health Coach, Associate in Science Degree

Financial Aid Eligible  
Banner Code: 1_AS_IHC  
Control Number: 38587

The Integrative Health Coach will have a holistic approach to patient services and will have knowledge of integrative modalities that support health and wellness. Integrative Health Coaches assist patients in understanding the recommendations of their clinicians for improved health outcomes. Tools used by Integrative Health Coach include goal setting for behavior change, motivational interviewing, and health education. Their understanding of the U.S. healthcare system and health insurance will allow them to help patients navigate the healthcare system, ensuring that patients are connected to services including under coverage and/or connecting the patient to additional community resources. The Integrative Health Coach program will prepare students to serve on health care teams, providing patient navigational support in understanding and accessing medical care.

The Integrative Health Coach empowers patients to make lasting health behavior changes that are the cornerstones of lifelong well-being. It bridges the gap between medical recommendations and patients’ ability to successfully implement their clinician’s recommendations into their behavior choices.

Students who complete the Integrative Health Coach Certificate of Achievement may elect to complete additional graduation requirements and earn an Associate of Science, Integrative Health Coach. The program is structured to allow students who have completed the Medical Assisting program can complete the requirements in one semester. It will also benefit individuals who are currently working within health care or who have completed an undergraduate degree and desire addition skills.

---

### Program Outcomes

1. Students will have the knowledge, skills, and dispositions to be successful members of an integrated healthcare team.

2. Students will understand basic disease etiology and treatment and be able to assist patients in understanding diagnostic test in relationship to behaviors and treatment adherence.

### Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a
minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/teaching-education/integrative-health/healthcare-associate-science-degreeto/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Course List

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tr>
<td><strong>Semester 1</strong></td>
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<tr>
<td>ALH A111</td>
<td>Medical Terminology</td>
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<td>ALH A115</td>
<td>Patient Care</td>
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<td>or INHL A115</td>
<td>Clinical Skills for the Integrative Health Coach</td>
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<tr>
<td>ALH A120</td>
<td>Human Diseases</td>
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<td>INHL A100</td>
<td>Integrative Health Coach Principles &amp; Practice</td>
<td>3</td>
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<tr>
<td>FN A140</td>
<td>Introduction to Nutrition Concepts</td>
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<td>or PUBH A210</td>
<td>Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs</td>
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<td>or PUBH A220</td>
<td>Techniques and Topics in Health Education</td>
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<td>Introduction to Complementary and Alternative Medicine</td>
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<tr>
<td>INHL A230</td>
<td>Assessing and Analyzing Health Information</td>
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</tr>
<tr>
<td>KIN A284</td>
<td>Theory of Yoga</td>
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</table>

### Integrative Health Coach, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_IHC
Control Number: 38598

The Integrative Health Coach will have a holistic approach to patient services and will have knowledge of integrative modalities that support health and wellness. Integrative Health Coaches assist patients in understanding the recommendations of their clinicians for improved health outcomes. Tools used by Integrative Health Coach include goal setting for behavior change, motivational interviewing, and health education. Their understanding of the U.S. healthcare system and health insurance will allow them to help patients navigate the healthcare system, ensuring that patients are connected to services including under coverage and/or connecting the patient to additional community resources. The Integrative Health Coach program will prepare students to serve on health care teams, providing patient navigational support in understanding and accessing medical care.

The Integrative Health Coach empowers patients to make lasting health behavior changes that are cornerstones of lifelong well-being. It bridges the gap between medical recommendations and patients’ ability to successfully implement their clinician’s recommendations into their behavior choices.

Students who complete the Integrative Health Coach Certificate of Achievement may elect to complete additional graduation requirements and earn an Associate of Science, Integrative Health Coach. The program is structured to allow students who have completed the Medical Assisting program can complete the requirements in one semester. It will also benefit individuals who are currently working within health care or who have completed an undergraduate degree and desire addition skills.

### Program Outcomes

1. Students will have the knowledge, skills, and dispositions to be successful members of an integrated healthcare team.
2. Students will understand basic disease etiology and treatment and be able to assist patients in understanding diagnostic test in relationship to behaviors and treatment adherence.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of
employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Kinesiology

- Fitness Specialist, Associate in Science Degree (p. 289)
- Fitness Specialist, Certificate of Achievement (p. 290)
- Yoga Instructor Training, Certificate of Specialization (p. 291)

### Fitness Specialist, Associate in Science Degree

Financial Aid Eligible  
Banner Code: 1_AS_PEPT  
Control Number: 03970

This program provides students with theory necessary to be effective in the health fitness industry (health clubs, corporate fitness, etc.). Students in this program will learn scientific principles of exercise and physical conditioning, techniques for the measurement of human performance, and methods for establishing healthy nutritional patterns.

#### Program Outcomes

1. Students will have the knowledge, skills & experience necessary to assess an individual’s level of physical fitness and design appropriate exercise programming to improve physical fitness.
2. Students will be qualified for careers as fitness instructors, exercise testing technicians, strength coaches, or personal fitness trainers.
3. Develops a strong understanding of the business aspects of personal training, including effective practices, professional ethics, marketing, record keeping, and communication.

### Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite. Psychology A160 or Math A100 or higher, with the exception of Math A220.

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#### Course Information

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<td>MA A150</td>
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<td>NC A180</td>
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<td>PUBH A200</td>
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<tr>
<td>PUBH A203</td>
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Total Units: 26.5-29.5

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### Course Table

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<td>Patient Care</td>
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<td>or INHL A115</td>
<td>Clinical Skills for the Integrative Health Coach</td>
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Subtotal: 12.5-13.5

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<td>INHL A220</td>
<td>Techniques and Topics in Health Education</td>
<td>3</td>
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<td>or PUBH A220</td>
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<td>INHL A250</td>
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Subtotal: 11-13

**Restricted Electives** - Students must complete a minimum of one course from the list below.

- HTT A180 | Enhancing Guest Service                   |
- INHL A230 | Assessing and Analyzing Health Information |
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/teaching-education/kinesiology/fitness-specialist-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

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<th>Course</th>
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<td>Fall</td>
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<td>KIN A270</td>
<td>Fitness and Health</td>
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<td>KIN A280</td>
<td>Strength Conditioning/Theory</td>
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</tr>
<tr>
<td>KIN A297</td>
<td>Fitness Specialist Practicum</td>
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<tr>
<td>Spring</td>
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<tr>
<td>KIN A282</td>
<td>Introduction to Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td>KIN A296</td>
<td>Personal Trainer</td>
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<td>KIN A298</td>
<td>Fitness Specialist Internship</td>
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**Total Units** 16-17

**Restricted Electives**

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<td>FN A136/ KIN A283</td>
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<td>KIN A202</td>
<td>Introduction to Kinesiology</td>
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<td>KIN A271</td>
<td>Drugs &amp; Sports</td>
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<td>KIN A272</td>
<td>Movement Analysis</td>
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<td>Sports Medicine</td>
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<td>KIN A279</td>
<td>Sports Management</td>
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<tr>
<td>Any Kinesiology active participation course KIN A105-A156, A205-256</td>
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**Total Units** 3-5

**Total Units - 19-22**

**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<tr>
<td>KIN A298</td>
<td>Fitness Specialist Internship</td>
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</table>

**Total Units** 16-17

This program provides students with theory necessary to be effective in the health fitness industry (health clubs, corporate fitness, etc.). Students in this program will learn scientific principles of exercise and physical conditioning, techniques for the measurement of human performance, and methods for establishing healthy nutritional patterns.

**Program Outcomes**

1. Students will have the knowledge, skills & experience necessary to assess an individual’s level of physical fitness and design appropriate exercise programming to improve physical fitness.
2. Students will be qualified for careers as fitness instructors, exercise testing technicians, strength coaches, or personal fitness trainers.
3. Develops a strong understanding of the business aspects of personal training, including effective practices, professional ethics, marketing, record keeping, and communication.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Fitness Specialist, Certificate of Achievement**

Financial Aid Eligible
Banner Code: 1_CN_PEPT
Control Number: 22389
Restricted Electives

<table>
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<tr>
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<td>BIOL A220</td>
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</table>

Total Units: 3-5

Total Units - 19-22

Yoga Instructor Training, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_YOGA

Orange Coast College’s Yoga Instructor 200-hour certification training provides students with the fundamentals required to teach yoga to a variety of levels and abilities. This program meets the requirements for Yoga Alliance, a professional membership and trade association, to become a registered yoga teacher (RYT). The Yoga Instructor Training program features an inclusive curriculum that focuses on philosophy, anatomy, theory, practice, and teaching. Once completed, the student is prepared for employment in health clubs, spas, yoga/dance studios, hospitals, the health industry, and self-employment as a private yoga instructor.

Program Outcome
1. Properly instruct a yoga class for all levels and abilities including the use of prop, utilizing themes and yoga philosophy to enhance classes.
2. Understand the history and evolution of yoga.
3. Satisfy the 200 hour requirement to qualify for the Yoga Alliance 200-Hour certification.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
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Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Speech-Language Pathology Assistant

• Speech-Language Pathology Assistant, Associate in Science Degree (p. 291)

Speech-Language Pathology Assistant, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_SLPA
Control Number: 12159

The Speech-Language Pathology Assistant program will provide the community with professionally trained personnel to assist the speech pathologist in this specialized field and to provide services in multiple settings to a diverse population in the administration of therapeutic and screening services. Employment opportunities include jobs as speech-language pathology assistants in educational institutes, hospitals, private offices, and rehabilitation centers. State of California Department of Consumer Affairs, Speech-Language Pathology and Audiology Board approved for licensure.
Program Admission

1. Allied Health A010 course – application and orientation.
2. The student must complete the general education requirements for Mathematics and English composition for the Associate in Science Degree and the program prerequisites prior to acceptance to the program.

Program Outcome

1. Graduates of the program will be competent Speech-Language Pathology Assistants meeting the employment needs of the community and participating in professional growth activities.

Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/teaching-education/speech-language-pathology-assistant/speech-language-pathology-assistant-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Required Prerequisites

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<tr>
<td>HMDV A180</td>
<td>Child Growth and Development ¹</td>
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<tr>
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<td>Speech, Language, and Hearing Development</td>
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Visual Arts, Design and Performing Arts

- Architectural Technology (p. 293)
- Art (p. 302)
- Dance (p. 308)
- Digital Media Arts and Design (p. 314)
- Fashion (p. 319)
- Film & Television (p. 330)
- Horticulture (p. 335)
- Interior Design (p. 340)
- Music (p. 343)
- Photography (p. 354)
- Theatre Arts (p. 357)

1. **ANTH A190 Introduction to Linguistic Anthropology, BIOL A221 Anatomy-Physiology, and HMDV A180 Child Growth and Development and in program double count towards General Education Breadth.**
• Digital Fabrication for Architecture, Certificate of Achievement (p. 299)
• Environmental Resource Management, Certificate of Specialization (p. 300)
• FrameCAD Steel Design, Certificate of Specialization (p. 300)
• FrameCAD Steel Production, Certificate of Specialization (p. 301)
• Integrated Project Design, Certificate of Achievement (p. 301)
• Sustainable Design, Certificate of Achievement (p. 302)
• Art (p. 302)
  • Art History, Associate in Arts Degree for Transfer (AA-T) (p. 303)
  • Ceramics, Certificate of Specialization (p. 304)
  • Entertainment Art, Certificate of Achievement (p. 304)
  • Narrative Illustration, Associate in Science Degree (p. 305)
  • Narrative Illustration, Certificate of Achievement (p. 306)
  • Studio Arts, Associate in Arts Degree for Transfer (AA-T) (p. 307)
• Dance (p. 308)
  • Dance Instructor, Certificate of Achievement (p. 308)
  • Dance, Associate in Arts Degree (p. 310)
  • Pilates Instructor, Certificate of Achievement (p. 311)
  • World Dance Instructor, Associate in Arts Degree (p. 312)
  • World Dance Instructor, Certificate of Achievement (p. 313)
• Digital Media Arts and Design (p. 314)
  • Animation, Associate in Science Degree (p. 314)
  • Animation, Certificate of Achievement (p. 315)
  • Graphic Design, Associate in Science Degree (p. 316)
  • Graphic Design, Certificate of Achievement (p. 317)
  • UX Design, Associate in Science Degree (p. 318)
  • UX Design, Certificate of Achievement (p. 318)
• Fashion (p. 319)
  • Apparel Construction, Associate in Science Degree (p. 320)
  • Apparel Construction, Certificate of Achievement (p. 321)
  • Apparel Industry Sustainability, Certificate of Specialization (p. 321)
  • Apparel Production and Product Development, Associate in Science Degree (p. 322)
  • Apparel Production and Product Development, Certificate of Achievement (p. 323)
  • Display and Visual Presentation, Associate in Science Degree (p. 324)
  • Display and Visual Presentation, Certificate of Achievement (p. 325)
  • Fashion Design, Associate in Science Degree (p. 326)
  • Fashion Design, Certificate of Achievement (p. 327)
  • Fashion Merchandising, Associate in Science Degree (p. 328)
  • Fashion Merchandising, Certificate of Achievement (p. 329)
  • Industrial Sewing, Certificate of Specialization (p. 329)
• Film & Television (p. 330)
  • Film & Television, Associate in Arts Degree (p. 330)
  • Film & Television, Certificate of Achievement (p. 331)
  • Film, Television and Electronic Media, Associate in Science Degree for Transfer (AS-T) (p. 333)
  • Immersive Media (VR/AR), Certificate of Achievement (p. 333)
• Media Arts and Creative Entertainment, Certificate of Achievement (p. 334)
• Horticulture (p. 335)
  • Advanced Landscape Design and Landscape Specialist, Certificate of Specialization (p. 335)
  • Basic Landscape Design, Certificate of Specialization (p. 336)
  • Horticulture, Associate in Science Degree (p. 336)
  • Horticulture, Certificate of Achievement (p. 337)
  • Intermediate Landscape Design and Landscape Specialist, Certificate of Specialization (p. 338)
  • Landscape Site Design Elements, Certificate of Specialization (p. 339)
  • Retrofitting California Urban Gardens, Certificate of Specialization (p. 339)
  • The Professional Practice of a Landscape Design & Construction Business, Certificate of Specialization (p. 340)
• Interior Design (p. 340)
  • Kitchen And Bath Advanced Certificate, Certificate of Specialization (p. 341)
  • Level 1 - Interior Merchandising, Certificate of Achievement (p. 341)
  • Level 2 - Interior Design Assistant, Associate in Science Degree (p. 342)
  • Level 3 - Interior Design Professional, Certificate of Achievement (p. 343)
• Music (p. 343)
  • Business Employee, Associate in Arts Degree (p. 344)
  • Business Employee, Certificate of Achievement (p. 345)
  • MIDI Applications, Associate in Arts Degree (p. 346)
  • MIDI Applications, Certificate of Achievement (p. 346)
  • Music, Associate in Arts Degree (p. 347)
  • Music, Associate in Arts Degree for Transfer (AA-T) (p. 348)
  • Musical Entertainer-Instrumental, Associate in Arts Degree (p. 349)
  • Musical Entertainer-Instrumental, Certificate of Achievement (p. 350)
  • Musical Entertainer-Vocal, Associate in Arts Degree (p. 351)
  • Musical Entertainer-Vocal, Certificate of Achievement (p. 351)
  • Studio Guitar Performer, Associate in Arts Degree (p. 352)
  • Studio Guitar Performer, Certificate of Achievement (p. 353)
• Photography (p. 354)
  • Digital SLR Photography and Videography Technician, Certificate of Achievement (p. 354)
  • Photography Digital Technician, Certificate of Achievement (p. 355)
  • Photography-Still, Associate in Science Degree (p. 355)
  • Photography-Still, Certificate of Achievement (p. 356)
• Theatre Arts (p. 357)
  • Theatre Arts, Associate in Arts Degree (p. 357)
  • Theatre Arts, Associate in Arts Degree for Transfer (AA-T) (p. 358)

Architectural Technology

Mission Statement
The OCC Architectural Technology Program endeavors to empower students to lead productive and creative professional lives in the context of Architecture and Environmental Design.

Program Description

The Architectural Technology Program offers courses in design, building materials, construction documents, design visualization and graphics, computer-assisted design, building information modeling and fabrication. Our comprehensive program provides students with the discipline and critical thinking skills necessary to transfer to a broad range of universities and the training and technical skills to gain employment with the many and varied firms in Southern California that hire our graduates. Former California Architects Board President, Christine Lampert, AIA, rates our program as one of the top community college programs in the state. OCC’s Architecture program has a long history of successful graduates and our current students continue to excel as indicated by winning design awards, high transfer rates, and becoming valued members of the professional community.

Architectural Technology Design Specialization Certificates

Specialization Certificates are designed to give Architectural Technology majors a focus within their major and to give non-major students and professionals the opportunity to gain skills in one of five areas within the context of Architecture & Environmental Design.

Department Contact Information

Dean Abernathy
dabernathy@occ.cccd.edu
(714) 432-5868

Architectural Technology Department Website (http://www.orangecoastcollege.edu/academics/divisions/technology/architectural_technology/Pages/default.aspx)

- Architectural Design 1, Associate in Science Degree (p. 294)
- Architectural Design 1, Certificate of Achievement (p. 295)
- Architectural Design 2, Associate in Science Degree (p. 296)
- Architectural Design 2, Certificate of Achievement (p. 297)
- Architecture, Associate in Science Degree (p. 298)
- Design/Build, Certificate of Achievement (p. 299)
- Digital Fabrication for Architecture, Certificate of Achievement (p. 299)
- Environmental Resource Management, Certificate of Specialization (p. 300)
- FrameCAD Steel Design, Certificate of Specialization (p. 300)
- FrameCAD Steel Production, Certificate of Specialization (p. 301)
- Integrated Project Design, Certificate of Achievement (p. 301)
- Sustainable Design, Certificate of Achievement (p. 302)

Architectural Design 1, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1,AS,ARCD
Control Number: 03955

Complete the Architectural Design 1 Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

This certificate may be completed with no required textbook costs. All required courses will have at least one section each semester that has either an online textbook provided to you free of charge or no required textbook. Most of the restricted electives are also textbook cost free. You may be required to purchase other course supplies for these classes. You may also choose to purchase a print copy of any of these texts if you wish.

Program Outcome

1. An entry-level professional position at an architectural or related design office.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/architectural-technology/architectural-technology/architectural-technology-1-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ARCH A105</td>
<td>Architectural Drawing and Design Visualization 1</td>
<td>2</td>
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<tr>
<td>ARCH A110</td>
<td>Introduction to Architecture</td>
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<td>ARCH A155</td>
<td>BIM 1 for Architecture</td>
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<tr>
<td>ARCH A115</td>
<td>Architectural Design and Theory 1</td>
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</tr>
<tr>
<td>ARCH A180</td>
<td>Architectural Construction Documents</td>
<td>4</td>
</tr>
<tr>
<td>ARCH A205</td>
<td>Architectural Drawing and Design Visualization 2</td>
<td>3</td>
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</tbody>
</table>
Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Architectural Design 1 Restricted Electives

No course may be applied to more than one Architectural Design award.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ARCH A101</td>
<td>Introduction to Environmental Sustainability</td>
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</tr>
<tr>
<td>ARCH A104</td>
<td>Introduction to FrameCAD Steel Framing</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A107</td>
<td>Tiny House Design</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A121</td>
<td>FrameCAD Studio 1</td>
<td>2</td>
</tr>
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<td>ARCH A122</td>
<td>FrameCAD Studio 2</td>
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<tr>
<td>ARCH A150</td>
<td>CAD 2-D for Architecture</td>
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<td>ARCH A156</td>
<td>BIM 2 for Architecture</td>
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<td>ARCH A160</td>
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</tr>
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<td>ARCH A162</td>
<td>3-D Modeling: Rhino 1</td>
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<td>ARCH A167</td>
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<td>ARCH A170</td>
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<td>ARCH A171</td>
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<td>ARCH A172</td>
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<td>ARCH A242</td>
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<tr>
<td>ARCH A243</td>
<td>FrameCAD Workshop 3</td>
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</tr>
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1 Elective courses not textbook cost free.

### Architectural Design 1, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_ARCD
Control Number: 22369

This certificate may be completed with no required textbook costs. All required courses will have at least one section each semester that has either an online textbook provided to you free of charge or no required textbook. Most of the restricted electives are also textbook cost free. You may be required to purchase other course supplies for these classes. You may also choose to purchase a print copy of any of these texts if you wish.

### Program Outcome

1. An entry-level professional position at an architectural or related design office.
Architectural Design 2, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_ARDD
Control Number: 16887

Complete the Architectural Design 2 Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Critical thinking, design, and visual communication for successful transfer to a university professional program in Architecture and/or related Environmental Design.
2. A junior/intermediate level drafting/design position at an architectural or related firm.

Associate in Science Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCCAA GE) (p. 384), Option 2 (OCCAS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/architectural-technology/architectural-design-2-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Required Prerequisites
Architectural Design 1 Certificate of Achievement

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<td>ARCH A110</td>
<td>Introduction to Architecture</td>
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<td>ARCH A155</td>
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Architectural Design Restricted Electives

No course may be applied to more than one Architectural Design award.

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<th>Course</th>
<th>Title</th>
<th>Units</th>
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<td>ARCH A101</td>
<td>Introduction to Environmental Sustainability</td>
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<td>Introduction to FrameCAD Steel Framing</td>
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<td>ARCH A107</td>
<td>Tiny House Design</td>
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</tr>
<tr>
<td>ARCH A121</td>
<td>FrameCAD Studio 1</td>
<td>2</td>
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<tr>
<td>ARCH A122</td>
<td>FrameCAD Studio 2</td>
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<tr>
<td>ARCH A150</td>
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<td>ARCH A156</td>
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<td>ARCH A160</td>
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<td>ARCH A170</td>
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<td>ARCH A171</td>
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<td>ARCH A172</td>
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Subtotal - 19

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<tr>
<td>ARCH A215</td>
<td>Architectural Drawing and Design Theory 2</td>
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The 2nd year Certificate of Achievement in Architectural Design 2 prepares students in the areas of critical thinking, design, and visual communication for successful transfer to a university professional program in Architecture and/or related Environmental Design or for a junior/intermediate level drafting/design position at an architectural or related firm.

**Program Outcomes**

1. Critical thinking, design, and visual communication for successful transfer to a university professional program in Architecture and/or related Environmental Design.
2. A junior/intermediate level drafting/design position at an architectural or related firm.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Required Prerequisites**

Architectural Design 1 Certificate of Achievement

<table>
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<tr>
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</tr>
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</tr>
<tr>
<td>ARCH A104</td>
<td>Introduction to FrameCAD Steel Framing</td>
<td>1</td>
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<tr>
<td>ARCH A107</td>
<td>Tiny House Design</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A121</td>
<td>FrameCAD Studio 1</td>
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</tr>
<tr>
<td>ARCH A122</td>
<td>FrameCAD Studio 2</td>
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<td>ARCH A150</td>
<td>CAD 2-D for Architecture 1</td>
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<td>BIM 2 for Architecture</td>
<td>2</td>
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<tr>
<td>ARCH A160</td>
<td>3-D Modeling: SketchUp 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A162</td>
<td>3-D Modeling: Rhino 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A165</td>
<td>Presentation Graphics</td>
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<tr>
<td>ARCH A167</td>
<td>Presentation Video</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A170</td>
<td>Introduction to Design Fabrication</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A171</td>
<td>Design Fabrication 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A172</td>
<td>Design Fabrication 2</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A201</td>
<td>Design/Build 1 for Architecture</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A241</td>
<td>FrameCAD Workshop 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A242</td>
<td>FrameCAD Workshop 2</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A243</td>
<td>FrameCAD Workshop 3</td>
<td>2</td>
</tr>
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</table>

1 Elective courses not textbook cost free.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Program Major Units</td>
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<tr>
<td>AS General Education Option 1, 2, or 3</td>
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<tr>
<td>Transferable electives to satisfy unit requirement</td>
<td>Varies</td>
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<tr>
<td>Total Degree Units</td>
<td>60</td>
</tr>
</tbody>
</table>

**Architectural Design 2, Certificate of Achievement**

**Financial Aid Eligible**

Banner Code: 1_CT_ARDD
Control Number: 22370

The 2nd year Certificate of Achievement in Architectural Design 2 prepares students in the areas of critical thinking, design, and visual communication for successful transfer to a university professional program in Architecture and/or related Environmental Design or for a junior/intermediate level drafting/design position at an architectural or related firm.

**Program Outcomes**

1. Critical thinking, design, and visual communication for successful transfer to a university professional program in Architecture and/or related Environmental Design.
2. A junior/intermediate level drafting/design position at an architectural or related firm.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Required Prerequisites**

Architectural Design 1 Certificate of Achievement

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A105</td>
<td>Architectural Drawing and Design Visualization 1</td>
<td>2</td>
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<tr>
<td>ARCH A110</td>
<td>Introduction to Architecture</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A155</td>
<td>BIM 1 for Architecture</td>
<td>2</td>
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</table>

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Units</th>
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<tr>
<td>ARCH A105</td>
<td>2</td>
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<tr>
<td>ARCH A110</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A155</td>
<td>2</td>
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<tr>
<td>Total Units</td>
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<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Units</th>
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<tbody>
<tr>
<td>ARCH A115</td>
<td>4</td>
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<tr>
<td>ARCH A180</td>
<td>4</td>
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<tr>
<td>ARCH A205</td>
<td>3</td>
</tr>
<tr>
<td>Architectural Design Restricted Elective(s) ARCH (see list)</td>
<td>2</td>
</tr>
</tbody>
</table>

| Total Units | 19 |

Architectural Design Restricted Elective(s) ARCH (see list)
Architectural Design 1 Restricted Electives

No course may be applied to more than one Architectural Design award.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A101</td>
<td>Introduction to Environmental Sustainability</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A104</td>
<td>Introduction to FrameCAD Steel Framing</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A107</td>
<td>Tiny House Design</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A121</td>
<td>FrameCAD Studio 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A122</td>
<td>FrameCAD Studio 2</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A150</td>
<td>CAD 2-D for Architecture ¹</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A156</td>
<td>BIM 2 for Architecture</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A160</td>
<td>3-D Modeling: SketchUp 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A162</td>
<td>3-D Modeling: Rhino 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A165</td>
<td>Presentation Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A167</td>
<td>Presentation Video ¹</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A170</td>
<td>Introduction to Design Fabrication</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A171</td>
<td>Design Fabrication 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A172</td>
<td>Design Fabrication 2</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A201</td>
<td>Design/Build 1 for Architecture</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A241</td>
<td>FrameCAD Workshop 1</td>
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<td>ARCH A242</td>
<td>FrameCAD Workshop 2</td>
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<tr>
<td>ARCH A243</td>
<td>FrameCAD Workshop 3</td>
<td>2</td>
</tr>
</tbody>
</table>

¹ Elective courses not textbook cost free.

Subtotal - 19

Architectural Design 2 Restricted Electives

No course may be applied to more than one Architectural Design award.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A101</td>
<td>Introduction to Environmental Sustainability</td>
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</tr>
<tr>
<td>ARCH A104</td>
<td>Introduction to FrameCAD Steel Framing</td>
<td>1</td>
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<tr>
<td>ARCH A107</td>
<td>Tiny House Design</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A121</td>
<td>FrameCAD Studio 1</td>
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<tr>
<td>ARCH A122</td>
<td>FrameCAD Studio 2</td>
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</tbody>
</table>

Total Units 40

Architecture, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_ARCH
Control Number: 14409

The Architecture Associate in Science degree provides courses to help develop students understanding of the concepts, skills and competencies necessary for further study in the field. The program prepares students in the areas of critical thinking, design, and visual communication. Students who are interested in transfer to a university professional program in Architecture and/or related Environmental Design should contact an OCC counselor for assistance in additional course preparation.

Program Outcome

1. Student will be able to demonstrate critical thinking, design, and visual communication as related to architecture.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “Pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/architectural-technology/architecture-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/, Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>Required Courses</td>
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<tr>
<td>Core Courses</td>
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<tr>
<td>ARCH A105</td>
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<td>ARCH A205</td>
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<td>Select at minimum of three units of the following:</td>
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<tr>
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<tr>
<td>ARCH A230</td>
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<tr>
<td>ARCH A290, or ARCH A290H</td>
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<tr>
<td>ARCH A296, or ARCH A296H</td>
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<td>Minimum Program Major Units</td>
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<td>AS General Education Option 1, 2, or 3</td>
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<td>Transferable electives as needed to satisfy unit requirement</td>
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<td></td>
</tr>
<tr>
<td>Total Units</td>
<td>60</td>
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</tr>
</tbody>
</table>

**Design/Build, Certificate of Achievement**

Not Financial Aid Eligible
Banner Code: 1_CN_ATDB
Control Number: 31516

The Design/Build specialization certificate prepares students to design, develop, and construct small, sustainable projects.

**Program Outcome**

1. Design, develop, and construct small, sustainable projects.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
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<td>ARCH A155</td>
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<tr>
<td>ARCH A202</td>
<td>4</td>
<td></td>
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<tr>
<td>ARCH A203</td>
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<td>CNST A116</td>
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<td>CNST A165</td>
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<td>Total Units</td>
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</tbody>
</table>

**Digital Fabrication for Architecture, Certificate of Achievement**

Not Financial Aid Eligible
Banner Code: 1_CM_ATDF
Control Number: 31517

The Digital Fabrication specialization certificate prepares students to design, develop, and construct three-dimensional environmental design installations and objects using digital fabrication tools.

**Program Outcome**

1. Design, develop, and construct three-dimensional environmental design installations and objects using digital fabrication tools.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.
1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A105</td>
<td>Architectural Drawing and Design</td>
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</tr>
<tr>
<td>ARCH A105</td>
<td>Visualization 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A162</td>
<td>3-D Modeling: Rhino 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A163</td>
<td>3-D Modeling: Rhino 2</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A171</td>
<td>Design Fabrication 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A172</td>
<td>Design Fabrication 2</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A201</td>
<td>Design/Build 1 for Architecture</td>
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<tr>
<td><strong>Total Units</strong></td>
<td><strong>12</strong></td>
<td><strong>12</strong></td>
</tr>
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</table>

**Environmental Resource Management, Certificate of Specialization**

Not Financial Aid Eligible

Banner Code: 1_CE_ERM

The Environmental Resource Management Certification Program (ERM) is designed to provide education and training for individuals interested in working in the recycling and resource management/green jobs sector. As more cities, businesses, and institutions develop sustainability and resource management policies and programs, there is a need for people who can serve as sustainability coordinators, environmental educators, resource managers, and environmental program advocates. The ERM curriculum emphasizes an interdisciplinary approach that explores recycling and resource management from a variety of perspectives and settings. Curriculum will provide students with a general knowledge of environmental resource management emphasizing cultural, community, business, and educational applications. Courses will also include opportunities to develop environmental advocacy programs and projects as well as entry to related internships and shadowship opportunities.

**Program Outcome**

1. Provide students with the skills and resources needed to find jobs across all industry sectors related to environmental resource management upon completion of the program

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A101</td>
<td>Introduction to Environmental Sustainability</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A102</td>
<td>Introduction to Environmental Studies</td>
<td>3</td>
</tr>
<tr>
<td>ARCH A141</td>
<td>Introduction to Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>ARCH A142</td>
<td>Environmental Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>ARCH A190</td>
<td>Environmental Studies Practicum</td>
<td>1.5-2.5</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>11.5-12.5</strong></td>
<td><strong>11.5-12.5</strong></td>
</tr>
</tbody>
</table>

**FrameCAD Steel Design, Certificate of Specialization**

Not Financial Aid Eligible

Banner Code: 1_CE_FCSD

The FrameCAD Steel Design Certificate prepares students and working professionals for design, production drawing, and file preparation for panelized steel frame production and installation. Course projects will use FrameCAD Structure and Detailer software to design and prepare files for production on a FrameCAD F325iT machine. FrameCAD is disrupting the way buildings get made by reducing waste, transportation, and build time and by increasing strength and longevity. People with skills in this
transforming industry command high salaries and will be part of a new age of design/manufacture/build.

Program Outcome
1. Successful students in this program will be able to design and produce digital files for a small structure using FrameCAD Structure and Detailer software and export the file for production in FrameCAD Factory.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A104</td>
<td>Introduction to FrameCAD Steel Framing</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A121</td>
<td>FrameCAD Studio 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A122</td>
<td>FrameCAD Studio 2</td>
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</tr>
<tr>
<td>ARCH A241</td>
<td>FrameCAD Workshop 1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

FrameCAD Steel Production, Certificate of Specialization
Not Financial Aid Eligible
Banner Code: 1_CE_FCSFP

The FrameCAD Steel Production Certificate prepares students and working professionals for design file preparation, cold form steel (CFS) fabrication, CFS panel production and assembly, and preparation for project delivery. Course projects will use FrameCAD design software to produce custom projects using FrameCAD Factory software on a FrameCAD F325iT machine. Students will also be trained to maintain and operate the machine, prepare worksite documents, and learn to organize workflow safely. People with skills in this transforming industry command high salaries and will be part of a new era of integrative design and construction.

Program Outcomes
1. Successful students in this program will be able to safely manufacture steel frame custom components using a FrameCAD F325iT machine and safely assemble the components into a structure.
2. Successful students will be able to operate and maintain a FrameCAD machine and be able to document projects, materials, and machine records.
3. Successful students will able to organize and schedule project workflow to utilize the machine and workers efficiently and safely.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>ARCH A104</td>
<td>Introduction to FrameCAD Steel Framing</td>
<td>1</td>
</tr>
<tr>
<td>ARCH A241</td>
<td>FrameCAD Workshop 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A242</td>
<td>FrameCAD Workshop 2</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A243</td>
<td>FrameCAD Workshop 3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

Integrated Project Design, Certificate of Achievement
Not Financial Aid Eligible
Banner Code: 1_CM_ATIP

The Integrated Project Design specialization certificate prepares students to design, develop, fabricate, construct, and administrate multi-disciplinary projects using BIM and integrative digital technologies.

Program Outcome
1. The Integrated Project Design specialization certificate prepares students to design, develop, virtually construct, administrate, and prototype multi-disciplinary projects using BIM-based technology.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A155</td>
<td>BIM 1 for Architecture</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A156</td>
<td>BIM 2 for Architecture</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A157</td>
<td>BIM Multidisciplinary</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A158</td>
<td>BIM Project Integration</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A202</td>
<td>Design/Build 2 for Architecture</td>
<td>4</td>
</tr>
<tr>
<td>or ARCH A203</td>
<td>Design/Build 3 Architecture</td>
<td></td>
</tr>
</tbody>
</table>

Total Units 12

Sustainable Design, Certificate of Achievement

Not Financial Aid Eligible
Banner Code: 1_CM_ATSD

The Sustainable Design specialization certificate prepares students to engage in Environmental Design as a balance of natural and man-made systems and resources and will prepare students pursuing further studies and careers in Architecture, Environmental Design, Landscape Design, Planning, and Sustainable Design.

Program Outcome
1. The Sustainable Design specialization certificate prepares students to design, develop, analyze, and promote sustainable environmental design practices.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<thead>
<tr>
<th>Course</th>
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<tr>
<td>ARCH A101</td>
<td>Introduction to Environmental Sustainability</td>
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</tr>
<tr>
<td>ARCH A102</td>
<td>Introduction to Environmental Studies</td>
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<tr>
<td>ARCH A185</td>
<td>Environmental Design Systems</td>
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<td>ARCH A190</td>
<td>Environmental Studies Practicum</td>
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<td>ESEC A100</td>
<td>Introduction to Environmental Science</td>
<td>3</td>
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<td>or HORT A100</td>
<td>Horticulture Science</td>
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<tr>
<td>ARCH A196</td>
<td>Green Building Codes</td>
<td>1.5</td>
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<tr>
<td>or ARCH A197</td>
<td>California Energy Code</td>
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</tbody>
</table>

Total Units 14.5

Art

The Orange Coast College Art Department offers students courses in almost every 2D and 3D art form imaginable: Drawing, Painting, 2D and 3D design, 2D and 3D Figurative art, Sculpture, Jewelry, Ceramics, Illustration, Entertainment, Printmaking, Screen Printing and more!
Students can earn AA-T degrees in Art History or Studio Arts, Certificates of Achievement in Entertainment Art or Narrative Illustration, and Certificates of Specialization in Ceramics. The Art Department resources include the latest technology of Digital Painting and 3D Printing, as well as the traditional time-tested processes of Metal Casting.

Department Contact Information
Roger Whitridge
rwhitridge@occ.cccd.edu (%E2%80%8Borwhitridge@occ.cccd.edu)

Art department website (http://www.orangecoastcollege.edu/academics/divisions/visual_arts/art/Pages/default.aspx)

- Art History, Associate in Arts Degree for Transfer (AA-T) (p. 303)
- Ceramics, Certificate of Specialization (p. 304)
- Entertainment Art, Certificate of Achievement (p. 304)
- Narrative Illustration, Associate in Science Degree (p. 305)
- Narrative Illustration, Certificate of Achievement (p. 306)
- Studio Arts, Associate in Arts Degree for Transfer (AA-T) (p. 307)

### Art History, Associate in Arts Degree for Transfer (AA-T)

Financial Aid Eligible
Banner Code: 1_AAT_ARTH
Control Number: 32532

Students graduating with an Associate in Art History for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Art History AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate in Arts in Art History Transfer Degree educates students on the history of art and its function as a global language. Courses are designed to foster an understanding of visual communication through study in context, culture, social, political, economic and religious conditions in different historical eras.

### Program Outcomes

1. Read, write, interpret and understand the major movements and concepts in art history.
2. Conduct original research in the history of art.
3. Understand the significance and application of art historical styles, cultures, artist and relevant vocabulary in art and design.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

### Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

#### Course Title Units

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>ART A103</td>
<td>Survey of Asian Art</td>
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</tr>
<tr>
<td>ART A150</td>
<td>Ceramics 1</td>
<td>3</td>
</tr>
<tr>
<td>ART A151</td>
<td>Ceramics 2</td>
<td>3</td>
</tr>
<tr>
<td>ART A170</td>
<td>Printmaking 1</td>
<td>3-4</td>
</tr>
<tr>
<td>ART A171</td>
<td>Printmaking 2</td>
<td>3-4</td>
</tr>
<tr>
<td>ART A140</td>
<td>Ceramics 1</td>
<td>3</td>
</tr>
<tr>
<td>ART A150</td>
<td>Ceramics 2</td>
<td>3</td>
</tr>
<tr>
<td>ART A170</td>
<td>Printmaking 1</td>
<td>3-4</td>
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<tr>
<td>ART A171</td>
<td>Printmaking 2</td>
<td>3-4</td>
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<tr>
<td>DMAD A115</td>
<td>Typography I</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A181</td>
<td>Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A182</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A120/A120H</td>
<td>Introduction to Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A122</td>
<td>Personal Expression</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A283</td>
<td>Art Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following: ANTH A100/A100H Cultural Anthropology

ANTH A190 Introduction to Linguistic Anthropology

ARCH A290/A290 History of Architecture 1

ARCH A296/A296H History of Architecture 2

ART A107 Introduction To Art

ART A108 Women in Art

...
Ceramics, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_CERM

The Ceramics certificate covers the interaction of clay and glaze, studio organization and maintenance, and industrial specialization. This program is intended to provide the necessary tools for a student to perform at basic levels within the ceramic community. Career opportunities include quality control and/or product manager at a ceramic studio, and ceramics instruction.

Program Outcomes
1. Students will demonstrate extensive ceramic knowledge.
2. Students will be employable at entry-level in the ceramics industry.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Entertainment Art, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_EART
Control Number: 39359

The Entertainment Art certificate is for students wanting a career as an artist working for a studio in the Film, TV, Animation and Game industries. The focus is on World Building, known as Visual Development in these industries. These artists design and illustrate characters, environments, vehicles and props that form the visual world of stories we see on screen. The program is intended to introduce students to these fields and give them the skills and methods for internship and entry level jobs, and that enable the lifelong learning necessary to be an Entertainment Artist.

Program Outcomes
1. Demonstrate the skills necessary to design and illustrate worlds (environments, characters, vehicles and props) for stories made for screens.
2. Create a portfolio utilizing industry standard techniques for the purpose of gaining employment and/or acceptance to an art college or university for advanced learning.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART A110</td>
<td>Color and Design: Two-Dimensional</td>
<td>3</td>
</tr>
<tr>
<td>ART A120</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART A125</td>
<td>Perspective Drawing</td>
<td>3</td>
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<tr>
<td>DMAD A181</td>
<td>Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ART A121</td>
<td>Life Drawing 1</td>
<td>3</td>
</tr>
<tr>
<td>ART A135</td>
<td>Digital Painting</td>
<td>3</td>
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Restricted Electives 15
Select five elective courses

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<tbody>
<tr>
<td>ART A111</td>
<td>Color and Design: Three-Dimensional</td>
<td></td>
</tr>
<tr>
<td>ART A122</td>
<td>Human Anatomy for Artists</td>
<td></td>
</tr>
<tr>
<td>ART A124</td>
<td>Advanced Drawing</td>
<td></td>
</tr>
<tr>
<td>ART A130</td>
<td>Painting 1</td>
<td></td>
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<tr>
<td>ART A143</td>
<td>Story Illustration Techniques</td>
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</tr>
<tr>
<td>ART A220</td>
<td>Figure Composition</td>
<td></td>
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<tr>
<td>ART A249</td>
<td>Digital Sculpture with ZBrush</td>
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<tr>
<td>ART A269</td>
<td>Cartooning 1</td>
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<tr>
<td>DMAD A193</td>
<td>Photoshop for Design</td>
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<tr>
<td>DMAD A280</td>
<td>2D Animation</td>
<td></td>
</tr>
<tr>
<td>DMAD A281</td>
<td>3D Computer Graphics Animation</td>
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Required Core

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<tr>
<td>ART A251</td>
<td>Character Design</td>
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<thead>
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<th>Course</th>
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<th>Units</th>
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<tbody>
<tr>
<td>ART A252</td>
<td>Prop and Vehicle Design</td>
<td>3</td>
</tr>
<tr>
<td>ART A253</td>
<td>Environment Design and Illustration</td>
<td>3</td>
</tr>
<tr>
<td>ART A255</td>
<td>Entertainment Art Project</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units 45

Narrative Illustration, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_CANI
Control Number: 08649

The Narrative Illustration option places its emphasis on a great variety of drawing and painting courses. The diversity of its curriculum may lead the student into career alternatives, such as Illustration for books, including children’s literature, magazines, entertainment art, editorial illustrations and corporate brochures. Students will work in hand made traditional media as well as digital art and illustrations.

Complete the Narrative Illustration Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. Note: this AS degree may require more than 60 units for completion, depending on electives chosen.

Program Outcomes

1. Create a series of illustrations in a variety of mediums demonstrating techniques and applications of current hands-on illustration techniques.

2. Demonstrate proficiency in drawing, perspective, and various mediums.

3. Create a portfolio utilizing multiple design techniques for the purpose of becoming freelance commercial artists and/or acceptance to an art college or university for advanced learning.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite. Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE)
Fourth Semester Narrative Illustration Restricted Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART A118</td>
<td>Product Illustration 1</td>
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<tr>
<td>ART A236</td>
<td>Life Painting 1</td>
<td>3</td>
</tr>
<tr>
<td>ART A251</td>
<td>Character Design</td>
<td>3</td>
</tr>
<tr>
<td>ART A263</td>
<td>Watercolor 1</td>
<td>3</td>
</tr>
<tr>
<td>ART A269</td>
<td>Cartooning 1</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A117</td>
<td>Rapid Illustration Techniques</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A190</td>
<td>Illustrator for Design</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A193</td>
<td>Photoshop for Design</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A280</td>
<td>2D Animation</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A281</td>
<td>3D Computer Graphics Animation</td>
<td>3</td>
</tr>
</tbody>
</table>

Requirement

- Program Major Units: 42.5-45.5
- AS General Education Option 1, 2, or 3: Varies
- Transferable electives to satisfy unit requirement: Varies
- Total Minimum Degree Units: 60.5

Narrative Illustration, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_CAIL
Control Number: 22409

The Narrative Illustration option places its emphasis on a great variety of drawing and painting courses. The diversity of its curriculum may lead the student into career alternatives, such as Illustration for books, including children's literature, magazines, entertainment art, editorial illustrations and corporate brochures. Students will work in hand made traditional media as well as digital art and illustrations.

Program Outcomes

1. Create a series of illustrations in a variety of mediums demonstrating techniques and applications of current hands-on illustration techniques.
2. Demonstrate proficiency in drawing, perspective, and various mediums.
3. Create a portfolio utilizing multiple design techniques for the purpose of becoming freelance commercial artists and/or acceptance to an art college or university for advanced learning.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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</thead>
<tbody>
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<td>Color and Design: Two-Dimensional</td>
<td>3</td>
</tr>
<tr>
<td>ART A120</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A181</td>
<td>Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>Narrative Illustration Restricted Electives (see list)</td>
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**Semester 2**

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<tr>
<td>ART A121</td>
<td>Life Drawing 1</td>
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<tr>
<td>ART A125</td>
<td>Perspective Drawing</td>
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<tr>
<td>DMAD A190</td>
<td>Illustrator for Design</td>
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</tr>
<tr>
<td>or DMAD A193</td>
<td>or Photoshop for Design</td>
<td></td>
</tr>
<tr>
<td>Narrative Illustration Restricted Electives (see list)</td>
<td>2-3</td>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART A143</td>
<td>Story Illustration Techniques</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>ART A142</td>
<td>Life Sculpture 1</td>
<td>3</td>
</tr>
<tr>
<td>ART A220</td>
<td>Figure Composition</td>
<td>3</td>
</tr>
<tr>
<td>ART A236</td>
<td>Life Painting 1</td>
<td>3</td>
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<table>
<thead>
<tr>
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<tr>
<td>ART A144</td>
<td>Illustration 2 - Sequential Illustration</td>
<td>3</td>
</tr>
<tr>
<td>ART A180</td>
<td>Professional Studies</td>
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<table>
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**Fourth Semester Narrative Illustration Restricted Electives**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ART A118</td>
<td>Product Illustration 1</td>
<td>2</td>
</tr>
<tr>
<td>ART A236</td>
<td>Life Painting 1</td>
<td>3</td>
</tr>
<tr>
<td>ART A251</td>
<td>Character Design</td>
<td>3</td>
</tr>
<tr>
<td>ART A263</td>
<td>Watercolor 1</td>
<td>3</td>
</tr>
<tr>
<td>ART A269</td>
<td>Cartooning 1</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A117</td>
<td>Rapid Illustration Techniques</td>
<td>3</td>
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<tr>
<td>DMAD A190</td>
<td>Illustrator for Design</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A193</td>
<td>Photoshop for Design</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A280</td>
<td>2D Animation</td>
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</tr>
<tr>
<td>DMAD A281</td>
<td>3D Computer Graphics Animation</td>
<td>3</td>
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</table>

**Studio Arts, Associate in Arts Degree for Transfer (AA-T)**

Financial Aid Eligible

Banner Code: 1_AAT_ARTS

Control Number: 32536

Students graduating with an Associate in Arts in Studio Arts for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Studio Arts AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The program will provide an opportunity to develop all the skills necessary to be successful in the field of art. Students build confidence in their abilities and the quality of their professional portfolios. They participate in rigorous problem solving and conceptual assignments to develop critical thinking, creative problem solving and aesthetic understanding skills. This major introduces students to foundation, history and technical knowledge of many facets of Art.

**Program Outcomes**

1. Display competence in the use of tools, materials and concepts by completing a portfolio of original art and design projects.
2. Demonstrate ability to evaluate works of art and design through critical discussion and written assignments.
3. Demonstrate an understanding of the contribution of art and design to human experience.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.
### Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

#### Course Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ART A101/A101H</td>
<td>Survey of Western Art from Renaissance to Modern</td>
<td>3</td>
</tr>
<tr>
<td>ART A110</td>
<td>Color and Design: Two-Dimensional</td>
<td>3</td>
</tr>
<tr>
<td>ART A111</td>
<td>Color and Design: Three-Dimensional</td>
<td>3</td>
</tr>
<tr>
<td>ART A120/A120H</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
</tbody>
</table>

#### List A

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART A100 &amp; A100H</td>
<td>Survey of Western Art from Prehistory Through Gothic or Honors Survey of Western Art from Prehistory Through Gothic</td>
<td>3</td>
</tr>
<tr>
<td>or ART A103</td>
<td>Survey of Asian Art</td>
<td></td>
</tr>
</tbody>
</table>

#### List B

Select three of the following: 9-10

- ART A121 Life Drawing 1
- or ART A124 Advanced Drawing
- ART A125 Perspective Drawing
- ART A130 Painting 1
- ART A131 Painting 2
- ART A141 Sculpture 1
- ART A142 Life Sculpture 1
- ART A143 Story Illustration Techniques
- ART A147 Jewelry 1
- ART A150 Ceramics 1
- ART A151 Ceramics 2
- ART A170 Printmaking 1
- ART A171 Printmaking 2
- ART A175 Screen Process Printing 1
- ART A241 Sculpture 2
- ART A247 Jewelry 2
- DMAD A181 Introduction to Computer Graphics
- PHOT A120/ A120H Introduction to Photography
- PHOT A122 Personal Expression
- PHOT A283 Art Photography

#### Program Major Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Transferable electives as needed to satisfy unit requirements</td>
<td>Varies</td>
</tr>
</tbody>
</table>

### Dance

The OCC Dance Department provides a foundation in the theory, technique, and aesthetics of the art of dance. Faculty guide those seeking to become professional, and the recreational dancer, to master strength, flexibility, and musicality within a particular dance form while also developing insight, perception, understanding, and evaluative skills. Students explore their own creative potential and have opportunities to perform in the Robert B. Moore Theatre.

Courses are available in Modern Dance, Ballet, Jazz, Contemporary, Tap, Pilates, Conditioning, World Dance (African, Flamenco, Spanish, East Indian, Middle Eastern and Polynesian), music, methodology and choreography. Transfer arrangements have been articulated with CSULB, UCI, UCLA, CSUF, and Cornish School of the Arts.

We offer an Associate in Arts Degree in Dance and three certificates of achievement: Dance Instructor, Pilates Instructor, and World Dance Instructor. These unique vocational programs prepare students for a variety of job opportunities.

#### Department Contact Information

Rachel Berman
rberman3@occ.cccd.edu

Jose Costas
jcostas@occ.cccd.edu

Dance department website (http://www.orangecoastcollege.edu/academics/divisions/visual_arts/Dance/Pages/default.aspx)

- Dance Instructor, Certificate of Achievement (p. 308)
- Dance, Associate in Arts Degree (p. 310)
- Pilates Instructor, Certificate of Achievement (p. 311)
- World Dance Instructor, Associate in Arts Degree (p. 312)
- World Dance Instructor, Certificate of Achievement (p. 313)

### Dance Instructor, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_DNDI
Control Number: 22407

The Dance certificate program trains students for positions in the commercial and artistic areas of dance. Graduates of the program would be qualified as instructors with an emphasis in one of the following: ballet, modern, jazz, tap and world dance forms in private studios, recreation or other community dance programs. The Dance Department also recommends that students complete their General Education Requirements for an Associate Degree. Students are able to apply principles of movement and creativity to all forms of dance, demonstrate skills of instructing dance to communicate through movement and words, and apply information learned in other disciplines to the art form of dance.
Instruction will utilize both classroom work, using a variety of instructional methods (lecture, lab/demonstration, independent and group projects) and internship experiences in business/industry to prepare the student for job requirements.

### Program Outcomes

1. Communicate proper dance technique effectively through movement demonstration and verbal cueing, using appropriate corresponding terminology.

2. Successfully teach a dance class in a particular style: modern dance, ballet, tap, jazz, hip hop or contemporary dance.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td><strong>Required Courses</strong></td>
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<tr>
<td>DANC A119</td>
<td>Kinesiology For Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC A152</td>
<td>Pilates Apparatus &amp; Mat Work Level 1</td>
<td>1-2</td>
</tr>
<tr>
<td>or DANC A153</td>
<td>Pilates Apparatus &amp; Mat Work Level 2</td>
<td></td>
</tr>
<tr>
<td>DANC A150</td>
<td>Dance Improvisation I</td>
<td>1</td>
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<tr>
<td>or DANC A250</td>
<td>Dance Improvisation II</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>DANC A160</td>
<td>Dance Composition/Choreography I</td>
<td></td>
</tr>
<tr>
<td>DANC A162</td>
<td>Dance Composition/Choreography II</td>
<td></td>
</tr>
<tr>
<td>DANC A262</td>
<td>Dance Composition/Choreography III</td>
<td></td>
</tr>
<tr>
<td>DANC A170</td>
<td>Music For Dancers</td>
<td>2</td>
</tr>
<tr>
<td>DANC A180</td>
<td>Dance Wellness and Injury Prevention</td>
<td>3</td>
</tr>
<tr>
<td>DANC A200</td>
<td>Appreciation Of Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC A201</td>
<td>Rehearsal and Performance I</td>
<td>1</td>
</tr>
</tbody>
</table>

### Program Outcomes

- **Minimum Grade Requirement**

   In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>or DANC A202</td>
<td>Rehearsal and Performance II</td>
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<tr>
<td>DANC A205</td>
<td>Dance as a Profession Seminar</td>
<td>2</td>
</tr>
<tr>
<td>DANC A210</td>
<td>Dance Methodology</td>
<td>3</td>
</tr>
<tr>
<td>DANC A211</td>
<td>Repertoire I</td>
<td>1-4</td>
</tr>
<tr>
<td>or DANC A212</td>
<td>Repertoire II</td>
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<tr>
<td>DANC A220</td>
<td>Dance Internship I</td>
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<tr>
<td>DANC A221</td>
<td>Dance Internship II</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>DANC A143</td>
<td>Jazz Dance III</td>
<td></td>
</tr>
<tr>
<td>DANC A243</td>
<td>Jazz IV</td>
<td></td>
</tr>
<tr>
<td>DANC A253</td>
<td>Preparation for Audition - Jazz</td>
<td></td>
</tr>
<tr>
<td>or DANC A254</td>
<td>Preparation for Audition - Ballet</td>
<td></td>
</tr>
<tr>
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<tr>
<td>DANC A145</td>
<td>Modern Dance III</td>
<td></td>
</tr>
<tr>
<td>DANC A245</td>
<td>Modern IV</td>
<td></td>
</tr>
<tr>
<td>DANC A255</td>
<td>Preparation for Audition - Modern</td>
<td></td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>DANC A125</td>
<td>Tap 1</td>
<td></td>
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<tr>
<td>DANC A126</td>
<td>Tap 2</td>
<td></td>
</tr>
<tr>
<td>DANC A146</td>
<td>Tap III</td>
<td></td>
</tr>
<tr>
<td>DANC A246</td>
<td>Tap IV</td>
<td></td>
</tr>
<tr>
<td>DANC A256</td>
<td>Preparation for Audition - Tap</td>
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<tr>
<td>Select three units of dance techniques from at least two different dance styles:</td>
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<tr>
<td>DANC A138</td>
<td>African Dance and Drumming I</td>
<td></td>
</tr>
<tr>
<td>DANC A158</td>
<td>African Dance and Drumming II</td>
<td></td>
</tr>
<tr>
<td>DANC A168</td>
<td>African Dance and Drumming III</td>
<td></td>
</tr>
<tr>
<td>DANC A137</td>
<td>Classical Danc of India</td>
<td></td>
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<tr>
<td>DANC A154</td>
<td>Contemporary Commercial Dance</td>
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<tr>
<td>DANC A135</td>
<td>Flamenco Dance 1</td>
<td></td>
</tr>
<tr>
<td>DANC A147</td>
<td>Flamenco Dance 2</td>
<td></td>
</tr>
<tr>
<td>DANC A247</td>
<td>Flamenco Dance 3</td>
<td></td>
</tr>
<tr>
<td>DANC A267</td>
<td>Flamenco Dance 4</td>
<td></td>
</tr>
<tr>
<td>DANC A149</td>
<td>Hip-Hop Dance I</td>
<td></td>
</tr>
<tr>
<td>DANC A159</td>
<td>Hip-Hop Dance II</td>
<td></td>
</tr>
<tr>
<td>DANC A169</td>
<td>Hip-Hop Dance III</td>
<td></td>
</tr>
<tr>
<td>DANC A269</td>
<td>Hip Hop 4</td>
<td></td>
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<tr>
<td>DANC A133</td>
<td>Intro To World Dance</td>
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<tr>
<td>DANC A116</td>
<td>Latin Dance Styles I</td>
<td></td>
</tr>
<tr>
<td>DANC A155</td>
<td>Latin Dance Styles II</td>
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<tr>
<td>DANC A165</td>
<td>Latin Dance Styles III</td>
<td></td>
</tr>
<tr>
<td>DANC A130</td>
<td>Mid-Eastern Dance 1</td>
<td></td>
</tr>
<tr>
<td>DANC A148</td>
<td>Mid-Eastern Dance 2</td>
<td></td>
</tr>
<tr>
<td>DANC A248</td>
<td>Mid-Eastern Dance 3</td>
<td></td>
</tr>
<tr>
<td>DANC A264</td>
<td>Mid-Eastern Dance 4</td>
<td></td>
</tr>
<tr>
<td>DANC A156</td>
<td>Polynesian Dance</td>
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Total Units: 34.5-40
### Dance Instructor Suggested Electives

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<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BUS A100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS A120</td>
<td>Personal Financial Success</td>
<td>3</td>
</tr>
<tr>
<td>CMST A100</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>DANC A129</td>
<td>Pilates Methodology</td>
<td>3</td>
</tr>
<tr>
<td>EC A131</td>
<td>Creativity for Children</td>
<td>3</td>
</tr>
<tr>
<td>HLED/PUBH A100</td>
<td>Personal Health Education</td>
<td>3</td>
</tr>
<tr>
<td>HLED/KIN A270</td>
<td>Fitness and Health</td>
<td>3</td>
</tr>
<tr>
<td>HMDV A180</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>PSYC A100</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

### Dance, Associate in Arts Degree

**Financial Aid Eligible**

**Banner Code:** 1_AA_DANC

**Control Number:** 03993

The degree provides students with a foundation in the theory, technique, and the aesthetics of the art of dance. This is fulfilled through a comprehensive program of dance study in areas of core techniques, contemporary and commercial styles, choreography, performance, and world dance forms. Students will demonstrate proficiency through accurate technical execution, performance skills, research papers, essays, and choreographic works. Program assessment is measured by public performances, program completion, transferability, and periodic program review. Students qualify to pursue a variety of dance-related careers and advanced degree options.

### Program Outcome

1. Develop an understanding and appreciation of the art of dance and its relevance to the multicultural world we live in.
2. Acquire the dance technical skills necessary to transfer to a university program or similar advanced dance study program.
3. Implement critical thinking skills and kinesthetic awareness in their observation, analysis, and interpretation of dance performances on stage or in media.
4. Develop dance composition and performance skills necessary to successfully transfer to a university program or similar advanced dance study program.

### Associate in Arts Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/dance/dance-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


#### Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC A150</td>
<td>Dance Improvisation I</td>
<td>1</td>
</tr>
<tr>
<td>DANC A250</td>
<td>Dance Improvisation II</td>
<td>1</td>
</tr>
<tr>
<td>DANC A170</td>
<td>Music for Dancers</td>
<td>2</td>
</tr>
</tbody>
</table>

Select one of the following:

- **DANC A143** Jazz Dance III
- **DANC A243** Jazz IV
- **DANC A253** Preparation for Audition - Jazz

Select one of the following:

- **DANC A144** Ballet III
- **DANC A244** Ballet IV
- **DANC A254** Preparation for Audition - Ballet

Select one of the following:

- **DANC A145** Modern Dance III
- **DANC A245** Modern IV
- **DANC A255** Preparation for Audition - Modern

Select one of the following:

- **DANC A160** Dance Composition/Choreography I
- **DANC A162** Dance Composition/Choreography II
- **DANC A262** Dance Composition/Choreography III

Select one of the following:

- **DANC A201** Rehearsal and Performance I
- **DANC A202** Rehearsal and Performance II
- **DANC A204** Rehearsal and Performance III
- **DANC A207** Rehearsal and Performance IV

Select one of the following:
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>DANC A211</td>
<td>Repertoire I</td>
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<td>DANC A214</td>
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**Restricted Electives**

Select four units of the following: 4

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<td>Yoga For Dancers</td>
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<td>Latin Dance Styles I</td>
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<td>Jazz Dance 1</td>
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<td>Jazz Dance 2</td>
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<td>DANC A126</td>
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<td>DANC A130</td>
<td>Mid-Eastern Dance 1</td>
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<td>DANC A135</td>
<td>Flamenco Dance 1</td>
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<td>Classical Danc of India</td>
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<td>DANC A149</td>
<td>Hip-Hop Dance I</td>
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<td>Pilates Apparatus &amp; Mat Work Level 1</td>
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<td>DANC A153</td>
<td>Pilates Apparatus &amp; Mat Work Level 2</td>
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<td>DANC A168</td>
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<td>DANC A169</td>
<td>Hip-Hop Dance III</td>
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<td>or DANC A269</td>
<td>Hip Hop 4</td>
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<td>DANC A171</td>
<td>Modern Dance Basics</td>
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<td>DANC A172</td>
<td>Ballet Dance Basics</td>
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<td>DANC A173</td>
<td>Jazz Dance Basics</td>
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<td>DANC A174</td>
<td>Tap Dance Basics</td>
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<td>DANC A180</td>
<td>Dance Wellness and Injury Prevention</td>
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<td>DANC A191</td>
<td>Classical Technique and Variation Workshop</td>
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<td>DANC A200</td>
<td>Appreciation Of Dance</td>
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<td>DANC A203</td>
<td>Performing Dance Ensemble I</td>
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<td>DANC A205</td>
<td>Dance as a Profession Seminar</td>
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<td>DANC A210</td>
<td>Dance Methodology</td>
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<td>DANC A223</td>
<td>Performing Dance Ensemble II</td>
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<td>DANC A230</td>
<td>World Dance and Culture</td>
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<td>DANC A233</td>
<td>Performing Dance Ensemble III</td>
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<td>DANC A246</td>
<td>Tap IV</td>
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<td>DANC A247</td>
<td>Flamenco Dance 3</td>
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<tr>
<td>or DANC A267</td>
<td>Flamenco Dance 4</td>
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<td>DANC A248</td>
<td>Mid-Eastern Dance 3</td>
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<td>or DANC A264</td>
<td>Mid-Eastern Dance 4</td>
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<td>DANC A256</td>
<td>Preparation for Audition - Tap</td>
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</table>

**Program Major Units**

19-22

**AA General Education Option 1, 2, or 3**

Varies

**Transferable electives as needed to satisfy unit requirement**

Varies

**Total Units**

60

---

**Pilates Instructor, Certificate of Achievement**

Financial Aid Eligible

Banner Code: 1_CN_PILA
Control Number: 33763

The Pilates/Dance Conditioning Instructor Certificate of Achievement prepares the student to teach in a privately owned dance, fitness or Pilates studio, recreational facility, or health club. The student takes theory and technique courses on Pilates apparatus taught by Pilates certified specialists and learns methods to determine appropriate conditioning programs for people of all ages and physical conditions. To prepare the student for employment, instruction uses both classroom work with a variety of instructional methods (lecture, lab/demonstration, independent and group projects), and internship experiences in dance and fitness facilities.

**Program Outcomes**

1. Successfully teach a Pilates mat and apparatus class with appropriate modifications.
2. Communicate effectively through clear demonstration and verbal cueing using appropriate terminology.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy
of the transcript while some divisions allow petitions for Certificates of Specialization before completing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Recommended Prior to Internship 2
Current First Aid/CPR Certification

Course | Title | Units
---|---|---
Core Courses
DANC A108 | Pilates Mat Work | 1
DANC A119 | Kinesiology For Dance | 3
DANC A129 | Pilates Methodology | 3
DANC A151 | Pilates as a Profession | 1
DANC A152 | Pilates Apparatus & Mat Work Level 1 | 2
DANC A153 | Pilates Apparatus & Mat Work Level 2 | 2
DANC A208 | Pilates 3-4 | 1.5
DANC A215 | Pilates Internship I | 1
DANC A217 | Pilates Internship II | 1

Select three units of the following: 3
DANC A106 | Strength and Stretch | 1
DANC A107 | Conditioning for Dance | 1
DANC A115 | Yoga For Dancers | 1
DANC A118 | Movement for Longevity | 1
DANC A139 | Gyrokinesis | 1

Total Units 18.5

World Dance Instructor, Associate in Arts Degree

Financial Aid Eligible
Banner Code: 1_AA_DNWD
Control Number: 08647

The Dance certificate program trains students for positions in the commercial and artistic areas of dance. Graduates of the program would be qualified as instructors in private studios, recreation or other community dance programs, and act as consultants, lecturers, or performers with an emphasis on the world dance forms, primarily Mid-Eastern, Flamenco, Spanish Classical, East Indian, or African. The Dance Department also recommends that students complete their General Education Requirements for an Associate Degree.

Students are able to apply principles of movement and creativity to all forms of dance, demonstrate skills of instructing dance to communicate through movement and words, and apply information learned in other disciplines to the art form of dance.

Instruction will utilize both classroom work, using a variety of instructional methods (lecture, lab/demonstration, independent and group projects) and internship experiences in business/industry to prepare the student for job requirements.

Complete the World Dance Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Successfully teach and perform in one or more of the following styles: African, American Social Dance, Classical Indian, Flamenco, Folklorico, Latin Dance Styles, Middle Eastern or Polynesian.
2. Communicate how to dance through movement demonstration and verbal cueing using appropriate dance terminology.

Associate in Arts Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 2 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/dance/world-dance-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Course | Title | Units
---|---|---
DANC A130 | Mid-Eastern Dance 1 | 0.5-2
## World Dance Instructor, Certificate of Achievement

Financial Aid Eligible  
Banner Code: 1_CT_DNWD  
Control Number: 18205

The Dance certificate program trains students for positions in the commercial and artistic areas of dance. Graduates of the program would be qualified as instructors in private studios, recreation or other community dance programs, and act as consultants, lecturers, or performers with an emphasis on the ethnic dance forms, primarily Mid-Eastern, Flamenco, Spanish Classical, East Indian, or African (Nigeria/Ghana).

Students are able to apply principles of movement and creativity to all forms of dance, demonstrate skills of instructing dance to communicate through movement and words, and apply information learned in other disciplines to the art form of dance.

Instruction will utilize both classroom work, using a variety of instructional methods (lecture, lab/demonstration, independent and group projects) and internship experiences in business/industry to prepare the student for job requirements.

Students will  
1. Successfully teach and perform in one or more of the following styles: African, American Social Dance, Classical Indian, Flamenco, Folklorico, Latin Dance Styles, Middle Eastern or Polynesian.  
2. Communicate how to dance through movement demonstration and verbal cueing using appropriate dance terminology.

### Program Requirements

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.
Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<td>0.5-2</td>
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<td>DAN C148</td>
<td>Mid-Eastern Dance 2</td>
<td>1-2</td>
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<td>DAN C116</td>
<td>Latin Dance Styles I</td>
<td>0.5-2</td>
</tr>
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<td>DAN C155</td>
<td>Latin Dance Styles II</td>
<td>1</td>
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<tr>
<td>DAN C138</td>
<td>African Dance and Drumming I</td>
<td>0.5-2</td>
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<tr>
<td>DAN C158</td>
<td>African Dance and Drumming II</td>
<td>1</td>
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<tr>
<td>DAN C135</td>
<td>Flamenco Dance 1</td>
<td>0.5-2</td>
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<tr>
<td>DAN C147</td>
<td>Flamenco Dance 2</td>
<td>1-2</td>
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<td>DAN C156</td>
<td>Polynesian Dance</td>
<td>1</td>
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<td>DAN C170</td>
<td>Music for Dancers</td>
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<td>DAN C218</td>
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<td>ANTH A100</td>
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Selected pair

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<td>or DAN C203</td>
<td>Performing Dance Ensemble I</td>
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Selected one course

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<td>DAN C263</td>
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Subtotal: 23-35

Restricted Electives

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<td>Flamenco Dance 3 and Flamenco Dance 4</td>
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<td>DAN C168</td>
<td>African Dance and Drumming III</td>
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Select four (4) units from at least two (2) different dance styles

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<td>DAN C133</td>
<td>Intro To World Dance</td>
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<td>DAN C137</td>
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<td>DAN C142</td>
<td>Folk Dance</td>
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<td>DAN C125</td>
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Total Units: 28-41

Digital Media Arts and Design

- Animation, Associate in Science Degree (p. 314)
- Animation, Certificate of Achievement (p. 315)
- Graphic Design, Associate in Science Degree (p. 316)
- Graphic Design, Certificate of Achievement (p. 317)
- UX Design, Associate in Science Degree (p. 318)
- UX Design, Certificate Achievement (p. 318)

Animation, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_DMAN
Control Number: 38663

Students in this program will explore animation concepts and gain hands-on experience using industry-standard hardware and software and motion capture systems. Animation is widely used in broadcast media, gaming and simulation, motion graphics, web design, and VR/AR. Students will employ techniques in storytelling and character development for both 2-dimensional and 3-dimensional animation. Computer and drawing skills are very important in this field. Students will leave with an animation portfolio representative of the material and techniques studied, suitable for employment or transfer to another institution.

Program Outcomes

1. Communicate ideas, emotion and intent effectively in visual, oral and written forms.
2. Create 2D and 3D characters and environments that reflect the integration of graphic clarity, design principles, performance principles and theoretical constructs.
3. Design layouts and backgrounds that incorporate principles of composition, perspective and color, with speed, accuracy and dexterity, using a variety of media.

Complete the Animation Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.
Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design/performing-arts/digital-media-arts-designanimation-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC p. 17) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

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<td>Editing 1</td>
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<td>ART A120</td>
<td>Beginning Drawing</td>
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<td>ART A110</td>
<td>Color and Design: Two-Dimensional</td>
<td>3</td>
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<td>DMAD A181</td>
<td>Introduction to Computer Graphics</td>
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<td>ART A121</td>
<td>Life Drawing 1</td>
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<td>ART A135</td>
<td>Digital Painting</td>
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<tr>
<td>DMAD A190</td>
<td>Illustrator for Design</td>
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<td>FILM A196</td>
<td>Introduction to Visual Effects</td>
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**Year 2**

| Semester 1 | | |
| DMAD A280 | 2D Animation | 3 |
| ART A151 | Ceramics 2 | 3 |
| Restricted Elective | | 3 |
| | Units | 9 |
| Semester 2 | | |
| DMAD A281 | 3D Computer Graphics Animation | 3 |
| Restricted Elective | | 6 |
| | Units | 9 |
| **Total Units** | | 42 |

### Restricted Electives

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<tr>
<td>ART A111</td>
<td>Color and Design: Three-Dimensional</td>
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<tr>
<td>ART A143</td>
<td>Story Illustration Techniques</td>
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<tr>
<td>ART A269</td>
<td>Cartooning 1</td>
<td>3</td>
</tr>
<tr>
<td>ART A220</td>
<td>Figure Composition</td>
<td>3</td>
</tr>
<tr>
<td>ART A270</td>
<td>Cartooning 2</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A117</td>
<td>Rapid Illustration Techniques</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A202</td>
<td>Studio Internship</td>
<td>2</td>
</tr>
<tr>
<td>DMAD A263</td>
<td>Motion Graphics and Video Compositing with Adobe After Effects</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A288</td>
<td>Digital Portfolio Development</td>
<td>3</td>
</tr>
<tr>
<td>FILM A106</td>
<td>Introduction to Media Writing</td>
<td>3</td>
</tr>
<tr>
<td>FILM A193</td>
<td>Sound Design for Film &amp; TV</td>
<td>3</td>
</tr>
<tr>
<td>FILM A220</td>
<td>Introduction to Virtual Reality (VR)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Animation, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_DMAN
Control Number: 38420

Students in this program will explore animation concepts and gain hands-on experience using industry-standard hardware and software and motion capture systems. Animation is widely used in broadcast media, gaming and simulation, motion graphics, web design, and VR/AR. Students will employ techniques in storytelling and character development for both 2-dimensional and 3-dimensional animation. Computer and drawing skills are very important in this field. Students will leave with an animation portfolio representative of the material and techniques studied, suitable for employment or transfer to another institution.

### Program Outcomes

1. Communicate ideas, emotion and intent effectively in visual, oral and written forms.
2. Create 2D and 3D characters and environments that reflect the integration of graphic clarity, design principles, performance principles and theoretical constructs.
3. Design layouts and backgrounds that incorporate principles of composition, perspective and color, with speed, accuracy and dexterity, using a variety of media.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.
1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z section of this catalog. Check with a counselor to determine the requirements for completion.

### Graphic Design, Associate in Science Degree

This program presents a concentrated course of study in the field of digital media arts and design. Concept development and the generation of a portfolio suitable for job applications or transfer to a degree program is a major focus in each of the core courses.

Courses emphasize the process and problem-solving in conjunction with visual design issues. DMAD graphic design courses provide broad-based entry level training for a variety of graphic design industries. Students are introduced to a broad range of media, including branding, publications, posters, print advertisements, website graphics, billboards and product packaging, as well as strategies and the techniques required to incorporate these areas into print and online.

Complete the Graphic Design Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

### Program Outcomes

1. Apply the principles of color, composition, hierarchy, typography as they relate in the various design media utilizing industry standard graphics software.
2. Apply critical thinking and aesthetic judgment to demonstrate the ability to analyze, synthesize, and develop probable graphic design solutions.
3. Develop an original, innovative and articulate body of graphic design work for a professional portfolio for the purpose of gaining employment and/or acceptance to an Art College or University.

### Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course or at or above the level of Intermediate Algebra as demonstrated by prior coursework, or

### Restricted Electives

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<tr>
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<th>Units</th>
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<td>ART A111</td>
<td>Color and Design: Three-Dimensional</td>
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<tr>
<td>ART A143</td>
<td>Story Illustration Techniques</td>
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<td>ART A269</td>
<td>Cartooning 1</td>
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<td>ART A220</td>
<td>Figure Composition</td>
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<td>Cartooning 2</td>
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<td>DMAD A117</td>
<td>Rapid Illustration Techniques</td>
<td>3</td>
</tr>
<tr>
<td>DMAD A202</td>
<td>Studio Internship</td>
<td>2</td>
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</table>
by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/digital-media-arts-design/graphic-design-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

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<thead>
<tr>
<th>Course</th>
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<th>Units</th>
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<td><strong>Year 1</strong></td>
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<td><strong>Semester 1</strong></td>
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<td>ART A110</td>
<td>Color and Design: Two-Dimensional</td>
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<td>DMAD A151</td>
<td>History of Graphic Design</td>
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<td>DMAD A181</td>
<td>Introduction to Computer Graphics</td>
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<td>ART A175</td>
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<td>Typography I</td>
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<td>DMAD A190</td>
<td>Illustrator for Design</td>
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<td>DMAD A182</td>
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<td>ART A180 or DMAD A202</td>
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<td>DMAD A183</td>
<td>InDesign for Design</td>
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<td>DMAD A288</td>
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<td>Units</td>
<td>8-8.5</td>
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<td><strong>38-38.5</strong></td>
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</table>

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Program Outcomes

1. Apply the principles of color, composition, hierarchy, typography as they relate in the various design media utilizing industry standard graphics software.
2. Apply critical thinking and aesthetic judgment to demonstrate the ability to analyze, synthesize, and develop probable graphic design solutions.
3. Develop an original, innovative and articulate body of graphic design work for a professional portfolio for the purpose of gaining employment and/or acceptance to an Art College or University.

Financial Aid Eligible
Banner Code: 1_CT_DMAG
Control Number: 22385

This program presents a concentrated course of study in the field of digital media arts and design. Concept development and the generation of a portfolio suitable for job applications or transfer to a degree program is a major focus in each of the core courses.

Courses emphasize the process and problem-solving in conjunction with visual design issues. DMAD graphic design courses provide broad-based entry level training for a variety of graphic design industries. Students are introduced to a broad range of media, including branding, publications, posters, print advertisements, website graphics, billboards and product packaging, as well as strategies and the techniques required to incorporate these areas into print and online.

Graphic Design, Certificate of Achievement

This program presents a concentrated course of study in the field of digital media arts and design. Concept development and the generation of a portfolio suitable for job applications or transfer to a degree program is a major focus in each of the core courses.

Courses emphasize the process and problem-solving in conjunction with visual design issues. DMAD graphic design courses provide broad-based entry level training for a variety of graphic design industries. Students are introduced to a broad range of media, including branding, publications, posters, print advertisements, website graphics, billboards and product packaging, as well as strategies and the techniques required to incorporate these areas into print and online.
UX Design, Associate in Science Degree

The UX Design Certificate is designed to prepare the student for an entry level position in the UX/UI Design Industry. Students will gain the knowledge and skills needed to create original digital art used to integrate user research, psychology as well as, text, images, animation, video, and other content into effective user interface design. Students will create prototypes that explore, demonstrate, and verify the effectiveness of their design solutions for the Web, Apps, Watches, and/or other Interactive Design Products. Digital Media Arts and Design is an important sector of the economy and industry is eager to find qualified candidates who not only understand practical knowledge of UX/UI design principles, but also know how to collaborate with fellow designers, stakeholders, clients.

Complete the UX Design Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes

1. Demonstrate skill in design utilizing industry standard user experience design and visual design software.
2. Design and create website and mobile app projects and prototypes, that demonstrate knowledge of design for different screens, user interface design, and best practices in typography, design and navigation.
3. Create a portfolio utilizing a variety of design techniques for the purpose of gaining employment and/or acceptance to an Art College or University.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/digital-media-arts-design/ux-design-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

UX Design, Certificate Achievement

Financial Aid Eligible
Banner Code: 1_CT_UXDS
Control Number: 22384
The UX Design Certificate is designed to prepare the student for an entry level position in the UX/UI Design Industry. Students will gain the knowledge and skills needed to create original digital art used to integrate user research, psychology, as well as, text, images, animation, video, and other content into effective user interface design. Students will create prototypes that explore, demonstrate, and verify the effectiveness of their design solutions for the Web, Apps, Watches, and/or other Interactive Design Products. Digital Media Arts and Design is an important sector of the economy and industry is eager to find qualified candidates who not only understand practical knowledge of UX/UI design principles, but also know how to collaborate with fellow designers, stakeholders, clients.

Program Outcomes

1. Demonstrate skill in design utilizing industry standard user experience design and visual design software.
2. Design and create website and mobile app projects and prototypes, that demonstrate knowledge of design for different screens, user interface design, and best practices in typography, design and navigation.
3. Create a portfolio utilizing a variety of design techniques for the purpose of gaining employment and/or acceptance to an Art College or University.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.
2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course | Title | Units
--- | --- | ---
**Semester 1**
DMAD A181 | Introduction to Computer Graphics | 3
DMAD A115 | Typography I | 3
DMAD A182 | Graphic Design | 3
DMAD A190 | Illustrator for Design | 3
DMAD A193 | Photoshop for Design | 3
**Semester 2**
DMAD A200 | Designing for the Web | 3
DMAD A203 | UX/UI Design | 3
ART A180 or DMAD A202 | Professional Studies or Studio Internship | 2-2.5
DMAD A288 | Digital Portfolio Development | 3
**Year 2**
**Semester 1**
DMAD A110 | Color and Design: Two-Dimensional | 3
DMAD A117 | Rapid Illustration Techniques | 3
DMAD A151 | History of Graphic Design | 3
**Semester 2**
ART A180 or DMAD A202 | Professional Studies or Studio Internship | 2-2.5
DMAD A288 | Digital Portfolio Development | 3
**Total Units** | **35-35.5**

Fashion

Orange Coast College Fashion Program

We welcome you to join the Fashion Program at Orange Coast College, where you can obtain the education to succeed in the fashion industry. This well-established program prepares you for transfer to a four-year program, a professional career, a career change, or advancement in your present fashion career.

Education in Fashion

Fashion is among the largest and most established industries in California. A fashion education can provide the necessary background and skills for a career in this ever thriving and dynamic world. Orange Coast College offers programs and courses that meet the needs of this vast industry. Our fashion program provides an environment that fosters understanding of social, organizational and technological systems.

A Career for You

Career opportunities in the fashion industry are endless and diverse. The fashion business is challenging, fast paced, exciting and constantly changing. It's a multi-billion dollar industry and the second largest employer in the United States. Fashion is the second largest industry among Southern California's manufacturing employers and second only to the aerospace industry.

Five Certificate of Achievement and Associate in Science options are available through the Fashion Department:

1. Apparel Construction,
2. Design,
3. Display and Visual Presentation,
4. Fashion Merchandising, and
5. Production/Product Development.

Completion of these programs prepares students for careers in the fashion industry and in related businesses. Students may also transfer
to programs at four-year colleges. Additionally, the department offers a Certificate of Specialization in Industrial Sewing.

Department Contact Information

Lauren Becker
lbecker@occ.cccd.edu

Fashion Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/family_consumer_science/fashion/)

- Apparel Construction, Associate in Science Degree (p. 320)
- Apparel Construction, Certificate of Achievement (p. 321)
- Apparel Industry Sustainability, Certificate of Specialization (p. 321)
- Apparel Production and Product Development, Associate in Science Degree (p. 322)
- Apparel Production and Product Development, Certificate of Achievement (p. 323)
- Display and Visual Presentation, Associate in Science Degree (p. 324)
- Display and Visual Presentation, Certificate of Achievement (p. 325)
- Fashion Design, Associate in Science Degree (p. 326)
- Fashion Design, Certificate of Achievement (p. 327)
- Fashion Merchandising, Associate in Science Degree (p. 328)
- Fashion Merchandising, Certificate of Achievement (p. 329)
- Industrial Sewing, Certificate of Specialization (p. 329)

Apparel Construction, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_APCN
Control Number: 11635

Completion of the Apparel Construction certificate program prepares students for careers in the fashion industry and in related businesses.

Complete the Fashion Apparel Construction Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Note: This AS degree requires 66 units for completion.

Program Outcomes

1. The outcome of the program is to prepare students for entry-level employment as a competent professional in the fields of garment construction, alterations, patternmaking, tailoring, alterations, and dressmaking and meet the needs of the local fashion industry.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/fashion/apparel-construction-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/) or Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

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<tr>
<td>FASH A100</td>
<td>Beginning Clothing Techniques</td>
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<td>FASH A110</td>
<td>Applied Textiles and Design</td>
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<td>FASH A115</td>
<td>Introduction to the Fashion Industry</td>
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<td>FASH A120</td>
<td>History of Fashion</td>
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<td>FASH A121</td>
<td>Street Style</td>
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<td>FASH A175</td>
<td>Applied Color and Design Theory</td>
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<td>FASH A137</td>
<td>Alterations</td>
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<td>or FASH A183</td>
<td>Fundamental Principles of Clothing</td>
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<td>or FASH A183</td>
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<td>Environment, Ethical Business Practices &amp; the Law</td>
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<td>FASH A233</td>
<td>Couture Techniques</td>
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<td>FASH A170</td>
<td>Clothing Design and Selection</td>
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<td>Fashion Internship</td>
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Apparel Construction, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_APCN
Control Number: 18199

Completion of the Apparel Construction certificate program prepares students for careers in the fashion industry and in related businesses.

Program Outcomes
1. The outcome of the program is to prepare students for entry-level employment as a competent professional in the fields of garment construction, alterations, patternmaking, tailoring, alterations, and dressmaking and meet the needs of the local fashion industry.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the divisions for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Apparel Industry Sustainability, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_AIS

This program focuses on sustainability in the apparel industry including, the study of responsible business, with a focus on environmental sustainability, responsible decision making, social impacts, corporate social responsibility, regulatory compliance, certifications, and other emerging technologies. Students will examine current topics, concepts, trends, and rules that are driving the sustainability and responsible
business movement and will develop the skills to compete in the global fashion industry. Completion of the Apparel Industry Sustainability certificate program prepares students for careers in the fashion industry and in related businesses.

**Program Outcomes**

1. The outcome of the program is to prepare students for entry-level employment as a competent professional in the fields of sustainable apparel design, merchandising, compliance, product development, production, sales and marketing and meet the needs of the local fashion industry.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

---

**Apparel Production and Product Development, Associate in Science Degree**

Financial Aid Eligible
Banner Code: 1_AS_ADDR
Control Number: 16888

Completion of the Apparel Production and Product Development Certificate program prepares students for careers in the fashion industry and in related businesses.

Students are encouraged to complete the Associate degree. Complete the Fashion Certificates of Achievement and the Associate in Science Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

**Note: this AS degree requires 66 units for completion.**

**Program Outcomes**

1. The outcome of the program is to prepare students for entry-level employment in the fields of patternmaking, sample-making, technical design, sourcing management, production management, quality control supervising, grading, marker making, costing/spec production, pre-production merchandising and meet the needs of the local fashion industry.

**Course Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FASH A100</td>
<td>Beginning Clothing Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>FASH A115</td>
<td>Introduction to the Fashion Industry</td>
<td>3</td>
</tr>
<tr>
<td>FASH A120</td>
<td>History of Fashion</td>
<td>1.5</td>
</tr>
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<td>FASH A121</td>
<td>Street Style</td>
<td>1.5</td>
</tr>
<tr>
<td>FASH A175</td>
<td>Applied Color and Design Theory</td>
<td>3</td>
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<tr>
<td>or ART A110</td>
<td>Color and Design: Two-Dimensional</td>
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</tr>
<tr>
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<td>Fashion Merchandising Concepts</td>
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<tr>
<td><strong>Semester 2</strong></td>
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<td>FASH A110</td>
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</tr>
<tr>
<td>FASH A180</td>
<td>Fundamental Principles of Clothing Construction 1</td>
<td>3</td>
</tr>
<tr>
<td>or FASH A183</td>
<td>Fundamental Principles of Clothing Construction 2</td>
<td></td>
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<tr>
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<tr>
<td><strong>Summer</strong></td>
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<td>Flat Pattern Techniques</td>
<td>3</td>
</tr>
<tr>
<td>FASH A170</td>
<td>Clothing Design and Selection</td>
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</tr>
<tr>
<td>FASH A180</td>
<td>Fundamental Principles of Clothing Construction 1</td>
<td>3</td>
</tr>
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<td>Course</td>
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<td>Apparel Industry Sustainability: The Environment, Ethical Business Practices &amp; the Law</td>
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<td>Fashion Internship</td>
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<td>Professional Practices</td>
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<td>Total Units</td>
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</table>

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/fashion/production-product-development-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

**Apparel Production and Product Development, Certificate of Achievement**

Financial Aid Eligible
Banner Code: 1_CT_APPD
Control Number: 18198

Completion of the Apparel Production and Product Development Certificate program prepares students for careers in the fashion industry and in related businesses. Students may also transfer to programs at four-year colleges.

**Program Outcomes**

1. The outcome of the program is to prepare students for entry-level employment in the fields of patternmaking, sample-making, technical design, sourcing management, production management, quality control supervising, grading, marker making, costing/spec production,
Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement • 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization • 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better in all program-required courses.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>FASH A100</td>
<td>Beginning Clothing Techniques</td>
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<td>FASH A121</td>
<td>Street Style</td>
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<tr>
<td>FASH A175</td>
<td>Applied Color and Design Theory</td>
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<tr>
<td>or ART A110</td>
<td>Color and Design: Two-Dimensional</td>
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<tr>
<td>FASH A177</td>
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<tr>
<th>Course</th>
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<tr>
<td>FASH A110</td>
<td>Applied Textiles and Design</td>
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<td>FASH A145</td>
<td>Fashion Reporting and Analysis</td>
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<td>FASH A180</td>
<td>Fundamental Principles of Clothing Construction 1</td>
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<tr>
<td>or FASH A183</td>
<td>Fundamental Principles of Clothing Construction 2</td>
<td>2</td>
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<td>FASH A255</td>
<td>Fashion Illustrating Techniques 1</td>
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<table>
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<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>FASH A150</td>
<td>Flat Pattern Techniques</td>
<td>3</td>
</tr>
</tbody>
</table>

Display and Visual Presentation, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_MKDV
Control Number: 03963

This certificate is designed to prepare students seeking careers as display and exhibit designers and covers interior, industrial, thematic, and promotional displays. The training program includes consideration of the total visual presentation design and production, including store planning, service promotion mix applied to retailers, wholesalers (trade show), corporate display, visual identity, and exhibits in cultural institutions (museums and galleries). Students are encouraged to work toward an Associate in Science degree.

Complete the Display and Visual Presentation Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes

1. Produce a digital presentation of a specific retail venue, illustrating continuity of theme through physical appearance, room settings, signage, merchandise, and website presentation.
2. Create the packaging for a product that will include product graphics and design, the merchandising concept for the retail venue, and an initial event or promotion to launch the product.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT • 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/fashion/display-visual-presentation-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Display and Visual Presentation, Certificate of Achievement

Financial Aid Eligible  
Banner Code: 1_CN_MKDV  
Control Number: 22379

This certificate is designed to prepare students seeking careers as display and exhibit designers and covers interior, industrial, thematic, and promotional displays. The training program includes consideration of the total visual presentation design and production, including store planning, service promotion mix applied to retailers, wholesalers (trade show), corporate display, visual identity, and exhibits in cultural institutions (museums and galleries). Students are encouraged to work toward an Associate in Science degree.

### Program Outcomes

1. Produce a digital presentation of a specific retail venue, illustrating continuity of theme through physical appearance, room settings, signage, merchandise, and website presentation.

2. Create the packaging for a product that will include product graphics and design, the merchandising concept for the retail venue, and an initial event or promotion to launch the product.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

### Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

#### Display and Visual Presentation Suggested Electives

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<tr>
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<td>ART A102</td>
<td>Survey of Modern and Contemporary Art History</td>
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<td>DMAD A117</td>
<td>Rapid Illustration Techniques</td>
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</tr>
<tr>
<td>ID A170</td>
<td>Space Planning</td>
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<td>ID A210</td>
<td>Fundamentals of Lighting</td>
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<th>Requirement</th>
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<td>Minimum Program Major Units</td>
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<tr>
<td>ART A110</td>
<td>Color and Design: Two-Dimensional</td>
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<tr>
<td>or FASH A175</td>
<td>or Applied Color and Design Theory</td>
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<td>or Applied Color and Design Theory</td>
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<td>Exhibition Design 1</td>
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<tr>
<td>ID A110</td>
<td>Design Communications 1: Design Graphics</td>
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<td>MKTG A130</td>
<td>Principles of Advertising</td>
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<td>Spring</td>
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<td>ART A111</td>
<td>Color and Design: Three-Dimensional</td>
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<td>ART A116</td>
<td>Furniture Making and Design</td>
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<td>or CNST A116</td>
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<tr>
<td>FASH A181</td>
<td>Fashion Internship</td>
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<tr>
<td>or ID A260</td>
<td>or Design Communication 4: Digital Visualization</td>
</tr>
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<td>PHOT A120</td>
<td>Introduction to Photography</td>
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<tr>
<td>or PHOT A123</td>
<td>or Introduction to Digital Photography</td>
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**Total Units**: 30
1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/fashion/fashion-design-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Fashion Design, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_FSDE
Control Number: 11634

Completion of the Design Certificate program prepares students for careers in the fashion industry and in related businesses. Students are encouraged to complete the Associate degree.

Complete the Fashion Certificates of Achievement and the Associate in Science Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

**Note:** This AS degree may require over 70 units for completion, depending on course selection in the major.

### Program Outcome

1. The outcome of the program is to prepare students for entry-level employment as a professional and competent fashion designer in the fields of design, technical design, and merchandising and meet the needs of the local fashion industry.

### Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation.

### Display and Visual Presentation Suggested Electives

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<td>DMAD A117</td>
<td>Rapid Illustration Techniques</td>
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<tr>
<td>ID A170</td>
<td>Space Planning</td>
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<td>ID A210</td>
<td>Fundamentals of Lighting</td>
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### Fashion Design, Associate in Science Degree

**Course**

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<td>FASH A110</td>
<td>Applied Textiles and Design</td>
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<tr>
<td>FASH A115</td>
<td>Introduction to the Fashion Industry</td>
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</tr>
<tr>
<td>FASH A120</td>
<td>History of Fashion</td>
<td>1.5</td>
</tr>
<tr>
<td>FASH A121</td>
<td>Street Style</td>
<td>1.5</td>
</tr>
<tr>
<td>FASH A177</td>
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**Subtotal**

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<td>FASH A175</td>
<td>Applied Color and Design Theory</td>
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<tr>
<td>FASH A180</td>
<td>Fundamental Principles of Clothing</td>
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<td>or FASH A183</td>
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<tr>
<td>FASH A190</td>
<td>Apparel Industry Sustainability: The</td>
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<td>or FASH A183</td>
<td>Environment, Ethical Business Practices &amp;</td>
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<tr>
<td>or FASH A180</td>
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**Subtotal**

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<table>
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<td>FASH A155</td>
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</table>
Design Suggested Electives

Course | Title                              | Units
--- | ----------------------------------- | ---
ART A107 | Introduction To Art               | 3
ART A111 | Color and Design: Three-Dimensional | 3
BUS A118/A118H | Introduction to International Business | 3
FASH A235 | Draping                           | 2
MKTG A220 | Retail Buying                     | 3

Requirement | Units
--- | ---
Minimum Program Major Units | 52
AS General Education Option 1, 2, or 3 | Varies
Total Degree Units | 70

Fashion Design, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_FSDE
Control Number: 18194

Completion of the Fashion certificate programs prepares students for careers in the fashion industry and in related businesses. Students may also transfer to programs at four-year colleges.

Students are encouraged to complete the Associate degree. Complete the Fashion Certificates of Achievement and the Associate in Science Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcome

1. The outcome of the program is to prepare students for entry-level employment as a professional and competent fashion designer in the fields of design, technical design, and merchandising and meet the needs of the local fashion industry.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<td>Applied Textiles and Design</td>
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<td>FASH A115</td>
<td>Introduction to the Fashion Industry</td>
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<td>FASH A120</td>
<td>History of Fashion</td>
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<td>FASH A121</td>
<td>Street Style</td>
<td>1.5</td>
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<td>FASH A177</td>
<td>Fashion Merchandising Concepts</td>
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<td>Semester 2</td>
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<td>FASH A135</td>
<td>Design Thinking</td>
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<td>FASH A150</td>
<td>Flat Pattern Techniques</td>
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<td>Fundamental Principles of Clothing Construction 1</td>
<td>3</td>
</tr>
<tr>
<td>or FASH A183</td>
<td>Fundamental Principles of Clothing Construction 2</td>
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<td>FASH A190</td>
<td>Apparel Industry Sustainability: The Environment, Ethical Business Practices &amp; the Law</td>
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<td>FASH A255</td>
<td>Fashion Illustrating Techniques 1</td>
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<td>Professional Practices</td>
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<td>FASH A256</td>
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</table>
**Course** | **Title** | **Units**
--- | --- | ---
**Total Units** | 52

**Design Suggested Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>ART A107</td>
<td>Introduction To Art</td>
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<td>ART A111</td>
<td>Color and Design: Three-Dimensional</td>
<td>3</td>
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<td>FASH A235</td>
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<td>MKTG A220</td>
<td>Retail Buying</td>
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**Fashion Merchandising, Associate in Science Degree**

Financial Aid Eligible  
Banner Code: 1_AS_FSMC  
Control Number: 08659  

Completion of the Fashion Merchandising Certificate programs prepares students for careers in the fashion industry and in related businesses. Students are encouraged to complete the Associate degree.

Complete the Fashion Certificates of Achievement and the Associate in Science Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

Note: This AS degree may require 64 units for completion, depending on course selection in the major.

**Program Outcomes**

1. The outcome of the program is to prepare students for entry-level employment as a professional and competent fashion merchandiser in the fields of retail management, retail buying, special events and promotions, visual merchandising, styling, fashion marketing, and public relations.

**Associate in Science Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/fashion/fashion-merchandising-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

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<td>Introduction to the Fashion Industry</td>
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<td>Professional Practices</td>
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**Total Units** | 49

**Fashion Merchandising Suggested Electives**

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<tr>
<td>BUS A239</td>
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<tr>
<td>CIS A132</td>
<td>Business Multimedia and Graphics</td>
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<tr>
<td>DMAD A181</td>
<td>Introduction to Computer Graphics</td>
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Fashion Merchandising, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_FSMC
Control Number: 22421

Completion of the Fashion Merchandising Certificate programs prepares students for careers in the fashion industry and in related businesses.

Program Outcomes
1. The outcome of the program is to prepare students for entry-level employment as a professional and competent fashion merchandiser in the fields of retail management, retail buying, special events and promotions, visual merchandising, styling, fashion marketing and public relations.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Fashion Merchandising Suggested Electives

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<td>BUS A239</td>
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<tr>
<td>CIS A132</td>
<td>Business Multimedia and Graphics</td>
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<td>Introduction to Computer Graphics</td>
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<td>BUS A240</td>
<td>Entrepreneurship</td>
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<td>MKTG A142</td>
<td>Direct Marketing</td>
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Industrial Sewing, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_FAIS
The courses in this certificate provide short-term training in the areas of clothing construction and the use of high-speed industrial sewing equipment. The certificate can be completed in one to two semesters. The program offers a self-paced open entry, open exit lab that allows for enrollment throughout the semester. Employment possibilities include apparel construction and textile product assembly careers.

**Program Outcomes**

1. The outcome of the program is to prepare students for entry-level employment as a competent professional in the field of clothing construction and the use of high-speed sewing equipment and meet the needs of the local fashion industry.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

**Film & Television**

For more than 50 years, the Film & Television department at Orange Coast College has been training and educating students to succeed in the exciting fields of film, television, broadcast and media production. Our dedicated faculty and staff have decades of professional experience giving students the insight and knowledge needed to be successful. OCC's Film & Television department pride themselves on staying current with new technologies and best industry practices.

**Department Contact Information**

O’Hara, Kevin (Chair)
Instructor - Film & Television
kohara7@occ.cccd.edu
(714) 432-5819

Film & Television department website (http://www.orangecoastcollege.edu/academics/divisions/visual_arts/film-television/Pages/default.aspx)

- Film & Television, Associate in Arts Degree (p. 330)
- Film & Television, Certificate of Achievement (p. 331)
- Film, Television and Electronic Media, Associate in Science Degree for Transfer (AS-T) (p. 333)
- Immersive Media (VR/AR), Certificate of Achievement (p. 333)
- Media Arts and Creative Entertainment, Certificate of Achievement (p. 334)

**Film & Television, Associate in Arts Degree**

Financial Aid Eligible
Banner Code: 1_AA_FTV
Control Number: 03967

The Film & Television program at OCC is designed to give the student two years of extensive theory and technical experience training in the basic skills required for employment in the film & television industries.

Complete the Film & Television Certificate of Achievement and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

**Program Outcome**

1. The Film & Television program offers a Certificate of Achievement that, when completed, gives the student the basic skills required for entry-level employment in the film, video, television, multi-media and entertainment industries in the areas of producing, directing, camera operation, lighting, sound and editing.

**Associate in Arts Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH A100</td>
<td>Beginning Clothing Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>FASH A180</td>
<td>Fundamental Principles of Clothing Construction 1</td>
<td>3</td>
</tr>
<tr>
<td>FASH A183</td>
<td>Fundamental Principles of Clothing Construction 2</td>
<td>3</td>
</tr>
<tr>
<td>FASH A102</td>
<td>Industrial Sewing Techniques</td>
<td>2</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
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</tr>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH A137</td>
<td>Alterations</td>
<td>2</td>
</tr>
<tr>
<td>ITRN A392</td>
<td>Internship Academy-Level 2</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**Industrial Sewing Suggested Electives**

- Film & Television, Associate in Arts Degree (p. 330)
- Film & Television, Certificate of Achievement (p. 331)
- Film, Television and Electronic Media, Associate in Science Degree for Transfer (AS-T) (p. 333)
- Immersive Media (VR/AR), Certificate of Achievement (p. 333)
- Media Arts and Creative Entertainment, Certificate of Achievement (p. 334)
an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/film-television/film-television-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


### Film & Television Restricted Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRCT A105</td>
<td>Broadcast Journalism</td>
</tr>
<tr>
<td>BRCT A205</td>
<td>Remote Broadcasting</td>
</tr>
<tr>
<td>DMAD A263</td>
<td>Motion Graphics and Video Compositing with Adobe After Effects</td>
</tr>
<tr>
<td>ENGL A127</td>
<td>Scriptwriting I</td>
</tr>
<tr>
<td>ENGL A148</td>
<td>Film As Literature</td>
</tr>
<tr>
<td>FILM A100</td>
<td>History and Appreciation of the Cinema ¹</td>
</tr>
<tr>
<td>FILM A102</td>
<td>The Business of Film &amp; Television</td>
</tr>
<tr>
<td>FILM A104</td>
<td>The Great Directors of the Cinema</td>
</tr>
<tr>
<td>FILM A106</td>
<td>Introduction to Media Writing</td>
</tr>
<tr>
<td>FILM A107</td>
<td>History of Video Games</td>
</tr>
<tr>
<td>FILM A109</td>
<td>Science Fiction Film</td>
</tr>
<tr>
<td>FILM A109H</td>
<td>Science Fiction Film Honors</td>
</tr>
<tr>
<td>FILM A112</td>
<td>Project Development and the Pitch</td>
</tr>
<tr>
<td>FILM A120</td>
<td>Event Productions</td>
</tr>
<tr>
<td>FILM A150</td>
<td>History of Radio &amp; Television ¹</td>
</tr>
<tr>
<td>FILM A193</td>
<td>Sound Design for Film &amp; TV</td>
</tr>
<tr>
<td>FILM A196</td>
<td>Introduction to Visual Effects</td>
</tr>
<tr>
<td>FILM A205</td>
<td>Remote Broadcasting</td>
</tr>
<tr>
<td>FILM A210</td>
<td>Production Management</td>
</tr>
<tr>
<td>FILM A215</td>
<td>Social Media Marketing</td>
</tr>
<tr>
<td>FILM A219</td>
<td>Editing 2</td>
</tr>
<tr>
<td>FILM A220</td>
<td>Introduction to Virtual Reality (VR)</td>
</tr>
<tr>
<td>FILM A253</td>
<td>Directing Theory</td>
</tr>
<tr>
<td>FILM A255</td>
<td>Television Production 2</td>
</tr>
<tr>
<td>FILM A258</td>
<td>Post Production Finishing</td>
</tr>
<tr>
<td>FILM A260</td>
<td>Special Projects</td>
</tr>
<tr>
<td>FILM A261</td>
<td>Television Studio Operations</td>
</tr>
<tr>
<td>FILM A262</td>
<td>Cinematography</td>
</tr>
<tr>
<td>FILM A264</td>
<td>Editing 3</td>
</tr>
<tr>
<td>FILM A265</td>
<td>Documentary Production ¹</td>
</tr>
<tr>
<td>FILM A270</td>
<td>Film Production 3 ¹</td>
</tr>
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<td>FILM A271</td>
<td>Portfolio Development</td>
</tr>
<tr>
<td>PHOT A120</td>
<td>Introduction to Photography</td>
</tr>
<tr>
<td>PHOT A123</td>
<td>Introduction to Digital Photography</td>
</tr>
<tr>
<td>THEA A275</td>
<td>Directing</td>
</tr>
</tbody>
</table>

**Total Units - 29**

¹ May fulfill restricted elective credit if the alternative course has been taken as a required course.

---

**Film & Television, Certificate of Achievement**

Financial Aid Eligible

Banner Code: 1_CN_FTV
The Film & Television program at OCC is designed to give the student two years of extensive theory and technical experience training in the basic skills required for employment in the film & television industries.

**Program Outcome**

1. The Film & Television program offers a Certificate of Achievement that, when completed, gives the student the basic skills required for entry-level employment in the film, video, television, multi-media and entertainment industries in the areas of producing, directing, camera operation, lighting, sound and editing.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Course Title Units

#### Year 1

<table>
<thead>
<tr>
<th>Semester 1</th>
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<tr>
<td>FILM A110</td>
<td>Film Production 1</td>
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<td>FILM A194</td>
<td>Editing 1</td>
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</tr>
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<td>Units</td>
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<table>
<thead>
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<td>FILM A240</td>
<td>Film Production 2</td>
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</tr>
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<td></td>
<td>Units</td>
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</table>

#### Year 2

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>FILM A100</td>
<td>History and Appreciation of the Cinema</td>
<td>3</td>
<td></td>
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<tr>
<td>or FILM A150</td>
<td>History of Radio &amp; Television</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Units</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### restricted electives - 10

**Total Units - 29**

### Film & Television Restricted Electives

Select ten units of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BRCT A105</td>
<td>Broadcast Journalism</td>
<td>10</td>
</tr>
<tr>
<td>BRCT A205</td>
<td>Remote Broadcasting</td>
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<tr>
<td>DMAD A263</td>
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<td>Television Production 2</td>
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<tr>
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<td>Post Production Finishing</td>
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<td>FILM A260</td>
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<td>Documentary Production</td>
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<td>FILM A270</td>
<td>Film Production 3</td>
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<tr>
<td>FILM A271</td>
<td>Portfolio Development</td>
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</tr>
<tr>
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<tr>
<td>PHOT A123</td>
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<td></td>
</tr>
<tr>
<td>THEA A275</td>
<td>Directing</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal 10
The following is required for all AA-T or AS-T degrees:

**Requirements**

**Associate Degree for Transfer**

Program Outcomes

is required for CSU admission, some majors may require a higher GPA. While a minimum of 2.0 in all CSU-transferable coursework. Minimum GPA of at least 2.0 in all CSU-transferable coursework. Minimum of 60 CSU-transferable semester units. Guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

**Program Outcomes**

1. Students will have the skills and knowledge necessary for film, video, and television production, direction, camera operation, lighting, sound, and editing.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

**Associate Degree for Transfer Requirements**

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

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1 May fulfill restricted elective credit if the alternative course has been taken as a required course.

**Film, Television and Electronic Media, Associate in Science Degree for Transfer (AS-T)**

Financial Aid Eligible
Banner Code: 1_AST_FILM
Control Number: 35498

The Film, Television, and Electronic Media Associate in Science Degree for Transfer (AS-T), is designed to give the student extensive theory and technical experience training in the basic skills required to enter a baccalaureate degree program in a similar major within the California State University system.

Students graduating with an Associate in Science in Film, Television and Electronic Media for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system. Completion of a minimum of 18-semester units in the major as required course.

**Immortal Media (VR/AR), Certificate of Achievement**

Financial Aid Eligible
Banner Code: 1_CT_VRAR
Control Number: 38324

This certificate is designed to be a comprehensive 2-year study in both Virtual and Augmented Reality within the growing field of Immersive Media, including targeted courses in the related specializations necessary for a well-rounded base of knowledge and practice. Transitioning from simple 360-degree video and audio capture through computer graphic-based 3D modeling and video game development principles will gradually add higher level skill and increased immersion into the course content. An Advanced Development Lab will be offered at the summit to allow students ample access to the specialized technology needed to create portfolio-level VR and AR projects with the intent of using these works to obtain gainful employment and/or internships in this rapidly growing field.

**Program Outcomes**

1. The Immersive Media program offers a Certificate of Achievement that, when completed, gives the student the basic skills required for entry-level employment and/or internships in Virtual Reality (VR), Augmented Reality (AR), Multimedia and Game-related industries in the areas of 360 video, 360 Audio, VR/AR Development & Content Creation, Immersive Game Design & 3D Modeling, and Drone Imagery for Immersive Media.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded.
A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

### Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Program Outcomes
Students will be able to demonstrate competence as directors, performers, actors and technicians and possess a critical understanding of visual storytelling coupled with current and effective performance and directing techniques.

### Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate program must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

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### Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.
Successful work in landscape design requires a comprehensive, multidisciplinary education in aspects of horticulture, design, and more. Without requiring prior background, the Landscape Design Certificate program provides entry-level skills for those seeking employment in the landscaping field or continuing education for landscapers, florists/nursery growers, architects, contractors, and anyone interested in a broader range of knowledge in this area.

The courses enable you to develop aesthetic sensitivity and environmental awareness, a thorough knowledge of historical precedent, a definable and defensible design methodology, the technical knowledge and skills necessary to compete effectively for jobs, and a comprehensive portfolio.

**Program Outcome**

1. Solve landscape challenges through the design/build process that provides basic human comfort and livability, and meet client functional and financial needs.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<thead>
<tr>
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<th>Units</th>
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<tr>
<td>HORT A109</td>
<td>Knowing Your Soils</td>
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<tr>
<td>HORT A181</td>
<td>Ornamental Trees</td>
<td>3</td>
</tr>
<tr>
<td>HORT A182</td>
<td>Ornamental Shrubs</td>
<td>3</td>
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<td>HORT A284</td>
<td>Portfolio Development</td>
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<tr>
<td>HORT A288</td>
<td>Sprinkler Irrigation Systems Design</td>
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</tbody>
</table>

**Horticulture**

- Advanced Landscape Design and Landscape Specialist, Certificate of Specialization (p. 335)
- Basic Landscape Design, Certificate of Specialization (p. 336)
- Horticulture, Associate in Science Degree (p. 336)
- Horticulture, Certificate of Achievement (p. 337)
- Intermediate Landscape Design and Landscape Specialist, Certificate of Specialization (p. 338)
- Landscape Site Design Elements, Certificate of Specialization (p. 339)
- Retrofitting California Urban Gardens, Certificate of Specialization (p. 339)
- The Professional Practice of a Landscape Design & Construction Business, Certificate of Specialization (p. 340)

**Advanced Landscape Design and Landscape Specialist, Certificate of Specialization**

Not Financial Aid Eligible
Banner Code: 1_CE_ALSC
Basic Landscape Design, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_BLSC

The Basic Landscape Horticulture certificate program is intended for those students who are limited by time constraints to a one-year program. Graduates with this certificate can find employment at the basic or entry level in grounds maintenance or as a park worker, gardener, or landscape designer.

Program Outcome
1. Communicate basic horticulture concepts to clients, contractors, and public agencies.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/pathways/visual-arts/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HORT A289</td>
<td>Installation of Residential</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Irrigation Systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units</td>
<td>13.5</td>
</tr>
</tbody>
</table>

Horticulture, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_OH
Control Number: 03954

Upon completion of the Horticulture Program students will have the knowledge, skills and experience to work with plant material in multiple applications and multiple fields in the Landscaping and Nursery industries. Students will be qualified for careers in Landscape Design, Landscape Contracting, Landscape Maintenance, Arboriculture, Nursery practices, and Irrigation and Water Management.

Complete the Horticulture Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Use knowledge of various plant materials to better design and maintain an outdoor garden or landscape.
2. Describe man’s relationship with plants for food and environmental enhancement.
3. Describe current sustainability issues in Southern California and how good horticultural practices will improve long term sustainability.
4. Use knowledge of a particular chosen plant, greenhouse systems and propagation practices to successfully produce a healthy crop by a target date.
5. Use knowledge of site conditions, drafting skills, client needs, and various plant and building materials to solve a design problem.

Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite. Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-
design-performing-arts/horticulture/horticulture-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/, Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Course and Title Selection

**Year 1**

**Fall**

- **Biol A183** or HORT A105: Botany 1
- **HORT A109** or Botany for Gardeners
- **HORT A181** or Ornamental Trees

**Spring**

- **HORT A182** or Ornamental Shrubs

**Units**

**Year 2**

**Fall**

Select 12 units of the following:

- **HORT A111** Landscape Drafting Techniques
- **HORT A151** Introduction to Tree Care
- **HORT A170** Pest Control Applicators and Gardeners P.C.O. Certification
- **HORT A184** Greenhouse and Nursery Science
- **HORT A185** Plant Diseases
- **HORT A187** Interplanting
- **HORT A200** Chronicles of Garden Design through the Ages 2
- **HORT A231** Business of Landscape Design and Construction
- **HORT A284** Portfolio Development 2
- **HORT A290** Low-Voltage Landscape Lighting
- **HORT A285** Introduction to Landscape Design 2
- **HORT A297** Garden Pools, Fountains and Waterfalls in the Landscape

**Units**

**Spring**

Select 12 units of the following:

- **HORT A115** Landscape Graphics
- **HORT A116** Digital Design
- **HORT A150** Landscape Maintenance
- **HORT A183** Plant Propagation
- **HORT A186** Pests of Ornamentals
- **HORT A189** Weeds and Their Control
- **HORT A190** California Friendly Landscape
- **HORT A191** Cacti and Succulents
- **HORT A200** Chronicles of Garden Design through the Ages 2
- **HORT A230** Calculations for Horticulture and Landscape Professionals
- **HORT A284** Portfolio Development 2
- **HORT A285** Introduction to Landscape Design 2
- **HORT A283** Therapeutic Gardens: Design for Healing Spaces
- **HORT A286** Landscape Design Elements
- **HORT A287** Planting Design
- **HORT A288** Sprinkler Irrigation Systems Design
- **HORT A289** Installation of Residential Irrigation Systems
- **Business Elective (any OCC Business course 100 or higher)**
- **HORT A296** Grading and Drainage for Landscape Design

**Total Units**

- **12 Units**
- **12 Units**

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Transfer students should also take BIOL A183L Botany Lab.

HORT A200 Chronicles of Garden Design through the Ages, HORT A284 Portfolio Development, HORT A285 Introduction to Landscape Design taken in Fall term may not be repeated in Spring term.

### Horticulture, Certificate of Achievement

Financial Aid Eligible

Banner Code: 1_CN_OH

Control Number: 22368

Upon completion of the Horticulture Program students will have the knowledge, skills and experience to work with plant material in multiple applications and multiple fields in the Landscaping and Nursery industries. Students will be qualified for careers in Landscape Design, Landscape Contracting, Landscape Maintenance, Arboriculture, Nursery practices, and Irrigation and Water Management.

### Program Outcomes

1. Use knowledge of various plant materials to better design and maintain an outdoor garden or landscape.
2. Describe man's relationship with plants for food and environmental enhancement.
3. Describe current sustainability issues in Southern California and how good horticultural practices will improve long term sustainability.
4. Use knowledge of a particular chosen plant, greenhouse systems and propagation practices to successfully produce a healthy crop by a target date.
5. Use knowledge of site conditions, drafting skills, client needs, and various plant and building materials to solve a design problem.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy
Intermediate Landscape Design and Landscape Specialist, Certificate of Specialization

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course Title Units

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<tr>
<th>Year 1</th>
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<tr>
<td>BIOL A183 Botany 1</td>
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<tr>
<td>or HORT A105 or Botany for Gardeners</td>
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<tr>
<td>HORT A109 Knowing Your Soils</td>
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<td>HORT A181 Ornamental Trees</td>
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<tr>
<th>Spring</th>
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<tr>
<td>HORT A182 Ornamental Shrubs</td>
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<tr>
<td>HORT A111 Landscape Drafting Techniques</td>
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<td>HORT A151 Introduction to Tree Care</td>
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<td>HORT A170 Pest Control Applicators and Gardeners P.C.O. Certification</td>
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<td>HORT A184 Greenhouse and Nursery Science</td>
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<td>HORT A185 Plant Diseases</td>
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<tr>
<td>HORT A187 Interior Plantscaping</td>
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<tr>
<td>HORT A201 Chronicles of Garden Design through the Ages 2</td>
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<tr>
<td>HORT A231 Business of Landscape Design and Construction</td>
<td></td>
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<tr>
<td>HORT A284 Portfolio Development 2</td>
<td></td>
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<tr>
<td>HORT A290 Low-Voltage Landscape Lighting</td>
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<td>HORT A285 Introduction to Landscape Design 2</td>
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<td>HORT A297 Garden Pools, Fountains and Waterfalls in the Landscape</td>
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<table>
<thead>
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<tbody>
<tr>
<td>Select 12 units of the following:</td>
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<tr>
<td>HORT A115 Landscape Graphics</td>
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<td>HORT A116 Digital Design</td>
</tr>
<tr>
<td>HORT A150 Landscape Maintenance</td>
</tr>
<tr>
<td>HORT A183 Plant Propagation</td>
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<tr>
<td>HORT A186 Pests of Ornamentals</td>
</tr>
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<td>HORT A189 Weeds and Their Control</td>
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<td>HORT A190 California Friendly Landscape</td>
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<tr>
<td>HORT A191 Cacti and Succulents</td>
</tr>
<tr>
<td>HORT A200 Chronicles of Garden Design through the Ages 2</td>
</tr>
<tr>
<td>HORT A230 Calculations for Horticulture and Landscape Professionals</td>
</tr>
<tr>
<td>HORT A284 Portfolio Development 2</td>
</tr>
<tr>
<td>HORT A285 Introduction to Landscape Design 2</td>
</tr>
<tr>
<td>HORT A283 Therapeutic Gardens: Design for Healing Spaces</td>
</tr>
<tr>
<td>HORT A286 Landscape Design Elements</td>
</tr>
<tr>
<td>HORT A287 Planting Design</td>
</tr>
<tr>
<td>HORT A288 Sprinkler Irrigation Systems Design</td>
</tr>
<tr>
<td>HORT A289 Installation of Residential Irrigation Systems</td>
</tr>
<tr>
<td>Business Elective (any OCC Business course 100 or higher)</td>
</tr>
<tr>
<td>Units</td>
</tr>
</tbody>
</table>

Course Title Units

| HORT A296 Grading and Drainage for Landscape Design | 0 |

Total Units 24

Intermediate Landscape Design and Landscape Specialist, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_ILSC

The Intermediate Landscape Design and Construction certificate program trains students to work in the field of landscape design/build. The curriculum provides studies in design, construction, history, basic horticulture, topics that help a student obtain employment in the field, and provide foundational training towards becoming licensed landscape contractors and related specialties.

Program Outcome
1. Solve landscape challenges through the design/build process that provides basic human comfort and livability, and meet client functional and financial needs.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

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**Minimum Grade Requirement**
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Landscape Site Design Elements, Certificate of Specialization

Not Financial Aid Eligible  
Banner Code: 1_CE_LSCP

This program will prepare students for the complex task of developing residential landscapes with grading, drainage, materials, structures, lighting and other complex components that require a deeper knowledge base.

**Program Outcome**
1. Students will be able to demonstrate fundamental skills in landscape design elements, process and techniques.
2. Apply their understanding of sustainable aspects to the development of landscape site design to promote green living environments.

**Certificate Requirements**
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

<table>
<thead>
<tr>
<th>Course Required Courses</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HORT A105</td>
<td>Botany for Gardeners</td>
<td>3</td>
</tr>
<tr>
<td>HORT A116</td>
<td>Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>HORT A190</td>
<td>California Friendly Landscape</td>
<td>2</td>
</tr>
<tr>
<td>HORT A200</td>
<td>Chronicles of Garden Design through the Ages</td>
<td>3</td>
</tr>
<tr>
<td>HORT A286</td>
<td>Landscape Design Elements</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

**Retrofitting California Urban Gardens, Certificate of Specialization**

Not Financial Aid Eligible  
Banner Code: 1_CE_RCUG

The Retrofitting California Urban Gardens Certificate of Specialization is designed to provide formal training for individuals interested in transforming the landscape into a water-wise sustainable garden. This program provides students with entry-level working knowledge of the skills and resources they will need to design various sustainable landscapes upon completion of the certificate.

**Program Outcome**
1. Students will demonstrate areas of critical thinking, design, and visual communication for entry-level employment as a landscape/garden designer that will have a strong background in sustainability as well as the ability to pursue industry certifications.

**Certificate Requirements**
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

<table>
<thead>
<tr>
<th>Course Required Courses</th>
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<th>Units</th>
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<tbody>
<tr>
<td>HORT A192</td>
<td>Urban Container Planting</td>
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<tr>
<td>HORT A286</td>
<td>Landscape Design Elements</td>
<td>2</td>
</tr>
<tr>
<td>HORT A290</td>
<td>Low-Voltage Landscape Lighting</td>
<td>1.5</td>
</tr>
<tr>
<td>HORT A296</td>
<td>Grading and Drainage for Landscape Design</td>
<td>3</td>
</tr>
<tr>
<td>HORT A297</td>
<td>Garden Pools, Fountains and Waterfalls in the Landscape</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>9.5</strong></td>
</tr>
</tbody>
</table>

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better.
The Professional Practice of a Landscape Design & Construction Business, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_LDSN

Prepares students for self-employment and work within small businesses in the landscape industry. Builds on their industry education in landscape design and construction. Expands their education in entrepreneurship and small business management. Contributes to the student’s financial independence, career success, and the world’s economy. Prepares them to work for others and after passing the state contractor’s examination, to own their own landscape construction business. The program is aligned with the California State License Board and completion of this program will help prepare students for the state exam.

Program Outcomes
1. Certificate students will be able to understand the theory and practice of managing a landscape business, including knowledge of legalities, finance, operations, planning, safety, estimating, bidding, decision making and the application leadership and managerial skills in various organizational environments.

2. Certificate students will be able to develop and implement a business plan by conducting research in the appropriate specialty area and identify the target market, competition, industry standards, and financial projections.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

### Interior Design

The Interior Design Program at Orange Coast College is dedicated to helping students develop their fullest potential in academic, professional, and personal skills, preparing them for a rewarding career in design.

This exceptional, multi-level program, developed by educators and industry professionals, promotes an interdisciplinary, equal opportunity education committed to building confident, responsible, and socially aware individuals who will contribute to the quality of life through Interior Design. We offer 3 certificates and an AS Degree.

#### Department Contact Information

Charlene Reed
creed@occ.cccd.edu

Interior Design Department Website (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/family_consumer_science/interior_design/Pages/default.aspx)

- Kitchen And Bath Advanced Certificate, Certificate of Specialization (p. 341)
- Level 1 - Interior Merchandising, Certificate of Achievement (p. 341)
- Level 2 - Interior Design Assistant, Associate in Science Degree (p. 342)
- Level 3 - Interior Design Professional, Certificate of Achievement (p. 343)
Kitchen And Bath Advanced Certificate, Certificate of Specialization

Not Financial Aid Eligible
Banner Code: 1_CE_IDKB

The Kitchen and Bath Advanced Certificate builds upon the foundation of Level 2 by applying added knowledge and technology to more advanced projects and a focused specialization. Students earning this certificate are ready to begin their interior design careers as entry level Kitchen and Bath designers and to pursue industry certifications.

Program Outcome
1. To prepare students for entry-level employment as a specialized Kitchen and Bath designer and for industry certifications.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Program Outcome
1. To prepare students for entry-level employment in retail furnishings and merchandising and to prepare students for the Level 2- Interior Design Associate in Science Degree.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

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<td>ID A285</td>
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Suggested Electives

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<th>Course</th>
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<th>Units</th>
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<tr>
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<td>3</td>
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<tr>
<td>ART A120</td>
<td>Beginning Drawing</td>
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<tr>
<td>ART A125</td>
<td>Perspective Drawing</td>
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<tr>
<td>ART A145</td>
<td>Exhibition Design 1</td>
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Level 1 - Interior Merchandising, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_IDIM
Control Number: 19548

The Interior Merchandising certificate prepares students for employment in retail furnishings and merchandising with a working knowledge of the design process, principles and elements of design, materials and products, and application of color theories.

Program Outcome
1. To prepare students for entry-level employment in retail furnishing and merchandising and to prepare students for the Level 2- Interior Design Associate in Science Degree.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog.

<table>
<thead>
<tr>
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<tr>
<td>ID A110</td>
<td>Design Communications 1: Design Graphics</td>
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<td>ID A170</td>
<td>Space Planning</td>
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<td>ID A250</td>
<td>Codes and Building Systems</td>
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<td>ID A260</td>
<td>Design Communication 4: Digital Visualization</td>
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<tr>
<td>ID A280</td>
<td>Interior Design Studio - Bath Design</td>
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</tbody>
</table>
this catalog. Check with a counselor to determine the requirements for completion.

### MAJOR REQUIREMENTS

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/interior-design/level-2-interior-design-assistant-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Required Prerequisite

#### Level 1 - Interior Merchandising Certificate of Achievement

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<td>Design Communications 1: Design Graphics</td>
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<td>ID A120</td>
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<tr>
<td>ID A180</td>
<td>History of Interior Architecture and Furnishings 1</td>
<td>3</td>
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</tbody>
</table>

Total Units: 27

### Level 2 - Interior Design Assistant, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_IDA
Control Number: 11632

The Level 2 Interior Design Assistant degree furthers the process of education by offering additional knowledge in design history, space planning, drafting, illustration, computer applications, selection and specification of materials and products, lighting, construction documents, building codes, business/professional practices, plus internship and portfolio development. Course information is applied to both residential and commercial design.

### Program Outcomes

1. To prepare students for entry-level employment as an interior design assistant to a professional interior designer. In addition, the outcome of this level is for students to progress to Level 3 – Interior Design Professional Level and/or for transfer.

### Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 70 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

### Required Prerequisite

#### Level 1 - Interior Merchandising Certificate of Achievement

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<td>ID A180</td>
<td>History of Interior Architecture and Furnishings 1</td>
<td>3</td>
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</tbody>
</table>

Total Units: 27
Level 3 - Interior Design Professional, Certificate of Achievement

Financial Aid Eligible  
Banner Code: 1_CF_IDP  
Control Number: 19547

The Interior Design Professional certificate builds upon the foundation of Level 2 by applying added knowledge and technology to more advanced projects. Students in Level 3 are prepared to begin their interior design careers as entry level professional designers and to pursue industry certifications.

Program Outcome
1. To prepare students for entry-level employment as a professional interior designer and for industry certifications.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Required Prerequisites
Level 2 - Interior Design Associate in Science

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<td>Design Communication 2: CAD 2D</td>
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<td>ID A150</td>
<td>Interior Materials and Products</td>
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<td>Design Communication 3: Illustration</td>
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<td>ID A210</td>
<td>Fundamentals of Lighting</td>
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<td>Design Communication 4: Digital Visualization</td>
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Program Major Units - 52
AS General Education Option 1, 2, or 3 - Varies
Subtotal - 70

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<td>ARCH A155</td>
<td>BIM 1 for Architecture</td>
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<td><strong>Units</strong></td>
<td><strong>Total Units</strong></td>
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Music

Because Orange County is close to the heart of the television, movie, and recording industries, OCC answers a real need to train performing musicians and sound technicians, as well as composers, teachers, and music-store owners and salespeople.
Our music industry programs are designed to give the serious music student the theory, applied training, and performing experience needed for success in the field they choose. Traditional music courses are integrated with music-industry courses to provide comprehensive programs.

To increase their chances of enjoying long and satisfying careers in a highly competitive industry, we encourage our students to become proficient in a wide variety of musical styles, and to be aware of the many career alternatives open to them.

- Business Employee, Associate in Arts Degree (p. 344)
- Business Employee, Certificate of Achievement (p. 345)
- MIDI Applications, Associate in Arts Degree (p. 346)
- MIDI Applications, Certificate of Achievement (p. 346)
- Music, Associate in Arts Degree (p. 347)
- Music, Associate in Arts Degree for Transfer (AA-T) (p. 348)
- Musical Entertainer-Instrumental, Associate in Arts Degree (p. 349)
- Musical Entertainer-Instrumental, Certificate of Achievement (p. 350)
- Musical Entertainer-Vocal, Associate in Arts Degree (p. 351)
- Musical Entertainer-Vocal, Certificate of Achievement (p. 351)
- Studio Guitar Performer, Associate in Arts Degree (p. 352)
- Studio Guitar Performer, Certificate of Achievement (p. 353)

**Business Employee, Associate in Arts Degree**

Financial Aid Eligible  
Banner Code: 1_AA_MBE  
Control Number: 03990

This program will prepare students for employment in music stores, record shops, and other commercial music activities. Many opportunities in the business of music are available to students with a broad general knowledge of how this segment of the music industry functions in addition to traditional musical skills.

Complete the Business Employee Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

**Program Outcomes**

1. Demonstrate knowledge of basic requirements of vocalists, guitarists and pianists
2. Working Knowledge of basic studio techniques and equipment applications
3. Prepare and deliver an effective sales presentation for a product or service.
4. Organize, develop and prepare a written professional sales presentation for a product or service.

**Associate in Arts Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/music/business-employee-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


<table>
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<tr>
<th>Course</th>
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<td>MUS A139</td>
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<tr>
<td>MUS A141</td>
<td>Piano 1</td>
<td>1</td>
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<tr>
<td>MUS A145</td>
<td>Voice 1</td>
<td>1</td>
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<td>MUS A116</td>
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<td>MUS A180</td>
<td>Theory 1</td>
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<td>MUS A181</td>
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<td>1</td>
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<td>MUS A110</td>
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Business Employee Restricted Electives

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<td>MKTG A200</td>
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<td>MUS A142</td>
<td>Piano 2</td>
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<tr>
<td>MUS A146</td>
<td>Voice 2</td>
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<td>MUS A148</td>
<td>Classical Guitar 1</td>
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<td>MUS A151</td>
<td>Studio Guitar 1</td>
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<td>MUS A241</td>
<td>Piano 3</td>
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<td>MUS A242</td>
<td>Piano 4</td>
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</table>

Total Units 5

Requirement

Total Degree Units 27
AA General Education Option 1, 2, or 3 Varies
Transferable electives to satisfy unit requirement Varies

Total Degree Units 60

Business Employee, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_MBE
Control Number: 22401

This program will prepare students for employment in music stores, record shops, and other commercial music activities. Many opportunities in the business of music are available to students with a broad general knowledge of how this segment of the music industry functions in addition to traditional musical skills.

Program Outcomes

1. Demonstrate knowledge of basic requirements of vocalists, guitarists and pianists
2. Working Knowledge of basic studio techniques and equipment applications
3. Prepare and deliver an effective sales presentation for a product or service.
4. Organize, develop and prepare a written professional sales presentation for a product or service.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

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Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

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<tr>
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<tr>
<td>MUS A139</td>
<td>History of Rock Music</td>
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<td>Music as a Business</td>
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Units 7

Semester 2

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<td>MUS A116</td>
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Units 9

Semester 3

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<td>MUS A110</td>
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Restricted Electives (see list) 5

Total Units 11

Total Units 27

Business Employee Restricted Electives

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<th>Title</th>
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<td>ACCT A100</td>
<td>Accounting for Small Business</td>
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<td>BUS A240</td>
<td>Entrepreneurship</td>
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<td>MKTG A200</td>
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<td>Beginning Instruments</td>
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<td>MUS A242</td>
<td>Piano 4</td>
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</table>

Total Units 5
**MIDI Applications, Associate in Arts Degree**

Financial Aid Eligible  
Banner Code: 1_AA_MIDI  
Control Number: 08641

This program is designed for the musician or computer professional who wants a concentrated course of study in the field of computer music. Courses are designed to emphasize the practical application of MIDI (Musical Instrument Digital Interface).

Complete the MIDI Applications Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

**Program Outcomes**

1. Create and perform musical compositions utilizing a standard scoring program.
2. Create musical compositions utilizing standard music production programs that demonstrate competency in the following techniques: looping, sequencing, editing, and virtual synthesis.
3. Demonstrate applications of studio recording techniques.

**Associate in Arts Degree Requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.</td>
<td>Varies</td>
</tr>
<tr>
<td>2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.</td>
<td>Varies</td>
</tr>
<tr>
<td>3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.</td>
<td>Varies</td>
</tr>
<tr>
<td>4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (<a href="https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/music/midi-applications-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/">https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/music/midi-applications-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/</a>), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.</td>
<td>26</td>
</tr>
</tbody>
</table>

**MIDI Applications Restricted Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS A100</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>MUS A110</td>
<td>Computers in Music 1</td>
<td>3</td>
</tr>
<tr>
<td>MUS A111</td>
<td>Computers in Music 2</td>
<td>3</td>
</tr>
<tr>
<td>MUS A112</td>
<td>Computers in Music 3</td>
<td>3</td>
</tr>
<tr>
<td>MUS A113</td>
<td>Computers in Music 4</td>
<td>3</td>
</tr>
<tr>
<td>MUS A115</td>
<td>Fundamentals of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS A261</td>
<td>Recording Techniques 1</td>
<td>3</td>
</tr>
</tbody>
</table>

Restricted Electives (see list)  
Total Units 26

**MIDI Applications, Certificate of Achievement**

Financial Aid Eligible  
Banner Code: 1_CN_MIDI  
Control Number: 22403

This program is designed for the musician or computer professional who wants a concentrated course of study in the field of computer music. Courses are designed to emphasize the practical application of MIDI (Musical Instrument Digital Interface).

**Program Outcomes**

1. Create and perform musical compositions utilizing a standard scoring program.
2. Create musical compositions utilizing standard music production programs that demonstrate competency in the following techniques: looping, sequencing, editing, and virtual synthesis.

3. Demonstrate applications of studio recording techniques.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Required Courses</strong></td>
<td></td>
</tr>
<tr>
<td>CIS A100</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>MUS A110</td>
<td>Computers in Music 1</td>
<td>3</td>
</tr>
<tr>
<td>MUS A111</td>
<td>Computers in Music 2</td>
<td>3</td>
</tr>
<tr>
<td>MUS A112</td>
<td>Computers in Music 3</td>
<td>3</td>
</tr>
<tr>
<td>MUS A113</td>
<td>Computers in Music 4</td>
<td>3</td>
</tr>
<tr>
<td>MUS A115</td>
<td>Fundamentals of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS A261</td>
<td>Recording Techniques 1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Restricted Electives (see list)</strong></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units</strong></td>
<td>26</td>
</tr>
</tbody>
</table>

**MIDI Applications Restricted Electives**

Select five units of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS A150</td>
<td>C++ Programming Language 1</td>
<td>5</td>
</tr>
<tr>
<td>FILM A110</td>
<td>Film Production 1</td>
<td></td>
</tr>
<tr>
<td>MUS A141</td>
<td>Piano 1</td>
<td></td>
</tr>
<tr>
<td>MUS A142</td>
<td>Piano 2</td>
<td></td>
</tr>
<tr>
<td>MUS A180</td>
<td>Theory 1</td>
<td></td>
</tr>
<tr>
<td>MUS A181</td>
<td>Musicianship 1</td>
<td></td>
</tr>
</tbody>
</table>

**Music, Associate in Arts Degree**

Financial Aid Eligible

Banner Code: 1_AA_MUS

Control Number: 03988

Complete eighteen (18) units from the following and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan must be developed with a counselor and placed on file prior to petitioning for graduation.

**Program Outcomes**

1. Demonstrate competence in the technical skills of music performance by presenting public performances of music compositions.

2. Demonstrate ability to analyze and critique music techniques, style, and aesthetic strategies.

**Associate in Arts Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/music/music-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

5. **GLOBAL AND MULTICULTURAL REQUIREMENT** (Required for AA degree only) Some of the courses listed in this requirement can also be used to meet General Education Requirements. Courses that are repeatable for credit can only be used once in this area. - Select one or more courses from the following totaling 3 units: Anthropology A100*, A100H*, A102*, A190*, Art A108*, Communication Studies A155*, Counseling A107*, A107H*, Dance A130*, A133*, A135*, A137*,

### Course Title Units

#### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS A100</td>
<td>History and Appreciation of Western Classical Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS A120</td>
<td>College Choir</td>
<td>1</td>
</tr>
<tr>
<td>MUS A133</td>
<td>Orchestra</td>
<td>1</td>
</tr>
<tr>
<td>MUS A141</td>
<td>Piano 1</td>
<td>1</td>
</tr>
<tr>
<td>MUS A142</td>
<td>Piano 2</td>
<td>1</td>
</tr>
<tr>
<td>MUS A143</td>
<td>History of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUS A145</td>
<td>Voice 1</td>
<td>1</td>
</tr>
<tr>
<td>MUS A151</td>
<td>Studio Guitar 1</td>
<td>1.5</td>
</tr>
<tr>
<td>MUS A180</td>
<td>Theory 1</td>
<td>3</td>
</tr>
<tr>
<td>MUS A185</td>
<td>Theory 2</td>
<td>3</td>
</tr>
<tr>
<td>MUS A230</td>
<td>Jazz Improvisation</td>
<td>1</td>
</tr>
<tr>
<td>MUS A241</td>
<td>Piano 3</td>
<td>2</td>
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<tr>
<td>MUS A242</td>
<td>Piano 4</td>
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<td>MUS A280</td>
<td>Theory 3</td>
<td>3</td>
</tr>
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<td>MUS A285</td>
<td>Theory 4</td>
<td>3</td>
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</table>

Minimum Program Major Units 18

<table>
<thead>
<tr>
<th>AA General Education Option 1, 2, or 3</th>
<th>Varies</th>
</tr>
</thead>
</table>

Transferable electives as needed to satisfy unit requirement Varies

Total Units 60

---

### Program Outcomes

1. Demonstrate competence in the technical skills of music performance by presenting public performances of music compositions.
2. Demonstrate ability to analyze and critique music techniques, style, and aesthetic strategies.
3. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

### Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

### Music, Associate in Arts Degree for Transfer (AA-T)

Financial Aid Eligible
Banner Code: 1_AAT_MUS
Control Number: 32231

Students graduating with an Associate in Arts in Music for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Music AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

This degree is designed to prepare students to demonstrate competence and discipline in the study of music in all of its facets, read and audiate music, and demonstrate commitment to the serious study of music in practice and in theory, and provide comprehensive preparation for upper-division work.

### Music AA-T Large Ensemble Courses

Complete four semesters of one-unit courses of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS A122</td>
<td>Chamber Singers</td>
<td></td>
</tr>
<tr>
<td>MUS A127</td>
<td>Jazz Lab Ensemble</td>
<td></td>
</tr>
<tr>
<td>MUS A129</td>
<td>Guitar Ensemble</td>
<td></td>
</tr>
<tr>
<td>MUS A132</td>
<td>Wind Ensemble</td>
<td></td>
</tr>
<tr>
<td>MUS A133</td>
<td>Orchestra</td>
<td></td>
</tr>
<tr>
<td>MUS A230</td>
<td>Jazz Improvisation</td>
<td></td>
</tr>
</tbody>
</table>

1 MUS A290 Applied Music is 0.5 unit course, which must be taken each semester for a total of two (2) units.
Associate in Arts Degree Requirements

Program Outcomes
1. Perform musical selections in a variety of popular styles.
2. Organize a performing event.
3. Develop repertoire for a performing event.
4. Develop a professional marketing strategy.

Associate in Arts Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/music/musical-entertainer-instrumental-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


Musical Entertainer-Instrumental, Associate in Arts Degree

Financial Aid Eligible
Banner Code: 1_AA_MMEI
Control Number: 08642

This program is designed to give the aspiring commercial instrumentalist a concentrated theoretical background in traditional and commercial music as well as a look at the music industry.

Complete the Musical Entertainer - Instrumental Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Perform musical selections in a variety of popular styles.
2. Organize a performing event.
3. Develop repertoire for a performing event.
4. Develop a professional marketing strategy.

Musical Entertainer-Instrumental, Associate in Arts Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/music/musical-entertainer-instrumental-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


Musical Entertainer-Instrumental Music Performance Group Course Options - Musical Entertainer Instrumental

Musical Entertainer Instrumental Music Performing Group Course Options - Musical Entertainer Instrumental
Musical Entertainer - Instrumental, Certificate of Achievement

Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS A151</td>
<td>Studio Guitar 1</td>
<td>1.5</td>
</tr>
<tr>
<td>MUS A152</td>
<td>Studio Guitar 2</td>
<td>1.5</td>
</tr>
<tr>
<td>MUS A240</td>
<td>Sophomore Recital</td>
<td>0.5</td>
</tr>
<tr>
<td>MUS A261</td>
<td>Recording Techniques 1</td>
<td>3</td>
</tr>
</tbody>
</table>

Requirement

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Major Units</td>
<td>28</td>
</tr>
<tr>
<td>AA General Education Option 1, 2, or 3</td>
<td>Varies</td>
</tr>
<tr>
<td>Transferable electives to satisfy unit requirement</td>
<td>Varies</td>
</tr>
<tr>
<td>Total Degree Units</td>
<td>60</td>
</tr>
</tbody>
</table>

Musical Entertainer-Instrumental, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_MMEI
Control Number: 18436

This program is designed to give the aspiring commercial instrumentalist a concentrated theoretical background in traditional and commercial music as well as a look at the music industry.

Program Outcomes
1. Perform musical selections in a variety of popular styles.
2. Organize a performing event.
3. Develop repertoire for a performing event.
4. Develop a professional marketing strategy.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Musical Entertainer - Instrumental Music Performing Group Course Options - Musical Entertainer Instrumental

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS A127</td>
<td>Jazz Lab Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUS A132</td>
<td>Wind Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUS A133</td>
<td>Orchestra</td>
<td>1</td>
</tr>
<tr>
<td>MUS A150</td>
<td>Intermediate Band/Orchestra</td>
<td>2</td>
</tr>
<tr>
<td>MUS A230</td>
<td>Jazz Improvisation</td>
<td>1</td>
</tr>
<tr>
<td>MUS A233</td>
<td>Symphonic Chamber Orchestra</td>
<td>1</td>
</tr>
<tr>
<td>MUS A234</td>
<td>Studio Jazz Ensemble</td>
<td>1</td>
</tr>
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<td>Total Units</td>
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<td>8</td>
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</table>

Musical Entertainer - Instrumental Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS A151</td>
<td>Studio Guitar 1</td>
<td>1.5</td>
</tr>
<tr>
<td>MUS A152</td>
<td>Studio Guitar 2</td>
<td>1.5</td>
</tr>
<tr>
<td>MUS A240</td>
<td>Sophomore Recital</td>
<td>0.5</td>
</tr>
<tr>
<td>MUS A261</td>
<td>Recording Techniques 1</td>
<td>3</td>
</tr>
</tbody>
</table>

Music students in this major must participate in at least one major performing group per semester. Students should select a performing group that fits their performance specialty or interest.
Musical Entertainer-Vocal, Associate in Arts Degree

Financial Aid Eligible
Banner Code: 1_AA_MMEV
Control Number: 08643

This program is designed to give the aspiring commercial vocalist a concentrated theoretical background in traditional and commercial music and vocal techniques as well as a look at the music industry.

Complete the Musical Entertainer - Vocal Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Perform musical selections in a variety of popular styles.
2. Organize a performing event.
3. Develop repertoire for a performing event.
4. Develop a professional marketing strategy.
5. Record a demo CD.

Associate in Arts Degree Requirements
1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. MAJOR REQUIREMENT - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. MATHEMATICS REQUIREMENT - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. GENERAL EDUCATION REQUIREMENT - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/music/entertainer-vocal-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


### Musical Entertainer-Vocal, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_MMEV
Control Number: 22404

This program is designed to give the aspiring commercial vocalist a concentrated theoretical background in traditional and commercial music and vocal techniques as well as a look at the music industry.

Program Outcomes
1. Perform musical selections in a variety of popular styles.
2. Organize a performing event.
3. Develop repertoire for a performing event.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MUS A120</td>
<td>College Choir</td>
<td>1</td>
</tr>
<tr>
<td>MUS A141</td>
<td>Piano 1</td>
<td>1</td>
</tr>
<tr>
<td>MUS A144</td>
<td>Popular Vocal Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>MUS A180</td>
<td>Theory 1</td>
<td>3</td>
</tr>
<tr>
<td>MUS A181</td>
<td>Musicianship 1</td>
<td>1</td>
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<tr>
<td></td>
<td>Units</td>
<td>7.5</td>
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<tr>
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<td>Applied Music</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Units</td>
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<tr>
<td>MUS A120</td>
<td>College Choir</td>
<td>1</td>
</tr>
<tr>
<td>MUS A143</td>
<td>History of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUS A261</td>
<td>Recording Techniques 1</td>
<td>3</td>
</tr>
<tr>
<td>MUS A262</td>
<td>Music as a Business</td>
<td>2</td>
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<tr>
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<td></td>
<td>Units</td>
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</table>

### Musical Entertainer - Vocal Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>MUS A116</td>
<td>Basic Guitar</td>
<td>2</td>
</tr>
<tr>
<td>MUS A240</td>
<td>Sophomore Recital</td>
<td>0.5</td>
</tr>
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</table>

### Musical Entertainer-Vocal, Certificate of Achievement

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Program Major Units</td>
<td>22</td>
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<tr>
<td>AA General Education Option 1, 2, or 3</td>
<td>Varies</td>
</tr>
<tr>
<td>Transferable electives to satisfy unit requirement</td>
<td>Varies</td>
</tr>
<tr>
<td>Total Degree Units</td>
<td>60</td>
</tr>
</tbody>
</table>
4. Develop a professional marketing strategy.
5. Record a demo CD.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Musical Entertainer - Vocal Suggested Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS A116</td>
<td>Basic Guitar</td>
<td>2</td>
</tr>
<tr>
<td>MUS A240</td>
<td>Sophomore Recital</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Studio Guitar Performer, Associate in Arts Degree

Financial Aid Eligible
Banner Code: 1_AA_MSGP
Control Number: 08645

A studio guitarist is a complete guitarist and musician who can accurately perform in a variety of musical styles. The courses in this program cover jazz, rock and classical guitar techniques, traditional and commercial music theory and include numerous performance opportunities.

Complete the Studio Guitar Performer Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Develop repertoire for a recording event.
2. Develop a professional marketing strategy.
3. Record a demo CD.

Associate in Arts Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite. Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/music/studio-guitar-performer-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/), Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

5. **GLOBAL AND MULTICULTURAL REQUIREMENT** *(Required for AA degree only)* Some of the courses listed in this requirement can also
Studio Guitar Performer, Certificate of Achievement

Financial Aid Eligible
Banner Code: I_CN_MSGP
Control Number: 22406

A studio guitarist is a complete guitarist and musician who can accurately perform in a variety of musical styles. The courses in this program cover jazz, rock and classical guitar techniques, traditional and commercial music theory and include numerous performance opportunities.

Program Outcomes
1. Develop repertoire for a recording event.
2. Develop a professional marketing strategy.
3. Record a demo CD.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filled in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MUS A141</td>
<td>Piano 1</td>
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<td>MUS A148</td>
<td>Classical Guitar 1</td>
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<td>MUS A151</td>
<td>Studio Guitar 1</td>
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<tr>
<td>MUS A180</td>
<td>Theory 1</td>
<td>3</td>
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<tr>
<td>MUS A181</td>
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</tr>
<tr>
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<table>
<thead>
<tr>
<th>Semester 2</th>
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<tr>
<td>MUS A110</td>
</tr>
<tr>
<td>MUS A129</td>
</tr>
<tr>
<td>MUS A149</td>
</tr>
<tr>
<td>MUS A152</td>
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<tr>
<td>MUS A187</td>
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<tr>
<td>MUS A290</td>
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<table>
<thead>
<tr>
<th>Studio Guitar Performer Suggested Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>MUS A144</td>
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<tr>
<td>MUS A145</td>
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<tr>
<td>MUS A185</td>
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<td>MUS A186</td>
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<td>MUS A240</td>
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<td>MUS A248</td>
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<td>MUS A271</td>
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<td>MUS A280</td>
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<td>MUS A281</td>
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<table>
<thead>
<tr>
<th>Requirement</th>
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<tr>
<td>Program Major Units</td>
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</tr>
<tr>
<td>Transferable electives to satisfy unit requirement</td>
<td>Varies</td>
</tr>
<tr>
<td>Total Degree Units</td>
<td>60</td>
</tr>
</tbody>
</table>
Students to “customize” the certificate to their unique needs.

- The first 19 units educated in the use of DSLR cameras, storytelling, event documentation, employment as both a photographer and videographer. Students will be

- Video production. It has been designed to prepare students for entry-level

- Concentrated course of study in the field of photography coupled with

- Career Technical Ed specialty, designed for the student who wants a

- Digital SLR Photography and Videography Technician program is

- Financial Aid Eligible

- Control Number: 32791

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>MUS A129</td>
<td>Guitar Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUS A149</td>
<td>Classical Guitar 2</td>
<td>2</td>
</tr>
<tr>
<td>MUS A152</td>
<td>Studio Guitar 2</td>
<td>1.5</td>
</tr>
<tr>
<td>MUS A187</td>
<td>Sightreading Workshop</td>
<td>2</td>
</tr>
<tr>
<td>MUS A290</td>
<td>Applied Music</td>
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<table>
<thead>
<tr>
<th>Semester 3</th>
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<tbody>
<tr>
<td>MUS A129</td>
</tr>
<tr>
<td>MUS A230</td>
</tr>
<tr>
<td>MUS A261</td>
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<tr>
<td>MUS A262</td>
</tr>
<tr>
<td>MUS A290</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

| Total Units | 26 |

**Program Outcome**

1. Students will be able to demonstrate competence as both a photographer and a videographer, and show a critical understanding of visual language.

**Certificate Requirements**

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

**Minimum Grade Requirement**

In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILM A110</td>
<td>Film Production 1</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A123</td>
<td>Introduction to Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A125</td>
<td>Imaging with Photoshop 1</td>
<td>3</td>
</tr>
<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Semester 2</th>
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<tr>
<td>FILM A194</td>
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<tr>
<td>PHOT A180</td>
</tr>
<tr>
<td>FILM A262</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

| Total Units | 19 |

**Electives**

Complete an additional six elective units, in either semester of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS A110</td>
<td>Computers in Music 1</td>
</tr>
<tr>
<td>FILM A102</td>
<td>The Business of Film &amp; Television</td>
</tr>
<tr>
<td>FILM A215</td>
<td>Social Media Marketing</td>
</tr>
<tr>
<td>FILM A265</td>
<td>Documentary Production</td>
</tr>
<tr>
<td>PHOT A188</td>
<td>Commercial Photography</td>
</tr>
</tbody>
</table>
Photography Digital Technician, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CN_PHDT
Control Number: 32791

This program offers training in areas such as digital photography, digital workflow, large format digital capture and studio photography techniques. It is intended to prepare students for digital tech and photo assisting jobs in the professional photography community.

Program Outcome
1. Students will be able to demonstrate competence in the digital skills of photography and display skills in professional practices.

Certificate Requirements
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (https://catalog.cccd.edu/orange-coast/programs-study/) section of this catalog. Check with a counselor to determine the requirements for completion.

Course & Title | Units
--- | ---
PHOT A200 | Documentary Photography
PHOT A225 | Professional Digital Workflow and Color Management
PHOT A280 | Professional Digital Techniques

Total Units: 25

Photography Digital Technician Suggested Electives

Course & Title | Units
--- | ---
PHOT A225 | Professional Digital Workflow and Color Management
PHOT A280 | Professional Digital Techniques
Select any "A200" level PHOT course, three units minimum

Total Units: 18

Photography-Still, Associate in Science Degree

Financial Aid Eligible
Banner Code: 1_AS_PHST
Control Number: 03995

Anyone with an interest in photography, whether beginner, advanced amateur or professional, will find a course or program within the photography program that will teach them new skills and/or prepare them for a career in photography.

The OCC Photography program is intended to prepare students for employment in a number of specialization areas within the field of professional photography. The student, after completing the first year foundation courses, may elect to take advanced courses in art, commercial, advertising illustration, portraiture, architectural, fashion, or documentary photography, color management, digital work flow, and business practices for photographers.

In addition to courses intended to train photographers, the program also includes several black and white and digital classes for professional photographers who wish to learn new skills and/or for those who are interested in careers as photographic digital technicians.

Complete the Photography - Still Certificate of Achievement and Associate in Science general education requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes
1. Demonstrate competence in the technical skills of photography.
2. Demonstrate the ability to evaluate photographic aesthetic strategies.
3. Create photographs that illustrate a critical understanding of visual language.

Associate in Science Degree Requirements

1. UNIT REQUIREMENT - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in...
an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/photography/photography-still-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/). Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### Course | Title | Units
---|---|---
**Semester 1** | | 
Select one of the following: | | 3
ART A101/A101H | Survey of Western Art from Renaissance to Modern | 
ART A102 | Survey of Modern and Contemporary Art History | 
PHOT A101 | Photography and Society | 
PHOT A123 | Introduction to Digital Photography | 3
PHOT A130 | History and Aesthetics of Still Photography | 3
---|---|---
**Semester 2** | | 
PHOT A125 | Imaging with Photoshop 1 | 3
PHOT A127 | Darkroom For Photography Majors | 2
PHOT A180 | Introduction to Professional Photography | 4
---|---|---
**Semester 3** | | 
PHOT A188 | Commercial Photography | 5
PHOT A225 | Professional Digital Workflow and Color Management | 3
Select three units of "A200" level PHOT courses | | 9
---|---|---
**Semester 4** | | 
PHOT A241 | Business Practices for Photographers | 3
PHOT A280 | Professional Digital Techniques | 3
PHOT A283 | Art Photography | 4
Select two units of "A200" level PHOT courses | | 2
---|---|---
**Total Units** | | 41

1 (Excluding PHOT A260 Art Portfolio Development 1-PHOT A267 Marketing and Self Promotion 2).

2 (Including PHOT A260 Art Portfolio Development 1-PHOT A267 Marketing and Self Promotion 2).

### Photography - Still Suggested Electives

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Program Major Units</td>
<td>41</td>
</tr>
<tr>
<td>AS General Education Option 1, 2, or 3</td>
<td>Varies</td>
</tr>
<tr>
<td>Transferable electives to satisfy unit requirement</td>
<td>Varies</td>
</tr>
<tr>
<td>Total Degree Units</td>
<td>60</td>
</tr>
</tbody>
</table>

### Photography-Still, Certificate of Achievement

Financial Aid Eligible
Banner Code: 1_CT_PHST
Control Number: 22408

Anyone with an interest in photography, whether beginner, advanced amateur or professional, will find a course or program within the photography program that will teach them new skills and/or prepare them for a career in photography.

The OCC Photography program is intended to prepare students for employment in a number of specialization areas within the field of professional photography. The student, after completing the first year foundation courses, may elect to take advanced courses in art, commercial, advertising illustration, portraiture, architectural, fashion, or documentary photography, color management, digital work flow, and business practices for photographers.

In addition to courses intended to train photographers, the program also includes several black and white and digital classes for professional photographers who wish to learn new skills and/or for those who are interested in careers as photographic digital technicians.

### Program Outcomes

1. Demonstrate competence in the technical skills of photography.
2. Demonstrate the ability to evaluate photographic aesthetic strategies.
3. Create photographs that illustrate a critical understanding of visual language.

### Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (p. 377) section of this catalog.

2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions...
as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement
In order to be awarded a certificate, students are required to obtain a grade of “C” or better in all program-required courses. Grades of “CR” or “P” will be accepted whereas “CR” or “P” meets the equivalency of a “C” or better. A list of certificate programs can be found in the Programs A-Z ([https://catalog.cccd.edu/orange-coast/programs-study/](https://catalog.cccd.edu/orange-coast/programs-study/)) section of this catalog. Check with a counselor to determine the requirements for completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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**Course**          | **Title**                                | **Units** |
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<tr>
<td>Semester 1</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>ART A101/A101H</td>
<td>Survey of Western Art from Renaissance to Modern</td>
<td>3</td>
</tr>
<tr>
<td>ART A102</td>
<td>Survey of Modern and Contemporary Art History</td>
<td></td>
</tr>
<tr>
<td>PHOT A101</td>
<td>Photography and Society</td>
<td></td>
</tr>
<tr>
<td>PHOT A123</td>
<td>Introduction to Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A130</td>
<td>History and Aesthetics of Still Photography</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Units</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>Semester 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHOT A125</td>
<td>Imaging with Photoshop 1</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A127</td>
<td>Darkroom For Photography Majors</td>
<td>2</td>
</tr>
<tr>
<td>PHOT A180</td>
<td>Introduction to Professional Photography</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Units</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>Semester 3</td>
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<td></td>
</tr>
<tr>
<td>PHOT A188</td>
<td>Commercial Photography</td>
<td>5</td>
</tr>
<tr>
<td>PHOT A225</td>
<td>Professional Digital Workflow and Color Management</td>
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</tr>
<tr>
<td>Select three units of &quot;A200&quot; level PHOT courses</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Units</strong></td>
<td><strong>11</strong></td>
</tr>
<tr>
<td>Semester 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHOT A241</td>
<td>Business Practices for Photographers</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A280</td>
<td>Professional Digital Techniques</td>
<td>3</td>
</tr>
<tr>
<td>PHOT A283</td>
<td>Art Photography</td>
<td>4</td>
</tr>
<tr>
<td>Select two units of &quot;A200&quot; level PHOT courses</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Units</strong></td>
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</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>41</strong></td>
</tr>
</tbody>
</table>

1. (Excluding PHOT A260 Art Portfolio Development 1-PHOT A267 Marketing and Self Promotion 2).
2. (Including PHOT A260 Art Portfolio Development 1-PHOT A267 Marketing and Self Promotion 2).

**Photography - Still Suggested Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A100</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

**Theatre Arts**

OCC’s Theatre Arts department offers students an opportunity to explore the art, theory and craft of live theatre in a hands-on and engaged way. Our lecture and practicum courses are designed to give the student opportunities to take the next step toward a degree or career in theatre or in the entertainment industry.

OCC Theatre offers four degree options and a Career Technical Education (CTE) Certificate in Media Arts and Creative Entertainment:

The AAT degree is offered with an emphasis in Acting or in Technical Theatre, and the AA degree is also offered with an emphasis in Acting or in Technical Theatre.

The Certificate is designed for the student who wants a concentrated course of study in the field of acting/directing coupled with film and television production. Students will be educated in performing, directing, storytelling, camera operation, event documentation, lighting, sound, post-production, and business practices.

Students can expand their foundational knowledge of theatre while gaining skills in hands-on collaboration with faculty and fellow students producing or performing in OCC theatre department productions.

Student participation in our specialty theatre courses forms a deeper understanding of the craft, and enrollment at OCC allows the student to select from a wide array of OCC general education courses that provide a strong foundation for transfer to four-year degree programs.

**Department Contact Information**

For general inquiries about OCC Theatre and for Performance majors, please contact Professor Tom Bruno, Department Chair tbruno@occ.cccd.edu (%E2%80%8Btbruno@occ.cccd.edu)

For Technical majors and for inquiries about our student-run theatre company The Rep (THEA A131), please contact Professor Cynthia Corley ccorley@occ.cccd.edu

Theatre Arts department website ([http://www.orangecoastcollege.edu/academics/divisions/visual_arts/Theatre_Arts/Pages/default.aspx](http://www.orangecoastcollege.edu/academics/divisions/visual_arts/Theatre_Arts/Pages/default.aspx))

- Theatre Arts, Associate in Arts Degree (p. 357)
- Theatre Arts, Associate in Arts Degree for Transfer (AA-T) (p. 358)

**Theatre Arts, Associate in Arts Degree**

Financial Aid Eligible

Banner Code: 1_AA_THEA
Control Number: 03991

Complete eighteen (18) units from the following and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan must be developed with a counselor and placed on file prior to petitioning for graduation.

**Program Outcome**

1. Understand and demonstrate the fundamental performance and technical production processes for the theatre arts.
2. Demonstrate knowledge of the historical and cultural dimensions of theatre, including the works of leading playwrights, actors, directors and designers, past and present.
3. Develop a clear understanding of the interaction between script, actor, and audience and the areas of scenery, lighting, sound and costume.

**Associate in Arts Degree Requirements**

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC.
A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (p. 384), Option 1 (OCC AS GE) (https://catalog.cccd.edu/orange-coast/pathways/visual-arts-design-performing-arts/theatre-arts/theatre-arts-associate-arts-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/). Option 2 (CSU GE) (p. 11), or Option 3 (IGETC (p. 17)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.


<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA A100</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA A101</td>
<td>Introduction to History and Literature of the Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA A106</td>
<td>Acting Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>THEA A129</td>
<td>Technical Theatre Practicum</td>
<td></td>
</tr>
<tr>
<td>THEA A120</td>
<td>Drama Rehearsal and Performance - Beginning</td>
<td>3</td>
</tr>
<tr>
<td>THEA A126</td>
<td>Musical Theatre Rehearsal and Performance - Beginning</td>
<td></td>
</tr>
<tr>
<td>THEA A123</td>
<td>Comedy Rehearsal and Performance - Beginning</td>
<td>3</td>
</tr>
<tr>
<td>THEA A172</td>
<td>Elizabethan Play Workshop and Production</td>
<td></td>
</tr>
</tbody>
</table>

**Restricted Electives**

Select a minimum of nine units of the following: 9-10

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA A106</td>
<td>Acting Fundamentals ▼</td>
<td></td>
</tr>
<tr>
<td>THEA A107</td>
<td>Acting 2</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units** 60

---

**Theatre Arts, Associate in Arts Degree for Transfer (AA-T)**

Financial Aid Eligible
Banner Code: 1_AAT_THEA
Control Number: 32081

Students graduating with an Associate in Arts in Theatre Arts for Transfer Degree are well positioned to complete a Bachelor’s Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Theatre Arts AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.
Program Outcomes

1. Understand and demonstrate the fundamental performance and technical production processes for the theatre arts.
2. Demonstrate knowledge of the historical and cultural dimensions of theatre, including the works of leading playwrights, actors, directors, and designers, develop a clear understanding of the interaction between script, actor, and audience and the areas of scenery, lighting, sound and costume.
3. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

Associate Degree for Transfer Requirements

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2 (p. 11)) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3 (p. 17)).

Course Title Units

<table>
<thead>
<tr>
<th>Required Courses</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
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<tr>
<td>THEA A101</td>
<td>Introduction to History and Literature of the Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA A106</td>
<td>Acting Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>THEA A120</td>
<td>Drama Rehearsal and Performance - Beginning</td>
<td></td>
</tr>
<tr>
<td>THEA A123</td>
<td>Comedy Rehearsal and Performance - Beginning</td>
<td></td>
</tr>
<tr>
<td>THEA A126</td>
<td>Musical Theatre Rehearsal and Performance - Beginning</td>
<td></td>
</tr>
<tr>
<td>THEA A129</td>
<td>Technical Theatre Practicum</td>
<td></td>
</tr>
<tr>
<td>List A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select three courses from above core courses not yet taken or of the following:</td>
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<td>9</td>
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<tr>
<td>THEA A107</td>
<td>Acting 2</td>
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</tr>
<tr>
<td>THEA A110</td>
<td>Theatre Laboratory Level 1</td>
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</tr>
<tr>
<td>THEA A175</td>
<td>Stage Scenery</td>
<td></td>
</tr>
<tr>
<td>THEA A176</td>
<td>Stage Lighting</td>
<td></td>
</tr>
<tr>
<td>THEA A177</td>
<td>Make-Up</td>
<td></td>
</tr>
<tr>
<td>THEA A178</td>
<td>Stage Costuming</td>
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<tr>
<td>Program Major Units</td>
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</tr>
<tr>
<td>CSU or IGETC for CSU</td>
<td></td>
<td>37-39</td>
</tr>
<tr>
<td>Transferable electives as needed to satisfy unit requirement</td>
<td>Varies</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

Adult Education/Noncredit

- Allied Health (p. 22)
  - Personal Care Aide Noncredit, Certificate of Completion (p. 22)
  - Skills Enhancement for Consumer and Health Sciences, Certificate of Completion (p. 23)
- Business (p. 23)
  - Not for Profit Management, Certificate of Completion (p. 23)
  - Chemistry (p. 24)
    - Chemistry Skills, Certificate of Competency (p. 24)
  - Computer & High Technology (p. 24)
    - Computer Basics, Certificate of Completion (p. 24)
  - Consumer and Health Sciences (p. 25)
    - Customer Service for the Retail Industry, Certificate of Completion (p. 25)
- English (p. 25)
  - Academic Preparation in English, Certificate of Competency (p. 25)
  - English as a Second Language (p. 25)
    - ESL Support for Freshman Composition, Certificate of Competency (p. 26)
- English Language Learning (p. 26)
  - Advanced English Language Skills, Certificate of Competency (p. 26)
  - Developmental English Language Skills, Certificate of Competency (p. 27)
  - Emergent English Language Skills, Certificate of Competency (p. 27)
  - English Language Learning for Career Development, Certificate of Competency (p. 27)
  - English Language Learning for Parents, Certificate of Competency (p. 28)
  - English Language Learning for Transition to Academics, Certificate of Competency (p. 28)
  - English Language Support for U.S. Citizenship, Certificate of Competency (p. 28)
  - Grammar Review, Certificate of Competency (p. 29)
- Kinesiology (p. 29)
  - Lifeguard Training, Professional Rescue, Certificate of Completion (p. 29)
  - Yoga Instructor Training, Certificate of Completion (p. 30)
- Mathematics (p. 30)
  - Math Skills Development, Certificate of Competency (p. 30)
- Tutoring (p. 30)
  - Tutoring Skills and Strategies, Certificate of Completion (p. 30)

Admissions and Registration

We want to make enrolling at Orange Coast College as convenient and easy as possible. It begins when the student completes and files an application form online at www.orangecoastcollege.edu (http://www.orangecoastcollege.edu)

Students that are new to Orange Coast College complete an online orientation.

New students complete the Assessment process in order to receive placement into English and Math courses. This process
may include submission of a transcript (to determine Math and English course placement), self-reporting of high school GPA (if no transcripts are available) or placement through a guided self-placement. For more information, please visit the OCC website at www.orangecoastcollege.edu/student_services/AssessmentCenter/ (http://www.orangecoastcollege.edu/student_services/AssessmentCenter/).

In addition, new students may schedule an appointment to meet with a counselor to create a Student Education Plan (SEP) and verify their program of study (major). These activities are followed by the actual registration process: signing up for classes and paying fees online using MyCoast. If a choice of a major is any one of the many allied health career programs, students must participate in a special admission process, in addition to the activities described above. Additional information may be found in this section.

Admissions Eligibility

Admission to OCC is granted to those applicants who meet one of the following requirements:

• High school graduation
• Certificate of Proficiency or a G.E.D. from the State of California
• Attainment of 18 years of age and who, in the judgment of College officials, are capable of profiting from instruction at the College
• Enrollment in the 9th through 12th grade, and recommendation for advanced academic or vocational college-level study

Students enrolled as 9th through 12th-grade students may enroll for courses at Orange Coast College under provisions of the Education Code, sections 76001 or 76001.5, and in accordance with the District’s policy and the following guidelines:

• Students must be enrolled as 9th through 12th-grade students at their schools
• The course is an advanced academic or vocational experience for the student and not available at their regular school
• Students must have the ‘Dual Enrollment Form’ completed, signed by the parent and high school principal or designee, recommending a specific course or courses and submit the completed ‘Dual Enrollment Form’ to the Enrollment Center for processing. Students must meet any and all prerequisite and co-requisite course requirements prior to enrollment. Visit the OCC website for more information.

International students who are, or intend to be, under F-1 visa status should visit the Global Engagement Center website for entrance requirements at www.orangecoastcollege.edu/student_services/gec/intl-students (http://www.orangecoastcollege.edu/student_services/gec/intl-students/Pages/default.aspx). (http://www.orangecoastcollege.edu/student_services/gec/intl-students/Pages/default.aspx)

Application

An application for admission is required for all students. Application forms may be accessed through the OCC website at www.orangecoastcollege.edu (http://www.orangecoastcollege.edu). International students should contact the Global Engagement Center regarding admission to the College at (714) 432-5940, or by email at occinternational@cccd.edu, or at www.orangecoastcollege.edu/student_services/gec (http://www.orangecoastcollege.edu/student_services/gec/Pages/Welcome.aspx). (http://www.orangecoastcollege.edu/student_services/gec/Pages/Welcome.aspx)

www.orangecoastcollege.edu/student_services/gec/Pages/Welcome.aspx)

Acceptance of Transfer Credit/Transcripts from Other Colleges

Students who have completed coursework, especially English and/or mathematics, at another regionally accredited college or university should submit their transcripts for evaluation to the Enrollment Services Office, located on the first floor of Watson Hall. Official College transcripts from accredited institutions are required in order for the student to receive credit toward the associate degree, certificates of achievement, transfer certification, all awards/credit, and advisement. For the purposes of this catalog, “accredited institutions” means those institutions accredited by one of the six U.S. regional accrediting associations. The six regional associations are:

• New England Association of Schools and Colleges
• Middle States Association of Colleges and Secondary Schools, Commissions on Institutions of Higher Education
• North Central Association of Colleges and Schools, Commission on Colleges and Universities
• Northwest Association of Secondary and Higher Schools, Commission on Higher Schools
• Southern Association of Colleges and Schools
• Western Association of Schools and Colleges, Accrediting Commission for Senior Colleges and Universities and Accrediting Commission for Junior Colleges

OCC reserves the right to evaluate work completed at other colleges in accordance with campus policies.

Official student transcripts of record from other institutions become the property of OCC. Students with transcripts from countries outside the United States must first submit their transcripts to an evaluation service. Please contact the Counseling Office, located on the third floor of Watson Hall, for information regarding these services.

Admission to School of Allied Health Professions

Admission into Allied Health Professions programs is limited for several reasons:

• Training in any health care program needs to meet an identified community need.
• Available clinical sites for hands-on experience is limited.
• Educators must meet stringent qualifications.
• Availability of specialized equipment in highly technical laboratories is limited.

Allied Health General Program Requirements

The following programs require Allied Health A010 as a prerequisite:

• Cardiovascular Technology, Electrocardiology, and Echocardiography
• Dental Assisting – Registered
• Diagnostic Medical Sonography
• Medical Assisting
Admission
Taking Allied Health A010 is the optimal method to determine career choice and is required to apply to a specific program. Students should take Allied Health A010 as early as possible and should take this course prior to completing other General Education or prerequisite classes. Admission criteria is based on a first-come, first-served basis and the priority criteria for acceptance is listed below in order of ranking:

- The dates of successful completion of specific program prerequisites and applicable General Education requirements.
- The date of application to the program through Allied Health A010.

More specific information concerning the admission procedure can be found on the Allied Health website at http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/Pages/default.aspx

General
- Students should have adequate financial support so as not to jeopardize their academic achievement and clinical experiences by extensive outside employment.
- Many programs have external licensing/certification examinations with specific requirements for employment.
- Many programs require completion of the General Education requirements for the Associate in Science degree before admission. See College Catalog for specific General Education requirements for the Associate in Science degree.

Course Recency for Programs that Require the Following Prerequisites:
To keep abreast of the industry standards, all students admitted to any of the Allied Health programs must adhere to the current catalog program requirements for the year they are admitted to a program.

- Allied Health A111 – Medical Terminology: must be successfully completed with a grade of “C” or better within a three-year period of the application date for the specific program.
- Biology A221 – Anatomy-Physiology: must be successfully completed with a grade of “C” or better within a three-year period of the application date for the specific program.
- Chemistry A110 – Introduction to Chemistry: must be successfully completed with a grade of “C” or better within a three-year period of the application date for the Respiratory Care program.
- Diagnostic Medical Sonography A110 – Introduction to Sonography must be successfully completed with a grade of “C” or better within a three-year period of the application date for the specific program.
- Radiologic Technology A100 – Radiation and Imaging Physics: must be successfully completed with a grade of “C” or better within a three-year period of the application date to the specific program.

Prerequisite courses listed above that have exceeded the three or five-year limit must be re-taken.

If the course is greater than three years old and the student has been working in a field that requires application of this course material, the student may ask for a waiver of the recency requirement. This waiver will require a letter from the employer indicating the need for and utilization of the course material. Final waiver determination is by the program director.

Clinical
- Admission into the clinical phase of a program requires that students be in good physical and mental health. A physical examination is required that includes blood testing, TB testing, and vaccinations.
- A criminal background check and drug screen are required. Students must pass this test to be admitted to the program. A valid Social Security number is needed for this screening process.
- Students must adhere to a specific dress code and wear picture identification badges.
- Students must have reliable transportation to off-campus clinical sites.

More specific information concerning the admission procedure can be found on the Allied Health website at www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/Pages/default.aspx (http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/Pages/default.aspx)

Termination of Allied Health Program and Procedure for Readmission
Any break in enrollment due to any of the items listed below will cause termination in the program.

1. Voluntary withdrawal due to extenuating circumstances, defined as personal/family health issues, personal/family financial issues, or family-related issues preventing the student from continuing (NOTE: Grades are not considered as extenuating circumstances) or
2. Non-passing grades (D or F) in Didactic Courses or
3. Non-passing grades (D or F) in Clinical and/or Laboratory Experiences or
4. Non-passing grades in Clinical and/or Laboratory Experiences for unsafe practices or substandard professional performance.

A student who terminates as indicated above in items numbered one to three, and who subsequently desires re-admission to the program, will need to follow the Procedures for Readmission as specified on the Allied Health website. Note: For item four above, the student will be unable to continue in their chosen program and will be unable to reapply to the School of Allied Health Professions for any program.

Priority Registration Policy
Enrollment priority is the process used to determine the order in which students will have the opportunity to register for classes. Recognizing that each college serves a unique student population that may have differing needs, the development of specific registration priorities for
some student groups will be done at the college level in accordance with District procedures.

The Coast Community College District is committed to the philosophy that all students should have fair and equitable access to courses and programs within the resources of each college and in accordance with State Education Code, Title 5 provisions, and guidelines adopted by the Board of Governors. Further, the District believes that students should be able to progress toward their stated educational objective in a timely manner.

The primary mission of the District colleges is to provide degree, certificate, and transfer programs. Therefore, priority is extended to students who have completed the requirements of SB1456 as defined by the Student Success Program. These include

1. completion of an orientation program
2. placement into English and Math courses via the assessment process
3. selection of a college program of study (major)
4. establishing a Student Education Plan (SEP) with an appropriate counselor and
5. demonstrate satisfactory academic progress toward their declared educational objectives (major).

Registration priority will be according to the framework established on Administrative Procedure (AP 5055).

Board Policies and Administrative Procedures are available on the Board Policy section of the Coast Community College District (CCCD) website at [www.cccd.edu](http://www.cccd.edu)

### Loss of Priority Registration

Students are assigned registration appointments in accordance with the Coast Community College District (CCCD) Board Policy 5055 and Administrative Procedure 5055. Students will lose priority registration due to unit cap limitations and/or not meeting academic progress standards (completion of more than 50% of courses attempted and maintaining a cumulative 2.0 GPA). Students will also lose eligibility for the California College Promise Grant (formerly BOGFW) due to not meeting academic standards. Students may submit an appeal form for consideration of reinstatement of priority registration and/or California College Promise Grant eligibility. The form is available on the OCC website at [www.orangecoastcollege.edu/enrollment/Pages/New-Registration-Priority-Information.aspx](http://www.orangecoastcollege.edu/enrollment/Pages/New-Registration-Priority-Information.aspx)

### Residence Requirements

#### California Residence

The initial residency classification will be made at the time the student applies for admission. Students may file residency questionnaire forms through the third week of the semester to request a review of their residency status. Final residency determination is made by Enrollment Services.

Verification of residence status may be required. Generally, California residence is established by one of the following:

1. If the applicant is under the age of 18, his or her parents must have had legal residence within the State of California for 12 consecutive months preceding the day before the first day of the semester.

2. If the applicant is 18 but not yet 19 years of age, the applicant and the applicant’s parents must have had legal residence within the State of California for 12 consecutive months preceding the day before the first day of the semester.

3. If the applicant is 19 years of age or older, the applicant must have had legal residence within the State of California for 12 consecutive months preceding the day before the first day of the semester. If the applicant’s parents or legal guardians reside out-of-state, the student must be financially independent. (See Non-California Residents #2.)

4. A non-immigrant holding a status that does not preclude the student from establishing residency in California must have legal residence in California for 12 consecutive months preceding the day before the first day of the semester, and a restrictive immigration status dated at least one year and one day prior to the semester start date.

Persons generally ineligible to establish California residency include: students under age 18, students dependent on out-of-state parents/guardians, students with certain non-immigrant status, etc. For further information regarding eligibility to establish residency, contact a Residency Specialist at the Enrollment Center on first floor of Watson Hall or via email at occresidency@occ.cccd.edu

#### Non-California Residents

Students who do not meet the California residence requirements as of the day immediately preceding the first day of the semester or summer session are required to pay the non-resident tuition fees and capital outlay fees. This includes:

1. Minors (under 18 years of age and not married) will be required to pay the non-resident tuition fee if their parents or legal guardians reside outside the state even though such minors may have lived in the State of California for one year or more.

2. Students who are financially dependent on their parents or legal guardians will be required to pay non-resident tuition and capital outlay fees if their parents or legal guardians reside outside the state, even though such students may have lived in the State of California for one year or more.

3. Students holding non-immigrant status that precludes them from establishing residency in California may be restricted in their enrollment and will have to pay non-resident tuition and capital outlay fees.

Exemptions authorized by the State of California:

- Active military personnel stationed in California are exempt from non-resident tuition fees. Beginning Summer 2017, active duty military students and their dependents who are only enrolled in fully online classes at any of the Coast Community College District sites are exempt from the capital outlay fee.

### Expansion of Resident Classification for Purposes of Determining Tuition and Fees

#### Active Duty, Veterans & Dependents

Education Code section 68074 provides that specified dependents of members of the Armed Forces of the United States who are stationed in California on active duty are entitled to “resident classification only for the purpose of determining the amount of tuition and fees.” In Assembly Bill 172 (2017), the Legislature extends this resident classification to specified dependents of transferred or retired members, provided the
dependent was admitted to a public postsecondary institution prior to the transfer or retirement. (Ed. Code, § 68074, subd. (b).)

This includes:

• Dependents of military personnel stationed on active duty in California are classified as a resident.
• Armed forces members who were stationed in CA for more than one year and remained in the state following discharge.
• Students who are eligible as covered individuals as defined in the Veterans Access, Choice and Accountability Act of 2014 (VACA Act).

**AB 540 Exemption**

Under Senate Bill 68 and AB 540, a student is exempt from paying nonresident tuition at the Californian Community Colleges if the student meets all three of the required criteria.

1. The student must have:
   • attended a combination of California high school, adult school, and California Community College for the equivalent of three years or more, or
   • attained credits earned in California from a California high school or California adult school equivalent to three or more years of full-time high school course work and attended a combination of elementary, middle and/or high schools in California for a total of three or more years, and

2. The student must have:
   • graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED or California High School Proficiency exam), or
   • completed an associate degree from a California Community College, or
   • completed the minimum requirements at a California Community College for transfer to the California State University or the University of California, and

3. The student must file an affidavit with the college stating that if the student is a non-citizen without current or valid immigration status, the student has filed an application to legalize immigration status, or will file an application as soon as the student is eligible to do so.

**International Students**

Orange Coast College is authorized by the U.S. Department of Homeland Security (DHS) to admit international students under F-1 visa status.

At OCC, we believe that our international students provide ethnic and cultural diversity to the campus and help increase the awareness and understanding of students from other countries and cultures. In addition, we provide an opportunity for international students to study in the United States and learn about our culture.

Interested international students can request an application for admission by emailing the Global Engagement Center at occinternational@cccd.edu. An application packet can also be downloaded by visiting the Global Engagement Center website at www.orangecoastcollege.edu/student_services/gec/intl-students/ (http://www.orangecoastcollege.edu/student_services/gec/intl-students/Pages/default.aspx) Our admission process allows for acceptance to OCC during the fall, spring, and summer semester. Applicants must submit all required documents prior to the application deadline for the semester in which they wish to attend. Approximate semesters start dates are late August for fall, late January for spring, and early June for summer semesters. International students must enroll in and complete a minimum of 12 units each semester in order to maintain their valid F-1 status. In addition, all international students must maintain continuous medical coverage that is provided through the Global Engagement Center throughout their studies at OCC.
international students pay non-resident tuition fees in addition to all other applicable fees during their entire attendance at OCC.

The following are admission requirements for international students who are, or intend to be under F-1 visa status:

- Completed and signed international student application.
- Application fee in the amount of $55 USD.
- Academic records from all previous institutions attended.
- English requirement: A minimum score of 500 (paper-based) or 61 (internet-based) on the Test of English as a Foreign Language (TOEFL) or an acceptable score on many other standardized tests or completion of an acceptable level in an approved intensive English program. For a complete list of acceptable tests and acceptable scores as well as intensive English programs and acceptable levels, please visit www.orangecoastcollege.edu/student_services/gec/intl-students (http://www.orangecoastcollege.edu/student_services/gec/intl-students/Pages/default.aspx)/.
- Financial support documentation
- Documents related to current or past legal status in the U.S.

DHS prohibits international students from unauthorized employment. International students must obtain approval from the Global Engagement Center before they engage in any on- or off-campus employment. For further information or specifics regarding admission and submission of documents, please refer to the International Student application packet or contact the Global Engagement Center by telephone at (714) 432-5940 or visit the Global Engagement Center.

IEC@OCC is a for-credit intensive English program primarily for international students who do not meet the English proficiency level. For more information, please visit the website at www.iec-occ.edu (http://www.iec-occ.edu) or call 714-432-5940.

**Students with Visas**

Students with certain types of visas who are eligible for admission may enroll (limitations of units and/or restrictions may apply) provided they have a valid status that does not expire before the end of the term for which they are enrolling. Students with a non-immigrant visa classification must ensure that enrollment in College does not interfere with their primary intent of non-immigrant status.

A student who is precluded from establishing domicile in the United States shall not be classified as a resident unless and until he or she has been granted a change in status by the Department of Homeland Security (DHS) to a classification which permits establishing domicile and has met other residency requirements.

Students with B1 or B2 visa status are not eligible to take courses. They must contact the Global Engagement Center to inquire about changing their visa status.

**Assessment Requirements**

Assessment is a process through which the College collects information about students to facilitate their success by ensuring their appropriate placement into English, ESL, and/or mathematics courses.

With the passing of Assembly Bill 705, which requires that community colleges maximize the probability that a student will enter and complete transfer-level coursework in English and mathematics within a one-year timeframe, the assessment process at OCC is changed to follow that guideline. Students (both new and continuing) will have access to enroll in first-level transfer English and mathematics courses regardless of prior placement or enrollment in below transfer-level courses or ESL. In addition to a transfer-level placement, students will receive a recommendation on the level of support needed to succeed in the course. Support recommendations are based on high school English and mathematics courses completed, the grades in those courses, and the cumulative, unweighted high school GPA. Students will not need to take an English and/or math placement test.

OCC will continue to offer ESL courses to allow students to practice and improve speaking, listening, reading, writing, and grammar skills. If you are an ESL student, you may benefit from additional training prior to enrolling in transfer-level English courses. ESL students who seek to enroll in ESL instruction will still receive access to first-level transfer courses.

In case the students do not have high school transcripts, they may self report their GPA and or receive placement via a Guided Self-Placement tool.

Students may also receive placement above first-level English and mathematics transfer courses via the following alternative methods:

- Successful completion of courses – students who have successfully completed an English or mathematics course from an accredited college or university that is considered equivalent at OCC.
- AP scores – students who received a score of “3” or above on AP Calculus and/or AP English Literature or AP English Language and Composition.

Students who possess an associate degree may be exempt from the assessment process. Students must provide official transcripts in order to verify the satisfactory completion of college-level English and mathematics coursework in order to be exempt. Students who possess a bachelor’s, master’s, or doctoral degree can be exempt from the assessment process. Students must provide official transcripts verifying the degree earned.

Students may challenge their placement results if they believe their placement is inaccurate. Challenge forms must be submitted prior to enrolling in the course. Forms are located in the division offices of Mathematics and Sciences and Literature and Languages, respectively.

Students are encouraged to visit the Assessment Center’s website at http://www.orangecoastcollege.edu/assessmentcenter (http://www.orangecoastcollege.edu/assessmentcenter/) or call (714) 432-5789 or stop by the Assessment Center, located on the first floor of Watson Hall, for more information about the assessment process. International students should contact the Global Engagement Center at (714) 432-5940 or occinternational@cccd.edu for testing requirements.

**Course Accessibility**

The policy of the Coast Community College District is that, unless specifically exempted by regulation, every course section, or class, reported for state aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to the college(s) and who meets such prerequisites as may be established pursuant to regulations contained in Title 5 of the California Code of Regulations, Division 6, Chapter 6, sub-chapter 1, Article 2.5, commencing with Section 55003.
Course Prerequisite, Co-requisite, and Advisory on Recommended Preparation

A “prerequisite” is a course a student is required to complete with a “C” or better, or a skill a student is required to have before enrolling in another course.

A “co-requisite” is a course a student is required to take at the same time he or she is enrolled in another course. All prerequisites and co-requisites are designed to ensure students have the skills or information they need to succeed in a course. These requirements are established because it has been determined that without meeting them, a student is not likely to receive a passing grade in the course. A prerequisite or co-requisite also may be necessary to protect a student’s health and safety, or the health and safety of others. Additionally, courses taken without prior completion of the prerequisite may be denied credit upon transfer to a CSU or UC per articulation agreements, either at time of admission or upon petition for graduation.

An “Advisory on recommended preparation” (listed as “Advisory”) is a course or skill a student should have before enrolling in another course. Such recommendations are offered by the faculty who teach these courses, and it should be followed for student success. However, unlike a prerequisite or co-requisite, an “Advisory” is not required.

Prerequisites and Co-requisites Clearance Process

OCC enforces prerequisites and corequisites at the time of registration. It is the student’s responsibility to determine if a course they wish to take has a prerequisite prior to their assigned registration appointment. Students can determine if a course has a prerequisite by visiting the online class schedule and selecting the CRN number of the course.

Students may be cleared in the registration system for enforced prerequisites and corequisites in the following ways:

• Successfully completing the prerequisite/co-requisite at OCC.
• Placing into the course via the assessment process.
• AP Scores of a score of 3 or higher in AP Calculus AB, AP Calculus BC, AP English Literature and Composition, AP English Language and Composition exam, AP Psychology.
• Successfully completing the equivalent prerequisite/corequisite with a “C” or better at another regionally accredited college/university and submitting transcripts to verify successful completion.

To initiate the clearance process, students must submit the Clearance Request Form, available on the Registration Information page, and upload the appropriate documentation (official or unofficial transcripts and/or test scores). Students may submit unofficial transcripts for prerequisite and corequisite clearance only, but must submit official transcripts to receive course credit/units. In order to avoid registration difficulty, students must submit the form in a timely manner prior to their registration date.

If a prerequisite/co-requisite course equivalency is denied, students have the right to challenge a course prerequisite or co-requisite in accordance with Title 5, Section 55201. Students who wish to challenge a prerequisite based on previous experience or knowledge must visit the respective division office to obtain and complete a Challenge Form. The initial burden falls upon the student to show that grounds exist for the challenge. A grade lower than a “C” in a prerequisite course may NOT be challenged through this process. Grades of “C-” do not meet the “C” grade or better requirement as defined for this purpose. Decisions on challenges of prerequisite/co-requisite course listings will be made by a committee of two College instructional staff members, at least one of whom will be a faculty member knowledgeable about the discipline, but not the faculty member assigned to teach the course section for which the challenge is being made. All decisions are final.

Fees and Expenses

California legislation requires the College to charge student enrollment fees. Student fees are:

• Enrollment fee of $46 per unit for students meeting California residency requirements;
• $30 parking permit*, $15 for summer sessions;
• $21 health service fee, $16 for summer sessions;
• $26 College Service Charge**, $15 for summer sessions;
• $2 Student Representation Fee*** for fall semester, spring semester, and summer sessions;
• Material fees as listed in the current class schedule.

* Parking Fee may be subject to an increase to $40 for Fall 2020 and beyond.

** The College Service Charge provides services and benefits, which include OCC Bookstore buyback, Robert B. Moore Theater discounts, free tutoring, interest-free emergency loans, student events and activities, and legal advice. Students may present their request to waive the College Service Charge to the Student Life & Leadership Department prior to the earliest refund deadline for the student’s enrolled classes. Please contact the Student Life & Leadership Department by email at asocc@occ.cccd.edu or telephone at (714) 432-5730 for more information.

*** The Student Representation Fee is divided between the Associated Students of Orange Coast College (ASOCC) and the recognized statewide community college student organization, Student Senate of the California Community Colleges (SSCCC) to provide support for governmental affairs representatives from the two organizations who may be stating their positions and viewpoints before city, county, state and/or federal government. The Student Representation Fee cannot be used to support individual candidates or campaigns. Students have the right to waive this fee by submitting a request to the Enrollment Center prior to the earliest refund deadline for the student’s enrolled classes. For questions about the waiver, contact the Enrollment Center by email at arinfo@occ.cccd.edu or telephone at (714) 432-5072

Students who do not meet California residency requirements are required to pay a non-resident fee of $290 per unit and a Capital Outlay fee of $10 per unit in addition to the Resident fee of $46 per unit, for a grand total of $346 per unit.

All fees quoted are at time of publication and are subject to change without notice. The state legislature may increase enrollment fees at any time including current and future terms.
Student Health Service Fee

Student Health Center services include no-cost visits with doctors, registered nurses, and the mental health team, in addition to other services at reduced rates.

The health service fee is a state-mandated fee unless students present a waiver prior to registration. Those eligible for a waiver are:

- Students who depend exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization.
- Students enrolled in courses of two weeks or less duration.
- Students enrolled only in non-credit courses.
- Students enrolled only in study abroad programs.
- High school students enrolled in dual enrollment and Career Access Pathway (CCAP) agreements.
- Students enrolled in an approved apprenticeship training program.
- Students who are incarcerated.

Parking

A registered student may purchase a parking permit for $30 each semester and $15 for the summer session. The permit is valid at Orange Coast College, Golden West College and Coastline Community College. Temporary parking permits are available at the ticket dispensers.

Parking spaces are available on a first-come, first-served basis. The Coast Community College District and Orange Coast College accept no liability for vandalism, theft or accidents; students use the parking facilities at their own risk.

For more information, complete parking rules and regulations are available at the campus safety office in Parking Lot C (714) 432-5017.

Student Photo ID Cards are required for use in the Bookstore, Library and for other transactions with the College. This card may be used in succeeding semesters when the student is enrolled. Students will be required to replace any lost, stolen or unusable card.

In accordance with regulations of the Board of Governors of the California Community Colleges, Title 5, California Administrative Code, Section 59400 et seq., the Coast Community College District shall provide free of charge to students all instructional materials, except for the following materials which the student may purchase from the district at cost or may be provided through the student’s own means.

- Optional Instructional Materials: Materials used to enhance the student's learning experience in the classroom, but that are not essential to the completion of course objectives.
- Required Instructional Materials: Materials required to complete the objectives of the course and that are tangible property of continuing value outside the classroom which the student will retain.

The College shall have the discretion to either charge or not charge a fee for instructional materials of the types indicated above. Such fees will cover actual district costs.

Refund Policy

In accordance with California State Regulations and Coast District Policy, registration fees will be refunded according to the following:

Enrollment Fees, Non-Resident Fees, Material Fees

100% refund of fees paid at registration for each class dropped by the refund deadline. No refund will be made after the refund deadline (refer to the Student Class Program/Web Schedule Bill on the Student Tab of the MyCoast portal page, or see Dates to Remember). There are no exceptions.

Health Fee, College Service Charge

100% of the fees paid at registration will be refunded if the student totally withdraws from all classes by the refund deadline for each class. No refund will be made after the refund deadline.

Parking Permit

Students must return the parking permit (if purchased) in-person or by mail. The parking permit must be postmarked or returned to the Enrollment Center (Registration Office) on or before the earliest refund deadline on the student’s official Student Class Program (Web Schedule Bill), which is available via the student tab on the MyCoast portal.

Refund Processing

Refunds will automatically be processed weekly beginning the first week of registration of the semester in which the fees were paid and each week thereafter, until the end of the term. Official withdrawals made in accordance with the refund policy and by the withdrawal deadline will generate a credit balance on the student’s account.

In order to be eligible for a refund, students must officially withdraw from classes by the refund deadline (refer to the Student Class Program/Web Schedule Bill on the Student tab of the MyCoast portal page or see Dates to Remember). It is the student’s responsibility to officially withdraw from classes and to verify all withdrawals by printing their Student Class Program/ Web Schedule Bill for confirmation. An instructor may drop students for non-attendance. Instructors are not responsible for dropping students prior to refund deadlines. Students who are officially enrolled in a class after the refund deadline will not be eligible for a refund. There are no exceptions.

Online Credit Card Payment Refunds

Registration fee payments made by credit card through MyCoast will be refunded to the same credit card used for payment. Allow 6-10 business days for the refund to post. If the credit card used to pay fees is no longer valid, it is the student’s responsibility to notify the Enrollment Center once the credit has been posted to the student’s account and prior to the refund being processed. The refund will be converted to a check refund upon proper notification.

On-Campus Payment Refunds

Fee payments paid on campus — by cash, check, money order or credit card — will be refunded through BankMobile as either a check, mailed to the mailing address the Enrollment Center has on file, direct deposit to an existing bank account; or to a BankMobile account, depending on the refund choice made by the student. It is the responsibility of the student to make sure their BankMobile Vibe account is activated, and updated, and to maintain correct and up-to-date address information. Addresses can be updated on MyCoast, under the Student tab, and then click on Banner Self Service.
All requests for review of account summary must be made within a one-year grace period from the semester in which the fees were assessed. Such petitions are subject to review and all decisions are final. There is no additional appeal process.

Important
Payments made using multiple payment methods (online credit card payments and cash, check or money order) during the current registration period will be refunded to the credit card used for online payments.

Student Services
The primary mission of all educational institutions is learning. Orange Coast College recognizes that there are many activities and programs outside of the classroom that enhance the learning process. Consequently, numerous student services have been established to help students move toward the attainment of their goals.

Students at OCC come from a diversity of backgrounds, ages, and lifestyles. The personal circumstances of many students often include financial, physical and/or learning constraints that make attending college difficult. The variety and comprehensive nature of student services at OCC is intended to support a multitude of concerns for a large student population. All students are encouraged to explore the services available at OCC by visiting the College’s website which provides valuable information.

Co-Curricular Programs
• Athletics (p. 367)
• Honors Program (p. 367)

Athletics
With several decades of winning tradition, Orange Coast College has been regarded as having one of the top athletic departments among all two-year colleges in the state. This standard has produced one of the highest totals of team and individual state and national championships throughout all California community colleges.

The Pirates field 12 men's athletic teams and 13 women's teams. Men's sports include baseball, basketball, crew, cross country, football, golf, soccer, swimming and diving, tennis track and field, volleyball and water polo. Women's sports include basketball, crew, cross country, golf, sand volleyball, soccer, softball, swimming and diving, tennis, track and field, volleyball and water polo. Cheerleading is a co-ed sport.

Intercollegiate Athletics
Orange Coast College participates as a member of the Orange Empire Conference for most of its sports sponsored by the California Community College Athletic Association (CCCAA). The Orange Empire Conference includes the following colleges: Orange Coast, Cypress, Santa Ana, Riverside, Saddleback, Fullerton, Golden West, Irvine Valley and Santiago Canyon.

For football, OCC is a member of the Southern California Football Association, National Southern Division, which includes the following colleges: Orange Coast, Palomar, Santa Ana, Saddleback, Long Beach, Fullerton and Grossmont.

Non-Conference Athletics
The men's and women's crew compete in individual sports associations.

Orange Coast College is the only community college in California to offer competitive rowing. OCC Crew is a member of the Western Intercollegiate Rowing Association and the American Collegiate Rowing Association. Other colleges competing in these associations include: CSU Long Beach, Loyola Marymount, CSU Sacramento, St. Mary's College, CSU San Diego, Santa Clara University, UC Irvine, UC Davis, UC San Diego, UC Santa Barbara, Stanford University, UC Berkeley, University of Washington, Oregon State University, UCLA, USC and Washington State University.

Honors Program
The OCC Honors Program provides an enriched collegiate experience for intellectually curious and highly motivated students. The Program celebrates the collaborative effort of students and instructors in reciprocal teaching-learning environments that promote student initiative, knowledge, curiosity about the world of ideas, and concern for current social issues.

Honors Courses
OCC Honors courses may be taken by OCC students who wish to engage in a more rigorous learning experience, whether or not they are enrolled in the Honors Program itself. The courses are challenging and demand a significant commitment of time for study and engagement. Honors instructors enhance the basic curriculum requirements of their classes by offering more opportunities for intensive study than are possible in most non-Honors sections. Freedom of inquiry and student discovery are stressed. The generally smaller Honors sections are intended to foster discussion, mastery of content, critical thinking, and analysis. Guest speakers, field trips and comprehensive research, including the presentation of results, further enhance many Honors sections.

Writing Skills and Honors Courses
While there are no prerequisites for Honors sections other than those that apply to non-Honors sections of the same courses, many Honors courses include scholarly reading and writing assignments, including research and essay-style exams. Strong college-level writing skills are critical to student success. Prior completion of, or concurrent enrollment in, English 100 or higher is strongly recommended.

Multiple Paths within Honors
Students enroll in the Honors Program for a variety of reasons and not all students are expected (or required) to pursue the same path or take advantage of the same benefits. In fact, certain benefits may not be available to all Honors students, depending on choice of major or target transfer school. Students are further advised that involvement in Honors Program on- and off-campus events, projects, academic conferences, creative works competitions and social gatherings are recommended. These activities provide a variety of personal development opportunities and may improve the likelihood of selection for transfer admission and scholarship awards.

Benefits of Enrollment
For all students enrolled:
• Close interaction with enthusiastic learners and passionate instructors
• Flexible, rigorous coursework emphasizing research, critical thinking and writing skills
• Added preparation for upper division coursework
• Opportunities to develop leadership and organizational skills through the Honors Student Council (HSC)
• Access to specialized Honors Counseling
• UCLA and UCI Library privileges
• Special activities, including guest speakers, seminars, field study, and social events
• Opportunities to present research and creative works at prestigious academic conferences
• Added preparation for upper division coursework
• Notation of each Honors course on transcripts
• Access to specialized Honors Counseling

Benefits of Certification
For students who choose to complete Honors Program certification requirements:

• Earn priority consideration for transfer admission to a number of respected four-year institutions, including UCLA and UCI
• Receive a notation on official OCC transcripts of Honors Program completion
• Earn the privilege of wearing the program’s distinctive black and silver Honors regalia and receiving recognition in the graduation program

Honors Program Enrollment Procedures
Students may apply to the OCC Honors Program year-round, if they believe they have met all of the enrollment criteria.

Successful applicants will:

• Be in good standing with the OCC Dean of Students Office and adhere to the Coast Community College District Student Code of Conduct and Disciplinary Procedures
• Be currently enrolled in OCC classes
• Complete an Honors Orientation prior to submitting an application (Visit the Honors Program website to make a reservation for an orientation session.)
• Meet the English composition requirement in one of the following ways:
  - Receive an exemption from English 100 with an AP exam score of 3 or higher;
  - Complete at least one qualifying English composition course with a grade of A or B: English 100, 101, 101H, 102, 102H, or 109.

Submit an Application to the Honors Program
Students who graduated from high school less than one year prior to submitting an Honors Program application AND who have completed fewer than 12 units of letter-graded college coursework MUST:

• Have a minimum final cumulative high school GPA of 3.25 for grades 9-12; AND
• Have a minimum cumulative GPA of 3.25 in all college coursework completed

All students who have completed 12 or more units of letter-graded college coursework MUST:

• Have a minimum cumulative GPA of 3.25 in all college coursework completed

Note: Applicants are required to submit transcripts from all colleges attended. Grades of D, F, or NP earned within the Coast Community College District at any time, or at another college during the two years prior to entering any of the CCCD colleges, must be “excluded” through course repetition or academic renewal. Incomplete grades of ID, IF, or INP must be resolved with a final grade for course completion. The total combined cumulative GPA will be calculated on GPA units and GPA points earned at all institutions attended.

Continuing Enrollment
After enrolling in the Honors Program, students will receive continuing benefits provided that they:

• Remain in good standing with the OCC Dean of Students Office and adhere to the Coast Community College District Student Code of Conduct and Disciplinary Procedures
• Remain enrolled in OCC classes or file a notification for a “Leave of Absence” with the Honors Office for up to one year
• Meet with an Honors Counselor at least once each academic year (preferably each semester before registering for the next semester’s classes)
• Complete at least one Honors course within one year of initial enrollment
• Maintain a minimum cumulative GPA of 3.25 in all transferable coursework and avoid grades below C (Grades of D, F, NP, ID, IF, or INP must be resolved the following semester through course repetition or successful completion. If eligible for Academic Renewal, a written notification must be filed with the Honors Office.)

Completion Requirements
Special recognition is awarded to transferring or graduating students enrolled in the Honors Program who meet the following requirements:

• Complete a minimum of 15 units of Honors coursework, distributed over at least three different subjects, with a letter grade of C or higher earned in each
• Earn a minimum cumulative GPA of 3.50 in all transferable coursework, including courses taken at other institutions
• Earn a grade of A or B in at least one qualifying English composition course (English 100, 101, 101H, 102, 102H, 109) or receive an exemption from English 100 with an AP score of 3 or higher
• Obtain an exclusion for all grades of D, F, or NP through course repetition or academic renewal prior to the start of the final semester, and earn a passing grade in all previous “Incomplete” courses.

Certification Requirements
Eligibility for Honors transfer priority requires that students meet applicable university transfer requirements AND Honors Program certification criteria: general education breadth, selective-major prerequisites, and completion of at least 12 units of Honors coursework before the start of the student’s final semester at OCC. (Up to three of the required 15 total Honors units may be in progress at the time certification is requested.)
Assessment Center

The Assessment Center, located on the first floor in Watson Hall, supports students through the enrollment process (from application to registration). Students can visit the Center to receive support with the application, completing the online orientation, and registering for courses. In addition, the Center assists with clearance of course prerequisites and challenges. The Center administers placement tests in English as a Second Language (ESL), Chemistry A180, and Spanish. For more information about the Assessment Center, please visit the website at www.orangecoastcollege.edu/assessmentcenter (http://www.orangecoastcollege.edu/assessmentcenter) or contact the Center at (714) 432-5789 or via email at ocaassessment@occ.cccd.edu.

Associated Students

The Associated Students of Orange Coast College (ASOCC) are responsible for student government and participation in College planning, policy-making and governance. They manage a large Student life program that includes a wide variety of clubs, social activities and informal learning experiences. They also oversee a substantial budget to assist students enrolled with a variety of different programs.

Within the ASOCC, students may choose a variety of leadership experiences such as serving on participatory governance committees, serving as a club member or officer, participating in programs and activities, and working on fiscal-related issues.

We invite students to participate in various programs and become involved as a student leader. For more information, please stop by the ASOCC office located in the Student Center.

For more information about ASOCC, please visit our website at www.orangecoastcollege.edu/student_life/associated_students (http://www.orangecoastcollege.edu/student_life/associated_students/Pages/default.aspx) or contact the Student Life & Leadership Department by email at asocc@occ.cccd.edu or by telephone at (714) 432-5730.

Bookstore

The OCC Bookstore provides all required textbooks and supplies for students and faculty and also offers general interest books, magazines, greeting cards, gifts, Pirate clothing and general merchandise to accommodate the needs of the campus community.

Bookstore Hours

Contact the bookstore at (714) 432-5896 or by fax at (714) 432-5928 or visit www.orangecoast.bncollege.com (http://www.orangecoast.bncollege.com)

Online Ordering

Textbooks and merchandise are available for online order, pick-up or delivery. You may visit the website 24/7 at www.orangecoast.bncollege.com (http://www.orangecoast.bncollege.com)

Software titles are available at www.thinkedu.com (http://www.thinkedu.com) and are educationally discounted up to 85%.

Returns

Textbooks: A full refund will be given in the original form of payment if textbooks are returned during the first week of classes with original receipt. With proof of a schedule change and original receipt, a full refund will be given in original form of payment during the first 30 days of classes. Textbooks must be returned in original condition. Unwrapped loose-leaf books and activated eBooks are non-returnable.

General Reading Books, Software, Audio, Video, and Small Electronics: A full refund will be given in your original form of payment if merchandise is returned within 14 days and with original receipt. Opened software and small electronics may not be returned. They can be exchanged for the same item if defective.

All Other Merchandise: A full refund will be given in your original form of payment with the original receipt.

For additional details visit the bookstore or www.orangecoast.bncollege.com (http://www.orangecoast.bncollege.com)
The Children’s Center

The Harry and Grace Steele Children’s Center is a unique and comprehensive child development program that offers child care for student parents enrolled at OCC, faculty, staff, and the community.

Buyback of Textbooks

We buyback textbooks if we have a book order for the next term and copies are needed. Students should bring their textbooks back to the bookstore at the end of the semester to receive up to 50% cashback. Finals week is the best time to get the most cash back, so sell early!

Books must include all original material and a Student ID or identification may be required at the time of buyback.

Textbook Rentals

Renting is easy and cost-effective. A majority of textbooks are available to rent. All book returns are subject to specific guidelines. Students must adhere to all book return policies. When shopping for textbooks in-store, the course information tag displays a “Rental” option as well as New and Used options.

Students also may shop online for rentals at www.orangecoast.bncollege.com (http://www.orangecoast.bncollege.com).

Students must be 18 years of age or older and provide a telephone number, government-issued ID, email address, and a personal credit card at the time of purchase. All accepted forms of payment may be used to pay for textbook rentals.

Students may register their email address to receive reminder notices when their rental due date approaches.

For more details visit: www.orangecoast.bncollege.com (http://www.orangecoast.bncollege.com)

Price Match

We will Price Match Amazon.com, BN.com and Fairview Textbooks:

• The exact textbook – same edition, format, rental term and ISBN
• One copy, per title, per customer
• Titles must be in stock on competitor’s website and in their store

We can’t Match:

• Digital textbooks or access codes
• Special orders
• New rentals
• Peer-to-peer pricing
• Online Marketplaces
• Titles listed on Amazon that are not “rented by” or “shipped and sold by” Amazon are excluded

For more information see a bookseller.

Forms of Payment

The OCC Bookstore accepts Barnes & Noble gift cards, Visa, Mastercard, American Express, and Discover cards. The account/cardholder must be present at the time of purchase.

California Department of Rehabilitation (DOR)

The California Department of Rehabilitation is a California state department that administers vocational rehabilitation services. It provides vocational rehabilitation services and advocacy from over 100 locations throughout California seeking employment, independence, and equality for individuals with disabilities. Students who have physical, emotional, or other disabilities may be eligible for State Department of Rehabilitation services if their disabilities affect their vocations. These services include vocational counseling and guidance, reimbursed training, and job placement. Under certain circumstances, students also may qualify for assistance with medical needs, living expenses, and transportation. Interested students should contact Disabled Student Programs and Services at (714) 432-5807 or visit DOR’s website: https://www.dor.ca.gov/.

CalWORKs

In cooperation with the Orange County Department of Social Services, the California Work Opportunities and Responsibilities to Kids (CalWORKs) program provides specialized services to families who are applying for or are current TANF (Temporary Aid to Needy Families) recipients. Additional services for qualified students may include: child care grants, personal counseling, academic advisement, advocacy, transportation assistance, subsidized work-study, community referrals and job placement guidance.

The CalWORKs program is located on the fourth floor of Watson Hall, Room 460. For more information please call (714) 432-5636.

Cooperative Agencies Resources for Education (CARE)

CARE is an additional support program for EOPS students who meet the following qualifications:

1. Be 18 years of age or older
2. Be a single parent and head of household of a child or children under 14 years of age
3. Receive TANF/CalWORKs monetary benefits

Services for CARE students include supportive counseling, textbook/supplies, transportation assistance and a meal program.
The CARE office is located on the fourth floor of Watson Hall, Room 456. For more information please call (714) 432-5173 or visit www.orangecoastcollege.edu/student_services/eops (http://www.orangecoastcollege.edu/student_services/eops/)

CLEEO Project

CLEEO Project has a commitment to promote Latin@ students access and success in higher education in an equitable and culturally supportive environment. The CLEEO Project focuses on developing an educational pathway for college students with an emphasis on the successful development of life skills and the attainment of Associate and Bachelor degrees and beyond toward a Post-Graduate education. This is a Multicultural Counseling Service guided with a culturally sensitive focus and understanding of Latin@ perspectives and directed toward academic major preparation and success in transferring to universities and preparation for postgraduate school (PhD.) and Professional School (Business, Law, and Medicine). Also, Counseling services available for students interested in the OCC Honors program and career specialization in STEM and Future Teacher Preparation. For further information, visit http://www.orangecoastcollege.edu/student_services/counseling/cleeo/Pages/default.aspx.

Counseling Services

Counseling appointments serve the needs of students seeking academic and/or career counseling. Appointments may be made in person at the Counseling Counter on the third floor of Watson Hall; by telephone at (714) 432-5078, or by visiting our website at www.orangecoastcollege.edu/student_services/counseling/Pages/Make_Appointment.aspx (http://www.orangecoastcollege.edu/student_services/counseling/Pages/Make_Appointment.aspx). For further counseling information call (714) 432-5078.

Resource Desk

A resource desk is located in the Counseling Center on the third floor of Watson Hall and is staffed by a credentialed counselor during most day and evening hours. The resource counselor cannot respond to questions that require a student’s records but is otherwise available to provide information and assistance. You may come in person to the resource desk, or for assistance, call (714) 432-5078.

Transfer Center

The Transfer Center provides comprehensive services and resources to assist students in preparation to transfer to four-year universities. It includes access to transfer counseling, transfer related workshops, application assistance, campus tours, and individual appointment with an admission representative from various four-year universities. The Transfer Center also hosts transfer fairs throughout the year. “Transfer Day” is the largest fair held in the fall semester with representatives on campus from more than 80 four year universities from both California and out-of-state universities! The Transfer Center is located on the second floor of Watson Hall, Room 215. For more information, call (714) 432-5894.

Workshops

Workshops, offered on an ongoing basis, focus on topics of interest to both new and returning students. Workshop schedules are available in the Counseling Center.

Instruction

The Counseling Division provides instruction in career and personal development, offering a variety of credit courses that support the developmental needs of both new and returning students. Counseling courses are offered both day and evening and are articulated for transfer the same as courses offered in other divisions. Courses are listed under “Counseling” in this catalog and the class schedule.

Petition Processing

A petition is a request for special action and is processed through the Counseling Center. Petitions for Credit by Examination, Waiver of Requirements, Excessive Units and Academic Renewal are available in the Counseling Center.

Disabled Students Programs and Services (DSPS)

The Orange Coast College (OCC) Disabled Student Programs and Services (DSPS) ensures qualified students with disabilities are provided equitable access and participation to Orange Coast College. The OCC DSPS department serves students with documented and/or observable permanent and temporary disabilities. Once a student has applied to DSPS and submitted appropriate medical documentation, the next step is to request to meet with a DSPS Counselor. During the Intake Appointment, the student and Counselor engage in an interactive process, which involves a discussion of learning barriers due to disability, and recommended academic modifications. In addition, the student and Counselor will develop an Educational Plan, which is a document that helps map out recommended courses, as well as an Academic Accommodation Plan, to achieve set academic goals. Students are responsible for reading and understanding their rights and responsibilities, as related to their accommodations. DSPS offers support services such as alternate testing accommodations, note-taking, interpreting, captioning, and alternate media for students with the approved accommodation. Check the OCC Disabled Student Programs and Services (DSPS) website at http://www.orangecoastcollege.edu/student_services/special_services/Pages/DSPSDisabledStudentsProgramsServices.aspx for more information.

You can reach the DSPS Office at (714) 432-5807 or via email at OCCDisabledStudents@occ.cccd.edu.

High Tech Center (HTC)

The High Tech Center is an assistive computer technology lab where students with disabilities can work independently. The lab features individual and accessible computer workstations in a student-friendly environment. In addition to assistive technology, the High Tech Center also provides access to standard software such as Microsoft Office, Adobe Creative Suite, and internet access. Orange Coast College students who are registered with Disabled Student Program and Services and have a verified disability are eligible to use the High Tech Center.

DSPS Learning Center

The DSPS Learning Center provides learning support in reading, writing, spelling, and arithmetic for students with learning and other disabilities. DSPS Instructional Associates evaluate the learning difficulties of each student and develop individualized programs that include a number of teaching techniques and materials. A student may
EOPS is a state-funded comprehensive support system that assists low-income students with barriers to their education. Support services include academic and personalized counseling, career and transfer planning, textbook services, bilingual services, cultural events and priority registration.

To determine eligibility, students should visit the EOPS office located on the fourth floor of Watson Hall, Room 443. For more information, call (714) 432-5817 or visit www.orangecoastcollege.edu/student_services/eops (http://www.orangecoastcollege.edu/student_services/eops/).

The Orange Coast College Federal School Code is 001250.

Please visit the financial aid website at www.orangecoastcollege.edu/student_services/financial_aid/Pages/default.aspx (http://www.orangecoastcollege.edu/student_services/financial_aid/Pages/default.aspx) to learn more about resources available to help with your cost of education including tuition, fees, room and board, books, supplies, and transportation. Students are welcome to visit the Financial Aid Office with their financial aid inquiries or visit Pirate Pete the financial aid bot on the website.

The Financial Aid Office is located on the fourth floor of Watson Hall. Students also can contact the financial aid office via email at occfinaid@occ.cccd.edu or visit Pirate Pete the financial aid bot on the website.

The William D. Ford Federal Direct Loan (Direct Loan) Program is the largest federal student loan program. Under this program, the U.S. Department of Education is the lender. The interest rate is variable (adjusted annually on July 1) and will not exceed 8.25 percent.

Direct Subsidized Loans are made to eligible students who demonstrate financial need to help cover the costs of education.

Direct Unsubsidized Loans are made to eligible students, but in this case the student does not have to demonstrate financial need to be eligible for the loan.

Direct PLUS Loans are loans made to parents of dependent student to help pay for education expenses not covered by other financial aid.

Students must be California residents and demonstrate financial need. To apply, visit www.calgrants.org and submit a grade point average (GPA) Verification form by March 2 and September 2.

Cal Grant B
Assists very low income, first-year students with living expenses, books, supplies, transportation and other non-tuition costs. (Renewals also may cover tuition/fee costs).

Cal Grant C
Assists low- and middle-income vocational students with tuition and training costs. Recipients must be in a program of study that is four months to two years in duration, at a vocational school, community college or independent college.
For more information, visit the California Student Aid commission website at www.csac.ca.gov (http://www.csac.ca.gov).

California College Promise Grant
The California College Promise Grant (formerly BOGFW) waives students’ course enrollment fees if they are California Residents and meet the eligibility requirements. If a student is eligible for the California College Promise Grant, he or she is still responsible for the student health fee, College service charge, material fees, student representation fee, parking permit, and any other fees associated with courses.

Students will lose their California College Promise Grant eligibility after two consecutive primary semesters (fall and spring semesters) of not meeting academic progress or progress standards. Academic requirements for California College Promise Grant are a cumulative GPA of at least 2.0 and a cumulative satisfactory completion of more than 50 percent of cumulative attempted units (in two consecutive semesters). Students who lose their California College Promise Grant may appeal to reinstate their California College Promise Grant eligibility. Students may submit the appeal form — which is available on the Enrollment Services website — directly to Enrollment Services on the first floor of Watson Hall.

Chafee Grant
This grant is only available to foster youth. Students who are eligible for a Chafee Grant also should contact the EOPS office to learn more about qualifying for the Guardian Scholars Program.

California DREAM Act
The California DREAM Act of 2011 is the result of two bills: Assembly Bill 130 (AB 130) and Assembly Bill 131 (AB 131). Together, these bills allow students who meet certain provisions of AB 540 law to apply for and receive private scholarships funneled through public universities (AB 130), state-administered financial aid such as the Cal Grant programs, university grants, and community college fee waivers (AB 131). The application is available at https://dream.csac.ca.gov. You must be eligible for ABS40 status for your Dream Act application to be processed.

Pirates’ Promise Program
The Pirates’ Promise Program provides qualifying first-year students free tuition who do not qualify for other forms of financial aid.

Student Success Completion Grant
The Student Success Completion Grant (SSCG) is a financial aid program for Cal Grant B and C recipients attending a California Community college full-time (12 units or more). In addition to the Cal Grant B or C award paid at community colleges, the SSCG pays full-time Cal grant B or C recipients a maximum of $1,298 annually at $649 per semester for eligible students who enroll and attend 12 through 14.99 units per term and a maximum of $4,000 annually at $2,000 per semester for eligible students who enroll and attend 15 units or more per term. Must meet Federal Satisfactory Academic Progress (SAP) standards and have unmet need to receive SSCG.

Satisfactory Academic Progress (SAP) Standards for Financial Aid Recipients
SAP standards apply to all federal and state aid applicants whether or not they have previously received student financial aid.

Students receiving financial aid must meet Satisfactory Academic Progress (SAP) toward an eligible educational goal. Failure to maintain these standards will result in loss of eligibility for financial assistance. These standards apply to students receiving assistance from those financial aid programs administered by the Orange Coast College Financial Aid Office and is separate from the College’s academic progress policies. All students must meet the SAP policy to be eligible to receive financial aid.

The Financial Aid Office reviews SAP at the end of each semester. SAP includes measures of cumulative GPA, pace or progress of unit completion, and a maximum number of attempted units allowed.

The Satisfactory Academic Progress (SAP) Standards is published on the Coast Community College website at www.cccd.edu (http://www.cccd.edu) (click on Students, then Financial Aid).

Return of Title IV Funds
Recipients of federal aid programs (Title IV grants or Direct Loans) who withdraw completely from the College before completing at least 60 percent of their enrollment period may be required to repay all or part of aid received. The Financial Aid Office will officially notify the student regarding the amount owed and repayment deadline.

Guardian Scholars
Orange Coast College's Guardian Scholars Program is committed to supporting ambitious college-bound students who are current or former foster youth/wards of the court. The program's mission is to provide a comprehensive program that contributes to the quality and depth of the student's college experience. It serves as a resource for young adults by assisting in their development and equipping them with skills necessary to transfer to a four-year university or the vocation of their choice. Guardian Scholars aims to be a "One Stop Shop" that provides caring and personalized assistance with educational goals and practical day-to-day needs to ensure that full advantage is taken of college life, both inside and outside the classroom. Services include academic advising, financial aid, and referrals to community resources. The Guardian Scholars Office is located on the fourth floor of Watson Hall. For more information please call (714) 432-6877, email guardianscholars@occ.cccd.edu or visit http://tinyurl.com/occguardianscholars (http://tinyurl.com/occguardianscholars/).

Garrison Honors Center
The Garrison Honors Center (GHC) is home to the OCC Honors Program and sixteen academic honor societies. Located at the geographical center of the campus near the new Planetarium and the Global Engagement Center, GHC study and meeting facilities are available for use by students enrolled in any of the honors organizations at OCC, as well as their guests.

The GHC hosts two major Honors Open House events each year: the first before the start of the fall semester and a second before the start of the spring semester. All current and prospective OCC students are welcome to attend. Student leaders from many of the honors organizations will describe the activities and opportunities available through their societies, answer questions, and to provide applications.

Academic Honor Societies
After completing 12 units of letter-graded coursework at OCC, current students who attained minimum cumulative GPAs of 3.0 or higher are invited to explore their honor society eligibility. Membership is not automatic but is available to students who meet the minimum academic
requirements and who wish to apply. Be sure to submit applications and fee payments by established deadlines. Permanent memberships will be noted on official transcripts. Associate degree and certificate candidates may be recognized by their colorful displays of honors regalia (cords, stoles, medallions or tassels) worn with OCC’s navy cap and gown at the spring commencement ceremonies.

OCC has established chapters of the following honor societies:

- Alpha Beta Gamma – International Business Honor Society
- Alpha Gamma Sigma – California Scholastic Honor Society
- Alpha Mu Gamma – Foreign Language Honor Society
- Eta Eta Omicron – OCC Marine Science Honor Society
- Mu Alpha Theta – National Mathematics Honor Society
- Mu Delta Rho – OCC Pre-Health Professions Honor Society
- National Technical Honor Society – STEM and CTE
- Omega Psi Sigma – OCC Pre-Law and Political Science Honor Society
- Phi Alpha Mu – OCC Social and Behavioral Sciences Honor Society
- Phi Theta Kappa – International Honor Society of the Two-Year College
- Pi Rho Sigma – OCC Music Honor Society
- Pi Tau Epsilon – OCC Film and Visual Arts Honor Society
- Psi Beta – National Psychology Honor Society
- SALUTE – Veterans’ Honor Society
- Sigma Chi Eta – National Communications Honor Society
- Sigma Kappa Delta – National English Honor Society

To learn more about Honors at OCC, visit the Garrison Honors Center or contact us by phone/email: 714-432-5601, garrisonhonorscenter@occ.cccd.edu.

Library Services

Containing more than 100,000 books, periodicals, and video visual materials, the Orange Coast College Library supports and enriches the quality of the College’s educational program. Check the Library website for hours of operation. The Library is closed during all school holidays. Remote access to the Library's online catalog and full-text databases is available through the Library website at www.orangecoastcollege.edu/library (http://www.orangecoastcollege.edu/library/)

An OCC student ID card acts as a Library card is required to check out Library materials. Circulating books may be checked out for a three-week period and renewed once if not on hold. Fines are $0.25 per day per book up to a maximum of $10. Reserve material will be found at the circulation desk and may be checked out for a limited time, usually two hours. In addition, the Library has established a textbook collection for the students, funded by the OCC Foundation, with a generous bequest from former OCC faculty member Shirley Brooke. Students may use a textbook in this reserve collection for two hours in the Library. Fines vary depending on whether the material is a reserved item, a circulating book, or a media item. Library materials may be returned in the book bin in Parking Lot E or at the front of the Library. Materials not found in the Library may, in some cases, be requested by students from libraries in the Cal-West Consortium and by faculty from libraries throughout the United States. Inquire at the reference desk for more information.

The media/computer lab department provides instructional videos, language resources, and a computer lab with access to the Internet and software for word processing, and other programs. Media reserves may be viewed in the Library or checked out overnight.

Reference librarians are available to teach and guide students in using the numerous print and online resources provided by the Library. The Library offers a transferable two-unit class (LIB A100, Library and Information Competency) designed to develop research skills.

Lost and Found

Lost and Found is located in the Student Life & Leadership Department located in the Student Union building. Check www.orangecoastcollege.edu/student_life/student-life-leadership (http://www.orangecoastcollege.edu/student_life/student-life-leadership/Pages/lost-found.aspx) for hours of operation. Please contact the Student Life & Leadership Department by email at asocc@occ.cccd.edu or telephone at (714) 432-5730 for more information.

OCC Cares & Food Pantry

OCC Cares is a collaborative effort on our campus to support the learning environment for students with additional resources as needed. Through OCC Cares, students can access campus basic needs like transportation support, shower access, and assistance from community partners. For a complete list of services visit OCC Cares at www.orangecoastcollege.edu/student_services/student-equity/occ-cares/Pages/default.aspx (http://www.orangecoastcollege.edu/student_services/student-equity/occ-cares/Pages/default.aspx).

The Pirates’ Cove Food Pantry & Resources Hub is one of the services offered through OCC cares and is designed to meet the immediate needs of OCC students facing food insecurity and lacking resources to fulfill essential needs. Students can access nonperishable and fresh food, and work with specialists to submit CalFresh applications and housing referrals. Pirates’ Cove is located in Journalism 108 and
can be reached at (714) 432-6892, piratescove@occcd.edu, and www.orangecoastcollege.edu/student_services/student-equity/occ-cares/Pages/pirates-cove.aspx (http://www.orangecoastcollege.edu/student_services/student-equity/occ-cares/Pages/pirates-cove.aspx).

**Off-campus Housing**

The Global Engagement Center is responsible for housing information for the campus. A current listing of housing options can be found on the Global Engagement Center website at www.orangecoastcollege.edu/global (http://www.orangecoastcollege.edu/global/)

The Homestay Program is another housing option for international students. The Global Engagement Center can provide information on Homestay Programs. Through these programs, students are put in contact with interested host families in the area. The goal of the program is to provide both guest and host with the opportunity to learn about each other's country and culture, see one's own country in a new light, and make new friends. For further information, please contact the Global Engagement Center at (714) 432-5940.

**Outreach**

The Outreach Office provides a variety of liaison activities with high schools, middle schools, and elementary schools. The activities with our school partners include providing OCC campus tours, participating in classroom presentations, information tables, college nights, and meetings with counseling and college personnel. The Outreach Office also coordinates events at OCC’s campus to educate the K-12 grade population of the various programs and services available at OCC. The office works closely with potential students, parents/guardians/supporters of potential students, and K-12 grade personnel by providing accurate information about the college campus. The Outreach Office and outreach counselors work closely with various campus departments such as Student Success and Support Program, Financial Aid, and the Enrollment Center to ensure that potential students are receiving the campus support that they need. The Outreach Office is located on the fourth floor of Watson Hall, Room 459. For more information, please contact the office at (714) 432-5197, occoutreach@occcd.edu, or visit http://www.orangecoastcollege.edu/prospective_student/outreach/Pages/default.aspx

**Pirates’ Promise Program**

Pirates’ Promise Program Orange Coast College is committed to the success of its students and wants to help them accelerate their education in order to start their career or transfer sooner. The Pirates’ Promise Program provides eligible students free tuition (and in some cases textbook support) for first and second-year students. Pirates’ Promise is perfect for students who do not qualify for other forms of federal or state financial aid, but must still submit a FAFSA or CA Dream Act application.

Additional eligibility criteria include California residency and 12 unit enrollment at OCC. Applications are available until capacity can be found at www.orangecoastcollege.edu/student_services/student-equity/Pages/pirates-promise (http://www.orangecoastcollege.edu/student_services/student-equity/Pages/pirates-promise.aspx). For questions please call (714) 432-6847, visit Watson Hall 205, or email freetuition@occcd.edu.

**Recycling Center**

The Associated Students of Orange Coast College sponsors an on-campus Recycling Center located on Harbor Boulevard and Fairview Road. The center accepts donated materials such as scrap metal, cardboard, newspaper, magazines, office paper, glass, aluminum and plastic beverage containers. The Center also accepts electronic waste.

The Center will pay the current market price for “CA Redemption Value” containers of glass, plastic, and aluminum; check www.orangecoastcollege.edu/about_occ/recycling-center/ (http://www.orangecoastcollege.edu/about_occ/recycling-center/Pages/default.aspx) for hours of operation. Profits from the Recycling Center go to scholarships for OCC students.

**Reserve Officers Training Corps**

Orange Coast College students can participate in the Army and Air Force Reserve Officers Training Corps.

Army ROTC classes are conducted two hours each week at UCLA and CSULB. Two-and four-year programs leading to a commission as a second lieutenant in the Army or in the National Guard. Participants must be physically qualified full-time students at the undergraduate or graduate level. During their last two years, students receive a monthly tax-free stipend throughout the regular school year. Students with ROTC scholarships receive full tuition and have their required fees and books paid for. Veterans ordinarily qualify for advanced placement. For more Army ROTC information, call California State University, Long Beach, or University of California, Los Angeles or California State University, Fullerton.

Through arrangements with Loyola Marymount University (LMU) in west Los Angeles, students may participate in the Air Force Reserve Officer Training Corps (AFROTC) program. AFROTC offers a variety of two-, three- and four-year scholarships, many of which pay the full cost of tuition, books, and fees. Successful completion of as little as four semesters of AFROTC academic classes and leadership laboratories can lead to a commission as a second lieutenant in the United States Air Force.

Classes consist of one hour of academics and two hours of laboratory for freshmen and sophomores, and three hours of academics and two hours of laboratory for juniors and seniors. The academic hours earned can normally be counted as elective credit toward graduation. All AFROTC classes and laboratories are held on Fridays to better accommodate students commuting from other colleges and universities. Currently, LMU does not charge for the courses and offers cross-town students free parking while attending AFROTC activities. Additionally, AFROTC cadets under scholarship and all juniors and seniors receive a monthly tax-free stipend.

For more information, contact the Loyola Marymount University Department of Aerospace Studies (AFROTC) at (310) 338-2770.

**Scholarships**

Students who complete OCC scholarship applications will be considered for a wide variety of scholarships awarded through the generosity of the citizens and civic groups in the Coast Community College District.

Application requirements vary, depending on the scholarship programs for which the student applies. For further information,
Student Equity Program

At OCC, Student Equity is a guarantee of fair treatment, access, opportunity, and advancement for all students, while working to identify and address barriers that stand in the way of student success. The Student Equity Program was created to address gaps in achievement for students with the greatest needs. Through this program, the College ensures that students are supported with the resources and services needed to achieve their educational outcomes, including peer mentoring, transportation support, textbooks, materials, and equipment necessary for success. For more information contact (714) 432-6847 or apply at www.orangecoastcollege.edu/student_services/student-equity/Pages/default.aspx (http://www.orangecoastcollege.edu/student_services/student-equity/Pages/default.aspx).

Student Health Center

The Orange Coast College Student Health Center serves currently enrolled OCC students, health insurance is not required. The Student Health Center is financed by the health fee that all students pay each semester; it receives no other college or state funding. Students must be enrolled and attending credit course(s) during the current semester and have paid the health fee to use the Student Health Center.

The Student Health Center is located off Fairview Road and Pirate Way, between the Peterson Gymnasium and Watson Hall. Check the OCC website for hours of operation. Summer and winter session hours will be announced and posted prior to the beginning of those sessions.

Students may schedule appointments to be seen at the Health Center by calling (714) 432-5808. Every effort will be made to care for emergencies and mental health crises promptly. The many services the Student Health Center offers include medical and mental health appointments, as well as disease prevention and family planning services. The Student Health Center does not provide primary care services for ongoing medical problems, such as chronic illnesses or long-term mental health treatment.

If a student is injured on campus or in the course of a College-sponsored activity, the Student Health Center staff will assist the student to access the Coast Community College accident insurance policy.

Student Success Center

The Student Success Center offers free tutoring to OCC students in most subject areas and consists of the Math Center, Writing/Reading Center, General Tutoring area and the Peer Assisted Study Sessions program. Services include scheduled appointments, drop-in tutoring, study groups, workshops and PASS program. All tutors are recommended by OCC instructors and required to complete a training course.

For more information, call (714) 432-5559 or visit our website at www.orangecoastcollege.edu/student_services/student_success_center (http://www.orangecoastcollege.edu/student_services/student_success_center/). The Student Success Center is located in C&L 103.

Student Success and Support Program

The Student Success and Support Program intends to help students achieve their educational goals through core matriculation services as well as support services that are necessary to assist students in meeting their personal, academic and career objectives. All students, unless exempt, are required to participate in orientation, complete the assessment process, and create a Student Educational Plan (SEP) with a counselor. Students, who complete orientation, assessment, and an SEP, will receive priority registration. The College also provides follow-up services to evaluate the academic progress of students and to provide additional resources as necessary.

Study Abroad Program

The Orange Coast College Study Abroad program offers a variety of short-term programs. For information on upcoming programs, visit www.orangecoastcollege.edu/studyabroad (http://www.orangecoastcollege.edu/studyabroad/)

The Global Engagement Center also provides additional information on study abroad opportunities. For more information, please visit the Global Engagement Center. It is students’ responsibility to verify that the courses taken abroad are transferable.

UMOJA

Umoja is a student success program open to all students and is specifically designed to increase the retention and success rates of African-American students. The Umoja Program is a Learning Community that offers student success, English, Math, and History classes which strives to educate the whole student informed by an ethic of love and its vital power. Academic success is also achieved through educational counseling, workshops, cultural events, mentoring, and personal development. The learning experience within Umoja will deliberately and intentionally provide each individual the opportunity to add their voice and their story to the collective voices and stories of the African Diaspora. For further information visit http://www.orangecoastcollege.edu/student_services/counseling/umoja/Pages/default.aspx.

Veterans Resource Center

Orange Coast College is grateful for the sacrifices made by members of the United States armed services and their families. We realize that veteran students bring a wealth of experience to the campus
environment, and we welcome their contributions as part of our campus community. The Veterans Resource Center (VRC), provides information on campus-based and external resources available to all veterans, including health services, career links, and direct access to the OCC Student Veterans Association.

The VRC Office is staffed with personnel who can assist student veterans with referrals to various services and programs on campus and access to: computer stations, peer support, and tutoring. Referrals are also available for basic needs. Interested students should visit the Veterans Resource Center, located in the Student Center, or visit the website at www.orangecoastcollege.edu/student_services/Veterans/Pages/Veterans'-Resource-Center.aspx (http://www.orangecoastcollege.edu/student_services/Veterans/Pages/Veterans-Resource-Center.aspx).

Veterans Services Office

Orange Coast College is approved for training veterans under all applicable laws. The College helps veterans by cooperating with the Veterans Administration and the California State Department of Veterans Affairs. OCC establishes policies and programs for educating veterans and active-duty military personnel. Veterans Services, located in the Enrollment Center, provides support services for Veterans, including the administration of GI Bill® Education Benefits and referrals to a variety of College-wide student services and activities.


Using GI Bill Education Benefits

In order to utilize VA education benefits, students must:

- Attend an OCC Benefits Briefing. For a current Briefing schedule, please contact Veterans Services or visit http://www.orangecoastcollege.edu/student_services/Veterans/Pages/default.aspx.
- Submit official transcripts from all colleges previously attended outside of the Coast Community College District. Transcripts must be received within four weeks of attending a Benefits Briefing. Failure to meet this requirement may cause an interruption in benefits.
- Obtain a Student Education plan from OCC’s veteran counselor. For appointments, contact Veterans Services. Classes will only be eligible for certification if they are applicable toward an approved program of study.
- Submit a Web Schedule Bill or Online Certification Request immediately after registering for classes to avoid a delay in benefits and/or being dropped for non-payment. After initial certification is complete, veterans and dependents are required to report any changes in enrollment to Veterans Services at the time they are made.
- In accordance with Title 38 US Code 3679 subsection (e), Orange Coast College will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under Chapter 31 or 33. Students may be required to submit a Certificate of Eligibility, VAF 28-1905, and/or additional information needed to properly certify enrollment, as outlined in other institutional policies.

CalVet Fee Waiver

Dependent students who have been approved for the CalVet Fee Waiver should complete a California College Promise Grant (CCPG) application and submit their Authorization Letter to the Financial Aid Office. This waiver covers the cost of tuition only. Students are responsible for paying any remaining fees to avoid being dropped for non-payment. For more information about this program, please contact Veterans Services.

Military Credit

Orange Coast College reserves the right to evaluate and grant credit based on the academic policies established at OCC. The college recognizes and grants academic credit to veterans who have completed a minimum of one year of active honorable service in the armed forces unless it has been awarded by another school. This credit includes three (3) units for AA Degree Area E-Self Development on the OCC General Education pattern, or Area E-Self Development on the California State University General Education pattern (CSU GE Breadth). A maximum of 15 units from eligible military service and training may also apply. Please refer to the Military Study Programs (https://cccd-preview.courseleaf.com/orange-coast/policies-regulations/alternate-methods-study-course-credit/) for additional information.

Military Withdrawal

Under Title 5, Section 55024, members of the service called to active duty during a semester in which they are enrolled, may petition to withdraw under special circumstances. The withdrawal will be posted as “MW” - Military Withdrawal on the student’s transcript and will be non-punitive, which means that it will not count in the student’s grade point average nor will it count towards academic or progress probation/disqualification. Students with orders to report during a semester in which they are enrolled should contact Veterans Services on the first floor of Watson Hall for the appropriate petition form.

Registration Priority For Veterans

All students are subject to the provisions under SBI 1456. Under the provisions of California Education Code Section 66025.8, OCC will grant priority registration to eligible members or former members of the Armed Forces of the United States. For eligibility information, please contact Veterans Services.

Tuition Assistance

Active military interested in using Tuition Assistance should consult with their Education Officer to obtain authorization. Please also contact Veterans Services for further information about how these benefits are processed at OCC.

Graduation Requirements

Associate Degree (AA, AS)

Orange Coast College awards the Associate Degree to students who have met all the requirements for graduation. OCC offers the Associate in Arts and the Associate in Science Degrees. Check with your counselor to determine which degree you should complete.

In accordance with the law and with rules and regulations of the Board of Governors of the California Community Colleges and the Board of
Trustees of the Coast Community College District, the requirements for the degree of Associate in Arts or Associate in Science include the following:

1. Unit Requirement
   60 UNITS, with at least a 2.0-grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

2. Major Requirement
   Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

3. Mathematics Requirement
   Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of “C” or better or “pass”) in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite; Psychology A160 or Math A100 or higher, with the exception of Math A220.

4. General Education Requirement
   Students may choose to complete Option 1 (OCC AA/AS GE), Option 2 (CSU GE), or Option 3 (IGETC) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

5. Global and Multicultural Requirement (Required for AA degree only)
   Some of the courses listed in this requirement can also be used to meet General Education Requirements. Courses that are repeatable for credit can only be used once in this area.

   Select one or more courses from the following totaling 3 units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH A100</td>
<td>Cultural Anthropology 1</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A100H</td>
<td>Cultural Anthropology Honors 1</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A102</td>
<td>Native American 1</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A190</td>
<td>Introduction to Linguistic Anthropology 1</td>
<td>3</td>
</tr>
<tr>
<td>CMST A155</td>
<td>Intercultural Communications 1</td>
<td>3</td>
</tr>
<tr>
<td>COUN A107</td>
<td>Chicana/o &amp; Latina/o Experience and Success in Higher Education 1</td>
<td>3</td>
</tr>
<tr>
<td>COUN A107H</td>
<td>Chicana/o &amp; Latina/o Experience and Success in Higher Education Honors 1</td>
<td>3</td>
</tr>
<tr>
<td>DANC A130</td>
<td>Mid-Eastern Dance 1 1</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DANC A133</td>
<td>Intro To World Dance 1</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DANC A135</td>
<td>Flamenco Dance 1 1</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DANC A137</td>
<td>Classical Danc of India 1</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DANC A138</td>
<td>African Dance and Drumming 1 1</td>
<td>0.5-2</td>
</tr>
<tr>
<td>EC A126</td>
<td>Teaching in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A152</td>
<td>Race, Culture, and Identity in Literature 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A173</td>
<td>Women Writers 1</td>
<td>3</td>
</tr>
<tr>
<td>ETHS A100</td>
<td>Contemporary Ethnic America 1</td>
<td>3</td>
</tr>
<tr>
<td>ETHS A150</td>
<td>Ethnic Groups in the U.S.: Their Histories 1</td>
<td>3</td>
</tr>
<tr>
<td>FN A185</td>
<td>Cultural Foods</td>
<td>2</td>
</tr>
<tr>
<td>GEOG A185</td>
<td>Cultural Geography 1</td>
<td>3</td>
</tr>
</tbody>
</table>

   Denotes courses that fulfill CSU GE Breadth and/or IGETC requirements. See the General Education Patterns section of this catalog for more information.

Associate Degree for Transfer (AA-T, AS-T)

The Student Transfer Achievement Reform Act (Senate Bill 1440, codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an “associate degree for transfer,” an established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. Students completing these degrees are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students transferring to a CSU campus that accepts the AA-T or AS-T degree will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is designated a "high-unit major"). This degree may not be the best option for students intending to transfer to a particular CSU campus, or to a university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU-transferable coursework.
   While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18-semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3).

Certificate Awards
Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. Certificate of Achievement - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed below.

2. Certificate of Specialization - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

A list of certificate programs and requirements can be found in the Degree and Certificate section of this catalog. Check with a counselor to determine the requirements for completion.

Continuous Attendance and Catalog Rights
For awarding of a degree or certificate, students may follow the catalog requirements that were in effect for the academic year when their attendance at Orange Coast College began or follow the catalog requirements in effect during subsequent years of attendance, provided that continuous enrollment has been maintained. Continuous enrollment is defined as enrollment in a course at Orange Coast College for at least one semester in a calendar year. The student must receive a grade of A, B, C, D, F, P, NP, W, I, or IP for the course.

The Academic Petition Council may authorize or require substitutions for discontinued courses.

Catalog rights do not apply to the certification of general education for transfer. Students must follow the general education pattern in effect when they petition for certification. Courses used for certification must be on the approved list at the time they are taken.

Minimum Grade Requirement
In order to be awarded a degree or certificate, students are required to obtain a grade of "C" or better in all program-required courses.

Grades of "CR" or "P" will be accepted whereas "CR" or "P" meet the equivalency of a "C" or better.

Petition for Graduation
Degrees and certificates are not automatically awarded. A petition must be filed at the Enrollment Center on the first floor of Watson Hall at the beginning of the semester in which the student completes the final requirements. Forms are also available online at www.orangecoastcollege.edu/enrollment/Pages/Graduation.aspx (http://www.orangecoastcollege.edu/enrollment/Pages/Graduation.aspx)

Petitioning periods are as follows:
- Summer — July 1 through August 1
- Fall — September 1 through November 15
- Spring — December 1 through March 15

Note: If a break in enrollment occurs (resulting in the loss of Catalog Rights) students must comply with the competency, general education and major course requirements in effect at the time the student resumes attendance in order to meet Graduation requirements.

Requirements for Additional Associate Degrees
1. Students are not permitted to acquire duplicate associate degrees in the same major from another college within the Coast Community College District.
2. General Education requirements earned for one associate degree may be applied toward an additional associate degree.
3. A student who holds a degree from any regionally accredited institution may earn an additional associate degree in a specific major.
4. A candidate for an additional associate degree must complete the requirements for a separate major at Orange Coast College, including an additional 12 or more major-related units of credit at Orange Coast College beyond the requirements for the prior or additional degree.
5. A student must complete all the required courses listed in the current catalog and general education.
6. A student may obtain an associate degree for transfer (AA-T/AS-T) and an associate degree (AA/AS) in a different major without an additional 12 units of coursework.
7. A student may obtain an associate degree for transfer (AA-T/AS-T) and an associate degree (AA/AS) in the same major without an additional 12 units of coursework.

Waiver of Associate Degree and/or Certificate Requirements
Students wishing to substitute or waive courses that satisfy the Associate Degree or Certificate of Achievement requirements must see a counselor and petition the Academic Petition Council. Counselors are located on the third floor of Watson Hall.

General Education
- Associate in Science General Education: Option 1 (Orange Coast College General Education) (p. 380)
- Associate in Arts General Education: Option 1 (Orange Coast College General Education) (p. 384)
• Associate Degree General Education: Option 2 (California State University General Education) (p. 11)
• Associate Degree General Education: Option 3 (IGETC) (p. 17)

**Associate in Science General Education 2020-2021: Option 1 (Orange Coast College General Education)**

Orange Coast College grants the degree of Associate in Science. Below are general education requirements for the AS degree.

For additional information regarding earning an Associate in Science Degree, please see the Graduation Requirements (p. 377) section of this catalog. Only one Associate in Science degree will be awarded to a student by OCC.

Complete a minimum of 18 units distributed among the following. One course may not be used to meet two separate requirements.

### Course Title | Units
--- | ---
**Area A: English Communication**

Students will be able to read, write, listen, and speak competently while demonstrating critical/analytical thinking skills. Six semester units (or eight quarter units) to include one course from A1 and one course from A2.

#### A1 English Composition

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A100</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>ESL A100</td>
<td>ESL College Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

#### A2 Communication and Analytical Thinking

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BUS A139</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>CMST A100</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>CMST A110</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CMST A220</td>
<td>Essentials of Argumentation</td>
<td>3</td>
</tr>
<tr>
<td>CMST A240</td>
<td>Media Literacy</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A101</td>
<td>Critical Reasoning: Fiction</td>
<td>4</td>
</tr>
<tr>
<td>or ENGL A101H</td>
<td>Critical Reasoning: Fiction Honors</td>
<td></td>
</tr>
<tr>
<td>ENGL A102</td>
<td>Critical Reasoning: Nonfiction</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL A102H</td>
<td>Critical Reasoning: Nonfiction Honors</td>
<td></td>
</tr>
<tr>
<td>ENGL A109</td>
<td>Critical Reasoning and Writing for Science and Technology</td>
<td>3</td>
</tr>
<tr>
<td>MATH A100</td>
<td>Liberal Arts Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH A103</td>
<td>Statistics for Elementary Teachers</td>
<td>3</td>
</tr>
<tr>
<td>MATH A104</td>
<td>Mathematics for Elementary Teachers</td>
<td>3</td>
</tr>
<tr>
<td>MATH A115</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH A120</td>
<td>Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH A140</td>
<td>Business Calculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH A155</td>
<td>Finite Mathematics with Applications</td>
<td>4</td>
</tr>
<tr>
<td>MATH A160</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MATH A170</td>
<td>Precalculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH A180</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A180H</td>
<td>Calculus 1 Honors</td>
<td></td>
</tr>
<tr>
<td>MATH A182H</td>
<td>Calculus 1 and 2 Honors</td>
<td>5</td>
</tr>
<tr>
<td>MATH A185</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
</tbody>
</table>

### Area B: Physical and Biological Sciences

Students will apply critical thinking skills concerning the causes and effects of natural phenomena and will become familiar with the rational approach that researchers use to analyze data and formulate logical conclusions. Three semester units (or four quarter units).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH A185</td>
<td>Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH A185H</td>
<td>Physical Anthropology Honors</td>
<td></td>
</tr>
<tr>
<td>ASTR A100</td>
<td>Introduction to Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>or ASTR A100H</td>
<td>Introduction to Astronomy Honors</td>
<td></td>
</tr>
<tr>
<td>ASTR A101</td>
<td>Planetary Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>ASTR A102</td>
<td>Stellar Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>ASTR A103</td>
<td>Cosmology</td>
<td>3</td>
</tr>
<tr>
<td>ASTR A200</td>
<td>Introduction to Astrophysics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A100</td>
<td>Introduction to Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL A100H</td>
<td>Introduction to Biology Honors</td>
<td></td>
</tr>
<tr>
<td>BIOL A101</td>
<td>The Biology of Cooking</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A115</td>
<td>Introduction to the Biology of Animals</td>
<td>3</td>
</tr>
<tr>
<td>BIOL A125</td>
<td>Human Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL A180</td>
<td>Introduction to Biology for Majors 1: Cell and Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A182</td>
<td>Zoology</td>
<td>3</td>
</tr>
<tr>
<td>or BIOL A182H</td>
<td>Zoology Honors</td>
<td></td>
</tr>
<tr>
<td>BIOL A183</td>
<td>Botany</td>
<td>3</td>
</tr>
<tr>
<td>BIOL A185</td>
<td>Introduction to Biology for Majors 2: Ecology, Evolution, Diversity, and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL A210</td>
<td>General Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL A220</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>BIOL A221</td>
<td>Anatomy-Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A225</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL A283</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>CHEM A100</td>
<td>Principles of Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A110</td>
<td>Introduction to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM A130</td>
<td>Preparation for General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM A180</td>
<td>General Chemistry A</td>
<td>5</td>
</tr>
<tr>
<td>CHEM A185</td>
<td>General Chemistry B</td>
<td>5</td>
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</tbody>
</table>

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### Units

<table>
<thead>
<tr>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MATH A182H</td>
<td>Calculus 1 and 2 Honors</td>
</tr>
<tr>
<td>MATH A185</td>
<td>Calculus 2</td>
</tr>
<tr>
<td>MATH A230</td>
<td>Introduction to Discrete Mathematics</td>
</tr>
<tr>
<td>MATH A235</td>
<td>Applied Linear Algebra</td>
</tr>
<tr>
<td>MATH A280</td>
<td>Calculus 3</td>
</tr>
<tr>
<td>MATH A280H</td>
<td>Calculus 3 Honors</td>
</tr>
<tr>
<td>MATH A285</td>
<td>Introduction to Linear Algebra and Differential Equations</td>
</tr>
<tr>
<td>or MATH A285H</td>
<td>Introduction to Linear Algebra and Differential Equations Honors</td>
</tr>
<tr>
<td>MATH A290H</td>
<td>Introduction to Tensors and Calculus on Manifolds</td>
</tr>
<tr>
<td>PHIL A150</td>
<td>Critical Reasoning &amp; Writing</td>
</tr>
<tr>
<td>PHIL A155</td>
<td>Introduction to Logic</td>
</tr>
<tr>
<td>PHIL/MATH A220</td>
<td>Introduction to Symbolic Logic</td>
</tr>
<tr>
<td>PSYC A160</td>
<td>Statistics for the Behavioral Sciences</td>
</tr>
<tr>
<td>PSYC A270</td>
<td>Psychology of Learning</td>
</tr>
</tbody>
</table>

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**Notes:**

- MATH A182H or MATH A185H can be used to meet two separate requirements.
- BIOL A180H or BIOL A182H can be used to meet two separate requirements.
- MATH A285H or CHEM A185H can be used to meet two separate requirements.
- PHYS A220H or PHYS A225H can be used to meet two separate requirements.
### Area C: Arts and Humanities

Students will develop skill sets associated with the arts and humanities by analyzing aesthetic qualities, evaluating and developing rational arguments, identifying cultural and historical influences, and engaging in artistic expression. Six semester units (or eight quarter units) to include at least one course from C1 and one course from C2.

#### C1 Arts

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>ARCH A290</td>
<td>History of Architecture 1</td>
<td>3</td>
</tr>
<tr>
<td>or ARCH A290H</td>
<td>History of Architecture 1 Honors</td>
<td></td>
</tr>
<tr>
<td>ARCH A296</td>
<td>History of Architecture 2</td>
<td>3</td>
</tr>
<tr>
<td>or ARCH A296H</td>
<td>History of Architecture 2 Honors</td>
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</tr>
<tr>
<td>ART A100</td>
<td>Survey of Western Art from Prehistory Through Gothic</td>
<td>3</td>
</tr>
<tr>
<td>or ART A100H</td>
<td>Honors Survey of Western Art from Prehistory Through Gothic</td>
<td></td>
</tr>
<tr>
<td>ART A101</td>
<td>Survey of Western Art from Renaissance to Modern</td>
<td>3</td>
</tr>
<tr>
<td>or ART A101H</td>
<td>Honors Survey of Western Art from Renaissance to Modern</td>
<td></td>
</tr>
<tr>
<td>ART A102</td>
<td>Survey of Modern and Contemporary Art History</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART A103</td>
<td>Survey of Asian Art</td>
<td>3</td>
</tr>
<tr>
<td>ART A107</td>
<td>Introduction To Art</td>
<td>3</td>
</tr>
<tr>
<td>ART A108</td>
<td>Women in Art</td>
<td>3</td>
</tr>
<tr>
<td>ART A109</td>
<td>Ancient Greek Art and Architecture</td>
<td>3</td>
</tr>
<tr>
<td>or ART A109H</td>
<td>Ancient Greek Art and Architecture Honors</td>
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</tr>
<tr>
<td>ART A110</td>
<td>Color and Design: Two-Dimensional</td>
<td>3</td>
</tr>
<tr>
<td>ART A114</td>
<td>Art of the Ancient Americas</td>
<td>3</td>
</tr>
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### Area D: Social and Behavioral Sciences

Students will use the theoretical and methodological principles of the social and behavioral sciences to explain and evaluate institutions, groups, and individuals across social, economic, and global contexts of historical periods. Three semester units (or four quarter units).

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<td>Consumer Economics</td>
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### Course Title Units

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<td>Ethnic Groups in the U.S.: Their Histories</td>
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<td>Women, Politics, and Inequality</td>
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<td>Men, Women, and Communication</td>
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<td>The World at War</td>
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<td>Child Growth and Development</td>
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<td>Family, School, and Community Partnerships</td>
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<td>Survey of Current Issues</td>
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<td>International Relations</td>
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<td>PSCI A180</td>
<td>American Government</td>
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<td>Introduction to American Legal System</td>
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<table>
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<tr>
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<td>Economics: General Concepts</td>
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<td>Microeconomics</td>
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</table>
Orange Coast College grants the degree of Associate in Arts. Below are OCC’s general education requirements for the AA degree.

For additional information regarding earning an Associate in Arts Degree, please see the Graduation Requirements (p. 377) section of this catalog. Only one Associate in Arts Degree will be awarded to a student by OCC.

Complete a minimum of 28 units distributed among the following. One course may not be used to meet two separate requirements.

### Course Title Units
#### Area A: English Language Communication and Analytical Thinking

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<tr>
<td>ESL A100</td>
<td>ESL College Composition (^1)</td>
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#### Area B: Physical and Biological Sciences; Scientific Inquiry; Life Science

Students will apply critical thinking skills concerning the causes and effects of natural phenomena and will become familiar with the rational approach that researchers use to analyze data and formulate logical conclusions. A minimum of four semester units (or six-eight quarter units) including a lab or six semester or nine quarter units of lecture-only courses.

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<tr>
<td>ANTH A185 &amp; A185L</td>
<td>Physical Anthropology &amp; Phys Anthropology Lab (^2)</td>
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<tr>
<td>ASTR A100</td>
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<td>Introduction to Astronomy Honors</td>
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<td>ASTR A100 &amp; A100L</td>
<td>Introduction to Astronomy Laboratory &amp; Astronomy Laboratory (^2)</td>
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<tr>
<td>or ASTR A100M</td>
<td>Introduction to Astronomy Laboratory Honors</td>
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<tr>
<td>ASTR A101</td>
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<td>Stellar Astronomy</td>
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<td>ASTR A103</td>
<td>Cosmology</td>
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<td>ASTR A200</td>
<td>Introduction to Astrophysics</td>
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<tr>
<td>BIOL A100</td>
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<tr>
<td>BIOL A101</td>
<td>The Biology of Cooking (^2)</td>
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<tr>
<td>or BIOL A180</td>
<td>Introduction to Biology for Majors 1: Cell and Molecular Biology (^2)</td>
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</table>

\(^1\) With a grade of 'C' or better.

### Associate in Arts General Education 2020-2021: Option 1 (Orange Coast College General Education)

Orange Coast College grants the degree of Associate in Arts. Below are OCC’s general education requirements for the AA degree.

For additional information regarding earning an Associate in Arts Degree, please see the Graduation Requirements (p. 377) section of this catalog. Only one Associate in Arts Degree will be awarded to a student by OCC.

Complete a minimum of 28 units distributed among the following. One course may not be used to meet two separate requirements.

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<td>Introduction to Psychology</td>
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<tr>
<td>PSYC A105</td>
<td>Psychology of Women</td>
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<tr>
<td>PSYC A130</td>
<td>Life Span Developmental Psychology</td>
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<td>PSYC A165</td>
<td>Principles of Human Sexuality 1</td>
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<tr>
<td>PSYC A185</td>
<td>Principles of Psychology</td>
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<td>Cross-Cultural Psychology</td>
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<td>PSYC A220</td>
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<td>PSYC A260</td>
<td>Social Psychology</td>
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<td>PSYC A270</td>
<td>Psychology of Learning</td>
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<td>PUBH A200</td>
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<td>PUBH A202</td>
<td>Drugs, Health, and Society</td>
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<td>SOC A110</td>
<td>Introduction to Dating, Relationships, and Marriage</td>
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<td>Introduction to Race and Ethnicity</td>
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<td>Analysis of Social Problems</td>
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<tr>
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<td>and Introductory Physics Laboratory ²</td>
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<td>University Physics 1 (non-majors)</td>
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**Area C: Arts and Humanities**

Students will develop skill sets associated with the arts and humanities by analyzing aesthetic qualities, evaluating and developing rational arguments, identifying cultural and historical influences, and engaging in artistic expression. A minimum of three semester units (or four-five quarter units) to include one course from Group One and one course from Group Two.

1. **Theory**

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<td>Preparation for Audition - Jazz</td>
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<td>Preparation for Audition - Ballet</td>
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<td>Preparation for Audition - Modern</td>
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<td>Preparation for Audition - Tap</td>
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<td>DMAD A181</td>
<td>Introduction to Computer Graphics</td>
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<tr>
<td>ENGL A119</td>
<td>Introduction to Creative Writing</td>
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<tr>
<td>ENGL A121</td>
<td>Short Story Workshop</td>
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<tr>
<td>ENGL A122</td>
<td>Novel Writing I</td>
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<tr>
<td>ENGL A126</td>
<td>Poetry Writing</td>
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<td>ENGL A127</td>
<td>Scriptwriting I</td>
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<td>FIML A110</td>
<td>Film Production</td>
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<td>MUS A115</td>
<td>Fundamentals of Music</td>
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</tr>
<tr>
<td>MUS A116</td>
<td>Basic Guitar</td>
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<tr>
<td>MUS A120</td>
<td>College Choir</td>
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<tr>
<td>MUS A129</td>
<td>Guitar Ensemble</td>
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<tr>
<td>MUS A132</td>
<td>Wind Ensemble</td>
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<tr>
<td>MUS A133</td>
<td>Orchestra</td>
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<tr>
<td>MUS A140</td>
<td>Beginning Instruments</td>
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<tr>
<td>MUS A141</td>
<td>Piano 1</td>
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<td>MUS A144</td>
<td>Popular Vocal Techniques</td>
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<td>MUS A145</td>
<td>Voice 1</td>
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<td>MUS A150</td>
<td>Intermediate Band/Orchestra</td>
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<td>MUS A230</td>
<td>Jazz Improvisation</td>
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<td>MUS A233</td>
<td>Symphonic Chamber Orchestra</td>
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<td>MUS A234</td>
<td>Studio Jazz Ensemble</td>
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<td>PHOT A120</td>
<td>Introduction to Photography</td>
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<td>PHOT A120H</td>
<td>Introduction to Photography Honors</td>
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</tr>
<tr>
<td>PHOT A123</td>
<td>Introduction to Digital Photography</td>
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<tr>
<td>THEA A106</td>
<td>Acting Fundamentals</td>
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<td>THEA A110</td>
<td>Theatre Laboratory Level 1</td>
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<tr>
<td>THEA A170</td>
<td>Stage Crew Activity</td>
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### Area D: Social and Behavioral Science

Students will use the theoretical and methodological principles of the social and behavioral sciences to explain and evaluate institutions, groups, and individuals across social, economic, and global contexts of historical periods. A minimum of 12 semester units (or 15-18 quarter units) to include two courses from Group One, and one course each from Group Two and Group Three.

1. **U.S. History and Constitution and American Ideals**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI A180</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>or PSCI A180H</td>
<td>American Government Honors</td>
<td></td>
</tr>
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</table>

Select one of the following:

- HIST A170 | History of the United States to 1876
- or HIST A170H | History of the United States to 1876 Honors
- HIST A175 | History of the United States Since 1876
- or HIST A175H | History of the United States Since 1876 Honors

2. **Social and Economic Institutions**

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>ANTH A100</td>
<td>Cultural Anthropology</td>
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<td>or ANTH A100H</td>
<td>Cultural Anthropology Honors</td>
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<tr>
<td>ANTH A102</td>
<td>Native American</td>
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<td>Course</td>
<td>Title</td>
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<tr>
<td>ANTH A105</td>
<td>Anthropology of Nonverbal Behavior</td>
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<tr>
<td>ANTH A190</td>
<td>Introduction to Linguistic Anthropology</td>
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<tr>
<td>ANTH A220</td>
<td>Magic, Witchcraft, and Religion</td>
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<td>ANTH A280</td>
<td>Introduction to Archaeology</td>
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<td>ANTH A285</td>
<td>World Ethnology</td>
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<td>CMST A155</td>
<td>Intercultural Communications</td>
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<td>CMST A165</td>
<td>Men, Women, and Communication</td>
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<td>COUN A107</td>
<td>Chicana/o &amp; Latina/o Experience and Success in Higher Education</td>
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<td>or COUN A107H</td>
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<td>EC A126</td>
<td>Teaching in a Diverse Society</td>
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<td>ECON A100</td>
<td>Economics: General Concepts</td>
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<td>ECON A170</td>
<td>Microeconomics</td>
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<td>ECON A175</td>
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<td>ETHS A100</td>
<td>Contemporary Ethnic America</td>
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<td>ETHS A150</td>
<td>Ethnic Groups in the U.S.: Their Histories</td>
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<td>ETHS A190</td>
<td>The Ethnic Family</td>
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<td>GNDR A100</td>
<td>Introduction to Gender Studies</td>
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<td>GNDR A130</td>
<td>Women, Politics, and Inequality</td>
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<td>GNDR A165</td>
<td>Men, Women, and Communication</td>
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<td>GNDR A187</td>
<td>Women in History</td>
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<td>GEOG A100</td>
<td>World Regional Geography</td>
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<td>World Regional Geography Honors</td>
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<td>GEOG A150</td>
<td>California Geography</td>
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<td>GEOG A185</td>
<td>Cultural Geography</td>
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<tr>
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<td>Introduction to Global Studies</td>
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<td>GLST A102</td>
<td>Introduction to Global Issues</td>
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<td>HLED A122</td>
<td>Drugs, Health and Society</td>
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<td>HIST A101</td>
<td>Afro-American History</td>
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<td>HIST A140</td>
<td>The California Experience</td>
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<td>History of Mexico</td>
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<td>Ethnic Groups of the United States: Their Histories</td>
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<td>HIST A151</td>
<td>History of the Middle East to 1500</td>
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<td>History of the Middle East Since 1500</td>
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<td>Women In U.S. History</td>
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<td>HIST A180</td>
<td>Western Civilization 1</td>
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<td>HIST A195</td>
<td>History of England and Greater Britain</td>
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<td>The World at War</td>
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<td>Destination the Americas</td>
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<td>Destination Eastern Europe</td>
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<td>HTT A128</td>
<td>Destination Africa/Pacific</td>
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<td>HTT A130</td>
<td>Cultural Tourism</td>
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<td>PSYC A105</td>
<td>Psychology of Women</td>
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<td>PSYC A165</td>
<td>Principles of Human Sexuality 1</td>
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<td>Principles of Psychology</td>
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<td>PSYC A255</td>
<td>Abnormal Psychology</td>
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<td>PSCI A101</td>
<td>Survey of Current Issues</td>
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<td>PSCI A110</td>
<td>International Relations</td>
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<td>Comparative Politics</td>
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<td>PSCI A188</td>
<td>Introduction to Political Theory</td>
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<td>PSCI A190</td>
<td>Introduction to American Legal System</td>
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<td>PSCI A200</td>
<td>Introduction to Political Science</td>
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<td>PUBH A202</td>
<td>Drugs, Health, and Society</td>
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<td>PUBH A203</td>
<td>Health and Social Justice</td>
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<td>SOC A100</td>
<td>Introduction to Sociology</td>
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<td>SOC A110</td>
<td>Introduction to Dating, Relationships, and Marriage</td>
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<td>SOC A150</td>
<td>Introduction to Race and Ethnicity</td>
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<td>Analysis of Social Problems</td>
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<td>Analysis of Social Problems Honors</td>
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<td>SOC A200</td>
<td>Introduction to Research Methods</td>
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<td>ANTH A187</td>
<td>Introduction to Primate Studies</td>
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<td>HLED A220</td>
<td>Concepts in Public Health</td>
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<td>HMDV A180</td>
<td>Child Growth and Development</td>
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<td>HMDV A190</td>
<td>Family, School, and Community Partnerships</td>
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<td>PSYC A100</td>
<td>Introduction to Psychology</td>
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<td>PSYC A130</td>
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<td>PSYC A190</td>
<td>Cross-Cultural Psychology</td>
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<td>Psychology of Personality</td>
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<td>PSYC A260</td>
<td>Social Psychology</td>
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<td>PSYC A270</td>
<td>Psychology of Learning</td>
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<tr>
<td>PUBH A200</td>
<td>Introduction to Public Health</td>
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</table>

**Area E: Life Skills, Life-Long Learning and Self Development**

Students will develop and demonstrate the life skills of interpersonal relationships, self-understanding and management, and decision making for professional success and personal well-being. A minimum of three semester units to include one course from Group One and one course from Group Two.

1. **Theory/ Non-activity**
   - ACCT A100 Accounting for Small Business 3
   - ALH A130 Applied Pharmacology 3
   - ANTH A105 Anthropology of Nonverbal Behavior 3
   - BUS A100 Introduction to Business 3
   - BUS A120 Personal Financial Success 3
### Course  
**Title**  
**Units**

- CMST A100  
  Interpersonal Communication  
  3  
- CMST A155  
  Intercultural Communications  
  3  
- CMST A170  
  Nonverbal Communication  
  3  
- CHT A100  
  Computer Use in Technology  
  3  
- CIS A100  
  Introduction to Computer Applications  
  3  
- CIS A111  
  Introduction to Computer Information Systems  
  3  
- COS A180  
  Life Management  
  3  
- COUN A100  
  Introduction To College  
  1  
- COUN A101  
  New Horizons for Adults Returning to College  
  1  
- COUN A104  
  Career & Life Planning: A Holistic Approach  
  3  
- COUN A105  
  Strategies for College Success  
  3  
- COUN A107  
  Chicana/o & Latina/o Experience and Success in Higher Education  
  3  
- COUN A107H  
  Chicana/o & Latina/o Experience and Success in Higher Education Honors  
  3  
- COUN A109  
  Developing and Understanding Happiness  
  3  
- COUN A110  
  Applied Stress Management  
  2  
- COUN A120  
  Career Decision Making/Accelerated  
  2  
- COUN A135  
  Principles of Effective Parenting  
  3  
- COUN A170  
  College Major Search  
  1  
- EC A126  
  Teaching in a Diverse Society  
  3  
- ECON A110  
  Consumer Economics  
  3  
- EMS A100  
  Emergency Medical Responder  
  4  
- FASH A170  
  Clothing Design and Selection  
  3  
- FN A136  
  Nutrition, Fitness and Performance  
  3  
- FN A140  
  Introduction to Nutrition Concepts  
  2  
- FN A170  
  Nutrition  
  3  
- FN A185  
  Cultural Foods  
  2  
- HLED A100  
  Personal Health Education  
  3  
- HLED A122  
  Drugs, Health and Society  
  3  
- HLED A270  
  Fitness and Health  
  3  
- HMDV A180  
  Child Growth and Development  
  3  
- HMDV A190  
  Family, School, and Community Partnerships  
  3  
- ID A100  
  Fundamentals of Interior Design  
  3  
- KIN A202  
  Introduction to Kinesiology  
  3  
- KIN A270  
  Fitness and Health  
  3  
- KIN A282  
  Introduction to Exercise Physiology  
  3  
- LEAD A180  
  Personal Leadership  
  3  
- LEAD A200  
  Organizational Leadership  
  3  
- LIBR A100  
  Library Research and Information Competency  
  2  
- MKTG A100  
  Introduction to Marketing  
  3  
- MKTG A110  
  Professional Selling  
  3  
- PHIL A120  
  Ethics  
  3  
- PSYC A105  
  Psychology of Women  
  3  
- PSYC A110  
  Psychology of Adjustment  
  3  
- PSYC A130  
  Life Span Developmental Psychology  
  3  
- PSYC A165  
  Principles of Human Sexuality 1  
  3  
- PSYC A200  
  Positive Psychology  
  3

### Course  
**Title**  
**Units**

- PUBH A100  
  Personal Health  
  3  
- PUBH A202  
  Drugs, Health, and Society  
  3  
- SOC A110  
  Introduction to Dating, Relationships, and Marriage  
  3

### Associate Degree General Education  
**2020-2021: Option 2 (California State University General Education)**

To earn a Bachelor’s degree from the California State University, each student must complete 48-51 semester units in general education. Nine to twelve of these units must be taken as upper-division course work after transfer. Orange Coast College will certify the extent to which the lower-division General Education Breadth Requirements have been met for students meeting the following A-E pattern. Students seeking certification must complete at least 12 of these units at OCC.

Students seeking GE transfer certification are eligible for a Certificate of Achievement award.

Any one course may be used to satisfy only one required sub-area (i.e. if Communication Studies A110 is used to satisfy sub-area A1, it may not be used to satisfy sub-area C2), with the exception of Area B where lab courses taken to meet the B3 requirement will also count in B1 or B2. A cross-listed course (the same course listed under more than one department such as History A150 and Ethnic Studies A150) may be used to meet only one requirement.

**Important Note:** Courses on this list are approved for a specific academic term. Students wishing to use a course to meet a CSU General Education Breadth requirement must be sure that the course is approved for the academic term in which it is taken.

**This list is valid only for courses taken Fall 2020 through Summer 2021.**

For courses taken prior to Fall 2020, students should check the master list which shows the dates that courses were added or deleted since the original list was published in 1991. This list is available in the Counseling Center or Transfer Center in Watson Hall.

### Course  
**Title**  
**Units**

<table>
<thead>
<tr>
<th>Area A: Communication in the English Language and Critical Thinking</th>
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</thead>
<tbody>
<tr>
<td>Nine semester units (or 12-15 quarter units) including one course from each sub-area with a grade of “C” or better.</td>
</tr>
</tbody>
</table>

- **A1 Oral Communication**
  - CMST A100  
    - Interpersonal Communication  
    - 3  
- **A2 Written Communication**
  - CMST A110  
    - Public Speaking  
    - 3  
  - ENGL A100  
    - Freshman Composition  
    - 3  
  - ESL A100  
    - ESL College Composition  
    - 3

- **A3 Critical Thinking**
Area B: Physical Universe and Its Life Forms

A minimum of nine semester units (or 12-15 quarter units) including at least one course from each subarea. Must include at least one laboratory course.

B1 Physical Science

<table>
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<tr>
<td>CMST A240</td>
<td>Media Literacy</td>
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<td>ENGL A101</td>
<td>Critical Reasoning: Fiction</td>
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<td>ENGL A109</td>
<td>Critical Reasoning and Writing for Science and Technology</td>
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ANTH A280 Introduction to Archaeology 3
ASTR A100 Introduction to Astronomy 3
or ASTR A100H Introduction to Astronomy Honors 3
ASTR A100 & A100L Introduction to Astronomy and Introduction to Astronomy Laboratory 1 4
ASTR A100H & ASTR A100L Introduction to Astronomy Honors and Introduction to Astronomy Laboratory 1 3
or ASTR A100M Introduction to Astronomy Laboratory Honors 3
ASTR A101 Planetary Astronomy 3
ASTR A102 Stellar Astronomy 3
ASTR A103 Cosmology 3
ASTR A104 Galactic Astronomy 3
ASTR A200 Introduction to Astrophysics 4
or ASTR A200H Introduction to Astrophysics Honors 4
CHEM A100 Principles of Chemistry 3
CHEM A110 Introduction to Chemistry 1 5
CHEM A130 Preparation for General Chemistry 1 4
CHEM A180 General Chemistry A 1 5
CHEM A185 General Chemistry B 1 5
CHEM A220 Organic Chemistry A 3
CHEM A220L Organic Chemistry A Lab 1 2
CHEM A225 Organic Chemistry B 3
CHEM A225L Organic Chemistry B Laboratory 1 2
GEOG A130 Introduction to Weather & Climate 3
GEOG A180 Physical Geography 3
or GEOG A180H Physical Geography Honors 3
GEOG A180 & A180L Physical Geography and Physical Geography Lab 1 4
GEOG A180H & GEOG A180L Physical Geography Honors and Physical Geography Lab 1 4
GEOL A105 General Geology 3
or GEOL A105H General Geology Honors 3
GEOL A105 & A105L General Geology and General Geology Laboratory 1 4
GEOL A105H & GEOL A105M General Geology Honors and General Geology Laboratory Honors 1 4
GEOL A105H & GEOL A105L General Geology Honors and General Geology Laboratory Honors 1 4

B2 Life Science

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ANTH A185 Physical Anthropology 3
or ANTH A185H Physical Anthropology Honors 3
ANTH A185 & A185L Physical Anthropology and Phys Anthropology Lab 1 4
BIOI A100 Introduction to Biology 1 4
BIOI A100H Introduction to Biology Honors 4
BIOI A101 The Biology of Cooking 4
BIOI A115 Introduction to the Biology of Animals 3
BIOI A125 Human Biology 3
BIOI A180 Introduction to Biology for Majors 1: Cell and Molecular Biology 1 4
BIOI A182 Zoology 3
or BIOI A182H Zoology Honors 3
BIOI A182 & A182L Zoology and Zoology Lab 1 4
BIOI A183 Botany 3
BIOI A183 & A183L Botany and Botany Lab 1 4
BIOI A185 Introduction to Biology for Majors 2: Ecology, Evolution, Diversity, and Physiology 1 5
BIOI A210 General Microbiology 1 5
BIOI A220 Human Anatomy 1 5
BIOI A221 Anatomy-Physiology 1 4
BIOI A225 Human Physiology 5
BIOI A283 Genetics 4
ESEC A100 Introduction to Environmental Science 3
or ESEC A100H Introduction to Environmental Science Honors 3
ESEC A101 Principles of Ecology 3
HORT A100 Horticulture Science 3
MRSC A100 Oceanography 3
or MRSC A100H Oceanography Honors 3
ART A100 & A100L
MRSC A100H or ART A100H
MRSC A100M or MATH A100M
MRSC A100H
MRSC A180 & A180L
MRSC A187
PSYC A250
THEA A106
THEA A105
THEA A101
THEA A100
RLST A135
PHOT A130
PHOT A123
PHOT A120
MUS A180
MUS A143
MUS A140
MUS A139
MUS A116
MUS A115
MUS A109
ART A101
or ART A101H
ART A102
ART A103
ART A107
ART A108
ART A109
or ART A109H
ART A114
ART A115
Course
Title
Units
MRSC A100
Oceanography
4
& A100L
and Oceanography Laboratory
MRSC A100H or MATH A100H
Oceanography Honors
4
& MRSC A100M
and Oceanography Laboratory Honors
MRSC A100
Oceanography
4
& A100M
and Oceanography Laboratory Honors
MRSC A100H
Oceanography Honors
4
& MRSC A100L
and Oceanography Laboratory
MRSC A180
Marine Biology
3
& A180L
Marine Biology Lab
4
MRSC A187
Marine Mammals
3
PSYC A250
Psychobiology
3
B3 Laboratory Activity
One of the courses taken in Area B1 or B2 must include a lab.

B4 Mathematical Concepts
One course from the following with a grade of “C” or better:
MATH A100
Liberal Arts Mathematics
3
MATH A103
Statistics for Elementary Teachers
3
MATH A104
Mathematics for Elementary Teachers
3
MATH A115
College Algebra
4
MATH A120
Trigonometry
3
MATH A140
Business Calculus
4
MATH A155
Finite Mathematics with Applications
4
MATH A160
Introduction to Statistics
4
MATH A170
Precalculus
4
MATH A180
Calculus 1
4
or MATH A180H
Calculus 1 Honors
5
MATH A182H
Calculus 1 and 2 Honors
4
MATH A185
Calculus 2
4
or MATH A185H
Calculus 2 Honors
4
MATH A230
Introduction to Discrete Mathematics
5
MATH A235
Applied Linear Algebra
3
MATH A280
Calculus 3
4
or MATH A280H
Calculus 3 Honors
4
MATH A285
Introduction to Linear Algebra and
4
Differential Equations
or MATH A285H
Introduction to Linear Algebra and Differential
Equations Honors
MATH A290H
Introduction to Tensors and Calculus on
5
Manifolds Honors
PSYC A160
Statistics for the Behavioral Sciences
4

Area C: Literature, Philosophy, & Foreign Language
A minimum of nine semester units (or 12-15 quarter units) with at least one course in C1 and one course in C2.

C1 Arts
ARCH A290
History of Architecture 1
3
or ARCH A290H
History of Architecture 1 Honors
ARCH A296
History of Architecture 2
3
or ARCH A296H
History of Architecture 2 Honors
ART A100
Survey of Western Art from Prehistory Through Gothic
3

Course
Title
Units
ART A101
Survey of Western Art from Renaissance to Modern
3
or ART A101H
Honors Survey of Western Art from Renaissance to Modern
ART A102
Survey of Modern and Contemporary Art
3
History
ART A103
Survey of Asian Art
3
ART A107
Introduction To Art
3
ART A108
Women in Art
3
ART A109
Ancient Greek Art and Architecture
3
or ART A109H
Ancient Greek Art and Architecture Honors
3
ART A114
Art of the Ancient Americas
3
ART A115
Art of Africa, Oceania, and Indigenous North America
3
ART A120
Beginning Drawing
3
ART A125
Perspective Drawing
3
ART A141
Sculpture 1
3
ART A142
Life Sculpture 1
3
ART A145
Exhibition Design 1
3
ART A147
Jewelry 1
3
ART A150
Ceramics 1
3
ART A263
Watercolor 1
3
ART A269
Cartooning 1
3
DANC A200
Appreciation Of Dance
3
DANC A230
World Dance and Culture
3
DMAD A181
Introduction to Computer Graphics
3
FILM A100
History and Appreciation of the Cinema
3
FILM A150
History of Radio & Television
3
HUM A100
Introduction to the Humanities
3
ID A180
History of Interior Architecture and Furnishings
3
ID A190
Hist Arch/Furnishings 2
3
MUS A100
History and Appreciation of Western Classical Music
3
MUS A105
Music from Bach Up to Rock
3
MUS A115
Fundamentals of Music
3
MUS A116
Basic Guitar
2
MUS A139
History of Rock Music
3
MUS A140
Beginning Instruments
2
MUS A143
History of Jazz
3
MUS A180
Theory 1
3
PHOT A120
Introduction to Photography
3
PHOT A123
Introduction to Digital Photography
3
PHOT A130
History and Aesthetics of Still Photography
3
RLST A135
Religion, Spirituality and Society
3
THEA A100
Introduction to Theatre
3
THEA A101
Introduction to History and Literature of the Theatre
3
THEA A105
Drama And Acting
3
THEA A106
Acting Fundamentals
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<td>Reader's Theater and Oral Interpretation</td>
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A minimum of nine semester units (or 12-15 quarter units) with courses from at least two sub-areas:

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### Area E: Life Long Learning and Self-Development

Three semester units (or four-quarter units); no more than one unit of activity courses.

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1 Lab course
2 Course will satisfy either C1 or C2

**American Institutions Requirement** *(Not part of CSU General Education Breadth. May be completed prior to transfer.)* In addition to the General Education Requirements listed above, all students must complete coursework in American History and Constitution for graduation from CSU. Completion of HIST A170 History of the United States to 1876 or HIST A170H History of the United States to 1876 Honors, HIST A175 History of the United States Since 1876 or HIST A175H History of the United States Since 1876 Honors, in Area D and PSCI A180 American Government or PSCI A180H American Government Honors in Area D will fulfill this requirement.
Associate Degree General Education 2020-2021: Option 3 (IGETC)

Completion of the Intersegmental General Education Transfer Curriculum (IGETC) will satisfy the lower division general education requirements of either the California State University or the University of California system. The IGETC should be completed in its entirety before transferring or the student may be subject to the general education requirements of the campus to which they have been admitted.

Students seeking GE transfer certification are eligible for a Certificate of Achievement award.

All courses must be completed with grades of "C" or better. Grades of "credit" can be used if "credit" is equal to a "C" or better. There are limits to the number of units that can be taken P/NP.

Courses used to meet IGETC requirements must be at least three semester units or four quarter units.

Important Note: Courses on this list are approved for a specific academic term. Students wishing to use a course to meet an IGETC requirement must be sure that the course is approved for the academic term in which it is taken. This list is valid only for courses taken Fall 2020 through Summer 2021. For courses taken prior to Fall 2020, students should check the master list which shows the dates that courses were added or deleted since the original list was published in 1991. This list is available in the Counseling Center or Transfer Center in Watson Hall.

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<td>Introduction to Tensors and Calculus on Manifolds</td>
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<td>PSYC A160</td>
<td>Statistics for the Behavioral Sciences</td>
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Area 3: Arts and Humanities

Three courses, with at least one course from Group A and one from Group B. Nine semester units (or 12-15 quarter units).

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<td>Survey of Modern and Contemporary Art History</td>
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<td>Survey of Asian Art</td>
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<td>Art of the Ancient Americas</td>
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<td>Art of Africa, Oceania, and Indigenous North America</td>
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<td>Music from Bach Up to Rock</td>
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### Area 4: Social and Behavioral Sciences
Three courses from at least two disciplines. 9 semester units (or 12-15 quarter units).

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<td>Introduction to Linguistic Anthropology</td>
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<td>ETHS A100</td>
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<td>The Ethnic Family</td>
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<td>GNDR A100</td>
<td>Introduction to Gender Studies</td>
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<td>GNDR A130</td>
<td>Women, Politics, and Inequality</td>
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<td>Women in History</td>
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<td>World Regional Geography</td>
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<td>GEOG A150</td>
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<td>GEOG A185</td>
<td>Cultural Geography</td>
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<td>GLST A101</td>
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<td>GLST A102</td>
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<td>HIST A101</td>
<td>Afro-American History</td>
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<td>History of the Americas 1</td>
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<td>HIST A142</td>
<td>History of the Americas 2</td>
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<td>HIST A151</td>
<td>History of the Middle East to 1500</td>
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<td>History of the Middle East Since 1500</td>
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<td>HIST A170</td>
<td>History of the United States to 1876</td>
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<td>HIST A180</td>
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<td>HIST A185</td>
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<td>HMDV A180</td>
<td>Child Growth and Development</td>
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<td>PSCI A101</td>
<td>Survey of Current Issues</td>
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<tr>
<td>PSCI A110</td>
<td>International Relations</td>
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<tr>
<td>PSCI A180</td>
<td>American Government</td>
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<tr>
<td>or PSYC A100H</td>
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<tr>
<td>PSYC A105</td>
<td>Psychology of Women</td>
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<tr>
<td>PSYC A130</td>
<td>Life Span Developmental Psychology</td>
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<tr>
<td>PSYC A165</td>
<td>Principles of Human Sexuality 1</td>
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<tr>
<td>PSYC A185</td>
<td>Principles of Psychology</td>
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<tr>
<td>PSYC A190</td>
<td>Cross-Cultural Psychology</td>
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<td>or PSYC A190H</td>
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<td>PSYC A220</td>
<td>Psychology of Personality</td>
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<td>PSYC A260</td>
<td>Social Psychology</td>
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<tr>
<td>SOC A100</td>
<td>Introduction to Sociology</td>
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<tr>
<td>or SOC A100H</td>
<td>Introduction to Sociology Honors</td>
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</tr>
<tr>
<td>SOC A110</td>
<td>Introduction to Dating, Relationships, and Marriage</td>
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<td>SOC A150</td>
<td>Introduction to Race and Ethnicity</td>
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<td>SOC A185</td>
<td>Analysis of Social Problems</td>
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</table>

### Area 5: Physical and Biological Sciences
Two courses, with one from Group A and one from Group B. One of the courses must include a lab. Seven to nine semester units (or nine to 12 quarter units).

#### Group 5A: Physical Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ASTR A100</td>
<td>Introduction to Astronomy</td>
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<td>or ASTR A100H</td>
<td>Introduction to Astronomy Honors</td>
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<tr>
<td>ASTR A100 &amp; A100L</td>
<td>Introduction to Astronomy Laboratory 1</td>
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<tr>
<td>or ASTR A100M</td>
<td>Introduction to Astronomy Laboratory Honors</td>
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<tr>
<td>ASTR A100H &amp; ASTR A100M</td>
<td>Introduction to Astronomy Laboratory Honors</td>
<td>4</td>
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<tr>
<td>or ASTR A100L</td>
<td>Introduction to Astronomy Laboratory</td>
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<tr>
<td>ASTR A101</td>
<td>Planetary Astronomy</td>
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<td>ASTR A102</td>
<td>Stellar Astronomy</td>
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<tr>
<td>ASTR A103</td>
<td>Cosmology</td>
<td>3</td>
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<tr>
<td>CHEM A100</td>
<td>Principles of Chemistry</td>
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<td>CHEM A110</td>
<td>Introduction to Chemistry 1</td>
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<tr>
<td>CHEM A130</td>
<td>Preparation for General Chemistry 1</td>
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<td>CHEM A180</td>
<td>General Chemistry A 1</td>
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<td>CHEM A185</td>
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<td>CHEM A220</td>
<td>Organic Chemistry A</td>
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<td>Organic Chemistry A Lab 1</td>
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<td>Organic Chemistry B</td>
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<td>Physical Geography Honors</td>
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<td>GEOG A180 &amp; A180L</td>
<td>Physical Geography and Physical Geography Lab</td>
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<tr>
<td>or GEOG A180H &amp; GEOG A180L</td>
<td>Physical Geography Honors and Physical Geography Lab</td>
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<tr>
<td>GEOL A105</td>
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<tr>
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<td>General Geology Honors</td>
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<td>General Geology and General Geology Laboratory 1</td>
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<td>or GEOL A105M</td>
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<td>GEOL A110</td>
<td>Physical Geology 3</td>
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<td>GEOL A160</td>
<td>Environmental Geology 1</td>
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<td>GEOL A185</td>
<td>Evolution of the Earth</td>
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<td>Evolution of the Earth Lab 1</td>
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<td>MRSC A185</td>
<td>Coastal Geology</td>
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<td>PHYS A110</td>
<td>Conceptual Physics</td>
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<td>Conceptual Physics and Introductory Physics Laboratory 1</td>
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<td>PHYS A120</td>
<td>Algebra Based Physics: Mechanics 1</td>
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<tr>
<td>PHYS A130</td>
<td>University Physics 1 (non-majors) 1</td>
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<td>PHYS A185</td>
<td>Calculus Based Physics: Mechanics 1</td>
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<td>Calculus Based Physics: Electricity/ Magnetism</td>
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<td>Calculus Based Physics: Modern 1</td>
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**Group 5B: Biological Science**

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<td>Physical Anthropology Honors and Phys Anthropology Lab 1</td>
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<td>BIOL A100</td>
<td>Introduction to Biology 1</td>
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<tr>
<td>or BIOL A100H</td>
<td>Introduction to Biology Honors</td>
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<tr>
<td>BIOL A101</td>
<td>The Biology of Cooking</td>
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<td>BIOL A115</td>
<td>Introduction to the Biology of Animals</td>
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<tr>
<td>BIOL A125</td>
<td>Human Biology</td>
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<td>BIOL A180</td>
<td>Introduction to Biology for Majors 1: Cell and Molecular Biology 1</td>
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<tr>
<td>BIOL A182</td>
<td>Zoology</td>
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<td>Botany</td>
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<td>Introduction to Biology for Majors 2: Ecology, Evolution, Diversity, and Physiology 1</td>
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<td>BIOL A210</td>
<td>General Microbiology 1</td>
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<td>Human Anatomy</td>
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<td>Anatomy-Physiology 1</td>
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<td>BIOL A283</td>
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<td>Introduction to Environmental Science</td>
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<td>ESEC A101</td>
<td>Principles of Ecology</td>
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<td>MRSC A100</td>
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<td>Oceanography Laboratory Honors</td>
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<td>Marine Biology</td>
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<tr>
<td>PSYC A250</td>
<td>Psychobiology</td>
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</table>

**Group SC: Laboratory Activity**

One of the courses taken in Group A or B must include a lab.

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**Language Other than English (UC only)**

1. Complete two years of a single high school foreign language with grades of “C” or better (high school transcripts must be on file at OCC), or
2. Complete Chinese, French, German, Hebrew, Italian, Japanese, Portuguese, Vietnamese A180 or Spanish A160 and A180. Advanced courses will validate this requirement, or
3. Earn a satisfactory score on one of the following (results must be on file at OCC):
   b. College Board Advanced Placement Examination in a language other than English (score: 3 or better) International Baccalaureate Higher Level Examination in language other than English (score: 5 or better)
   c. An achievement test administered by a college or university (score: proficiency equivalent to at least two years of high school language).
   d. A passing grade on the international O Level or A Level exam in a language other than English.
   or
4. Complete, with grades of “C” or better, two years of formal schooling at the sixth grade level or higher in an institution where the language of instruction is not English (documentation must be on file at OCC).
5. Complete a Defense Language Institute course in a language other than English with a grade of “C” or better (documentation must be on file with Admissions and Records).

**American Institutions Requirement**

(*Not part of IGTC. May be completed prior to transfer.*)

CSU has an American Institutions requirement that is separate from IGTC. Courses used to meet the CSU requirement can be double counted in Area 3 or 4. To meet the CSU requirement, students should take PSCI A180 American Government or PSCI A180H American Government Honors and one of the following courses: HIST A170 History of the United States to 1876, HIST A170H History of the United States to 1876 Honors, HIST A175 History of the United States Since 1876, HIST A175H History of the United States Since 1876 Honors.
Transfer Information

This section of the Catalog is designed to help students plan an academic program for transfer to a four-year college or university. It includes information about the transfer process as well as general education. Please refer to www.assist.org (http://www.assist.org) for lower division major requirements to the CSU and UC systems.

Since transfer requirements change frequently, students should meet with a counselor regularly to plan an academic program which will assure a smooth transition to the transfer institution of their choice.

Four-year colleges and universities often make changes in their requirements. The requirements listed in this section were updated at the time of publication; however, changes may have occurred after publication. Current Transfer Curriculum Guides and official articulation agreements are available in the Transfer Center, the Counseling Center, and on the Internet.

- Admission Procedures for Four-Year Colleges and Universities (p. 400)
- ASSIST (p. 400)
- California State University (p. 400)
- California State University – Admission Requirements for Transfers (p. 401)
- Community College Honors Transfer Program - UCI (p. 401)
- Course Identification Numbering System (C-ID) (p. 401)
- General Education Requirements for California State University (p. 401)
- General Education Requirements for Independent and Out-of-State Colleges and Universities (p. 402)
- General Education Requirements for the University of California (p. 402)
- Independent and Out-of-State Colleges and Universities (p. 402)
- Individual Campus General Education Requirements (p. 402)
- Transfer Opportunity Program (TOP) (p. 402)
- Transfer Student Course Requirements (p. 403)
- Transfer to a Four-Year College or University (p. 407)
- Transferability of Courses (p. 408)
- UC Davis - Transfer Admission Guarantee (TAG) (p. 408)
- UC Irvine - Transfer Admission Guarantee (TAG) (p. 408)
- UC Merced - Transfer Admission Guarantee (TAG) (p. 408)
- UC Riverside - Transfer Admission Guarantee (TAG) (p. 408)
- UC Santa Barbara - Transfer Admission Guarantee (TAG) (p. 408)
- UC Santa Cruz - Transfer Admission Guarantee (TAG) (p. 408)
- UCLA - Transfer Alliance Program (TAP) (p. 408)
- University of California (p. 408)
- University of California – Admission Requirements (p. 408)

Admission Procedures for Four-Year Colleges and Universities

Students should take the following steps in applying for admission:

1. Submit an application during the filing period. Do not send it early, as it will not be accepted before the initial filing date; sending it early will only delay processing.
2. If entrance exams (SAT, ACT) are required, register for them as soon as possible and at least six months in advance of transfer. Registration forms are available from the Assessment Center located in Watson Hall. Most four-year schools do not require entrance exams for transfer students.
3. Have the OCC Records Office send a copy of your Orange Coast College transcript to the transfer college as requested. Four-year colleges and universities will also require transcripts of coursework completed at all other educational institutions. Students must contact each school attended and request that official transcript be sent directly.

ASSIST

ASSIST (Articulation System Stimulating Interinstitutional Student Transfer) is a Web-based student transfer information system which contains data about how courses taken at California community colleges can be applied when transferring to a University of California or California State University campus. ASSIST has been designated as the official repository of articulation for California’s public colleges and universities, and therefore provides the most accurate and up-to-date information available.

It includes information such as:

- UC Transferable Courses - courses from California community colleges that transfer to all University of California campuses.
- CSU Transferable Courses - courses from California community colleges that transfer to any CSU campus for credit.
- CSU General Education Breadth Courses - courses from California community colleges that can be used to satisfy CSU General Education Breadth requirements.
- IGETC (intersegmental General Education Transfer Curriculum) Courses - courses from California community colleges that apply to the IGETC requirements.
- Articulation Agreements - These agreements between a particular California community college and a four-year institution identify comparable lower division courses between the two institutions. These agreements are designed to help students prepare for transfer into a particular major at a specific institution.

ASSIST can be accessed at www.assist.org (http://www.assist.org)

California State University

California State University has 23 campuses located throughout the state. While each campus within the system has its own unique geographic and curricular character, all campuses offer undergraduate
and graduate instruction for professional and occupational goals, as well as broad liberal education. The CSU offers more than 1,500 bachelor’s and master’s degrees in some 200 subject areas. Campuses are located at Bakersfield, Channel Islands, Chico, Dominguez Hills, Fresno, Fullerton, Hayward, Humboldt, Long Beach, Los Angeles, Monterey Bay, Northridge, Pomona (Cal Poly), Sacramento, San Bernardino, San Diego, San Francisco, San Jose, San Luis Obispo (Cal Poly), San Marcos, Sonoma, Stanislaus, and Vallejo (California Maritime Academy).

California State University – Admission Requirements for Transfers

Students who transfer with 59 or fewer transferable semester units are considered lower-division transfer students.

Students who transfer with 60 or more transferable semester units are considered upper-division transfer students.

Lower Division Transfer Admission Requirements

You are eligible if you:

1. Have a college GPA of 2.0 or better in all transferable units attempted.
2. Are in good standing at the last college or university attended.
3. Meet the admission requirements for a first-time freshman or have successfully completed necessary courses to make up the deficiencies you had in high school if you did not complete the 15-unit pattern of college preparatory subjects.
4. Meet the eligibility index (GPA and SAT/ACT scores) required for a freshman.
5. Some campuses may require the completion of English composition and general education math.
6. Many campuses do not admit lower-division transfers.

Upper Division Transfer Admission Requirements

You are eligible for admission if you:

1. Have a college GPA of 2.0 or better (2.4 for non-California residents) in all transferable coursework.
2. Are in good standing at the last college attended.
3. Have completed or will complete prior to transfer at least 30 semester units of courses equivalent to general education requirements with a grade of C or better in each course. The 30 units must include the general education requirements in communication in the English language (English composition, oral communication and critical thinking) and one course of at least three units in college-level mathematics.

Community College Honors Transfer Program - UCI

The Community College Honors Transfer Program gives students priority consideration for admission to University of California, Irvine. Students in this program may use the UCI Library and attend selected cultural activities on UCI’s campus. Students wishing to participate in this program must first apply to and be accepted into the OCC Honors Program (p. 367). Additional information about this program is available in the Transfer Center in Watson Hall.

Course Identification Numbering System (C-ID)

The Course Identification Numbering System (C-ID) is a statewide numbering system independent from the course numbers assigned by local California community colleges. A C-ID number next to a course signals that participating California colleges and universities have determined that courses offered by other California community colleges are comparable in content and scope to courses offered on their own campuses, regardless of their unique titles or local course number. Thus, if a schedule of classes or catalog lists a course bearing a C-ID number, for example COMM A110, students at that college can be assured that it will be accepted in lieu of a course bearing the C-ID COMM 110 designation at another community college. In other words, the C-ID designation can be used to identify comparable courses at different community colleges. However, students should always go to www.assist.org (http://www.assist.org) to confirm how each college’s course will be accepted at a particular four-year college or university for transfer credit.

The C-ID numbering system is useful for students attending more than one community college and is applied to many of the transferable courses students need as preparation for transfer. Because these course requirements may change, and because courses may be modified and qualified for or deleted from the C-ID database, students should always check with a counselor to determine how C-ID designated courses fit into their educational plans for transfer.

Students may consult the www.assist.org (http://www.assist.org) for specific information on C-ID course designations. Counselors always can help students interpret or explain this information.

General Education Requirements for California State University

To earn a bachelor’s degree from the California State University, each student must complete a program of general education. Orange Coast College offers two general education programs which will enable students to meet the lower division general education requirements for all CSU campuses prior to transfer. Students can complete either the Intersegmental General Education Transfer Curriculum (OCC General Education Option 3) or the CSU General Education breadth Requirements (OCC General Education Option 2). Students transferring to a specific CSU campus also can meet the general education requirements of that campus.

CSU General Education Breadth Requirements

See the Graduation Requirements section of the Catalog for specific courses which meet these requirements.

1. English Language Learning and Critical Thinking - 9 units
2. Scientific Inquiry and Quantitative Reasoning - 9 units
3. Arts and Humanities - 9 units
4. Social Sciences - 9 units
5. Life-Long Learning and Self Development - 3 units

California State University has an American Institutions requirement which can be satisfied prior to transfer by taking an American History course and a course in Political Science 180 or 180H in Area D.

**Intersegmental General Education Transfer Curriculum (IGETC) for CSU**

See the Graduation Requirements section of the Catalog for specific courses which meet these requirements.

1. English Communication - 9 units
2. Mathematical Concepts - 3 units
3. Arts and Humanities - 9 units
4. Social and Behavioral Science 9 units
5. Physical and Biological Sciences - 7-9 Units

California State University in addition has an American Institutions requirement which can be satisfied prior to transfer by taking PSCI A180 American Government or PSCI A180H American Government Honors and one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST A170</td>
<td>History of the United States to 1876</td>
<td>3</td>
</tr>
<tr>
<td>HIST A170H</td>
<td>History of the United States to 1876</td>
<td>3</td>
</tr>
<tr>
<td>HIST A175</td>
<td>History of the United States Since 1876</td>
<td>3</td>
</tr>
<tr>
<td>HIST A175H</td>
<td>History of the United States Since 1876</td>
<td>3</td>
</tr>
</tbody>
</table>

The IGETC should be completed in its entirety prior to transfer. Students who are missing no more than two courses prior to matriculation at a four-year institution may request partial certification during any term except in the final term prior to graduation from the four-year institution.

**General Education Requirements for Independent and Out-of-State Colleges and Universities**

Orange Coast College has articulated general education requirements with many colleges and universities located in California. Copies of these agreements can be found on MyCoast.

**MyCoast** is your one-stop website that connects you to the Online Class Schedule, Registration, as well as many other features. You can also access your Coast Community College District student email account which is used for all official forms of communication from the College.

You can log into MyCoast from any computer with an internet connection and web browser (Chrome/Internet Explorer 7/Firefox). MyCoast works on PC and Mac computers.

**General Education Requirements for the University of California**

To earn a bachelor’s degree from the University of California, each student must complete a program of general education. To meet the general education requirements of the university, students can complete either the Intersegmental General Education Transfer Curriculum (Orange Coast College General Education Option 3) or individual campus general education requirements. OCC strongly recommends that students follow the IGETC rather than the individual campus requirements as this will provide more flexibility when applying to transfer. IGETC should not be used for the following: Business Administration, Chemistry, Environmental Design and Natural Resources at UC Berkeley, Nursing at UCLA, Revell and Roosevelt College at UCSD, Engineering at all UC campuses, and other high-unit majors at UC campuses (e.g. biological and physical sciences). Students who began at a UC campus and who intend to transfer back to the same campus cannot use IGETC. Some UC campuses do not allow students who began at another UC campus to use IGETC. Students in the above categories should follow the General Education requirements of the UC campus they are transferring to.

**Intersegmental General Education Transfer Curriculum (IGETC) for UC**

See the Graduation Requirements section of the Catalog for specific courses which meet these requirements.

1. English Communication - six units
2. Mathematical Concepts - three units
3. Arts and Humanities - nine units
4. Social and Behavioral Sciences - nine units
5. Physical and Biological Sciences - seven to nine Units
6. Language Other Than English - zero to five units

The IGETC should be completed in its entirety prior to transfer. Students who are missing no more than 2 courses prior to matriculation at a four year institution may request partial certification during any term except in the final term prior to graduation from the four year institution.

**Independent and Out-of-State Colleges and Universities**

In addition to state supported colleges and universities in California, there are many outstanding independent institutions in the state. There are also many colleges, both private and public, located throughout the United States which Orange Coast College students can transfer to. Each of these institutions has its own unique requirements for admission. In order to determine eligibility, students should visit the school’s website and consult with their counselor.

**Individual Campus General Education Requirements**

Each campus of the university has its own general education requirements. Students transferring to a specific UC campus can meet the general education requirements of that campus rather than follow the IGETC.

Orange Coast College has articulated individual general education requirements with several UC campuses.

**Transfer Opportunity Program (TOP)**

Historically, underrepresented students (African Americans, Latinos and Native Americans) have made up a small percentage of transfer students. The Transfer Opportunity Program at Orange Coast College seeks to
increase the pool of eligible underrepresented students and close the gap between minority and majority transfer students. TOP is designed to assist historically underrepresented students transfer to four-year colleges and universities. The primary goal of the program is to retain these students and increase the probability of their transfer. Through the program, these students are provided with support services including a college success course, information workshops, personal advisement and counseling, tutoring and group study sessions. For more information on joining TOP contact 714-432-5792.

Transfer Student Course Requirements

A student can transfer from Orange Coast College to a four-year college or university as a junior without loss of time or credits by completing the following:

1. **Lower Division Major Requirements**: These courses should be completed before transferring. They provide background and preparation in order to concentrate on the major beginning in the junior year. Course requirements for specific majors and schools are listed in the Transfer Curriculum Guides. These Guides are available in the Counseling Center and Transfer Center in Watson Hall.

2. **General Education Requirements**: These are the courses required of everyone to obtain a degree regardless of major. They are designed to provide students with the knowledge, skills and understanding which will enable them to function as intelligent and creative members of the community. Courses in writing, critical thinking, mathematics, sciences, arts and humanities, and the social sciences are included in general education.

3. **Electives**: These are transferable courses of choice taken in addition to courses for the major and general education requirements.

**Lower Division Major Requirements**

Most majors at four-year colleges and universities require the completion of one or more lower division courses as preparation for upper division coursework. Orange Coast College offers courses to meet the lower division requirements for most majors at most four-year schools.

Transfer Curriculum Guides are available that list the requirements for specific majors at UC Berkeley, UC Irvine, UC Los Angeles, UC San Diego, UC Santa Barbara, CSU Fullerton, CSU Long Beach, Cal Poly Pomona, San Diego State, San Francisco State, Cal Poly San Luis Obispo, Chapman and USC. Additional schools are included on most of the Guides. The Guides are available in the Counseling Center, the Transfer Center and on the Transfer Center website at www.orangecoastcollege.edu/transfer (http://www.orangecoastcollege.edu/transfer/)

Students should check the catalog of the college they wish to transfer to and meet with their counselor for additional information about major programs and requirements.

The courses listed below are required for the major at most four-year schools; however, many colleges require additional coursework to complete the lower division major requirements. The course information given below has been edited for catalog publication purposes and may not accurately reflect recent changes or total course requirements for particular programs or schools.

**Advertising**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST A180</td>
<td>Introduction to Mass Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Communications, Economics, Marketing and/or Political Science.

**Anthropology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH A100</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH A100H</td>
<td>Cultural Anthropology Honors</td>
<td></td>
</tr>
<tr>
<td>ANTH A185/A185L</td>
<td>Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A280</td>
<td>Introduction to Archaeology</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Biology, Chemistry, Computer Science and/or Physics.

**Architecture/Landscape Architecture**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH A105</td>
<td>Architectural Drawing and Design Visualization 1</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A110</td>
<td>Introduction to Architecture</td>
<td>2</td>
</tr>
<tr>
<td>ARCH A115</td>
<td>Architectural Design and Theory 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH A180</td>
<td>Architectural Construction Documents</td>
<td>4</td>
</tr>
<tr>
<td>ARCH A185</td>
<td>Environmental Design Systems</td>
<td>4</td>
</tr>
<tr>
<td>ARCH A205</td>
<td>Architectural Drawing and Design Visualization 2</td>
<td>3</td>
</tr>
<tr>
<td>ARCH A215</td>
<td>Architectural Drawing and Design Theory 2</td>
<td>4</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Architecture, Art, Drafting, Engineering, English, Mathematics and/or Physics. Landscape Architecture requires coursework in Horticulture.

**Art**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART A100</td>
<td>Survey of Western Art from Prehistory Through Gothic</td>
<td>3</td>
</tr>
<tr>
<td>or ART A100</td>
<td>Survey of Western Art from Prehistory Through Gothic</td>
<td></td>
</tr>
<tr>
<td>ART A101</td>
<td>Survey of Western Art from Renaissance to Modern</td>
<td>3</td>
</tr>
<tr>
<td>or ART A101H</td>
<td>Honors Survey of Western Art from Renaissance to Modern</td>
<td></td>
</tr>
<tr>
<td>ART A110</td>
<td>Color and Design: Two-Dimensional</td>
<td>3</td>
</tr>
<tr>
<td>ART A111</td>
<td>Color and Design: Three-Dimensional</td>
<td>3</td>
</tr>
<tr>
<td>ART A120</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
<tr>
<td>or ART A120H</td>
<td>Beginning Drawing Honors</td>
<td></td>
</tr>
</tbody>
</table>

Additional coursework may be required in Art, Film and/or Photography

**Biology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A180</td>
<td>Introduction to Biology for Majors 1: Cell and Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A185</td>
<td>Introduction to Biology for Majors 2: Ecology, Evolution, Diversity, and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM A180</td>
<td>General Chemistry A</td>
<td>5</td>
</tr>
</tbody>
</table>
## Transfer Student Course Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM A185</td>
<td>General Chemistry B</td>
<td>5</td>
</tr>
<tr>
<td>CHEM A220</td>
<td>Organic Chemistry A</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A225</td>
<td>Organic Chemistry B</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A130</td>
<td>University Physics 1 (non-majors)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS A135</td>
<td>University Physics 2 (non-majors)</td>
<td>4</td>
</tr>
<tr>
<td>MATH A180</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A180H</td>
<td>Calculus 1 Honors</td>
<td></td>
</tr>
<tr>
<td>MATH A185</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A185H</td>
<td>Calculus 2 Honors</td>
<td></td>
</tr>
</tbody>
</table>

Additional coursework may be required in Biology and/or Mathematics. Some schools will accept Physics A120 & A125 instead of A130 & A135.


<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS A185</td>
<td>Calculus Based Physics: Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS A280</td>
<td>Calculus Based Physics: Electricity/Magnetism</td>
<td>4</td>
</tr>
<tr>
<td>PHYS A285</td>
<td>Calculus Based Physics: Modern</td>
<td>4</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Biology, Chemistry and/or Mathematics.

### Child Development

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMDV A180</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Biology, Early Childhood, Food and Nutrition, Human Development, Psychology and/or Sociology.

### Computer Science

See Transfer Curriculum Guide for requirements.

### Criminal Justice and Law

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### Dance

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### Economics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON A170</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON A175</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH A180</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A180H</td>
<td>Calculus 1 Honors</td>
<td></td>
</tr>
<tr>
<td>MATH A185</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A185H</td>
<td>Calculus 2 Honors</td>
<td></td>
</tr>
</tbody>
</table>

Additional coursework may be required in Accounting, Business, Computer Science, Mathematics and/or Philosophy. CSU Fullerton requires Accounting A110 in addition to A101 & A102. CSULB requires Math A140 and A155.

### Engineering

See Transfer Curriculum Guide for requirements.

### English

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A100</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A101</td>
<td>Critical Reasoning: Fiction</td>
<td>4</td>
</tr>
<tr>
<td>or ENGL A101H</td>
<td>Critical Reasoning: Fiction Honors</td>
<td></td>
</tr>
<tr>
<td>ENGL A270</td>
<td>Survey of British Literature Before 1800</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A275</td>
<td>Survey of British Literature After 1800</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Communications, English, Foreign Language, History, Philosophy and/or Speech.

### Business (CSU)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT A101</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT A102</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS A110</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ECON A170</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON A175</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>CIS A111</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MATH A115</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A155</td>
<td>Finite Mathematics with Applications</td>
<td></td>
</tr>
<tr>
<td>MATH A140</td>
<td>Business Calculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH A160</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Accounting, Business, Computer Science, Mathematics and/or Philosophy. CSU Fullerton requires Accounting A110 in addition to A101 & A102. CSULB requires Math A140 and A155.

### Business (UC and Independent)

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### Chemistry

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM A180</td>
<td>General Chemistry A</td>
<td>5</td>
</tr>
<tr>
<td>CHEM A185</td>
<td>General Chemistry B</td>
<td>5</td>
</tr>
<tr>
<td>CHEM A220</td>
<td>Organic Chemistry A</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A225</td>
<td>Organic Chemistry B</td>
<td>3</td>
</tr>
<tr>
<td>MATH A180</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A180H</td>
<td>Calculus 1 Honors</td>
<td></td>
</tr>
<tr>
<td>MATH A185</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A185H</td>
<td>Calculus 2 Honors</td>
<td></td>
</tr>
<tr>
<td>MATH A280</td>
<td>Calculus 3</td>
<td>4</td>
</tr>
</tbody>
</table>
Environmental Studies
For UC, see www.assist.org (http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

Family and Consumer Science
For UC, see www.assist.org (http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

Film
For UC, see www.assist.org (http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

Food Science and Nutrition
See Transfer Curriculum Guide for requirements.

Foreign Languages
Foreign Language through A285H.

Forestry/Natural Resources Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A180</td>
<td>Introduction to Biology for Majors 1: Cell and Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A185</td>
<td>Introduction to Biology for Majors 2: Ecology, Evolution, Diversity, and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>or BIO A182</td>
<td>Zoology and Zoology Lab</td>
<td>4</td>
</tr>
<tr>
<td>&amp; A182L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL A183 &amp; A183L</td>
<td>Botany and Botany Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM A180</td>
<td>General Chemistry A</td>
<td>5</td>
</tr>
<tr>
<td>MATH A180</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A180H</td>
<td>Calculus 1 Honors</td>
<td></td>
</tr>
</tbody>
</table>

Additional coursework may be required in Anthropology, Biology, Computer Science, Chemistry, Ecology, Economics, Geology, History, Mathematics, Physics and/or Political Science.

Geography

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG A180</td>
<td>Physical Geography</td>
<td>3</td>
</tr>
<tr>
<td>or GEO A180H</td>
<td>Physical Geography Honors</td>
<td></td>
</tr>
<tr>
<td>GEOG A185</td>
<td>Cultural Geography</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Biology, Chemistry, Economics, Geography, Marine Science, Mathematics and/or Political Science.

Geology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHEM A180</td>
<td>General Chemistry A</td>
<td>5</td>
</tr>
<tr>
<td>CHEM A185</td>
<td>General Chemistry B</td>
<td>5</td>
</tr>
<tr>
<td>GEOL A110</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL A185/A185L</td>
<td>Evolution of the Earth</td>
<td>3</td>
</tr>
<tr>
<td>MATH A180</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
</tbody>
</table>

Health Sciences
See Transfer Curriculum Guide for requirements.

History
For UC, see www.assist.org (http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

Horticulture

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A183/A183L</td>
<td>Botany</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A180</td>
<td>General Chemistry A</td>
<td>5</td>
</tr>
<tr>
<td>CHEM A185</td>
<td>General Chemistry B</td>
<td>5</td>
</tr>
<tr>
<td>HORT A181</td>
<td>Ornamental Trees</td>
<td>3</td>
</tr>
<tr>
<td>HORT A182</td>
<td>Ornamental Shrubs</td>
<td>3</td>
</tr>
<tr>
<td>HORT A183</td>
<td>Plant Propagation</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Biology, Business, Chemistry, Computer Science and/or Mathematics.

Hotel and Food Service Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT A101</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT A102</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>CIS A111</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CA A100</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>ECON A170</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON A175</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Biology, Business, Chemistry, Culinary Arts, Food and Nutrition, Food Service Management, Mathematics, Philosophy, Psychology, Sociology and/or Speech.

Interior Design
For UC, see www.assist.org (http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

Kinesiology
For UC, see www.assist.org (http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.
### Journalism

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST A180</td>
<td>Introduction to Mass Communications</td>
<td>3</td>
</tr>
<tr>
<td>JOUR A110</td>
<td>News Writing and Reporting</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Computer Information Systems, Economics, Film and/or Photography.

### Liberal Studies

For UC, see www.assist.org (http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### Marine Science/Oceanography

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A180</td>
<td>Introduction to Biology for Majors 1: Cell and Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A185</td>
<td>Introduction to Biology for Majors 2: Ecology, Evolution, Diversity, and Physiology</td>
<td>5</td>
</tr>
</tbody>
</table>

or

| BIOL A182 & A182L | Zoology and Zoology Lab | 4     |

and

| BIOL A183 & A183L | Botany and Botany Lab | 4     |
| CHEM A180         | General Chemistry A    | 5     |
| CHEM A185         | General Chemistry B    | 5     |
| MATH A180         | Calculus 1             | 4     |
| or MATH A180H     | Calculus 1 Honors      | 4     |
| MATH A185         | Calculus 2             | 4     |
| or MATH A185H     | Calculus 2 Honors      | 4     |
| PHYS A130         | University Physics 1 (non-majors) | 4     |
| PHYS A135         | University Physics 2 (non-majors) | 4     |

Additional coursework may be required in Biology, Chemistry, Computer Science, Geology, Marine Science and/or Mathematics.

### Mathematics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH A180</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A180H</td>
<td>Calculus 1 Honors</td>
<td></td>
</tr>
<tr>
<td>MATH A185</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A185H</td>
<td>Calculus 2 Honors</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH A280</td>
<td>Calculus 3</td>
<td>3</td>
</tr>
<tr>
<td>MATH A280H</td>
<td>Calculus 3 Honors</td>
<td></td>
</tr>
<tr>
<td>MATH A285</td>
<td>Introduction to Linear Algebra and Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH A285H</td>
<td>Introduction to Linear Algebra and Differential Equations Honors</td>
<td>4</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Chemistry, Computer Science, Mathematics and/or Physics.

### Music

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS A180</td>
<td>Theory 1</td>
<td>3</td>
</tr>
<tr>
<td>MUS A185</td>
<td>Theory 2</td>
<td>3</td>
</tr>
<tr>
<td>MUS A280</td>
<td>Theory 3</td>
<td>3</td>
</tr>
<tr>
<td>MUS A285</td>
<td>Theory 4</td>
<td>3</td>
</tr>
</tbody>
</table>

Majors must demonstrate keyboard proficiency. Additional coursework may be required in Foreign Language and/or Music.

### Philosophy

For UC, see www.assist.org (http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### Physics/Astronomy

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH A180</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A180H</td>
<td>Calculus 1 Honors</td>
<td></td>
</tr>
<tr>
<td>MATH A185</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A185H</td>
<td>Calculus 2 Honors</td>
<td></td>
</tr>
<tr>
<td>MATH A280</td>
<td>Calculus 3</td>
<td>4</td>
</tr>
<tr>
<td>or MATH A280H</td>
<td>Calculus 3 Honors</td>
<td></td>
</tr>
<tr>
<td>PHYS A185</td>
<td>Calculus Based Physics: Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS A280</td>
<td>Calculus Based Physics: Electricity/ Magnetism</td>
<td>4</td>
</tr>
<tr>
<td>PHYS A285</td>
<td>Calculus Based Physics: Modern</td>
<td>4</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Astronomy, Chemistry, Computer Science and/or Mathematics.

### Political Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI A180</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>or PSCI A180H</td>
<td>American Government Honors</td>
<td></td>
</tr>
<tr>
<td>PSCI A185</td>
<td>Comparative Politics</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Computer Science, Economics, History, Mathematics and/or Political Science.

### Public Relations

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST A180</td>
<td>Introduction to Mass Communications</td>
<td>3</td>
</tr>
<tr>
<td>JOUR A110</td>
<td>News Writing and Reporting</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional coursework may be required in Computer Information Systems, Economics, Film, Marketing, Photography and/or Political Science.

### Religious Studies

For UC, see www.assist.org (http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### Social Ecology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH A160</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC A100</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

or PSYC A100H | Introduction to Psychology Honors |   |
Start with a question or statement:

**Social Science**

See Transfer Curriculum Guide for requirements.

**Social Work**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH A160</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC A100</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC A100H</td>
<td>Introduction to Psychology Honors</td>
<td></td>
</tr>
<tr>
<td>SOC A100</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>or SOC A100H</td>
<td>Introduction to Sociology Honors</td>
<td></td>
</tr>
</tbody>
</table>

Additional coursework may be required in Anthropology, Economics, History, Philosophy, Political Science, Psychology, Sociology and/or Speech.

**Speech and Communicative Disorders**

For UC, see www.assist.org (http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

**Teaching**

Students wishing to teach in the public schools in California must obtain the appropriate credential. Both the Multiple Subjects Credential and the Single Subject Credential require the completion of specific coursework. The completion of a teaching credential program usually requires five years of college. Most of the lower division coursework required for these programs is offered at OCC.

**Technology**

See Transfer Curriculum Guide for requirements.

**Theatre Arts**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA A106</td>
<td>Acting Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>THEA A107</td>
<td>Acting 2</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional coursework is required in Theatre Arts.

**Certification of General Education for Transfer to UC or CSU**

Upon a student's request, Orange Coast College will verify the completion of lower division general education requirements for transfer to the University of California (Intersegmental General Education Transfer Curriculum) or the California State University (either the CSU General Education Breadth Requirements or the Intersegmental General Education Transfer Curriculum). Students who transfer without certification will have to meet the general education requirements of the specific UC or CSU campus to which they are transferring. Meeting these requirements usually necessitates taking additional courses.

Both CSU General Education Breadth and the IGETC should be completed in their entirety prior to transfer. Students can request partial certification of CSU General Education Breadth sub-areas if all requirements within the sub-area are met. Students using the IGETC who are missing no more than two courses prior to matriculation at a four-year institution may request partial certification during any term except in the final term prior to graduation from the four-year institution.

Students who have taken courses at other colleges can have these courses "passed along" in the certification process. OCC will certify courses taken at other California community colleges and CSU in the areas designated by the offering college. Courses taken at California four-year colleges or out-of-state two- or four-year colleges will be certified if they are equivalent to courses on the IGETC or CSU General Education Breadth list taught at any of the California community colleges. Courses from foreign institutions cannot be used in the certification process.

Students requesting CSU General Education Breadth certification must complete at least 12 of the 39 required units at OCC.

OCC will certify courses only once. Certification is not automatic and must be requested after the completion of the last term, prior to transfer. This request should be made in the Enrollment Center in Watson Hall when final transcripts are sent to UC or CSU. Courses taken at other colleges after a student has left OCC will not be certified.

A course used in the certification process must be on either the IGETC or the CSU General Education Breadth list during the term in which it is taken. If a course is taken before it is approved for inclusion on the list, it cannot be certified. Similarly, a course which is taken after it has been removed from the list cannot be certified.

OCC will also certify the completion of the CSU American Institutions Requirement for students following either IGETC or CSU General Education Breadth.

**Transfer to a Four-Year College or University**

Orange Coast College provides the first two years of a four-year college or university program. Students enrolled in a transfer program will complete most of their general education and lower division major requirements before transferring. Students who are planning to transfer to a four-year college or university should meet with a counselor in the Counseling Center in Watson Hall to develop a Student Educational Plan, which will identify the courses needed to transfer.

**Transfer Center**

The Transfer Center, in Watson Hall, provides information and assistance to students who are preparing to transfer to four-year colleges and universities. Representatives from four-year schools are available in the Transfer Center to meet with students individually and provide information about their programs, requirements and procedures. The Center maintains a complete resource library containing college catalogs and other information on transfer programs. The Center also provides applications for CSU, UC and several independent colleges and universities, as well as offering assistance in the four-year campus application process. The Transfer Center sponsors a Transfer Day in the fall semester with representatives on campus from over 80 colleges and universities from both California and out-of-state. College fairs are held each semester with representatives from Southern California colleges and universities providing information to potential students. Transfer-planning workshops are offered throughout the academic year. Organized tours to various four-year campuses are also available through the Transfer Center each semester.
Transfer Center Web Page

The Transfer Center Web page on the Internet is a rich source of information for potential transfer students. Information at this site includes: a listing of scheduled events and college representative visits, transfer course requirements, articulation agreements, transfer planning guides, ratings and evaluations of colleges, student financial aid resources, and college search engines. There is also a complete application center which allows students to apply to colleges throughout the country electronically. The site can be reached at www.orangecoastcollege.edu/transfer (http://www.orangecoastcollege.edu/transfer/)

Transferability of Courses

Many courses offered at Orange Coast College will transfer to meet general education, major or elective requirements at four-year colleges and universities. All courses numbered A100 or above will transfer to California State University.

Courses which are transferable to the University of California will be designated in the Courses section of the catalog with a UC at the end of the course description. Some of the courses which are transferable to the University of California have credit limitations. Check the UC Transferable Course List to determine these limitations. This list is available in the Counseling Center and the Transfer Center.

Independent and out-of-state colleges and universities usually accept most courses which are transferable to the University of California, and many of the courses acceptable at CSU. Articulation agreements are available for many colleges in the Transfer Center website.

UC Davis - Transfer Admission Guarantee (TAG)

The UC Davis Transfer Admission Guarantee guarantees admission to UC Davis for students completing all program requirements. TAG students receive priority admission to UCD. The TAG is a formal written agreement between UC Davis, OCC and the student which outlines the courses and GPA required before transferring. It can be written after completion of 30 semester units of transferable coursework.

UC Irvine - Transfer Admission Guarantee (TAG)

UC Irvine’s Transfer Admission Guarantee offers provisional admission to well-qualified students in most majors. OCC students must meet with a UC representative in the Transfer Center for a review of their qualifications. Qualified applicants will be offered preliminary provisional admission to UCi and provided with recommendations for coursework that should be completed prior to transfer. Participants in this program must have a GPA designated in all transferable coursework.

UC Merced - Transfer Admission Guarantee (TAG)

UC Merced offers students who have completed all of their coursework at a California community college the opportunity to have guaranteed admission into their major at UC Merced. For more information please visit the Transfer Center.

UC Riverside - Transfer Admission Guarantee (TAG)

Students participating in the Transfer Admission Guarantee with UC Riverside are guaranteed admission. Students who want to participate in this program must visit the UCR website for more details. UCR also has an honors transfer program called the Honors Alliance for Riverside Transfers (HART). Participants in HART must first apply and be accepted into the OCC Honors Program.

UC Santa Barbara - Transfer Admission Guarantee (TAG)

UC Santa Barbara has established a Transfer Admission Guarantee which guarantees admission for fall terms. The TAG includes most majors in both the College of Letters and Science and the College of Engineering. To see if they qualify, students must make an appointment in the OCC Transfer Center.

UC Santa Cruz - Transfer Admission Guarantee (TAG)

UC Santa Cruz’s Transfer Admission Guarantee provides students with the opportunity to have their academic records reviewed in advance of the regular application process. Those who are approved for TAG know their admission to UCSC is guaranteed for the following fall; they won’t have to wait until spring to learn their admission decision.

UCLA - Transfer Alliance Program (TAP)

The Transfer Alliance Program with UC Los Angeles gives students priority consideration for admission to UCLA’s College of Letters and Science (except for the Communications Studies major). Students participating in TAP learn more about UCLA through meetings with UCLA counselors, faculty and students. TAP students may use the UCLA Library and participate in cultural and athletic events on the UCLA campus. Students wishing to participate in the program first must be accepted into the OCC Honors Program (p. 367).

University of California

The University of California has 10 campuses located throughout the state. Each campus within the system has its own unique geographic and academic character. The university offers bachelor’s, master’s and doctoral degrees in a variety of subject areas. Campuses of the university are located at Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, San Francisco (Schools of Medicine, Dentistry and Pharmacy), Santa Barbara and Santa Cruz.

University of California – Admission Requirements

Students planning to transfer to the University of California must follow the requirements listed below:

1. Applicants eligible for admission to the University as freshmen, meaning they satisfied the Subject, Scholarship, and Examination Requirements or were defined by the university during their senior
year as Eligible in the Local Context (ELC), are eligible to transfer after they have a "C" (2.0) average in their transferable college coursework.

2. Applicants who met the Scholarship Requirement but did not satisfy the A-G subject requirements must take transferable college courses in the missing high school subjects to be eligible to transfer.

3. Applicants not eligible for admission to the University as freshmen because they did not meet the Scholarship Requirement must:
   a. Complete 60 semester units of transferable college work with a grade point average of at least 2.4. Most campuses and majors require higher grade point averages.
   b. Complete a course pattern requirement to include:
      i. Two transferable college courses (three semester or four to five quarter units each) in English Composition;
      ii. One transferable college course (three semester or four to five quarter units each) in mathematical concepts and quantitative reasoning; and
      iii. Four transferable college courses (three semester or four to five quarter units each) chosen from at least two of the following subject areas: the Arts and Humanities; the Social and Behavioral Sciences; and the Physical and Biological Sciences.

### Policies and Regulations

In accordance with requirements of DVB Circular 20-76-84, Appendix P, this is to certify this school catalog is true and correct in policy at the time of printing.

- Academic Freedom (p. 409)
- Academic Honesty (p. 410)
- Academic Honors (p. 410)
- Academic Renewal Policy and Procedures (p. 410)
- Attendance (p. 410)
- Alcohol and Drug Abuse Notice (p. 411)
- Alternate Methods of Study and Course Credit (p. 411)
  - Advanced Placement Credit (AP) (p. 413)
  - College Level Examination Program (CLEP) (p. 416)
  - International Baccalaureate (IB) (p. 418)
- Classroom and Lab Access (p. 418)
- Course Auditing (p. 418)
- Disabled Students’ Rights and Responsibilities (p. 419)
- Equal Opportunity Policy (p. 419)
- Family Rights and Privacy Act of 1974 Policy (FERPA) (p. 419)
- Grades and Grade Points (p. 419)
- Grade Grievance (p. 421)
- Illegal Distribution of Copyrighted Materials (p. 421)
- Liability (p. 421)
- MyCoast (p. 421)
- Non-Discrimination Policy (p. 422)
- Declaración de no discriminación (p. 422)
- Chinh Sách Bất Kỷ Thi (p. 422)
- Online Learning (p. 422)
- Probation and Dismissal Policy (p. 422)
- Privacy of and Access to Student Records (p. 423)
- Remedial Coursework Limits (p. 423)
- Repetition of Courses (p. 423)
- Service Complaint (p. 424)
- Sexual Misconduct (p. 425)
- Student Classifications (p. 425)
- Student Community Standards and Code of Conduct (p. 425)
- Student Due Process Procedure (p. 425)
- Student Responsibility & Campus Communication (p. 425)
- Study Load (p. 426)
- Transcript Requests (p. 426)
- Veterans, Active Duty Military, and Credit for Military Training (p. 426)

### Academic Freedom

In accordance with District Board Policy 4030 (https://www.cccd.edu/boardoftrustees/BoardPolicies/Documents/Academic_Affairs/BP_4030_Academic_Freedom.pdf), Orange Coast College recognizes that the search for truth and free expression of ideas is essential to a democratic society, and affirms the following as principles of academic freedom:

1. Academic Freedom is essentially the right of faculty to express or discuss in their classrooms and throughout the District challenging ideas and topics related to courses they teach and their own academic, professional expertise. The primary responsibility is to achieve the objectives of the course outline of record. This does not preclude Faculty Members from using their professional judgment in discussing other topics with their students when aimed at enhancing student learning. The expression of this right is guided by a deep conviction of the worth and dignity of students and the advancement of their knowledge.

2. Academic Freedom includes the right of faculty to create and use instructional materials that may be thought-provoking or controversial and are relevant to the courses they teach to enhance student learning. These rights notwithstanding, Academic Freedom is to be practiced within the parameters of commonly recognized standards of teaching, professional conduct, and applicable policies and laws.

3. Faculty Members recognize the special responsibilities placed upon them. These responsibilities include the obligation to exercise critical self-discipline and sound judgment in using, extending, and transmitting knowledge. In the conduct of their teaching and professional lives, faculty members demonstrate intellectual honesty and devotion to continual improvement of scholarly competence.

With the shared understanding of the rights and responsibilities, Academic Freedom will be promoted and protected.

A Faculty Member’s exercising of his/her right of academic freedom as delineated below shall not be subject to any adverse action affecting the Faculty Member’s employment status with the District:

1. For the development and publication of instructional materials, as well as the interpretation of course content and adoption of innovative instructional methods compatible with the course outline of record and standards accepted within the academic community;

2. For exercising freedom to examine or endorse unpopular or controversial ideas within their fields of professional expertise as appropriate to course content, discussions with students, or academic research or publication. In so doing, the Faculty Member
shall attempt to be accurate, fair, objective, and show respect for diverse opinions;
3. For using or recommending, within the parameters of (a) above, instructional materials which may challenge prevailing social attitudes, or contain unpopular or controversial ideas;
4. For presenting all points of view in teaching and discussing controversial ideas or content in their courses and for including library materials of broad and diverse interest, information and enlightenment without prejudice in regards to the race/ethnicity, gender, sexual orientation, nationality, social, political or religious views of the authors;
5. For expressing in an appropriate forum the Faculty Member’s viewpoint on matters of College and District policy.
6. In collegial life, for example, for participation in the governance of their colleges, and engaging in the collegial expression of opinions in their department, college, and/or District meetings.

Political activities on college campuses shall be governed by District policies and procedures which shall be in accordance with the requirements of applicable Federal and State law.

The District shall respect the Faculty Member’s right in public life to exercise freedom of speech, freedom of association, freedom of union activity, and freedom to express expert opinions in a public forum provided it is clear that the Faculty Member is not speaking or acting on behalf of the District.

**Academic Honesty**

Orange Coast College has the responsibility to ensure that grades assigned are indicative of the knowledge and skill level of each student. Acts of academic dishonesty make it impossible to fulfill this responsibility. Faculty have a responsibility to ensure that academic honesty is maintained in their classroom. Students share that responsibility and are expected to refrain from all acts of academic dishonesty. Procedures for dealing with any violation of academic honesty will be followed. Additionally, the Student Code of Conduct, Board Policy 5500 (https://www.cccd.edu/boardoftrustees/BoardPolicies/Documents/Student_Services/BP_5500_Student_Code_of_Conduct.pdf), and Administrative Procedure 5500 (https://www.cccd.edu/boardoftrustees/BoardPolicies/Documents/Student_Services/AP_5500_Student_Code_of_Conduct.pdf) shall be applied to incidents of academic dishonesty.

**Academic Honors**

**President’s List**

Students are eligible for the President’s List after completing a semester of at least 12 units in courses awarding letter grades and a GPA of 4.0. To request a letter recognizing this achievement or obtain additional information, please contact the Office of the President in the Administration Building. Your official transcript will show that you are on the President’s List.

**Dean’s List**

Students are eligible to be included on the Dean’s List after completing a semester of at least 12 units in courses awarding letter grades and in which a GPA of 3.50 to 3.99 is earned. To request a letter recognizing this achievement or obtain additional information, please contact the Office of Instruction in the Administration Building. Your official transcript will show that you are on the Dean’s List.

**Honors List**

Students are eligible to be included on the Honors List after completing a semester of 6.0 to 11.9 units in courses awarding letter grades and in which a GPA of 3.75 to 4.0 is earned. To request a letter recognizing this achievement or obtain additional information, please contact the Office of Instruction in the Administration Building. Your official transcript will show that you are on the Honors List.

**Academic Renewal Policy and Procedures**

The Academic Renewal Policy (BP 4240 (https://www.cccd.edu/boardoftrustees/Documents/BP_4240_Academic_Renewal.pdf)) for the Coast Community College District is issued pursuant to Title 5 Section 55046 of the California Administrative Code of Regulations.

The purpose of this policy is to disregard past substandard academic performance of students when such work is not reflective of their current demonstrated ability. It is based on the recognition that due to unusual circumstances, or circumstances beyond the students’ control, the past substandard work will negatively affect their academic standing and unnecessarily prolong the rate at which they complete their current objectives. For information on how to petition for academic renewal, please consult with a counselor. The Academic Renewal Procedure, AP 4240 (https://www.cccd.edu/boardoftrustees/Documents/AP_4240_Academic_Renewal.pdf), can be found at:


**Attendance**

In accordance with District Administrative Procedure 5070 (https://www.cccd.edu/boardoftrustees/BoardPolicies/Documents/Student_Services/AP_5070_Attendance.pdf), OCC’s attendance policy is as follows.

Students are expected to attend class regularly. Failure to attend may be taken into consideration by instructors when assigning grades. Students who miss the first class meeting, are absent for two contiguous class meetings, or have too many absences MAY be dropped by the instructor at any time during the semester until the final deadline for withdrawal. Instructors may have more restrictive requirements for attendance and these requirements shall be stated in the class syllabus. Students who miss class due to verifiable extenuating circumstances beyond the control of the student, (i.e. accident, illness, death in the immediate family, etc.) should inform their Instructors prior to missing class meetings. A student who has been absent due to verifiable extenuating circumstances should report to the instructor immediately on the day of his/her return. No absence excuses a student from making up the work missed. Students should realize that absences may adversely affect their grades.

Please Note: It is the responsibility of the student to withdraw in order to meet all fee/refund deadlines and it is also the responsibility of the student to withdraw by state-mandated deadlines to avoid grade penalties.
Absences
Instructors may allow absences for reasons of illness, emergencies, or College-sponsored activities including field trips, athletic events, speech tournaments, or other co-curricular activities. Those student activities should be scheduled to minimize absences. Prior to the activity, instructors are responsible for submitting Co-Curricular Participation Lists to their academic division office. All others are responsible for submitting lists to the Dean of Student Services. Students, also, should inform instructors of upcoming co-curricular activities and ask for ways of making up the absences.

Absence/Make-up Activities
Instructors may require make-up activities equivalent to the lessons missed through absence. What constitutes an excused absence and any required make-up activities, should be stated clearly, preferably in writing, by the instructor at the start of the course.

It is recommended that a student not be absent more than the number of course units in order to maintain a passing course grade/credit. That is one hour of absence for each unit of class. State law requires an accurate attendance record in order for the College to receive funding.

Student Responsibility
It is the student’s responsibility to be aware of and adhere to State-mandated drop deadlines and deadlines to request a pass/no pass grading option. In addition, students should be aware of and adhere to the deadlines for fee-payments and fee refunds. Students should verify all transactions of adds or drops by printing their Student Class Program/ Web Schedule Bill for confirmation of actions taken. Finally, it is the student’s responsibility to be aware of and adhere to the Student Code of Conduct and all other student policies. Students who wish to submit either of the following petitions: Petition for Review of Account Status or 'Petition for Late Withdrawal' must submit the appropriate petition no later than the end of the subsequent semester in which the course in question was taken. (Ex: student received an “F” in ENGL A100 for Spring, 2017, the ‘Petition for Late Withdrawal’ must be submitted prior to the end of the Fall 2017 term.) Petitions submitted after the stated deadlines will not be accepted or reviewed. Students should check their MyCoast page — particularly their Student Class Program/ Web Schedule Bill — and their CCCD issued email account often for important updates and information. The CCCD email account is the official communication method that instructors and staff use to send students important information.

Working Students
Working students should remember that taking 15 units of college coursework requires about the same amount of time as working 40 hours a week; therefore, full-time students should work no more than 20 hours a week. Students may contact the Financial Aid Office or call (714) 432-5508 to determine their eligibility for financial assistance. No student should expect any instructor to lower course standards to accommodate them for not doing the required coursework due to work employment.

Alcohol and Drug Abuse Notice
It is the intention of the Coast Community College District to provide an environment that maximizes academic achievement and personal growth. The District recognizes that alcohol and other drug abuse pose a significant threat to the health, safety, and well-being of users and the people around them. Substance abuse also interferes with academic, co-curricular, and extra-curricular interests, and can lead to health, personal, social, economic, and legal problems.

Policy
OCC is committed to a drug-free campus so that students and staff can work in a drug-free environment.

In addition to our commitment to providing a drug-free environment, education, and help to students, there are state laws and the CCCD Student Code of Conduct which specifically prohibit the use and possession, distribution, or sale of drugs or alcohol on College property or at any College-sponsored activity or event. These rules also describe the penalties and disciplinary actions that may come into play when violations occur for those who abuse or don’t take positive steps to get help.

Information on the laws and Student Code of Conduct is available at the Dean of Students Office.

The District policy is that all use of alcohol and other drugs is prohibited on District property and at any College-sponsored activity regardless of its location. Furthermore, the use of tobacco is prohibited in all District buildings and vehicles, and in designated outdoor areas.

Referrals
The Student Health Center provides information and referrals to community resources, support groups, and social services. Visit the Student Health Center website on the OCC home page.

Students can meet with a mental health counselor or registered nurse at the Student Health Center if they have questions or concerns. In addition, a number of OCC staff members are available to refer students to the help they need.

Information
OCC offers several classes that focus on alcohol and drugs.

- Health Education A100 — Personal Health
- Health Education A122 — Drugs, Health, & Society
- Health Education A160 — Peer Health Education, Level 1
- Health Education A271 — Drugs and Sports

Self-Help Resources
A wide variety of self-help groups meet on campus, or in the community. All of them are open to students if they wish to take advantage of the services. Visit the Student Health Center for current referrals.

Confidential professional counseling for all active employees and family members is available. Employees can contact the Employee Assistance Program 24-hour helpline at (800) 635-3616.

Alternate Methods of Study and Course Credit
Orange Coast College recognizes work taken at other accredited colleges. Additional college credit is awarded in the following areas:

Credit by Examination
Credit by Examination may be offered on a limited basis at the discretion of the respective instructional division. Students who have completed a
minimum of 12 units at OCC, with a cumulative grade point average of at least 2.4 (C+) may inquire in the respective division office regarding eligible courses. If the course is eligible, students may petition through the division office and seek approval. Since Credit by Examination may not transfer to other institutions, students are strongly encouraged to make an appointment with a counselor. The final approval is determined by the respective division office.

1. Contact the respective division office to determine course eligibility for Credit by Examination.

2. If eligible, obtain and complete the petition from the respective division office and attach an official or unofficial OCC transcript showing successful completion of a minimum of 12 units at OCC prior to the petition, AND a cumulative grade point average (GPA) of 2.4 or higher. There are no exceptions to this requirement.

3. If the petition is approved by the dean and the instructor, take the petition to Enrollment Services in Watson Hall to file your petition for credit and make payment no later than the third week of the semester.

4. Meet with the instructor at the agreed-upon time and place, and take the examination. Exam grades are final and will be posted to the transcript. Failure to successfully complete the examination will result in an unsatisfactory grade.

Students should not enroll in the course to be taken as Credit by Examination. The course grade is clearly identified on the student’s transcript and designated as “Credit by Examination.” Transferability of Credit by Examination is subject to review by other colleges and universities, and may not transfer. Units earned by examination are excluded from enrollment verifications, Financial Aid eligibility, and OCC residence requirements for associate degrees.

Advanced Placement (AP)
Orange Coast College grants academic credit towards an Associate Degree for successful completion of examinations of the Advanced Placement Program of the College Entrance Examination Board.

Course credit or General Education area credits granted for Advanced Placement Examinations can be used to meet OCC general education requirements for an A.A. and/or A.S. degree under General Education Options 1, 2, or 3.

Course credit earned through Advanced Placement Examination can be used to certify general education requirements for transfer to UC under Option 3 (Intersegmental General Education Transfer Curriculum). AP credit can be used to certify general education for transfer to CSU under Option 2 (CSU General Education Breadth) or Option 3 (IGETC). Students certified using Option 3 can satisfy only one course requirement per exam on the IGETC.

Posting of Advanced Placement credit on the OCC transcript does not guarantee transfer to other colleges. The respective college or university determines eligibility for AP units, according to its policies. AP scores must be submitted for evaluation to the college or university where the student requests credit. Students planning to transfer should consult the catalog of the transfer institution to determine how AP credit is granted at that school.

Students may request AP credit through Enrollment Services on the first floor of Watson Hall. Submission of official exam results is required prior to any evaluation and posting of credit.

College Level Examination Program (CLEP)
Orange Coast College grants a maximum of 24 units for any combination of CLEP general exams and subject exams, using as minimum standards a score at or above 500 on the general exams and 50 on the subject exams, and 50 for all CLEP computer-based exams. CLEP scores count toward graduation requirements at OCC under General Education Option 1 or Option 2, and AS GE. CLEP credit may be used to certify general education requirements for transfer to the CSU only. The University of California does not grant credit for CLEP exams. CLEP scores must be submitted for evaluation directly to the college or university where the student requests credit. CLEP policies for each private or out-of-state four-year college may be found in their catalogs.

Students may request CLEP credit through Enrollment Services on the first floor of Watson Hall. Submission of official exam results is required prior to any evaluation and posting of credit.

International Baccalaureate (IB)
Students can earn OCC credit for International Baccalaureate examinations with a minimum score of 5. Exam results can be used to satisfy CSU General Education-Breadth and IGETC requirements but may require a score of 4 in some of the areas.

Students may request IB credit through Enrollment Services on the first floor of Watson Hall. Submission of official exam results is required prior to any evaluation and posting of credit.

Learning Contract for Independent Study
This is an alternative method of college study. If the instructor and the division dean approve, a student may take any course in the Orange Coast College catalog on a contract basis. The number of units received and the prescribed hours of study follow the approved catalog description. Two kinds of independent study exist at OCC:

Contracted Studies
A student who, for one reason or another, cannot attend a class or classes (excluding class or time conflicts) may negotiate an Independent Study Contract by following these procedures:

1. Request a Learning Contract from the respective division office.
2. Ask the instructor and division dean to approve the contract.
3. Take the contract personally to Enrollment Services in Watson Hall. If the contract is approved, the Enrollment Center will officially enroll the student in the course and notify the student.
4. After the student completes the coursework, the instructor will certify the earned grade. Enrollment Services will then record the grade on the student’s transcript.

Directed Studies
A student may take advanced coursework in a field of study after having completed the introductory courses. Most departments offer a set of directed study courses numbered A291-A295. In unusual cases, students may petition to enroll in directed studies without completing the pertinent beginning courses. Directed Studies students must ask the instructor to
fill out a Learning Contract for Independent Study and have it approved by
the Division Dean. Follow the procedures given under Contracted Studies.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Units</th>
<th>Clock Hours per Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>A291</td>
<td>1</td>
<td>54</td>
</tr>
<tr>
<td>A292</td>
<td>2</td>
<td>108</td>
</tr>
<tr>
<td>A293</td>
<td>3</td>
<td>162</td>
</tr>
<tr>
<td>A294</td>
<td>4</td>
<td>216</td>
</tr>
<tr>
<td>A295</td>
<td>5</td>
<td>270</td>
</tr>
</tbody>
</table>

A maximum credit of 3 units per term —6 units total— in otherwise
transferable subject areas is allowed. Letter grades are assigned for
Directed Studies (grade only). Transfer credit for courses of this kind
is contingent upon a review of the course outline by a University of
California or California State University campus.

Not all courses are eligible for Contracted Studies or Directed Studies
options. Students must first meet with the appropriate instructor and
division dean to determine if a Learning Contract for Independent Study is
a viable option.

Licensure Credit

Radiologic Technologist

Forty-five units may be awarded for holders of valid Certified Radiologic
Technologist State License (or equivalent agency). Students must show
the original license to Enrollment Services in order to be eligible for this
credit. Credits are posted to transcripts upon completion of 12 units of
credit at Orange Coast College.

Other Licensure Credit

Other licenses issued by the State of California will be considered through
the Academic Petition Council procedures as appropriate.

Military Study Programs

OCC recognizes and grants academic credit to veterans for eligible
military service and training credit completed in the armed forces for
a maximum of 15 units. To be eligible for academic credit, Veterans must
have had at least one year of active duty service. OCC reserves the right
to evaluate and grant credit based on the academic policies established

Advanced Placement Credit (AP)

Students can earn AP credit with a minimum score of 3 unless otherwise indicated.

The AP Chart is based on the most current information available. Although every attempt has been made to ensure the accuracy of the information
provided, make
sure to use the following links to verify the information.

AP Courses and Exams College Board — https://apcentral.collegeboard.org

<table>
<thead>
<tr>
<th>AP Examination</th>
<th>OCC AA/AS (Subject Credit and/or GE) Units &amp; Area</th>
<th>CSU GE Area for Certification</th>
<th>Total CSU Semester Transfer Units</th>
<th>IGETC Area for Certification</th>
<th>Total UC Semester Transfer Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>Art A100 &amp; A101 / 6 units / Area C</td>
<td>C1 or C2, 3 semester units</td>
<td>6</td>
<td>3A or 3B, 3 semester units</td>
<td>5.3</td>
</tr>
<tr>
<td>Biology</td>
<td>Biol A100 / 4 units / Area B</td>
<td>B2 &amp; B3, 4 semester units</td>
<td>6</td>
<td>5B with Lab, 4 semester units</td>
<td>5.3</td>
</tr>
</tbody>
</table>

by the College. Veterans may apply for evaluation of this credit by
presenting official military service and training records — including a

copy of discharge papers indicating honorable discharge — to Veteran’s
Services in the Enrollment Center on the first floor of Watson Hall.
Awarded credit will be applied once the student has completed 12 units
at OCC. Credit earned for military training may count toward satisfying
requirements for the Associate Degrees; military credit awarded may not
transfer to other colleges. Veterans are advised to check with the college
they plan to transfer to for information regarding awarding military
credit. Under no circumstances will OCC graduate a student who has not
completed 12 units of OCC coursework.

Technical Advanced Placement Process
(TAP for ROP/High School Students)

Students who complete approved articulated courses in high school,
or with an ROP program with a “B” grade or better, may be eligible
for TAP credit at the college. Students must provide the appropriate
TAP Petition Form and Official High School Transcripts to the
Counseling Office at OCC for processing. Additional information is
available on the OCC website at www.orangecoastcollege.edu (http://
www.orangecoastcollege.edu)

Upper-Division Credit

Request for transfer of upper-division courses and credits will be
evaluated on a case by case basis. Upper-division units may be
considered for application towards a Certificate, local/non-transfer
Associate Degree, Associate Degree for Transfer (ADT), CSU/GE, and
IGETC certification. The units will count toward the 60 units required for
the associate degrees and meet the transfer requirements. If you are
using upper-division courses to fulfill a lower-division IGETC or CSU/GE
course or Associate Degree for Transfer major requirement, remember
that you are required to have a certain number of upper-division courses
at the transfer institution. Contact the receiving institution to see how
upper-division course credit will be awarded towards the baccalaureate
degree. See the IGETC Standards (http://ccctransfer.org/sites/default/
files/documents/IGETC/2015-16/IGETC-Standardsversion-1-6-final.pdf)
or the CSU policy (http://www.calstate.edu/oe/OE-%20110100.html) for
details.
<table>
<thead>
<tr>
<th>AP Examination</th>
<th>OCC AA/AS (Subject Credit and/or GE Units &amp; Area)</th>
<th>CSU GE Area for Certification</th>
<th>Total CSU Semester Transfer Units</th>
<th>IGETC Area for Certification</th>
<th>Total UC Semester Transfer Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus AB</td>
<td>Math A180 / 4 units / Area A2</td>
<td>B4, 3 semester units</td>
<td>3</td>
<td>2A, 3 semester units</td>
<td>2.6*</td>
</tr>
<tr>
<td>Calculus BC *</td>
<td>Math A180 / 4 units / Area A2</td>
<td>B4, 3 semester units</td>
<td>6</td>
<td>2A, 3 semester units</td>
<td>5.3*</td>
</tr>
<tr>
<td>AP Calculus Exam Limitations *</td>
<td>*score 5 for A180 + A185 / 8 units max</td>
<td>*Max 1 exam toward transfer</td>
<td>*5.3 semester units for both</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>Chem A110 / 5 units / Area B</td>
<td>B1 &amp; B3, 4 semester units</td>
<td>6</td>
<td>5A with Lab, 4 semester units</td>
<td>5.3</td>
</tr>
<tr>
<td>Chinese Language &amp; Culture</td>
<td>N/A / 5 units / Area C</td>
<td>C2, 3 semester units</td>
<td>6</td>
<td>3B &amp; 6A, 3 semester units</td>
<td>5.3</td>
</tr>
<tr>
<td>Computer Science: A</td>
<td>N/A / N/A / N/A</td>
<td>N/A</td>
<td>3*</td>
<td>N/A</td>
<td>1.3*</td>
</tr>
<tr>
<td>Computer Science: AB</td>
<td>N/A / N/A / N/A</td>
<td>N/A</td>
<td>6*</td>
<td>N/A</td>
<td>2.6*</td>
</tr>
<tr>
<td>Computer Science Principles</td>
<td>N/A / N/A / N/A</td>
<td>B4, 3 semester units</td>
<td>6</td>
<td>N/A</td>
<td>5.3</td>
</tr>
<tr>
<td>AP CS Exam Limitations *</td>
<td></td>
<td></td>
<td>*Max 1 exam toward transfer</td>
<td></td>
<td>2.7 semester units for both; AB always supersedes A</td>
</tr>
<tr>
<td>English Language &amp; Composition</td>
<td>Engl A100 / 3 units / Area A1</td>
<td>A2, 3 semester units</td>
<td>6</td>
<td>1A, 3 semester units</td>
<td>5.3*</td>
</tr>
<tr>
<td>English Literature &amp; Composition</td>
<td>Engl A100 / 6 units / Area A1 &amp; C1 (AA) / C2 (AS)</td>
<td>A2 &amp; C2, 6 semester units</td>
<td>6</td>
<td>1A or 3B *, 3 semester units</td>
<td>5.3*</td>
</tr>
<tr>
<td>AP English Exam Limitations *</td>
<td></td>
<td></td>
<td>*Max. 8 quart./5.3 semester units for both</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Science</td>
<td>N/A / 4 units / Area B</td>
<td>B1 &amp; B3*, 4 semester units</td>
<td>4</td>
<td>5A with Lab, 3 semester units</td>
<td>2.6</td>
</tr>
<tr>
<td>AP ES Limitations *</td>
<td></td>
<td></td>
<td>*If taken prior to Fall 2009 B1 &amp; B3 or B2 &amp; B3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>European History</td>
<td>Hist A180 &amp; A185 / 6 units / Area C1 or D2 (AA) / C2 or D (AS)</td>
<td>C2 or D6, 3 semester units</td>
<td>6</td>
<td>3B or 4F, 3 semester units</td>
<td>5.3</td>
</tr>
<tr>
<td>French Language &amp; Culture</td>
<td>Fren A185 / 5 units / Area C1 (AA) / C2 (AS)</td>
<td>C2, 3 semester units</td>
<td>6</td>
<td>3B &amp; 6A, 3 semester units</td>
<td>5.3</td>
</tr>
<tr>
<td>French Literature &amp; Culture</td>
<td>N/A / 3 units / Area C1 (AA) / C2 (AS)</td>
<td>C2*, 3 semester units</td>
<td>6</td>
<td>3B &amp; 6A, 3 semester units</td>
<td>5.3</td>
</tr>
<tr>
<td>AP French Literature Exam Limitations *</td>
<td></td>
<td></td>
<td>*If taken prior to Fall 2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>German Language</td>
<td>German A185 / 5 units / Area C1 (AA) / C2 (AS)</td>
<td>C2, 3 semester units</td>
<td>6</td>
<td>3B &amp; 6A, 3 semester units</td>
<td>5.3</td>
</tr>
<tr>
<td>Government &amp; Politics:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparative</td>
<td>PSCI A185 / 3 units / Area D1 (AA) / D (AS)</td>
<td>D8, 3 semester units</td>
<td>3</td>
<td>4H, 3 semester units</td>
<td>2.6</td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government &amp; Politics:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP Government Exam Limitations *</td>
<td>*Doesn't fulfill CA Govt. requirement</td>
<td>*Doesn't fulfill CA Govt. requirement</td>
<td>*Doesn't fulfill CA Govt. requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Geography</td>
<td>N/A / 3 units / Area D1 (AA) / D (AS)</td>
<td>D5, 3 semester units</td>
<td>3</td>
<td>4E, 3 semester units</td>
<td>2.6</td>
</tr>
<tr>
<td>Italian Language and Culture</td>
<td>N/A / 5 units / Area C1 (AA) / C2 (AS)</td>
<td>C2, 3 semester units</td>
<td>6</td>
<td>3B &amp; 6A, 3 semester units</td>
<td>5.3</td>
</tr>
<tr>
<td>Japanese Language and Culture</td>
<td>N/A / 5 units / Area C1 (AA) / C2 (AS)</td>
<td>C2, 3 semester units</td>
<td>6</td>
<td>3B &amp; 6A, 3 semester units</td>
<td>5.3</td>
</tr>
<tr>
<td>Latin Literature</td>
<td>N/A / 3 units / Area C1 (AA) / C2 (AS)</td>
<td>C2*, 3 semester units</td>
<td>6</td>
<td>3B &amp; 6A, 3 semester units</td>
<td>2.6</td>
</tr>
<tr>
<td>AP Examination</td>
<td>OCC AA/AS (Subject Credit and/or GE Units &amp; Area)</td>
<td>CSU GE Area for Certification</td>
<td>Total CSU Semester Transfer Units</td>
<td>IGETC Area for Certification</td>
<td>Total UC Semester Transfer Units</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------------------------------------</td>
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<td>------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>AP Latin Literature Exam Limitations*</td>
<td>*If taken prior to Fall 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latin: Vergil</td>
<td>*If taken prior to Fall 2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latin</td>
<td>N/A / 3 units / Area C1 (AA) / C2 (AS)</td>
<td>C2*, 3 semester units</td>
<td>6</td>
<td>3B &amp; 6A, 3 semester units</td>
<td>2.6</td>
</tr>
<tr>
<td>Macro Economics</td>
<td>Econ A175 / 3 units / Area D2 (AA) / D (AS)</td>
<td>D2, 3 semester units</td>
<td>3</td>
<td>4B, 3 semester units</td>
<td>2.6</td>
</tr>
<tr>
<td>Micro Economics</td>
<td>Econ A170 / 3 units / Area D2 (AA) / D (AS)</td>
<td>D2, 3 semester units</td>
<td>3</td>
<td>4B, 3 semester units</td>
<td>2.6</td>
</tr>
<tr>
<td>Music Theory</td>
<td>Mus A115 / 3 units / Area C1</td>
<td>C1*, 3 semester units</td>
<td>6</td>
<td>N/A</td>
<td>5.3</td>
</tr>
<tr>
<td>AP Music Theory Exam Limitations*</td>
<td>*If taken prior to Fall 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics 1</td>
<td>Phys A120 / 4 units / Area B</td>
<td>B1 &amp; B3, 4 semester units</td>
<td>4</td>
<td>5A with Lab, 3 semester units</td>
<td>2.7</td>
</tr>
<tr>
<td>Physics 2</td>
<td>Phys A125 / 4 units / Area B</td>
<td>B1 &amp; B3, 4 semester units</td>
<td>4</td>
<td>5A with Lab, 3 semester units</td>
<td>2.7</td>
</tr>
<tr>
<td>Physics B</td>
<td>Phys A110 &amp; A111 / 4 units / Area B</td>
<td>B1 &amp; B3*, 4 semester units prior to Fall 2013</td>
<td>6</td>
<td>5A with Lab, 4 semester units</td>
<td>5.3*</td>
</tr>
<tr>
<td>Physics C: Mechanics</td>
<td>Phys A120 / 4 units / Area B</td>
<td>B1 &amp; B3*, 4 semester units</td>
<td>4</td>
<td>5A with Lab, 3 semester units</td>
<td>2.6*</td>
</tr>
<tr>
<td>Physics C: Electricity and Magnetism</td>
<td>Phys A125 / 4 units / Area B</td>
<td>B1 &amp; B3*, 4 semester units</td>
<td>4</td>
<td>5A with Lab, 3 semester units</td>
<td>2.6*</td>
</tr>
<tr>
<td>AP Physics Exam Limitations*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>Psyc A100 / 3 units / Area D3 (AA) / D (AS)</td>
<td>D9, 3 semester units</td>
<td>3</td>
<td>4I, 3 semester units</td>
<td>2.6</td>
</tr>
<tr>
<td>Spanish Language and Culture</td>
<td>Span A185 / 5 units / Area C1 (AA) / C2 (AS)</td>
<td>C2, 3* semester units</td>
<td>6</td>
<td>3B &amp; 6A, 3 semester units</td>
<td>5.3</td>
</tr>
<tr>
<td>AP Spanish Language Exam Limitations*</td>
<td>*6 semester units if taken prior to Spring 2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish Literature and Culture</td>
<td>N/A / 3 units / Area C1 (AA) / C2 (AS)</td>
<td>C2, 3* semester units</td>
<td>6</td>
<td>3B &amp; 6A, 3 semester units</td>
<td>5.3</td>
</tr>
<tr>
<td>AP Spanish Literature Exam Limitations*</td>
<td>*6 semester units if taken prior to Spring 2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td>Math A160 / 3 units / Area A2</td>
<td>B4, 3 semester units</td>
<td>3</td>
<td>2A, 3 semester units</td>
<td>2.6</td>
</tr>
<tr>
<td>Studio Art: 2D Design</td>
<td>Art A110 / 3 units / Area C1</td>
<td>N/A</td>
<td>3</td>
<td>N/A</td>
<td>5.3*</td>
</tr>
<tr>
<td>Studio Art: 3D Design</td>
<td>N/A / N/A / N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>5.3*</td>
</tr>
<tr>
<td>Studio Art: Drawing</td>
<td>N/A / N/A / N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>5.3*</td>
</tr>
<tr>
<td>AP Studio Art Exam Limitations*</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>United States History</td>
<td>Hist A170 &amp; A175 / 6 units / Area D1 (AA) / C2 or D (AS)</td>
<td>C2 or D6, 3 semester units</td>
<td>6</td>
<td>3B or 4F, 3 semester units</td>
<td>5.3</td>
</tr>
<tr>
<td>World History: Modern</td>
<td>Hist A61 &amp; A162 / 6 units / Area D1 (AA) / C2 or D (AS)</td>
<td>C2 or D6, 3 semester units</td>
<td>3</td>
<td>3B or 4F, 3 semester units</td>
<td>5.3</td>
</tr>
</tbody>
</table>
Many colleges or universities may apply AP test credit toward satisfaction of subject or specific requirements (e.g., major). AP policies vary by institution. Students should see a counselor to discuss how AP is applied based on the transfer institution’s application of AP major credit. UC AP major credit information can be found at http://admission.universityofcalifornia.edu/counselors/exam-credit/ap-credits/index.html

**OCC Associate Degrees** – Students should be aware that AP test credit is evaluated by corresponding it to an equivalent OCC course (e.g. History A170). A student who receives AP Credit and then takes the equivalent OCC course will have the unit credit for such duplication deducted prior to being awarded the A.A. or A.S. degree.

Credit by Advanced Placement exam is noted and listed first on a student’s transcript, with units assigned and no grade. Course credit and units granted to the OCC Associate Degree may differ from course credit and units granted by a transfer institution. For more information, please see a counselor.

**CSU GE** – The Advanced Placement examinations may be incorporated into the certification of California State University General Education-Breadth requirements by any certifying institution. All CSU campuses will accept the minimum units shown and apply them toward fulfillment of the designated General Education-Breadth area if the examination is included as part of a full or subject-area certification. Please note that individual CSU campuses may choose to grant more units than those specified toward completion of General Education-Breadth requirements.

**IGETC** – AP Exams must be used in an area indicated regardless of where the certifying California Community College’s discipline is located. Many colleges or universities may apply AP credit toward satisfaction of subject or specific requirements (e.g. major). AP policies vary by institution. For policy information regarding individual institutions, visit apstudent.collegeboard.org/creditandplacement

### College Level Examination Program (CLEP)

The CLEP Chart is based on the most current information available. Although every attempt has been made to ensure the accuracy of the information provided, make sure to use the following link to verify the information: https://calstate.policystat.com/policy/7800250/latest/.

Course credit and units granted at Orange Coast College may differ from course credit and units granted by a transfer institution.

<table>
<thead>
<tr>
<th>CLEP Exam</th>
<th>OCC Passing Score</th>
<th>OCC AA/AS GE Area</th>
<th>OCC Units Towards AA/AS GE</th>
<th>CSU Passing Score</th>
<th>CSU Minimum Units Earned Toward Transfer</th>
<th>Units Towards CSU GE Breadth</th>
<th>American Institutions and/or GE Breadth Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Government</td>
<td>50</td>
<td>D1/D</td>
<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>D8</td>
</tr>
<tr>
<td>American Literature</td>
<td>50</td>
<td>C1/C2</td>
<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>C2</td>
</tr>
<tr>
<td>Analyzing &amp; Interpreting Literature</td>
<td>50</td>
<td>C1/C2</td>
<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>C2</td>
</tr>
<tr>
<td>Biology</td>
<td>50</td>
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<td>3</td>
<td>50</td>
<td>3</td>
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<td>B2</td>
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<tr>
<td>Calculus</td>
<td>50</td>
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<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>B4</td>
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<tr>
<td>Chemistry</td>
<td>50</td>
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<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>B1</td>
</tr>
<tr>
<td>College Algebra</td>
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<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
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</tr>
<tr>
<td>College Algebra - Trig</td>
<td>50</td>
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<td>3</td>
<td>50</td>
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<td>3</td>
<td>B4</td>
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<tr>
<td>College Mathematics</td>
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<td>0</td>
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</tr>
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<td>English Comp (No Essay)</td>
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<td>50</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
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<tr>
<td>English Comp (With Essay)</td>
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<td>50</td>
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<td>English Literature</td>
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<td>50</td>
<td>3</td>
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<td>(Fall 2011)**</td>
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<td>Financial Accounting</td>
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<td>0</td>
<td>50</td>
<td>3</td>
<td>0</td>
<td>N/A</td>
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<tr>
<td>CLEP Exam</td>
<td>OCC Passing Score</td>
<td>OCC AA/AS GE Area</td>
<td>OCC Units Towards AA/AS GE</td>
<td>CSU Passing Score</td>
<td>CSU Minimum Units Earned Toward Transfer</td>
<td>Units Towards CSU GE Breadth</td>
<td>American Institutions and/or GE Breadth Area</td>
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<td>French Level I*</td>
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<td>50</td>
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<td>French Level II*</td>
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<td>3</td>
<td>59</td>
<td>12</td>
<td>3</td>
<td>C2 (Fall 2015)**</td>
</tr>
<tr>
<td>French Level III*</td>
<td>59</td>
<td>C1/C2</td>
<td>3</td>
<td>59</td>
<td>9</td>
<td>3</td>
<td>C2</td>
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<tr>
<td>Freshman College Comp</td>
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<td>0</td>
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<td>German Level I*</td>
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<td>50</td>
<td>6</td>
<td>0</td>
<td>N/A</td>
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<tr>
<td>German Level II*</td>
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<td>3</td>
<td>60</td>
<td>12</td>
<td>3</td>
<td>C2 (Fall 2015)**</td>
</tr>
<tr>
<td>German Level III*</td>
<td>60</td>
<td>C1/C2</td>
<td>3</td>
<td>60</td>
<td>9</td>
<td>3</td>
<td>C2</td>
</tr>
<tr>
<td>History, US I</td>
<td>50</td>
<td>D1/D</td>
<td>3</td>
<td>50</td>
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<td>3</td>
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<tr>
<td>History, US II</td>
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<td>D1/D</td>
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<td>3</td>
<td>D6+US-1</td>
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<tr>
<td>Human Growth and Dev</td>
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<td>D</td>
<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>E</td>
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<tr>
<td>Humanities</td>
<td>50</td>
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<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>C2</td>
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<td>Info Systems &amp; Computer Apps</td>
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<td>3</td>
<td>50</td>
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<td>Intro to Educational Psychology</td>
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<td>0</td>
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<tr>
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<td>50</td>
<td>D3/D</td>
<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>D9</td>
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<tr>
<td>Intro to Sociology</td>
<td>50</td>
<td>D2/D</td>
<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>D0</td>
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<td>Natural Sciences</td>
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<td>3</td>
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<td>3</td>
<td>B1 or B2</td>
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<tr>
<td>Pre-Calculus</td>
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<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>B4</td>
</tr>
<tr>
<td>Principles of Accounting</td>
<td>50</td>
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<td>0</td>
<td>50</td>
<td>3</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Macroeconomics</td>
<td>50</td>
<td>D2/D</td>
<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>D2</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>50</td>
<td>3</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Marketing</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>50</td>
<td>3</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>50</td>
<td>D2/D</td>
<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>D2</td>
</tr>
<tr>
<td>Social Sciences and History</td>
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<td>50</td>
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<td>0</td>
<td>N/A</td>
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<tr>
<td>Spanish Level I*</td>
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<td>0</td>
<td>50</td>
<td>6</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>Spanish Level II*</td>
<td>63</td>
<td>C1/C2</td>
<td>3</td>
<td>63</td>
<td>12</td>
<td>3</td>
<td>C2 (Fall 2015)**</td>
</tr>
<tr>
<td>Spanish Level III*</td>
<td>63</td>
<td>C1/C2</td>
<td>3</td>
<td>63</td>
<td>9</td>
<td>3</td>
<td>C2</td>
</tr>
<tr>
<td>Trigonometry</td>
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<td>A2</td>
<td>3</td>
<td>50</td>
<td>3</td>
<td>4</td>
<td>B4 (Fall 2006)**</td>
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<tr>
<td>Western Civilization I</td>
<td>50</td>
<td>D2/D</td>
<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>C2 or D6</td>
</tr>
<tr>
<td>Western Civilization II</td>
<td>50</td>
<td>D2/D</td>
<td>3</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>D6</td>
</tr>
</tbody>
</table>

*If a student passes more than one CLEP test in the same language other than English (e.g., two exams in French), then only one examination may be applied to the baccalaureate. For each test in a language other than English, a passing score of 50 is considered “Level I” and earns six units of baccalaureate credit; the higher score listed for each test is considered “Level II” and earns additional units of credit and placement in Area C2 of General Education Breadth, as noted.
International Baccalaureate (IB)

Students seeking certification in GE Breadth prior to transfer must have passed the test before this date.

Students can earn OCC credit for International Baccalaureate examinations with a minimum score of 5, except where noted. Exam results can be used to satisfy CSU General Education Breadth and IGETC requirements but may require a score of 4 in some of the areas.

The IB Chart is based on the most current information available. Although every attempt has been made to ensure the accuracy of the information provided, make sure to use the following link to verify the information: https://calstate.policystat.com/policy/7800250/latest/.

<table>
<thead>
<tr>
<th>Exam</th>
<th>OCC AA/AS GE Area</th>
<th>CSU GE Area</th>
<th>CSU Minimum Units Earned Toward Transfer</th>
<th>IGETC Area</th>
<th>UC Semester Units Earned Toward Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology HL</td>
<td>B, 3 units</td>
<td>B2, 3 units</td>
<td>6</td>
<td>5B (without lab), 3 units</td>
<td>5.3</td>
</tr>
<tr>
<td>Chemistry HL</td>
<td>B, 3 units</td>
<td>B1, 3 units</td>
<td>6</td>
<td>5A (without lab), 3 units</td>
<td>5A (without lab), 3 units</td>
</tr>
<tr>
<td>Economics HL</td>
<td>D2/D, 3 units</td>
<td>D2, 3 units</td>
<td>6</td>
<td>4B, 3 units</td>
<td>5.3</td>
</tr>
<tr>
<td>Geography HL</td>
<td>D2/D, 3 units</td>
<td>D5, 3 units</td>
<td>6</td>
<td>4E, 3 units</td>
<td>5.3</td>
</tr>
<tr>
<td>History (any region)</td>
<td>D2/C2 or D, 3 units</td>
<td>C2 or D6, 3 units</td>
<td>6</td>
<td>3B or 4F, 3 units</td>
<td>5.3</td>
</tr>
<tr>
<td>Language A1 (any language, except English) HL</td>
<td>C1/C2, 3 units</td>
<td>N/A</td>
<td>0</td>
<td>3B &amp; 6A (UC only), 3 units</td>
<td>5.3</td>
</tr>
<tr>
<td>Language A2 (any language, except English) HL</td>
<td>C1/C2, 3 units</td>
<td>N/A</td>
<td>0</td>
<td>3B &amp; 6A (UC only), 3 units</td>
<td>5.3</td>
</tr>
<tr>
<td>Language A1 (any language) HL</td>
<td>C1/C2, 3 units</td>
<td>C2*, 3 units</td>
<td>6*</td>
<td>3B, 3 units</td>
<td>5.3</td>
</tr>
<tr>
<td>Language A2 (any language) HL</td>
<td>C1/C2, 3 units</td>
<td>C2*, 3 units</td>
<td>6*</td>
<td>3B, 3 units</td>
<td>5.3</td>
</tr>
<tr>
<td>Mathematics HL</td>
<td>A2, 3 units</td>
<td>B4*, 3 units</td>
<td>6*</td>
<td>2A, 3 units</td>
<td>5.3</td>
</tr>
<tr>
<td>Physics HL</td>
<td>B, 3 units</td>
<td>B1, 3 units</td>
<td>6</td>
<td>5A (without lab), 3 units</td>
<td>5.3</td>
</tr>
<tr>
<td>Psychology HL</td>
<td>D, 3 units</td>
<td>D9, 3 units</td>
<td>3</td>
<td>4I, 3 units</td>
<td>5.3</td>
</tr>
<tr>
<td>Theatre HL</td>
<td>C, 3 units</td>
<td>C1*, 3 units</td>
<td>6*</td>
<td>3A, 3 units</td>
<td>5.3</td>
</tr>
</tbody>
</table>

* A minimum score of 4 is needed for CSU credit.

CSU GE – The IB examinations may be incorporated into the certification of California State University General Education-Breadth requirements by any certifying institution. All CSU campuses will accept the minimum units shown and apply them toward fulfillment of the designated General Education-Breadth area if the examination is included as part of a full or subject-area certification. Please note that individual CSU campuses may choose to grant more units than those specified toward completion of General Education-Breadth requirements.

IGETC – IB Exams must be used in an area indicated regardless of where the certifying California Community College's discipline is located.

Classroom and Lab Access

With the exception of persons expressly invited by the faculty, or persons providing an accommodation per Special Services, persons sitting in on a class or lab or using an athletic facility must be enrolled in that class or lab.

Course Auditing

In accordance with the California Education Code Section 76370 and district policy, students may audit courses specifically designated by the college as eligible for audit. Students who audit classes will be expected to participate in all class activities as required by the instructor. No credit is awarded. Further information can be obtained in the division offices.

Conditions for Course Auditing

1. The course has been designated by the College as eligible for audit.
2. The student is ineligible to enroll for credit because the course has already been taken for the maximum number of times allowed within the Coast Community College District.

Note: Permission to audit a class requires the approval of the faculty member and Division Dean. Students who enroll in a class for the semester requested are ineligible for an audit option.
Disabled Students’ Rights and Responsibilities

1. Under Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990, Orange Coast College will take all necessary steps to ensure that no student with a verified disability is denied the benefits of, excluded from participation in, or otherwise subjected to discrimination in an education program because of the absence of auxiliary aids or academic accommodations.

2. Participation by students with disabilities in Orange Coast College’s Disabled Students Programs and Services (DSPS) shall be entirely voluntary.

3. A student with a verified disability may be entitled to auxiliary aids or academic accommodations. The decision for authorization of such accommodations is the responsibility of the DSPS counselor after a review of documentation verifying the disability and any resulting educational barriers.

4. Each student has the right to privacy of his/her confidential information. No information held by the Orange Coast College DSPS will be released without written permission of the student.

Responsibilities

Students may have services terminated from the DSPS for any of the following reasons:

1. Failure to provide information from an appropriate professional to verify the students’ disability.

2. Failure of the student to complete and sign the Student Education Plan.

3. Failure to complete the required testing to determine eligibility in the learning disabilities program.

4. Students using interpreter services must notify Orange Coast College of any absences at least 24 hours in advance. Upon the first unreported absence, the interpreter may be canceled for the next class. The student must discuss the unreported absence with the DSPS counselor before interpreter services are resumed. If the student accumulates three unreported absences, interpreter services may be terminated for the semester.

5. Students utilizing reader or tutoring services must notify the service provider in advance of any absences. Three unexcused absences may result in termination of services.

6. Students attending Adapted Kinesiology or DSPS tutoring classes may be dropped from these classes if they exceed three absences.

7. Students must conform to the college’s code of conduct. Students not conforming to this code will be referred to the Dean of Students for disciplinary action.

8. Students not making measurable progress toward the goals established in the Student Education Plan may have services terminated.

9. Students enrolled in regular classes must meet the academic standards established by the College. Failure to meet these standards may result in suspension from the college.

Equal Opportunity Policy

Orange Coast College is committed to providing equal opportunities in its educational programs and activities. Therefore, neither an Orange Coast College student nor a Coast Community College District employee, nor any applicant for enrollment or employment, shall be unlawfully denied the benefits of, or be unlawfully subject to, discrimination on the basis of race, color, sex, gender identity, religion, age, national origin, ancestry, sexual orientation, marital status, physical or mental disability, and/or veteran status. Inquiries about the District’s Equal Opportunity Policy should be directed to the Director of Personnel Services at (714) 432-5670 in Administration, or the District Office of Human Resources.

Inquiries regarding compliance and/or grievance procedures may be directed to the Associate Dean, Student Relations and Title IX and/or the 504/ADA coordinator.

Title IX Coordinator and 504/ADA Coordinator
Shannon Quihuiz
Associate Dean, Student Relations and Title IX
Student Union
Phone: (714) 432-5930
squihuiz@occ.cccd.edu

Family Rights and Privacy Act of 1974 Policy (FERPA)

Orange Coast College may release student directory information upon request, provided such release is approved by the College president or a designee. Students may request in writing to the College president that directory information not be released. The president or a designee may limit or deny the release of specific categories of directory information based upon a determination of the best interests of the student.

Directory information is defined to mean one or more of the following: student’s name, city of residence, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and previous public or private school attended.

Any currently enrolled or former students shall have access to any and all of their records on file at the College. Such access shall be granted within 15 working days of a written request and shall be subject to procedures established by the Dean of Enrollment Services.

Students, by written request to the above administrator, may challenge the content of their records pursuant to Education Code section 76232. Such challenges will be processed according to procedures established by those responsible administrators. All students will receive annual notice about FERPA and their rights.

Grades and Grade Points

Performance in each course is indicated by one of seven grades. Each grade and its value in grade points follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Significance</th>
<th>Grade Points per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Passing; less than satisfactory</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0</td>
</tr>
<tr>
<td>P</td>
<td>Pass; at least satisfactory</td>
<td>Hours awarded; not counted in GPA</td>
</tr>
</tbody>
</table>

Orange Coast College 2020-2021 Catalog
**Abbreviation/Definition**

### W (Withdraw)

1. A "W" grade will be assigned for students who officially withdraw prior to the end of week 12 of the term for full-semester classes, week 6 of the term for eight-week classes, and 75 percent of the class for all other courses.

2. No notation ("W" or otherwise) is made on the permanent record of a student who withdraws prior to the third Monday of the term for full-semester classes, or 20 percent of a class for all other courses.

   Specific drop deadline dates can be found on the Web at MyCoast (Student Class Program/Web Schedule Bill). **Students are responsible for withdrawing from a class within the appropriate time to avoid an unsatisfactory grade. Students may drop a class using the MyCoast website, or by letter to the Enrollment Center, U.S. postmarked prior to the drop deadline.**

### Grade Changes

Students requesting a change from a standard grade to a withdrawal due to a serious, documented, extenuating circumstance, must submit the appropriate petition no later than the end of the subsequent semester. OCC semesters are: Fall, Spring, and Summer. (Except grade grievance cases which have a shorter time limit. See Grade Grievance information in catalog). Petitions are subject to review.

**Note:** Students that believe their grade was submitted in error also must adhere to the one-year deadline (from the term in which the grade was received) to contest their grade. No exceptions will be made.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Significance</th>
<th>Grade Points per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP</td>
<td>Non Pass; not satisfactory or failing</td>
<td>No hours awarded; not counted in GPA</td>
</tr>
<tr>
<td>EW</td>
<td>Excused Withdrawal</td>
<td>No hours awarded; not counted in GPA</td>
</tr>
<tr>
<td>MW</td>
<td>Military Withdrawal</td>
<td>No hours awarded; not counted in GPA</td>
</tr>
</tbody>
</table>

The grade point average is calculated by dividing the number of grade points earned by the number of GPA hours for the grades of A, B, C, D, F. The grades of P and NP; and the symbols of IP, Incomplete (I) and W are not used in the grade point average calculation.

A disciplinary grade of "F" may be assigned for violations of the Academic Honesty Policy, consistent with the District Student Code of Conduct.

The following non-evaluative symbols may be used as defined. These symbols are not used when calculating the grade point average.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Pass</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
</tr>
<tr>
<td>EW</td>
<td>Excused Withdrawal</td>
</tr>
<tr>
<td>MW</td>
<td>Military Withdrawal</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
<tr>
<td>IP</td>
<td>In Progress</td>
</tr>
<tr>
<td>RD</td>
<td>Report Delayed</td>
</tr>
</tbody>
</table>

### I (Incomplete)

If agreed upon between the instructor and the student, a student may receive an "I" grade when work in the class cannot be completed by the last day of the semester due to extenuating circumstances.

1. Most of the academic work must be completed and there must be a justifiable reason for receiving the incomplete such as an accident or illness.

2. The condition for removal of the "I" shall be stated by the instructor in a written record, including the grade the incomplete will revert to if the student doesn't meet the condition for removal within the stated period of time. If the Instructor does not write the grade that the Incomplete should revert to then the grade will automatically post as a "F".

3. All academic work must be completed and submitted to the instructor per written agreement with the student, which will be valid no longer than one year following the end of the semester in which it was assigned.

4. An incomplete not made up within the specified timeline will revert to the alternate grade assigned by the instructor when the "I" was assigned. If the Instructor did not write the grade that the Incomplete should revert to then the grade will automatically post as a "F".

5. A student may not re-enroll in a class in which an incomplete was awarded.

### IP (In Progress)

The "IP" abbreviation is used only in those courses which extend beyond the usual academic term. The "IP" symbol remains on the student's academic record to document enrollment, but is not used in calculating grade point averages. If a student enrolled in an "open-entry, open-exit" course is assigned an "IP" at the end of a term and does not re-enroll in that course during the next term, the appropriate grade will be assigned.

### Grade or Pass/No Pass Option

Students who enroll in courses designated "graded or pass/no pass" may select the pass/no pass option via their MyCoast account until the class starts. Once the class has started, students may request pass/no pass by submitting a pass/no pass request form to the Enrollment Center on the first floor of Watson Hall.

- Students must choose the grade or pass/no pass option no later than the third week of a semester-length course or before the completion of 20 percent of the course. Pass/no pass options are not reversible after this time.

- Before selecting the pass/no pass option, students should consult with a counselor. Generally, it is recommended that students select a letter grade in courses satisfying requirements for majors, general education or a high school course deficiency.

- Grades of "NP" are considered unsatisfactory for progress probation or dismissal

- In courses where one performance standard determines unit credit, only a "P" or "NP" is given. A maximum of 15 units of Pass/No Pass graded courses may be used towards an associate degree. Students also should consult with a counselor to determine pass/no pass eligibility for specific courses prior to submitting the pass/no pass forms.

Students may repeat a course in which they received a "NP", "D", "F" or "W" two additional times for credit within the Coast Community College District (Orange Coast College, Golden West College, or Coastline Community College). After three unsuccessful attempts, a student's
registration in the course is automatically blocked (BP4225). Only the second grade and units in the repeated course will be counted when determining grade point average. A student can request to have the first substandard grade for a repeated course removed from the grade point average calculation by filling out a form in Enrollment Services (Petition to Exclude a Sub-Standard Grade from GPA Calculation).

Grade Grievance

Recognizing that a trusting, positive relationship between students and instructors is vital to successful learning and teaching, the Grade Grievance procedure at Orange Coast College is intended to provide all parties with due process in the event of a disagreement or misunderstanding regarding classroom policies or grades. The Grade Grievance process does not address personality, character, or styles of teaching, this process takes into account only the grading concern of the student to determine if the California Code of Education was violated.

The final grade that is assigned to a student is the purview of the course instructor who teaches the course. The California Code of Regulations, Title 5, Section 55025, Grade Changes (a), states, “In any course of instruction in a community college district for which grades are awarded, the instructor of the course shall determine the grade to be awarded each student in accordance with this article. The determination of the student’s grade by the instructor shall be final in the absence of mistake, fraud, bad faith, or incompetency.”

Concerns about grades should be addressed as soon as possible in order to ensure availability of student and instructor records, and to permit time for a formal appeal, should one be necessary. Grade grievances will be permitted only through the end of the sixth week of the semester following the semester or summer session in which the grade was assigned. For more information, contact the Associate Dean, Student Relations at (714) 432-5930.

Illegal Distribution of Copyrighted Materials

OCC supports the Higher Education Opportunity Act and Digital Millennium Copyright Act, including efforts to eliminate the illegal distribution of copyrighted material.


Liability

Throughout the academic year, some classes will meet at off-campus locations. The College will not provide transportation to these sites, and students enrolled in these classes are responsible for making their own transportation arrangements. Orange Coast College personnel may assist in coordinating this transportation and/or recommend travel time, routes, carpooling, etc. However, the student does not have to follow these recommendations. The Coast Community College District is in no way responsible, nor does it assume liability, for any injuries or losses resulting from this non-sponsored transportation. If you ride with another student, that student is not an agent of, nor driving on behalf of the District.

Under the California Code of Regulations, Subchapter 5, Section 55450, if you participate in a voluntary field trip or excursion, you hold the District, its officers, agents and employees harmless from all liability or claims that may arise out of, or in connection with, your participation in this activity.

MyCoast

All admitted students receive a personal account to log in to MyCoast (https://pgsso.cccd.edu/_layouts/PG/login.aspx?ReturnUrl=%2F%2Fgo.ashx), the College’s student/staff portal, which may be accessed via the College website. Access to the following services and important information is available via MyCoast:

• Order official transcripts
• Access/print unofficial transcripts
• Access account balances and pay fees
• Check academic standing
• Check for holds on records/registration
• View important targeted announcements & OCC News
• Order a verification of enrollment
• Print a student class program Web Schedule Bill (includes specific course information including meeting dates/times, deadlines for each course, and detail of fees paid)
• Register for classes
• Drop classes
• View registration history
• Change mailing address and/or phone number
• Access and print 1098T Hope Tax Credit Form
• Access CCCD student email account
• Purchase a parking permit
• Access the online textbook order system
• Access Library resources
• Access Canvas course websites (http://www.orangecoastcollege.edu/about_occ/faculty-staff-resource/iic/Pages/Student-Support-Materials.aspx)
• OCC student financial aid information
• Apple Store
• Important deadlines

It is the student’s responsibility to be aware of and adhere to state-mandated drop deadlines and deadlines to request a pass/no-pass option. In addition, students should be aware of and adhere to the deadlines for fee-payment and refund of fees. Students should check their MyCoast page, particularly their student class program (Web
Non-Discrimination Policy

The District is committed to the concept and principles of providing equal opportunity in education and employment for all persons, and does not discriminate unlawfully in providing educational or employment opportunities to any person on the basis of race, color, sex, gender identity, gender expression, religion, age, national origin, ancestry, sexual orientation, marital status, medical condition, physical or mental disability, military or veteran status, or genetic information. This commitment applies to every aspect of education and personnel actions and practices in employment, development, advancement, and treatment of employees, students and the general public.

Declaración de no discriminación

El Distrito honra su compromiso para con el concepto y los principios de la igualdad de oportunidades de educación y empleo para todas las personas, y no discrimina ilegalmente a ninguna persona, en la prestación de oportunidades de educación o empleo, sobre la base de raza, color, género, identidad de género, expresión de género, religión, edad, origen nacional, ascendencia, orientación sexual, estado civil, afeción médica, discapacidad física o mental, calidad de militar o veterano de guerra, o información genética. Este compromiso se aplica a todos los aspectos de las decisiones y prácticas de educación y gestión del personal en el empleo, así como en el desarrollo, avance y trato de los empleados, los estudiantes y el público en general.

Chính Sách Bất Kỳ Thi

Co Quan cam keo dung quan diem va nguyen tac to co ho i binh dang trong giau duoc va viec lam cho tat ca moi nguoi, va khong phan biet doi xuat biet hop phap trong viec cung cap co ho i giau duoc va viec lam cho bat ky ai vi ly do sac toc, mau da, phai tinh, dac diem gioi tinh, the he gioi tinh, tan gio, tuoi, quoc gia noi xuat than, nguyen goi to tien, xu huong tinh duc, ting trang hon thanh, benh tiet, khuyet tiet ve the chat hoac tinh thinh, ting trang quan ngu hoac cu chu bienh, hoac thong tin diuyen. Cam keo na y duong cho moi hanh dong va cach thuc hanh dong lieu quan tai giau duoc va nan su trong viec lam, phat trien, thang trien, va doi xuvoi cac nhan vien, hoc sinh va cong chung.

Online Learning

As an important instructional tool and delivery system, the Web is used to enhance instruction at Orange Coast College in a wide variety of ways. Online learning opportunities at OCC include courses taught partially or completely via the Internet, as well as campus-based classes that include online materials and activities. All online courses are equivalent to their campus counterparts. Many of the online instructional modules offer students new and highly stimulating modes of learning.

Consult the OCC schedule of classes for more information about online courses.

Extended Learning Attendance and Non-Participation Policy (Online Learning)

All students enrolled in extended learning courses (online learning) must log in to each course and complete any assignment or other activity, to be determined by the instructor, that are required during the first week. Students who fail to complete first week assignments/activities within the instructor’s deadline may be dropped.

After the first week and during the time period before the final withdrawal date. Students are responsible for withdrawing from a class within the appropriate time to avoid an unsatisfactory grade,” as stated in this catalog. (See “Grades and Grade Points” section on page 33 for additional details.)

OCC’s Attendance Policies state that “instructors may drop a student from a course when absences number the equivalent of two weeks of class recorded from the first day of instruction.” In the case of extended learning, “absences” shall be defined as “non-participation.” Instructors may drop students after the equivalent of two weeks of non-participation from the first day of class. Non-participation shall be defined as, but not limited to:

- Not following the instructor’s participation guidelines as stated in the syllabus.
- Not submitting required assignments.
- Not contributing meaningful discussion in required chat rooms, discussion boards, or other online forums.
- Not participating in scheduled activities.
- Failure to communicate with the instructor as required.

It should be noted that simply logging into the course does not constitute participation. Students must demonstrate that they are actively participating in the course by submitting required assignments, contributing to discussion forums, etc. as outlined above.

Probation and Dismissal Policy

Probation

A student in the Coast Community College District shall be placed on probation whenever one of the two conditions listed below are met.

1. Academic Probation
   Has attempted at least 12 semester units at a college in the District as shown by the official academic record and has a cumulative grade point average of less than 2.0 in all units which were graded.

2. Progress Probation
   Has attempted at least 12 semester units at a college in the District as shown by the official academic record and the percentage of all units in which the student has been enrolled for which entries of “W”, “I,” and “NP” are recorded reaches or exceeds 50 percent.

All probationary students shall be notified of their status and provided with an opportunity for counseling services. (Title 5, Sections 55034).

Dismissal

A student in the Coast Community College District who is on academic or progress probation shall be disqualified subject to dismissal whenever one of the two conditions listed below are met:

Academic Disqualification Dismissal
A student who is on academic probation shall be subject to dismissal if the student has earned a semester grade point average of less than 2.0 in all units attempted in each of three consecutive semesters.

**Progress Dismissal**

- A student who is on progress probation shall be subject to dismissal if the cumulative percentage of units in which the student has been enrolled for which entries of “W”, “I”, and “NP” are recorded in three consecutive semesters reaches or exceeds 50 percent.

**Appeal for Reinstatement:** When notified of dismissal, a student will be informed about appeal procedures, through the Counseling Division office. Any student dismissed from a college within the Coast Community College District may be suspended from enrollment for a minimum of one semester. A student dismissed from one district college shall not attend another district college during the semester of disqualification dismissal. (Title 5, Section 55033).

### Privacy of and Access to Student Records

The Information Practices Act of 1977, California Civil Code, Sections 1798 et. seq., guarantee certain rights:

- **The Right to Privacy.** Only information about a student that is relevant and necessary to carry out the purpose of the College will be collected. This information will be used only in the administration of specific College programs.

- **The Right to Access.** Students may request access to any records about them that are maintained by the College. The College will promptly let students or a chosen representative inspect or shall provide students copies of any document or item of information in their case record, within 15 working days of a written request. In a few cases, medical or psychological information will be released only with consent to an appropriate licensed professional.

- **Protection Against Re-disclosure.** All persons who are allowed access to student records are prohibited from disclosing this information to anyone else without specific, informed, and written consent. There are specific instances where information may be released without informed, written consent, such as in the case of a medical or mental health emergency.

- **Student Identification Number.** Students are not required to provide their social security number except to receive student financial aid and the 1098T Hope Tax Credit Form. However, social security numbers are helpful in identifying student records upon transfer to other institutions. All students are strongly encouraged to select a personal identification number to protect electronic access to their records.

- **Records Holds.** Student records subject to hold for outstanding fee obligations include: grades, diplomas, enrollment verifications and registration privileges.

### Withholding of Student Records

In accordance with District Administrative Procedure 5035 (https://www.cccd.edu/boardoftrustees/Documents/AP_5035_Withholding_of_Student_Records.pdf), the College Admissions and Records Director shall withhold grades, diplomas, enrollment verifications, and registration privileges from any current or former student who fails to pay a proper financial obligation to the District. The student shall be given written notification and the opportunity to explain if the financial obligation is in error.

The definition of proper financial obligation shall include, but is not limited to: student fees; obligations incurred through the use of facilities, equipment or materials; library fines; unreturned library books; materials remaining improperly in the possession of the student; and/or any other unpaid obligation a current or former student owes to the District. A proper financial obligation does not include any unpaid obligation to a student organization.

### Remedial Coursework Limits

No more than 30 semester units of course credit may be assigned to a student for remedial coursework, except when the student is enrolled in one or more courses in English as a Second Language or is identified as having a learning disability. This limit may be waived if the student can show significant and/or measurable progress toward the development of skills appropriate to enrollment in college-level courses. Students needing remedial instruction beyond the course credit restrictions set forth in this section shall be referred to appropriate non-credit adult basic education programs conducted by an adult school.

### Repetition of Courses

For courses in which a “D,” “F,” “NP,” or “W” was recorded on the student’s academic transcript, the student may repeat the course two additional times within the Coast District (Orange Coast College, Golden West College, or Coastline Community College). After three unsuccessful attempts, a student’s registration in the course is automatically blocked (BP 4225 (https://www.cccd.edu/boardoftrustees/BoardPolicies/Documents/Academic_Affairs/BP_4225_Course_Repetition_and_Repeatability.pdf)). Only students with an extenuating circumstance may petition the OCC Academic Petition Council for consideration of a fourth attempt. If approved, students will register for the course at the end of the priority registration period. Petitions are available in the Counseling Office, located on the third floor of Watson Hall, and should be filed at least 30 days prior to the semester start date. Students must meet all registration deadlines.

For courses in which an “A,” “B,” “C,” or “P” was recorded on the student’s academic transcript, the student may repeat the course for admittance into a program, licensing requirement, etc.). Students should see a counselor to obtain the proper form.

If a student is authorized to repeat a course, the grade earned in the authorized repeat course will be used in GPA calculations. The grade earned in the previous attempt will be excluded from GPA calculations.

If a course is repeated after the student received a substandard grade, the student may submit a Petition to Exclude Sub-Standard Grade to have the sub-standard grade ("D", "F" or "NP") excluded from their grade point average. The course must be repeated in the Coast Community College District or at another regionally accredited college and the grade recorded in the latest semester the course was taken will count in the grade point average regardless of which grade is higher. Although the previous grade will not count in the grade point average, the grade will still appear on the student’s academic transcript.
If an incomplete grade ("I") was recorded on the student’s academic transcript, the student may not re-enroll in the course. The incomplete grade is changed according to the requirements as set forth by the faculty member who assigned the incomplete (see Incomplete under Grades and Grade Points for more information.)

Repeatability of Activities Courses

New regulations governing the repetition of credit courses in the California Community College system — effective Fall 2014 — have eliminated repeatability in active participation courses in kinesiology, art, dance, theatre arts, and most music courses. Intercollegiate athletics and some music courses that are required for transfer programs will be the only courses that will remain repeatable; all other courses previously offered as repeatable will be offered as one-time enrollment courses.

While students will not, in most cases, be allowed to repeat individual active participation courses in kinesiology, art, dance, music, and theatre arts, they will still be allowed to enroll in a series of active participatory courses that are related in content (commonly referred to as a family of courses) a maximum of four times, provided prerequisites are satisfied. This is a state regulation and applies to all athletics, dance, music and theatre arts activity classes in the District.

For example, all ballet courses are part of the “Ballet Family.” Repeatable courses that are related in content and taken prior to Fall 2014 will count toward the four-enrollment limitation. A student who previously enrolled in DANC A110 Ballet 1 twice can only take two more courses in the family; a student who previously enrolled in DANC A110 Ballet 1 four times may not take any additional courses in the family. Due to the regulatory changes, a student who is unable to successfully complete one course in a family after three attempts will not be allowed to enroll in any subsequent courses in the family. Therefore, the Dance and Music families include the following courses:

Dance

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballet Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DANC A110</td>
<td>Ballet 1</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DANC A111</td>
<td>Ballet 2</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DANC A144</td>
<td>Ballet III</td>
<td>2</td>
</tr>
<tr>
<td>DANC A172</td>
<td>Ballet Dance Basics</td>
<td>2</td>
</tr>
<tr>
<td>DANC A244</td>
<td>Ballet IV</td>
<td>2</td>
</tr>
<tr>
<td>DANC A254</td>
<td>Preparation for Audition - Ballet</td>
<td>2</td>
</tr>
<tr>
<td>Jazz Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DANC A120</td>
<td>Jazz Dance 1</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DANC A121</td>
<td>Jazz Dance 2</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DANC A143</td>
<td>Jazz Dance III</td>
<td>2</td>
</tr>
<tr>
<td>DANC A173</td>
<td>Jazz Dance Basics</td>
<td>2</td>
</tr>
<tr>
<td>DANC A243</td>
<td>Jazz IV</td>
<td>2</td>
</tr>
<tr>
<td>DANC A253</td>
<td>Preparation for Audition - Jazz</td>
<td></td>
</tr>
<tr>
<td>Modern Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DANC A101</td>
<td>Modern Dance 1</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DANC A102</td>
<td>Modern 2</td>
<td>0.5-2</td>
</tr>
<tr>
<td>DANC A145</td>
<td>Modern Dance III</td>
<td>2</td>
</tr>
<tr>
<td>DANC A171</td>
<td>Modern Dance Basics</td>
<td>2</td>
</tr>
<tr>
<td>DANC A245</td>
<td>Modern IV</td>
<td>2</td>
</tr>
<tr>
<td>DANC A255</td>
<td>Preparation for Audition - Modern</td>
<td></td>
</tr>
</tbody>
</table>

A family of courses may include more than four courses, but students are limited to a maximum of four courses in any family within the District. Further, all grades — including “W’s,” will count toward the four — course enrollment limitation and for computing the grade point average (GPA). Students can repeat athletics, art, dance, music, and theatre arts courses that are included in Family of Courses in which a “NF,” “D,” “F” grade was earned or “W” was assigned; however, all enrollments count toward the four enrollment maximum for each family of courses.

Service Complaint

Orange Coast College and its employees make every effort to serve students and non-students courteously and efficiently, including acting in accordance with College policies and state and federal laws. Individuals dissatisfied with a campus policy or the conduct of a College employee can bring a complaint — a written or verbal notice of dissatisfaction — to the attention of the appropriate faculty, staff or administrator at any time. If a problem is identified, applicable remedies will be put in place as soon as possible. Before filing a complaint, individuals should make every effort to resolve their dissatisfaction informally with the College personnel immediately involved. If addressing an issue informally does not lead to satisfactory resolution, the individual may register a complaint with the appropriate supervisor or administrator. If, after contacting the appropriate supervisor or administrator, the individual is not satisfied with the outcome, they may file a Complaint Form. Service complaints escalating to this level should be submitted in writing (a Complaint Form...
Sexual Misconduct

Sexual Misconduct comprises a broad range of unwelcome behaviors focused on sex and/or gender that may or may not be sexual in nature. Any intercourse or other intentional sexual touching or activity without the other person's consent is Sexual Assault. Sexual Misconduct encompasses Sexual Harassment, Sexual Assault, Sexual Exploitation, or Gender-based Harassment, which is a form of Harassment based on gender identity, gender expression, or non-conformity with gender stereotypes. Sexual Misconduct may also encompass acts of a sexual nature, including acts of Sexual Stalking, Domestic Violence, and Dating Violence, intimidation, or for Retaliation following an incident where alleged Sexual Misconduct or has occurred.

Sexual Misconduct can occur between strangers or acquaintances, or people who know each other well, including between people involved in an intimate or sexual relationship, can be committed by anyone regardless of gender identity, and can occur between people of the same or different sex or gender.

Sexual Misconduct is a form of Sex Discrimination which violates Title VII of the Federal Civil Rights Act of 1964 as amended; Title IX of the Education Amendments of 1972; California state law; and the Coast Community College District Board policies.

If you have questions regarding the behaviors of sexual misconduct or if you would like to discuss your concern with an administrator, please contact the Associate Dean, Student Relations and Title IX at (714) 432-5930, Director of Mental Health Services (Confidential) at (714) 432-6858 or visit the OCC website for the College's complete policy on Sexual Misconduct at http://www.orangecoastcollege.edu/student_services/sexual-misconduct/Pages/Home%20Page.aspx.

Student Classification

Students are classified as follows:

- **Freshman** — A student who has completed fewer than 30 units
- **Sophomore** — A student who has completed 30 or more units
- **Part-time** — A student carrying fewer than 12 units per semester (for Summer session, fewer than 6 units)
- **Full-time** — A student carrying 12 or more units per semester (for Summer session, 6 or more units)

Enrollment Status for Reporting Purposes

- **Full-time** — A student carrying 12 or more units per semester (for Summer session, 6 or more units)
- **Three-Quarter time** — A student carrying 9 to 11.99 units per semester (for Summer session, status not used)
- **Half-time** — A student carrying 6 to 8.99 units per semester (for Summer session, 3 to 5.99 units)
- **Less Than Half-time** — A student carrying .5 to 5.99 units per semester (for Summer session, .5 to 2.99 units)

Student Community Standards and Code of Conduct

Students enrolled at Orange Coast College assume an obligation to conduct themselves in accordance with our institutional mission and values, the laws of the State of California, federal laws and regulations, the California Education Code, and the policies and procedures of the Coast Community College District. The Student Code of Conduct has been established by the Coast Community College District Board of Trustees to provide notice to students of the type of conduct that is expected of each student.

Copies of the Coast Community College District Student Code of Conduct and Disciplinary Procedures which includes complete definitions of the above violations are available in the Office of the Dean of Student Services and on the Coast Community College District website (under BP 5500 (https://www.cccd.edu/boardoftrustees/BoardPolicies/Documents/Student_Services/BP_5500_Student_Code_of_Conduct.pdf) & AP 5500 (https://www.cccd.edu/boardoftrustees/BoardPolicies/Documents/Student_Services/AP_5500_Student_Code_of_Conduct.pdf)).

Student Due Process Procedure

If charges are brought against a student by another student or by a representative of the College, that student should get information about the College’s due process procedure from the Dean of Students Office. The due process procedure guarantees fair and reasonable treatment of all concerned parties. OCC is bound by the laws of State of California, the California Education Code and the policies and procedures of the Coast Community College District.

Student Responsibility & Campus Communication

OCC makes every effort to communicate important information in a timely manner. In an effort to minimize costs, OCC utilizes the Coast Community College District issued student email and targeted announcements posted in students' MyCoast portals as the official
means of communication. Students are expected to check their MyCoast and student email account on a regular basis for important information about registration, grades, holds, and deadlines. Students are responsible for being aware of state-mandated and College deadlines and should verify all transactions.

Study Load

The average student carries a 15 unit full academic load during a semester at Orange Coast College. This load requires most students to spend 40-45 hours each week preparing for and attending classes. The College recommends that entering freshmen carrying a full academic load (15 or more units) plan to work no more than 12-16 hours each week. Students who have a poor high school record — below a “C” average — probably should work no more than 6-8 hours each week.

Students need to take 15 units per semester, or 30 semester units per academic year, in order to graduate within two years. No OCC student may carry more than 19 units during a semester, 9 units during summer, or 6 units during intersession without the permission of the OCC Dean of Counseling Services. This maximum applies to the combination of all units in which the student enrolls per semester/term in the Coast Community Colleges (Orange Coast, Golden West and Coastline).

Transcript Requests

Orange Coast College has retained Credentials, Inc. to accept transcript orders online via a secure website. Official transcripts must be ordered online. OCC does not accept transcript orders through the mail.

Current students may access the Credentials, Inc. service through their MyCoast account. Former students may access the online service at www.credentials-inc.com/tplus/?ALUMTRO001250 (http://www.credentials-inc.com/tplus/?ALUMTRO001250).

Students on campus will have access to computers for online ordering in Watson Hall, the Computing Center, and the Library.

The first two transcripts and/or verification of record are provided free. Each additional transcript or verification of record costs $5.

For more information, including fees for expedited processing, please visit www.orangecoastcollege.edu/enrollment/records/Pages/Transcripts.aspx (http://www.orangecoastcollege.edu/enrollment/records/Pages/Transcripts.aspx). Please note that OCC does not offer same-day transcript service.

Veterans, Active Duty Military, and Credit for Military Training

Orange Coast College is approved for training veterans under all applicable laws. The College helps veterans by cooperating with the Veterans Administration and the California State Department of Veterans Affairs. OCC establishes policies and programs for educating veterans and active-duty military personnel.

Under Title 5, Section 55024, members of the service called to active duty during a semester in which they are enrolled, may petition to withdraw under special circumstances. The withdrawal will be posted as "MW" - Military Withdrawal on the student’s transcript and will be non-punitive, which means that it will not count in the student’s grade point average nor will it count towards academic or progress probation/disqualification. Students with orders to report during a semester in which they are enrolled should contact Veterans Services on the first floor of Watson Hall for the appropriate petition form.

OCC recognizes and grants academic credit to veterans for eligible military service and training credit completed in the armed forces (refer to the Alternate Methods of Study policies (p. 411) for more detailed information).

Course Descriptions

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Credit Courses

Transfer Courses

All courses numbered A100 or higher are transferable to the California State Universities (CSU).

Courses that are transferable to the University of California are designated "UC." Some of these courses have limits on the amount of credit that is granted. See the UC Transferable Course List available in the Counseling Center or Transfer Center for these limitations.

Honors Courses

All courses designated with an "H", or an "M" in the case of lab courses, are honors courses. Students should be advised that honors courses cover more rigorous content and require additional out-of-class assignments

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- Airline and Travel Careers (ARLN) (p. 430)
- Allied Health (ALH) (p. 431)
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Accounting (ACCT)

ACCT A100
3 Units (54 lecture hours)
Accounting for Small Business
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU

Accounting for small businesses in services and retail. The course includes basic accounting procedures, preparation and analysis of financial statements, banking, payroll processing, and forms. May be taken for grades or on a pass-no pass basis.

ACCT A101
4 Units (68 lecture hours; 12 lab hours)
Financial Accounting
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Fundamentals of financial accounting relating to corporations. Application of widely used accounting theory and practice for both service and merchandise enterprises. Preparation and analysis of financial statements. This course may also be offered online. C-ID: ACCT 110.

ACCT A101H
4 Units (68 lecture hours; 12 lab hours)
Financial Accounting Honors
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Fundamentals of financial accounting relating to corporations. Application of widely used accounting theory and practice for both service and merchandise enterprises. Preparation and analysis of financial statements. This course may also be offered online.

ACCT A102
4 Units (68 lecture hours; 12 lab hours)
Managerial Accounting
Prerequisite(s): ACCT A101 or ACCT A101H.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introduction to management’s use of accounting information for planning, control, and decision-making within an organization. Covers both traditional and contemporary topics, including product costing, overhead, budgeting, cash flow, financial statement analysis, and decision-making tools. This course may also be offered online. C-ID: ACCT 120.

ACCT A102H
4 Units (68 lecture hours; 12 lab hours)
Managerial Accounting Honors
Prerequisite(s): ACCT A101 or ACCT A101H.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Introduction to management’s use of accounting information for planning, control, and decision-making within an organization. Covers both traditional and contemporary topics, including product costing, overhead, budgeting, cash flow, financial statement analysis, and decision-making tools. This course may also be offered online.

ACCT A107
3 Units (54 lecture hours)
Not for Profit Recordkeeping and Compliance
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A course utilizing the theory and fundamentals of generally accepted accounting principles and industry-specific guidance in conjunction with legal and regulatory issues needed for managing the recordkeeping and compliance documentation for Not-for-Profit entities. Creation of recordkeeping systems and various financial statements/reports that will help to evaluate accountability, transparency, and persuasiveness of a Not-for-Profit entity. Topics will include day to day transaction and special project accounting, tax and audit issues, endowments and grants, reporting obligations and other legal considerations.

ACCT A110
3 Units (54 lecture hours)
Excel for Accounting and Finance
Prerequisite(s): ACCT A101 or ACCT A101H.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course includes a detailed study of accounting using Excel spreadsheet software. Topics include the use of functions and formulas in Excel with emphasis on accounting as a financial analysis tool. Students are expected to have a working knowledge of Windows. Graded or Pass/No Pass option.

ACCT A111
3 Units (54 lecture hours)
Individual Income Tax
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Introduction to federal income taxation theory and practice as applied to individuals. Covers gross income, business and personal deductions, exemptions, tax credits, property transactions, and tax computation. Includes individual and group problem-solving and tax return preparation. May be taken for grades or on a pass-no pass basis.
ACCT A112  
2 Units (36 lecture hours; 18 lab hours)  
Accounting with QuickBooks  
**Prerequisite(s):** ACCT A100 or ACCT A101 or ACCT A101H.  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU.  
QuickBooks is a complete computerized accounting system for small businesses. Topics include a review of basic accounting concepts, preparation of business reports and graphs, and the creation of a company using QuickBooks accounting. Covers creation and operation of a detailed accounting system for new and existing businesses. May be taken for grades or on a pass-no pass basis.

ACCT A114  
1 Unit (10 lecture hours)  
Volunteer Income Tax Assistance  
**Advisory:** ACCT A111.  
**Grading Mode:** Pass/No Pass  
**Transfer Credit:** CSU.  
This hands on course provides training and an experiential service learning opportunity in the preparation of federal and state individual income tax returns. After attending training and review classes and passing the IRS and state individual income tax exams, student volunteers will provide free tax assistance to qualifying community residents. Offered on a pass-no pass basis only.

ACCT A116  
3 Units (54 lecture hours)  
Business Taxation  
**Prerequisite(s):** ACCT A100 or ACCT A101 or ACCT A101H or an equivalent district course.  
**Advisory:** ACCT A111.  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU.  
Topics will include rules related to the organization, life, and dissolution of corporations, partnerships, S-corporations, and LLCs. Tax research and planning issues are considered.

ACCT A119  
3 Units (54 lecture hours)  
Payroll  
**Prerequisite(s):** ACCT A100 or ACCT A101 or ACCT A101H.  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU.  
Creation of a payroll cycle, recording of payroll information, payroll transmittal and verification with Output reports that reflect both Federal and State of California’s laws and policies. Prepares students for FPC Designation Exam. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

ACCT A118  
4 Units (72 lecture hours)  
Accounting Ethics  
**Prerequisite(s):** ACCT A101 or ACCT A101H or ACCT A102 or ACCT A102H.  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU.  
Designed to expose students to a comprehensive coverage of ethical and professional issues encountered by accounting professionals. Prepares students to meet part of the ethics requirement for becoming a Certified Public Accountant in the State of California. Primarily focuses on ethics pertaining to the Accounting profession. Study of the ethical framework includes the American Institute of Certified Public Accountants (AICPA) Code of Professional Ethics, Audit Responsibilities and Accounting Fraud, Legal and Regulatory Obligations, Earnings Quality, Corporate Governance, and International Financial Reporting.

ACCT A119  
1-4 Units (18-72 lecture hours; 0-54 lab hours)  
Current Topics in Accounting  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU.  
Course covers topics currently receiving attention in the Accounting industry. This course may also be offered online. May be taken for grades or on a pass-no pass basis. One to four hours lecture, 0-three hours non-lecture.

ACCT A210  
3 Units (54 lecture hours)  
Cost Accounting  
**Prerequisite(s):** ACCT A102 or ACCT A102H.  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU.  
Covers cost accounting concepts and practices. Includes the determination, analysis, and control of product costs (materials, labor, and overhead) through traditional and advanced costing systems. Other managerial tools such as budgeting and break-even analysis and cost accounting on government contracts are also considered. May be taken for grades or on a pass-no pass basis.

ACCT A212  
3 Units (54 lecture hours)  
Intermediate Accounting 1  
**Prerequisite(s):** ACCT A101 or ACCT A101H.  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.  
An intensive study and application of Generally Accepted Accounting Principles (GAAP) and International Accounting Standards (IAS) for asset valuation, income measurement, and financial statement presentation for business organizations, including the processes through which GAAP and IAS have evolved. The emphasis in this course is on the basic financial statements and related footnotes, the time value of money, the valuation and presentation of assets, current liabilities, and related income statement accounts, and other special accounting topics. International accounting standards (IAS) will be presented parallel to GAAP due to the convergence of both sets of standards within the next five years. Suitable for CPA Exam preparation.
ACCT A213  3 Units (54 lecture hours)
Intermediate Accounting 2
Advisory: ACCT A101 or ACCT A101H or ACCT A212.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A continuation of the intensive study and application of GAAP and IAS begun in ACCT A212. The emphasis in this course is on the valuation and presentation of long-term liabilities, stockholders equity, revenue recognition, revenue and related income statement accounts, income taxes, leases, footnote disclosures required by GAAP and IAS, and other special/current accounting topics. Suitable for CPA Exam preparation.

ACCT A215  3 Units (54 lecture hours)
Governmental Accounting
Prerequisite(s): ACCT A100 or ACCT A101 or ACCT A101H.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course covers fund accounting, budget and control issues, revenue and expense recognition, and issues of reporting for governmental agencies. Many of the topics covered may be used to prepare for portions of the CPA exam.

ACCT A216  3 Units (54 lecture hours)
Not-for-Profit Accounting
Prerequisite(s): ACCT A100 or ACCT A101 or ACCT A101H or equivalent district course.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A course utilizing the theory and fundamentals of accounting for and the administration of not-for-profit organizations and governmental entities. Application of accounting principles for both not-for-profit organizations and government entities. Preparation and analysis of various financial statements and introduction to the required not-for-profit federal, state and local tax filings.

ACCT A218  3 Units (54 lecture hours)
Auditing
Prerequisite(s): ACCT A101 or ACCT A101H; ACCT A102 or ACCT A102H.

Advisory: ACCT A212.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Examines the use of financial statement audits and details the audit process. Topics include professional responsibilities of auditors, audit design, sampling approaches, substantive testing, testing controls, and audit report formulation and communication.

ACCT A220  3 Units (54 lecture hours)
Data Analytics for Accounting
Advisory: ACCT A101 or ACCT A101H.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

The advent of data analytics offers both challenges and opportunities for CPAs. The challenges include undertaking appropriate training to develop the skills needed to initiate and support data analytics activities, as well as altering the present audit model to include appropriate audit analytics techniques. The opportunities include a technology rich audit model that provides for greater thoroughness, efficiency, and accuracy, as well as new business opportunities to provide data analytics expertise to CPAs’ clients and organizations. CPAs, whether working in public practice or industry, will enhance their career opportunities through the acquisition of additional data analytics expertise.

Airline and Travel Careers (ARLN)

ARLN A117  3 Units (54 lecture hours)
Aviation Management
Grading Mode: Standard Letter

This course is designed for students interested in management and operations in travel. Preparation for demands of schedules, Official Airline Guide, federal agencies, airport operations, airline deregulation, mergers and acquisitions. Study of management practices in the travel industry with innovative insight into the processes behind running successful airline and airport operations. Examine the concepts of Crew Resource Management (CRM), Human Factors and decision-making. The role of crew supervision, training, leadership styles and management oversight will be studied in both single and multi crew aircraft situations. This course may also be offered online.

ARLN A120  1.5 Units (27 lecture hours)
Airline Service Excellence
Grading Mode: Standard Letter

Transfer Credit: CSU.

Examines the priority of customer service and satisfaction in the airline industry. Students will investigate how airlines differentiate service to be competitive and will use their findings to develop a personal approach to customer care. This course may also be offered online.

ARLN A137  3 Units (54 lecture hours)
Operations, Terminology, & Safety
Grading Mode: Standard Letter

Transfer Credit: CSU.

Preparation for stringent demands of airline travel career training and FAA exams to include industry terminology, airline codes, schedules, Official Airline Guide, federal agencies, airport operations, history, airline deregulation, mergers and acquisitions and their effects. This course examines travel safety and security. Topics include safety regulations of the Federal Aviation Administration, the Department of Transportation and airlines themselves. This course may also be offered online.
ARLN A139  3 Units (54 lecture hours)
Flight Attendant Qualifications and Opportunities
Prerequisite(s): ARLN A137.

Grading Mode: Standard Letter
Transfer Credit: CSU.

This course provides hands-on training to qualify as a Flight Attendant for both Commercial and Corporate structure. Instruction will follow strict FAA guidelines; indoctrination training, general emergency training, aircraft ground and differences training, including competency checks and testing. Identify flight attendant and in-flight service team qualifications and opportunities for employment including base stations, responsibilities, salary schedule, and benefits. Examine the priority of customer service and satisfaction in the airline industry. Students will study standards to current performance, public opinion, and service principles. They will investigate how airlines differentiate service to be competitive and will use their findings to develop a personal approach to customer care. This course may also be offered online.

Allied Health (ALH)

ALH A010  0.5 Units (16 lecture hours)
Health Occupations
Grading Mode: Pass/No Pass

Introduction to the allied health careers and programs at Orange Coast College including presentations of each allied health program and School of Allied Health Professions application. Required for admission to most allied health programs. This course may also be offered online. Offered on a pass-no pass basis only.

ALH A111  3 Units (54 lecture hours)
Medical Terminology
Advisory: BIOL A221.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Development of a medical vocabulary emphasizing building of terms utilizing prefixes, combining forms and suffixes. Includes symptomatic, therapeutic, diagnostic, operative and related diagnostic testing terms. Students learn the meaning and spelling of medical terms with application of terms to comprehend medical record documents. This course may also be offered online.

ALH A112  2 Units (36 lecture hours)
Introduction to Autism Spectrum Disorders and Applied Behavioral Analysis
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course will provide an overview of the foundations of Autism Spectrum Disorders in children, Applied Behavioral Analysis treatment, and evidence-based intervention for treatment. This will include collecting Antecedent-Behavior-Consequence ABC data, and learning operations to increase/strengthen behavior and weaken/decrease behavior.

ALH A115  2.5 Units (27 lecture hours; 27 lab hours)
Patient Care
Prerequisite(s): ALH A010; ALH A111 or concurrent enrollment.

Advisory: Non-native speakers must complete ESL A051 (exemption based on assessment results).

Grading Mode: Standard Letter
Transfer Credit: CSU.

A pre-clinical course taken within six months prior to first clinical entry. Orientation to clinical setting including communication, legal & ethical issues, healthcare finance, patient care techniques, CPR, emergency interventions, aspects of death & dying and employment as a healthcare professional. Three hours lecture, three hours non-lecture.

ALH A120  2 Units (36 lecture hours)
Human Diseases
Advisory: ALH A111 and BIOL A221.

Grading Mode: Standard Letter
Transfer Credit: CSU.

The study of disease processes and diseases affecting each body system. Includes etiology, pathophysiological mechanisms, methods of diagnosis, manifestations, and treatment of each disease. Recent completion of human anatomy and physiology is recommended before attempting this class.

ALH A130  3 Units (54 lecture hours)
Applied Pharmacology
Advisory: BIOL A221.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Basic principles of pharmacology; drug classifications; methods and routes of administration; legal aspects of drug administration; pharmacokinetics: action, indication, contraindication, hazards, metabolism, and excretion. Use of drugs in the treatment of various disease processes and body systems.

ALH A199  0.5 Units (9 lecture hours)
Current Issues in Allied Health
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course deals with current issues in the allied health profession. Topics vary. May be taken for grades or on a pass-no pass basis.

Anthropology (ANTH)

ANTH A100  3 Units (54 lecture hours)
Cultural Anthropology
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

The analysis of social structure, kinship, belief, and rite. The determinants of culture and personality. The social analysis of three societies. The methods and perspectives of anthropology. C-ID: ANTH 120.
ANTH A100H 3 Units (54 lecture hours)
Cultural Anthropology Honors
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

The analysis of social structure, family, kinship, belief, and rite. The determinants of culture and personality. The social analysis of three societies. The methods and perspectives of anthropology. C-ID: ANTH 120.

ANTH A102 3 Units (54 lecture hours)
Native American
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

The course provides students with an introduction to the development of Native North American cultures prior to the introduction of European Civilization in the Western Hemisphere. Students will explore the cultural conflicts generated by the European invasion and the position of Native North American life in contemporary America. May be taken for grades or on a pass-no pass basis.

ANTH A105 3 Units (54 lecture hours)
Anthropology of Nonverbal Behavior
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU

An analysis and individual awareness of nonverbal behavior in human interaction with emphasis on Western cultural patterns. Attention is given to the various levels of segments of nonverbal human interaction, including gesture, spatiality, body positions, and expression laughter. Foundations and developmental patterns of nonverbal dimensions are explored. May be taken for grades or on a pass-no pass basis.

ANTH A185 3 Units (54 lecture hours)
Physical Anthropology
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

As an introductory survey course, the class will cover three major areas in particular: 1) evolutionary theory, 2) the theories of human origin and evolution based upon comparative anatomy, biochemical studies and the fossil record, and 3) the origin and evolution of human culture and social organizations as revealed by the archaeological record and biochemical variations in modern humans, individual adaptations and growth and development studies. This course may also be offered online. C-ID: ANTH 110.

ANTH A185H 3 Units (54 lecture hours)
Physical Anthropology Honors
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.

As an introductory survey course, the class will cover three major areas in particular: 1) evolutionary theory, 2) the theories of human origin and evolution based upon comparative anatomy, biochemical studies and the fossil record, and 3) the origin and evolution of human culture and social organizations as revealed by the archaeological record and biochemical variations in modern humans, individual adaptations and growth and development studies. C-ID: ANTH 110.

ANTH A185L 1 Unit (54 lab hours)
Phys Anthropology Lab
Prerequisite(s): ANTH A185 or concurrent enrollment.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

This course covers laboratory exercises on human genetics, comparative primate anatomy, morphological characteristics of hominin fossils, and techniques of forensic anthropology. May be taken for grades or on a pass-no pass basis. C-ID: ANTH 115L.

ANTH A187 3 Units (54 lecture hours)
Introduction to Primate Studies
Advisory: ENGL A099.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This is an introductory course that will explore the evolution of primate behavior and morphology, with special attention to nonhuman primates. The course will enhance the understanding of human evolution by emphasizing nonhuman primate research. Topics include primate taxonomic classifications, social behaviors, foraging behavior, mating behavior, cognition, conservation, fossil record, and ecological conditions. Students will be introduced to the scientific method and behavioral observation methods. This course may include a zoo trip.

ANTH A190 3 Units (54 lecture hours)
Introduction to Linguistic Anthropology
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This course uses an anthropological approach to understand language by exploring the following core areas: the biocultural basis of language, structural linguistics, historical linguistics, and sociocultural linguistics. C-ID: ANTH 130.

ANTH A220 3 Units (54 lecture hours)
Magic, Witchcraft, and Religion
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

The course provides a comparative overview of systems of magic, witchcraft, and religion from past and present societies around the world. Students will identify and examine supernatural beliefs and practices in cultural settings with respect to the role of the material world as well as social and political systems.
ANTH A280
Introduction to Archaeology
Advisory: Eligibility for ENGL A100.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
A study of the basic principles of archaeological research and cultural evolution based on technological change. Artifact types, site composition, and dating techniques are discussed as they relate to the various cultures both prehistoric and historic in the Old and New World. The cultural evolution of humans is then traced using artifact assemblages as the key to understanding cultural growth. C-ID: ANTH 150.

ANTH A285
World Ethnology
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
A survey of primitive, peasant, and contemporary cultures representing major world areas. Different levels of cultural development with emphasis on the interaction of environment, technology, social system, and cultural history. The major theories of culture will be explored.

Architecture (ARCH)

ARCH A101
Introduction to Environmental Sustainability
Grading Mode: Standard Letter
Transfer Credit: CSU
This course is an overview to environmental sustainability and will provide a fundamental understanding of the cultural, man-made and natural factors involved in creating ecological balance and ethical stewardship of natural resources. Focus will be on the building and design related aspects of sustainability. This course may also be offered online.

ARCH A102
Introduction to Environmental Studies
Grading Mode: Standard Letter, Pass/No Pass
This course is designed to present an overview of the environmental studies field to students from multiple disciplines. A basic understanding of issues related to the environmental components of air, soil and water; historic development of ecological issues; economic, political, and cultural concepts; regulations, and technology will be presented. An overview of career opportunities and paths within the environmental industry will also be covered.

ARCH A104
Introduction to FrameCAD Steel Framing
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU
Introduction to FrameCAD Steel Framing is an overview of integrated steel panelization design and fabrication. Instruction includes entry level use of FrameCAD Structure and FrameCAD Detailer software as well as file export to FrameCAD Factory and machine. The class will produce and assemble a small sample project using the OCC FrameCAD F325iT.

ARCH A105
Architectural Drawing and Design Visualization 1
Grading Mode: Standard Letter
Transfer Credit: CSU.
This introductory course in architectural visualization techniques will focus on how to communicate a three-dimensional design using a two-dimensional medium. Subjects and techniques presented will include orthographic projection, paralines, plan views, elevations, sections, basic perspective drawing, rendering materials and tonal values, and an introduction to SketchUp and hand modeling.

ARCH A107
Tiny House Design
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Tiny House Design is a 5 week seminar course that introduces design concepts, codes, budgeting, and building strategies unique to Tiny Houses. The course is packed with guest speakers, hands-on demonstrations, and information resources. Students will plan out their own project and are encouraged to bring lots of ideas and questions. A field trip to experience a tiny house build will also be scheduled. No prior experience needed.

ARCH A110
Introduction to Architecture
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
This introductory course explores the professional and academic aspects of architecture and related professions. Lectures will include licensing, educational choices, history, practice, design, theory, structures, and personal goal setting; guest speakers and an office visit will give students a firsthand chance to observe multiple sides of the profession. This course may also be offered online.

ARCH A110H
Introduction to Architecture Honors
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
This introductory course explores the professional and academic aspects of architecture and related professions. Lectures will include licensing, educational choices, history, practice, design, theory, structures, and personal goal setting; guest speakers and an office visit will give students a firsthand chance to observe multiple sides of the profession. This course may also be offered online.

ARCH A115
Architectural Design and Theory 1
Advisory: ARCH A105.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC
This beginning architectural design course includes the perceptual and physical study of three dimensional design theories, principles and compositional techniques used in the creation and manipulation of architectural form, space, and light. Focus will be on fundamental design skills and will progress to a complete architectural design project using models, drawings, and graphics to study and communicate the design.
ARCH A121  2 Units (36 lecture hours; 12 lab hours)
FrameCAD Studio 1
Advisory: ARCH A104.
Grading Mode: Standard Letter
Transfer Credit: CSU.
FrameCAD Studio 1 is a project-based course that develops design skills to produce a steel panel project using FrameCAD software. Basic steel frame design concepts will be covered as well as use of FrameCAD Structure and FrameCAD Detailer. Students will also receive basic machine safety and steel panel assembly experience.

ARCH A122  2 Units (36 lecture hours; 12 lab hours)
FrameCAD Studio 2
Advisory: ARCH A121.
Grading Mode: Standard Letter
Transfer Credit: CSU.
FrameCAD Studio 2 is a project-based intermediate course that develops design skills to produce a steel panel project using FrameCAD software. Students will be encouraged to design a project of choice and will work collaboratively to design and prepare each project for production. This is a continuation of FrameCAD Studio 1 and FrameCAD Structure and FrameCAD Detailer software will be used to design the projects and export to FrameCAD Factory software for production.

ARCH A141  3 Units (54 lecture hours)
Introduction to Resource Management
Grading Mode: Standard Letter
Transfer Credit: CSU.
This course introduces the principles of environmental resource management. An overview of the global aspects of resources and waste, creative strategies for reclaiming resources, and an introduction to community and industry opportunities and skills needed for employment in green industries, sustainable advocacy and education will be presented and explained.

ARCH A142  3 Units (54 lecture hours)
Environmental Advocacy
Grading Mode: Standard Letter
Transfer Credit: CSU.
This course covers a range of environmental advocacy strategies and includes engaging community stakeholders towards improved environmental resource management goals. Students will have the opportunity to create and plan for environmental campaigns, educational programs, and a range of environmental advocacy activities, including writing effective proposals and grants.

ARCH A143  3 Units (54 lecture hours)
Resource Management and Zero Waste for Communities
Grading Mode: Standard Letter
Transfer Credit: CSU.
This course will identify how resource management and zero waste policies and programs are developed within a community, what type of planning and facilities are needed, and how to finance the systems. Students will also learn business recycling tools, best practices for proposals and contracts, enforcement options, design for resource recovery parks, performance reporting and financial records, Extended Producer Responsibility and Local Producer Responsibility policies, and development of local markets and uses.

ARCH A144  3 Units (54 lecture hours)
Resource Management and Zero Waste for Business
Grading Mode: Standard Letter
Transfer Credit: CSU.
This course will include a global overview of environmental resource management standards and provide hands-on knowledge and application tools for students to assess and propose resource management strategies for regional businesses, industries, and institutions. Studies and activities will include zero waste program design, implementation strategies, waste reduction and resource management practices, market and economic drivers and incentives, and regulatory policies. Case studies and projects will focus on local practices and community networking.

ARCH A150  2 Units (27 lecture hours; 36 lab hours)
CAD 2-D for Architecture
Grading Mode: Standard Letter
Transfer Credit: CSU.
This course introduces Computer Aided Drafting (CAD) as used to produce 2-dimensional architectural drawings. PCs with Autodesk Architecture and/or ArchiCAD will be used and instruction will focus on computer drawing a simple project to include the following drawing types: floor plan, site plan, elevation, and enlarged section/details. Students should have basic knowledge of computer operation and file management.

ARCH A155  2 Units (27 lecture hours; 36 lab hours)
BIM 1 for Architecture
Grading Mode: Standard Letter
Transfer Credit: CSU.
This course introduces Building Information Modeling (BIM) as used to produce a 3-dimensional architectural model with detailed construction information. PCs with Autodesk Revit, ArchiCAD, or Microstation will be used and instruction will focus on computer modeling a simple project and extracting construction documentation. Students should have basic knowledge of computer operation and file management.
ARCH A156  
BIM 2 for Architecture  
Advisory: ARCH A155 or comparable skills with BIM.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
This course introduces Building Information Modeling (BIM) as used to produce a 3-dimensional architectural model with detailed construction information. PCs with Autodesk Revit, ArchiCAD or Microstation will be used and instruction will focus on computer modeling a simple project and extracting construction documentation. Students should have basic knowledge of computer operation and file management as well as construction.

ARCH A157  
BIM Multidisciplinary  
Advisory: ARCH A156 or equivalent skills.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
This course uses Building Information Modeling (BIM) with multidisciplinary applications (Structural, Mechanical, Electrical, and Plumbing) and project management tools to create an integrated 3-dimensional architectural model. PCs with Autodesk Revit and other software will be used and instruction will focus on coordinating one or more disciplines in a collaborative environment.

ARCH A158  
BIM Project Integration  
Advisory: ARCH A156 or equivalent skills.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
This course uses Building Information Modeling (BIM) in conjunction with prototyping and manufacturing software (such as Fusion 360 or FrameCAD) to integrate design, construction, and manufacturing applications for a small project. Autodesk Revit, Fusion 360, FrameCAD Structure and/or other software will be used in a collaborative team environment.

ARCH A159  
3-D Modeling: SketchUp 1  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
This course introduces Google SketchUp 3-D Modeling as used for architectural design visualization. Computers with SketchUp Pro will be used and instruction will focus on computer modeling a rectilinear design and exporting images and animation for design presentation. Students should have basic knowledge of computers and file management. This course may also be offered online.

ARCH A160  
3-D Modeling: Rhino 1  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
This course introduces 3-D Modeling for design visualization using Rhino software. Hands-on instruction will focus on digitally modeling a design with rectilinear and non-rectilinear geometry, including preparing files for fabrication and presentation. Students should have basic knowledge of computers and file management.

ARCH A162  
3-D Modeling: Rhino 2  
Advisory: ARCH A162.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
This course introduces fundamental skills of coding and 3-D computational design using Rhino software with additional plug-ins. Hands-on instruction will focus on parametrically modeling and testing design variations with rectilinear and non-rectilinear geometry, including preparing files for fabrication and presentation. Students should have basic knowledge of 3-D modeling.

ARCH A163  
Presentation Graphics  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
This course is for architecture/design students who want to improve their graphic communication skills. Emphasis is on improving personal presentations and portfolios using Adobe Creative Suite: Photoshop, Illustrator, In-design, and/or Acrobat. Students should have knowledge of computer operation and file management and projects to bring in.

ARCH A164  
Presentation Video  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
This course is for architecture/design students and professionals who want to use digital video to present creative projects. Emphasis will be on narrative story telling and communicating a message using Windows Movie Maker or Apple iMovie. Students should have knowledge of computer operation and file management and provide a USB drive.

ARCH A170  
Introduction to Design Fabrication  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
This is a limited introduction to computer-assisted design fabrication, including simple operations and shop safety. Students will have the opportunity to use laser cutters, CNC routers, robotics, a 3-D printer, etc.
ARCH A171  2 Units (27 lecture hours; 36 lab hours)
Design Fabrication 1
Grading Mode: Standard Letter
Transfer Credit: CSU

This course introduces digital fabrication techniques for architecture and design, including shop safety. Emphasis is given to design iteration and fabricating basic projects using computer-assisted equipment (laser cutters, CNC routers, robotics, 3-D printers and scanners, etc.).

ARCH A172  2 Units (27 lecture hours; 36 lab hours)
Design Fabrication 2
Advisory: ARCH A171.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course promotes intermediate digital fabrication techniques for architecture and design. Emphasis is given to independent project design and construction using computer-assisted equipment (laser cutters, CNC routers, robotics, 3-D printers and scanners, etc.).

ARCH A180  4 Units (36 lecture hours; 108 lab hours)
Architectural Construction Documents
Advisory: ARCH A105 and ARCH A115.
Grading Mode: Standard Letter
Transfer Credit: CSU.

A basic course focusing on representation skills as applied to digital and physical construction models and documents for a wood frame structure. Further emphasis is on architectural symbols and conventions, specifications, building codes, products, materials, equipment, and the development of a student-designed structure.

ARCH A185  4 Units (36 lecture hours; 108 lab hours)
Environmental Design Systems
Advisory: ARCH A180.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This intermediate design course focuses on the environmental, cultural, and physical forces that affect architecture. Students will research and utilize design approaches and building components/systems that respond to human needs and the natural and built environments. Study topics will include site design and cultural context, environmental/climate responsive approaches to design, maintaining structural design integrity, incorporating life safety and access, and ecologically minded approaches to design.

ARCH A190  1.5-2.5 Units (9 lecture hours; 60-120 other hours)
Environmental Studies Practicum
Advisory: ARCH A141, ARCH A142, ARCH A143, and ARCH A144.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course provides environmental studies students with a practicum cooperatively planned by a private, public or non-profit agency and environmental studies faculty. The focus is on providing students with an opportunity to apply environmental studies theory and zero waste applications in a realistic work setting and includes preparation and assistance in locating internship opportunities that may take place locally, nationally, or internationally.

ARCH A196  1.5 Units (27 lecture hours)
Green Building Codes
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A complete analysis of the California Green Building Code. Special local Green Building ordinances are also covered along with a comparison of the International Green Building Code. Same as CNST A196; students completing ARCH A196 may not receive credit for CNST A196. May be taken for grades or on a pass/no-pass basis.

ARCH A197  1.5 Units (27 lecture hours)
California Energy Code
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A complete analysis of the California Energy Code. Special local Energy Code ordinances are also covered along with a comparison of the International Energy Code. Explanation of the State's energy and compliance forms. Same as CNST A197; students completing ARCH A197 may not receive credit for CNST A197. May be taken for grades or on a pass/no-pass basis.

ARCH A199  0.5-4 Units (9-72 lecture hours; 0-54 lab hours)
Current Topics in Architecture
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Current topics in Architecture may include cultural topics as well as architectural technology topics and could rotate through a variety of topics, such as field studies, design/build projects, design studies, and construction studies. May be taken for grades or on a pass-no pass basis.

ARCH A201  2 Units (27 lecture hours; 36 lab hours)
Design/Build 1 for Architecture
Grading Mode: Standard Letter
Transfer Credit: CSU.

This learn-by-doing course involves the design and construction of a transportable structure. Students will work in teams with an instructor. Projects will vary and are likely to involve off-campus assembly.
ARCH A201H  
2 Units (27 lecture hours; 36 lab hours)  
Design/Build 1 for Architecture Honors  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  

This learn-by-doing course involves the design and construction of a transportable structure. Students will work in teams with an instructor. Projects will vary and are likely to involve off-campus assembly.

ARCH A202  
4 Units (48 lecture hours; 80 lab hours)  
Design/Build 2 for Architecture  
Advisory: ARCH A180.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  

This learn-by-doing course involves the design and construction of a structure or interior project. Students will work in teams with an instructor. Projects will vary and are likely to involve off-campus assembly.

ARCH A202H  
4 Units (48 lecture hours; 80 lab hours)  
Design/Build 2 for Architecture Honors  
Advisory: ARCH A180.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  

This learn-by-doing course involves the design and construction of a structure or interior project. Students will work in teams with an instructor. Projects will vary and are likely to involve off-campus assembly.

ARCH A203  
4 Units (48 lecture hours; 80 lab hours)  
Design/Build 3 Architecture  
Advisory: ARCH A180 or comparable course completion or work experience.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  

This learn-by-doing course involves the design and construction of a small structure with an emphasis on integrating digital fabrication and/or manufacturing techniques. Students will work in teams with an instructor. Projects will vary and could involve off-campus assembly.

ARCH A205  
3 Units (36 lecture hours; 54 lab hours)  
Architectural Drawing and Design Visualization 2  
Prerequisite(s): ARCH A105.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC  

A continuation of Architecture A105, this advanced studio builds on a basic understanding of design communication, strengthening complexity and design intention in two and three-dimensional visualization techniques; including freehand sketching, graphic conventions, modeling, perspective and orthographic drawings, shade/shadow, color rendering, graphic presentations, and portfolio development.

ARCH A210  
2 Units (27 lecture hours; 36 lab hours)  
Environmental Design Field Studies  
Grading Mode: Standard Letter, Pass/No Pass  
The course is an active, on-site study of Architecture, Design, and Planning with an emphasis on sustainable environmental practices. Areas to be studied will be optimized based on the offered location site and will include a study of architectural design, planning and development patterns, analysis of resources, sustainable building techniques, sustainable lifestyle practices and culture, and may include design and/or construction of an improvement project. Students will participate in project-based learning opportunities and community service (where possible) and a multi-night field trip or travel abroad will be required.

ARCH A215  
4 Units (36 lecture hours; 108 lab hours)  
Architectural Drawing and Design Theory 2  
Advisory: ARCH A115 or equivalent skill level.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  

This intermediate architectural design course teaches theories, principles, methods, and means to the creation of architectural space by manipulation of form, space, and light. Focus is on the critical consideration and communication of spatial sequence and organization, composition, hierarchy, structure, and meaning as an expression of human, aesthetic, and environmental determinants.

ARCH A220  
4 Units (54 lecture hours; 72 lab hours)  
Building Materials and Systems  
Advisory: ARCH A180.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  

This advanced course focuses on the materials, building systems, design, and construction methods used for non-residential construction. The course will include field studies and hands-on projects that explore the principles and properties of various building materials and systems and sustainable considerations.

ARCH A225  
3 Units (54 lecture hours)  
Land and Building Development  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  

A general survey of land development principles and procedures used prior to the actual construction of structures. Site analysis and planning, mapping, regulatory controls, obtaining entitlements, grading, road and street designs, utility systems, principles of real property value, and project financing will be covered. Same as Construction Technology 225. Students completing Architectural Technology 225 may not receive credit for Construction Technology 225.
FrameCAD Workshop 2 is a project-based continuation of Workshop 1 dealing with theories, principles, methods and means used in the creation of architectural space by manipulation of form, space & light in an urban context. Focus is on the conceptual design process of establishing and challenging design criteria, communication and editing of design narrative, and portfolio development.

FrameCAD Workshop 3 is a project-based continuation of FrameCAD Workshop 2 that develops advanced level production skills needed to produce steel panel framing systems using FrameCAD software and a FrameCAD F325iT machine. Students will review FrameCAD machine operation and safety and be involved in coordinating production jobs, panel assembly, and fabrication workflow on the machine.
ARCH A296H 3 Units (54 lecture hours)
History of Architecture 2 Honors
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
Introductory study of the history of world architecture and urbanism from the late 17th century to the present. Lectures and presentations focus on the architecture of various regions and historical periods, highlighting architects, buildings and environments of significance. Special emphasis is placed on the architecture of the 20th century and socio-political, economical, technological, cultural and global influences in the evolution of architecture.

Art (ART)

ART A100 3 Units (54 lecture hours)
Survey of Western Art from Prehistory Through Gothic
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
This course provides an overview of western art and architecture from prehistory through the medieval period. May be taken for grades or on a pass-no pass basis. C-ID: ARTH 110.

ART A100H 3 Units (54 lecture hours)
Honors Survey of Western Art from Prehistory Through Gothic
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
This course provides an overview of western art and architecture from prehistory through the medieval period. May be taken for grades or on a pass-no pass basis. C-ID: ARTH 110.

ART A101 3 Units (54 lecture hours)
Survey of Western Art from Renaissance to Modern
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
This course provides an overview of art and architecture from the Renaissance to the Contemporary period. May be taken for grades or on a pass-no pass basis. C-ID: ARTH 120.

ART A101H 3 Units (54 lecture hours)
Honors Survey of Western Art from Renaissance to Modern
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
This course provides an overview of art and architecture from the Renaissance to the Contemporary period. May be taken for grades or on a pass-no pass basis.

ART A102 3 Units (54 lecture hours)
Survey of Modern and Contemporary Art History
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
This course provides an overview of modern and contemporary art and architecture from the late 19th century to the present. This course may be taken for grades or on a pass/no-pass basis. Lecture.

ART A103 3 Units (54 lecture hours)
Survey of Asian Art
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
This course provides a select overview of art and architecture from India, Southeast Asia, China, Korea, and Japan from pre-history to modern times. May be taken for grades or on a pass-no pass basis. Lecture. C-ID: ARTH 130.

ART A107 3 Units (54 lecture hours)
Introduction To Art
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
This course provides a general introduction to art that offers a look at works of art through the study of theory, terminology, themes, design principles, media, techniques, with an introduction to the visual arts across time and diverse cultures. Topics will include drawing, painting, sculpture, film arts, printmaking, and architecture. Gallery/museum visits are required. May be taken for grades or on a pass-no pass basis.

ART A108 3 Units (54 lecture hours)
Women in Art
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Women artists and the image of women in art from the Paleolithic period to the present day. Art criticisms, the feminist art movement, and the status of contemporary women artists. May be taken for grades or on a pass-no pass basis.

ART A109 3 Units (54 lecture hours)
Ancient Greek Art and Architecture
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
A study of Ancient Greek art and architecture beginning with prehistory and ending with the Hellenistic period. This course will relate artistic styles and major developments with the social and political events of the period. May be taken for grades or on a pass-no pass basis.

ART A109H 3 Units (54 lecture hours)
Ancient Greek Art and Architecture Honors
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
A study of Ancient Greek art and architecture beginning with prehistory and ending with the Hellenistic period. This course will relate artistic styles and major developments with the social and political events of the period. May be taken for grades or on a pass-no pass basis.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Hours</th>
<th>Title</th>
<th>Advisory</th>
<th>Grading Mode</th>
<th>Transfer Credit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART A110</td>
<td>3</td>
<td>27/81</td>
<td>Color and Design: Two-Dimensional</td>
<td></td>
<td>Standard Letter</td>
<td>CSU; UC.</td>
<td>Introduction to the concepts, applications, and historical references related to two-dimensional art and composition, including the study of the basic principles and elements of line, shape, texture, value, color and spatial illusion. Development of a visual vocabulary for creative expression through lecture presentations, studio projects, problem solving, and written assignments. Required for art majors and certificate programs. C-ID: ARTS 100</td>
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<tr>
<td>ART A111</td>
<td>3</td>
<td>27/81</td>
<td>Color and Design: Three-Dimensional</td>
<td></td>
<td>Standard Letter</td>
<td>CSU; UC.</td>
<td>Introduction to the concepts, applications, and historical references related to three-dimensional design and spatial composition, including the study of the elements and organizing principles of design as they apply to three-dimensional space and form. Development of a visual vocabulary for creative expression through lecture presentations and use of appropriate materials for non-representational three-dimensional studio projects. Required for art majors and recommended for certificate programs. C-ID: ARTS 101</td>
</tr>
<tr>
<td>ART A114</td>
<td>3</td>
<td>54</td>
<td>Art of the Ancient Americas</td>
<td>ENGL A100</td>
<td>Standard Letter, Pass/No Pass</td>
<td>CSU; UC.</td>
<td>Survey of visual culture within the historical context of select ancient civilizations in Mexico, Central America, and South America up to European contact. C-ID: ARTH 145.</td>
</tr>
<tr>
<td>ART A118</td>
<td>2</td>
<td>36</td>
<td>Product Illustration 1</td>
<td></td>
<td>Standard Letter, Pass/No Pass</td>
<td>CSU.</td>
<td>For the beginner through semi-professional levels of drawing skill. Principles of line, shade-shadow, highlight reflection, color, materials and graphic presentation. Sketching and rendering using various media and papers. May be taken for grades or on a pass-no pass basis.</td>
</tr>
<tr>
<td>ART A119</td>
<td>2</td>
<td>36</td>
<td>Product Illustration 2</td>
<td>ART A118</td>
<td>Standard Letter, Pass/No Pass</td>
<td>CSU.</td>
<td>Continuation of Product Illustration 1 to include more detailed renderings. May be taken for grades or on a pass-no pass basis.</td>
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<tr>
<td>ART A120</td>
<td>3</td>
<td>27/81</td>
<td>Beginning Drawing</td>
<td></td>
<td>Standard Letter</td>
<td>CSU; UC.</td>
<td>Introduction to principles, elements, and practices of drawing, employing a wide range of subject matter and drawing media. Focus on perceptually based drawing, observational skills, technical abilities, and creative responses to materials and subject matter. C-ID: ARTS 110.</td>
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<tr>
<td>ART A120H</td>
<td>3</td>
<td>27/81</td>
<td>Beginning Drawing Honors</td>
<td></td>
<td>Standard Letter</td>
<td>CSU; UC.</td>
<td>Introduction to principles, elements, and practices of drawing, employing a wide range of subject matter and drawing media. Focus on perceptually based drawing, observational skills, technical abilities, and creative responses to materials and subject matter. C-ID: ARTS 110.</td>
</tr>
<tr>
<td>ART A121</td>
<td>3</td>
<td>27/81</td>
<td>Life Drawing 1</td>
<td>ART A120 or ART A120H</td>
<td>Standard Letter</td>
<td>CSU; UC.</td>
<td>Introduction to drawing the human figure from observation using a wide variety of drawing media and techniques. Topics include an introduction to human anatomy and the historical and contemporary roles of figure drawing in the visual arts. Students in this course will learn both descriptive and interpretive approaches to drawing the figure. Required of art majors. C-ID: ARTS 200.</td>
</tr>
</tbody>
</table>
ART A122  3 Units (27 lecture hours; 81 lab hours)
Human Anatomy for Artists
Advisory: ART A120 or ART A120H.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
A drawing and study course using the human figure as a model. Emphasis will be on human anatomy and how it relates to drawing the figure. This course is recommended for art majors.

ART A124  3 Units (27 lecture hours; 81 lab hours)
Advanced Drawing
Prerequisite(s): ART A120 or ART A120H.
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
Designed as a continuation of Art A120, the emphasis will be to advance artistic concepts, style, and creative expression for intermediate and advanced students using a variety of drawing mediums, techniques and methodologies. C-ID: ARTS 205.

ART A125  3 Units (27 lecture hours; 81 lab hours)
Perspective Drawing
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Drawing of three dimensional objects using perspective as a tool. Emphasis on fundamentals and different procedures used. Emphasizes methods which are directly related to the artist’s needs including short cuts. Recommended for art majors and certificate programs.

ART A130  3 Units (27 lecture hours; 81 lab hours)
Painting 1
Prerequisite(s): ART A110; ART A120 or ART A120H.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Introduction to the basic craft of painting focusing on the examination of selected materials, perceptual skills, and techniques used to explore elemental and theoretical design practices while rendering landscape, still life, and figurative compositions. C-ID: ARTS 210.

ART A131  3 Units (27 lecture hours; 81 lab hours)
Painting 2
Prerequisite(s): ART A130.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Continuation of Art A130 with emphasis on personal expression. Alternate painting mediums introduced.

ART A132  3 Units (27 lecture hours; 81 lab hours)
Painting 3
Advisory: ART A131.
Grading Mode: Standard Letter
Transfer Credit: CSU.
A continuation of Art A131 with emphasis on personal expression in one painting style and methodology. Conceptual approaches and theme development will be taught.

ART A133  3 Units (27 lecture hours; 81 lab hours)
Painting 4
Advisory: ART A132.
Grading Mode: Standard Letter
Transfer Credit: CSU.
A continuation of student painting and conceptual skills with emphasis on materials of painting production and their application to the practice of painting.

ART A135  3 Units (27 lecture hours; 81 lab hours)
Digital Painting
Prerequisite(s): ART A110; ART A120 or ART A120H.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
An introduction to digital painting focusing on techniques for creating digital artwork for the entertainment industry. Students will also be introduced to industry standard digital painting hardware and software commonly used within entertainment and other commercial art industries.

ART A141  3 Units (27 lecture hours; 81 lab hours)
Sculpture 1
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Introduction to three-dimensional sculptural principles, techniques, and concepts utilizing a wide range of materials and practices. Various sculpture methods are practiced with attention to creative self-expression and historical context. Exploration of sculptural material and concepts, technical experiences may include modeling, casting and fabricating with sculptural media.

ART A142  3 Units (36 lecture hours; 72 lab hours)
Life Sculpture 1
Prerequisite(s): ART A110.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Exploration of figurative sculpture from the human model. Emphasizing anatomical structure and expression. Experiences will include armature building, clay modeling, Kiln firing, glazing and staining of the finished sculpture.
ART A143  3 Units (27 lecture hours; 81 lab hours)
Story Illustration Techniques
Advisory: ART A120 or ART A120H.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Principles of Illustration applied to various drawing and painting media. Imaginative application of theories and techniques that produce original illustrations with clear communication of concept.

ART A144  3 Units (27 lecture hours; 81 lab hours)
Illustration 2 - Sequential Illustration
Prerequisite(s): ART A143 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Sequential illustration with an emphasis on advanced visual storytelling techniques and the development of a personal style. Application of principles of concept, character and background design. One and one-half hours lecture, one and one-half hours lab.

ART A145  3 Units (27 lecture hours; 81 lab hours)
Exhibition Design 1
Grading Mode: Standard Letter
Transfer Credit: CSU.

Includes the solving of design problems related to gallery and museum exhibits. Emphasis on spatial planning, crowd flow and thematic presentation based on curatorial criteria. Development of skills related to art handling, lighting and signage graphics. Development of skills for framing, pedestal construction and model making for exhibition presentation. Recommended for all visual art and architecture students.

ART A147  3 Units (27 lecture hours; 81 lab hours)
Jewelry 1
Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to a wide range of methods, techniques, and materials used to create jewelry and small-scale metal artwork and objects. Includes examination of the history and contemporary practices of jewelry making and small metal casting / fabrication with a global cultural perspective.

ART A148  3 Units (54 lecture hours)
World History of Ceramics
Advisory: Completion of any level ceramics course or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

The World History of Ceramics provides us with a foundation of information dating as far back as the Old Stone Age, commonly known as the Paleolithic era. Most every culture has produced some type of fired clay object, ranging from utilitarian ware, religious icons, musical instruments, play toys and wall coverings in the form of tile. The tactile versatility, permanence and historical significance are all reasons why ceramics should be considered a phenomenon. This course will cover the evolution of clay and production of pottery made by early man, Greek, Islamic, Pre-Columbian and Asian cultures right up to the time of Post Modern ceramics.

ART A150  3 Units (27 lecture hours; 81 lab hours)
Ceramics 1
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

An introduction to ceramic materials and various techniques associated with and necessary to work in ceramics. Exploration in Historical and traditional pottery form as well as trends in contemporary ceramics. Various glazing and firing techniques will include Stoneware, Porcelain and Earthenware.

ART A151  3 Units (27 lecture hours; 81 lab hours)
Ceramics 2
Prerequisite(s): ART A150.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Students will be introduced to the Potters Wheel and to various wheel thrown techniques. Students will be familiarized with functional Ceramics, studio organization and advanced technical language. The study of selected historic and contemporary information will be covered.

ART A152  3 Units (27 lecture hours; 81 lab hours)
Intermediate Ceramic Design
Prerequisite(s): ART A151.

Grading Mode: Standard Letter
Transfer Credit: CSU.

This third semester ceramics course is an exploration in surface, form, and researching the interface of clay and glaze. Combinations of various forming techniques in handbuilding and wheel thrown form will be executed.
ART A153  
3 Units (27 lecture hours; 81 lab hours)  
Ceramics and its Narrative  
Prerequisite(s): ART A152.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
A formal, critical look at ceramics through its social, political, and contemporary historical value. Students will design objects that are narrative driven.

ART A162  
3 Units (27 lecture hours; 81 lab hours)  
Applied Arts I  
Prerequisite(s): ART A111.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Beginning Applied Arts/Crafts. Traditional and contemporary concepts and processes will be explored with emphasis on design principles in the development and fabrication of aesthetic forms based on function. The student will work with paper, fiber, wood and metal to create unique works of art and function.

ART A170  
3 Units (27 lecture hours; 81 lab hours)  
Printmaking I  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
Introduction to contemporary practices and aesthetics of printmaking. Formal elements and techniques using a broad range of materials and processes including: relief (linocut, woodcut), intaglio (drypoint, etching, collograph), lithography, and monoprinting.

ART A171  
3 Units (27 lecture hours; 81 lab hours)  
Printmaking 2  
Prerequisite(s): ART A170.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
Further development of formal, technical, and conceptual skills in printmaking. Emphasis on color printing and combinations of print techniques as well as development of personal handling of the media. Rotating concentration of specific print processes such as intaglio, relief and planographic.

ART A172  
3 Units (27 lecture hours; 81 lab hours)  
Applied Arts II  
Prerequisite(s): ART A162.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Intermediate Applied Arts/Crafts. A more advanced approach to traditional and contemporary concepts and processes in the craft field that continues to build an education in functional art and design. More advanced techniques and sophisticated approaches to self expression within the craft field will be explored. Emphasis will continue to be placed on the application of design principles to the development of aesthetic functional forms that are expressive and meet the needs of the assignments. The aim of this course is to help students realize the potential of their creative concepts and continue to develop the skills necessary to make these concepts into tangible forms based on function. Further emphasis will be placed on the current permeable boundaries between fine arts and crafts disciplines. The course also hopes to instill the desire to further explore and engage in the crafts as a vehicle for artistic expression.

ART A175  
3 Units (27 lecture hours; 81 lab hours)  
Screen Process Printing I  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Theory and practice of screen process printing; construction of the screen, techniques of photo stencil making, color registration, and printing on various surfaces pertinent to fine art and commercial application. Emphasis on execution of original designs and understanding of contemporary applications.

ART A176  
3 Units (27 lecture hours; 81 lab hours)  
Silk Screen Process Printing II  
Prerequisite(s): ART A175.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
A screen printing course for artists and the art student. Theory and practice of screen-process printing; techniques of stencil making, registration, and printing on various surfaces pertinent to fine art and commercial application.

ART A180  
2.5 Units (36 lecture hours; 36 lab hours)  
Professional Studies  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
An exploration and identification of areas of employment and professional activity in art making. Presentation techniques including a portfolio of art work, personal artistic statement, and critiques and reports reflecting an understanding of the information presented through guest lecturers, films and field trips. Recommended for all Visual Arts majors.
ART A220
Figure Composition
Prerequisite(s): ART A121.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

An advanced drawing and painting course. The primary focus is pictorial composition. Creative solutions to the posed model situations are emphasized. Design of the picture plane using traditional compositional devices will be taught. Examples from old master art reproductions and their art history will be integral part of the class.

ART A235
Experimental Painting
Advisory: ART A110.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Exploration and presentation of painting using contemporary mixed media and materials in non-traditional contexts for the purpose of developing individual expressive directions. Experimentation with various painting supports and non-traditional media. This course may be taken four times.

ART A236
Life Painting 1
Prerequisite(s): ART A121.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A course in figure painting using the live model. Various painting media and analysis of light, shade, and color will be covered. May be taken for grades or on a pass-no pass basis.

ART A237
Life Painting 2
Prerequisite(s): ART A236.

Grading Mode: Standard Letter
Transfer Credit: CSU.

This is an intermediate course and a continuation of A236 with emphasis on visual devices used by artists in a variety of styles. An additional emphasis on personal expression, painting style, and methodology.

ART A241
Sculpture 2
Prerequisite(s): ART A141.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Advanced study in the creative use of techniques and materials of sculpture with an emphasis on metal manipulation, mold making and casting, additive sculpture, and assemblage as performed in fine and applied arts. Focus is on portfolio building for career or transfer.

ART A242
Advanced Sculpture New Media
Prerequisite(s): ART A141.

Advisory: ART A241.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Advanced study in the creative use of techniques and materials of sculpture with an emphasis on new digital and physical techniques and concepts in sculpture including public art, performance, installation, and sculpture in the entertainment industry.

ART A244
Metal Casting and Forming
Prerequisite(s): ART A141.

Advisory: ART A241.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to various processes in metalworking for sculpture and industry. Activities will include direct and indirect techniques of developing wax models to be used in the lost wax metal casting process. Students will design unique sculptural forms which will be cast in metal using either plaster investment or ceramic shell molds. Students will fabricate metal forms using techniques of forging and forming. Course emphasis will be placed on the safe and proper use of hand and power tools and upon a variety of foundry and metal-forming practices such as: mold making, sprue and gating systems, mold dewaxing, metal pouring procedures, forging, fastening, cold finishing, metal finishing, and coloring techniques.

ART A245
Exhibition Design 2
Prerequisite(s): ART A145.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Continued coursework in the solving of design problems related to gallery and museum exhibits. Emphasis on spatial planning, crowd flow and thematic presentation based on curatorial criteria. Development of skills related to art handling, lighting and signage graphics. Development of skills for framing, pedestal construction and model making for exhibition presentation. Assignment of specific responsibilities in design and management. Recommended for all visual art and architecture students.

ART A247
Jewelry 2
Prerequisite(s): ART A147.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Further development of hand wrought jewelry fabrication techniques to include explorations in casting, hollow form construction, linking devices and lapidary. Emphasis will also be on individual student’s field of interest.
ART A249 3 Units (27 lecture hours; 81 lab hours)
Digital Sculpture with ZBrush
Grading Mode: Standard Letter
Transfer Credit: CSU.

This is an introductory course in digital sculpting introducing the student to the Pixologic ZBrush 3-D Digital Sculpting application. The ZBrush application can simulate traditional sculpting in clay by using a stylus and tablet to create high resolution digitally sculpted models. These models are often used in creating illustrations and 3-D models for film, game, and animation productions.

ART A251 3 Units (27 lecture hours; 81 lab hours)
Character Design
Prerequisite(s): ART A120 or ART A120H; ART A121.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An introduction to techniques and strategies used for developing characters for the entertainment industry focusing on animation and game design. Assignments will explore how the story affects the design and development of characters both individually and in groups.

ART A252 3 Units (27 lecture hours; 81 lab hours)
Prop and Vehicle Design
Advisory: ART A125; ART A135.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course explores the process of designing compelling props and vehicles for entertainment projects. Students will learn how to visually develop concepts from initial sketches to final renderings of objects from the everyday mundane to the fantastic. Emphasis is placed on principles of three-dimensional drawing and the application of design research. PREREQUISITES: ART A120 or ART A120H.

ART A253 3 Units (27 lecture hours; 81 lab hours)
Environment Design and Illustration
Prerequisite(s): ART A120 or ART A120H.
Advisory: ART A125, ART A135.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course explores the process of designing compelling environments for illustration and entertainment projects. Students will develop strategies to understand, evaluate and create a variety of environments for film, animation, interactive, immersive, and real-world themed environments. Topics covered include visual composition, perspective drawing, cinematography, architectural styles, and user/guest experience.

ART A255 3 Units (27 lecture hours; 81 lab hours)
Entertainment Art Project
Prerequisite(s): ART A135.
Advisory: ART A251.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course covers the design and production of a faculty-supervised project for portfolio development to be used in the entertainment industry. Students will learn how to visually develop an idea for production in Animation, Film or Games. Areas covered by this course include story/concept development, art direction, and the design and illustration of props, vehicles, environments, and characters necessary for world building.

ART A256 3 Units (27 lecture hours; 81 lab hours)
Watercolor 1
Advisory: ART A110.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Materials, methods, composition, and color for still life and landscape painting.

ART A269 3 Units (27 lecture hours; 81 lab hours)
Cartooning 1
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

A basic course in cartooning for students interested in learning how to cartoon without any previous formal art training.

ART A270 3 Units (27 lecture hours; 81 lab hours)
Cartooning 2
Prerequisite(s): ART A269.
Grading Mode: Standard Letter
Transfer Credit: CSU.

A continuation of Cartooning 1 with an emphasis on developing skills, story idea interpretation, and a professional approach to cartooning.

ART A286 2 Units (18 lecture hours; 54 lab hours)
Book Arts
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

An exploration into historical and modern approaches in the making, construction and binding of artists’ books. Preliminary exercise and experiments with different types of bindings will lead the student to a final project in book form.
Astronomy (ASTR)

ASTR A100 3 Units (54 lecture hours)
Introduction to Astronomy
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introduction to the origin, evolution and structure of the solar system, stars, galaxies and the Universe. Milestones in the science of astronomy from ancient times to the space age. Historical development of astronomical ideas leading to current models. Special focus on the latest discoveries from both ground- and space-based instruments. Consideration of current controversies in astronomy and the future of astronomical research. May be taken for grades or on a pass-no pass basis. Lecture.

ASTR A100H 3 Units (54 lecture hours)
Introduction to Astronomy Honors
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introduction to the origin, evolution and structure of the solar system, stars, galaxies and the universe. Milestones in the science of astronomy from ancient times to the space age. Historical development of astronomical ideas leading to current models. Special focus on the latest discoveries from both ground- and space-based instruments. Consideration of current controversies in astronomy and the future of astronomical research. May be taken for grades or on a pass-no pass basis. Lecture.

ASTR A100L 1 Unit (54 lab hours)
Introduction to Astronomy Laboratory
Prerequisite(s): ASTR A100, ASTR A100H, ASTR A101, ASTR A102, ASTR A103 or ASTR A104, or concurrent enrollment.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A laboratory course designed for non-science majors. It will provide practical experience with the scientific method through outdoor astronomical observations and indoor analysis of experimental data. May be taken for grades or on a pass-no pass basis. Lab.

ASTR A100M 1 Unit (54 lab hours)
Introduction to Astronomy Laboratory Honors
Prerequisite(s): ASTR A100, ASTR A100H, ASTR A101, ASTR A102, ASTR A103 or ASTR A104, or concurrent enrollment.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A laboratory course designed for non-science majors. It will provide practical experience with the scientific method through outdoor astronomical observations and indoor analysis of experimental data. May be taken for grades or on a pass-no pass basis.

ASTR A101 3 Units (54 lecture hours)
Planetary Astronomy
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

An introduction to the current solar system. A comparative study will be made of the planets and their satellites, dwarf planets, asteroids, and interplanetary debris. An overview of the formation, evolution and structure of the solar nebula will be presented. Current topics on interplanetary missions, extrasolar planets, and extraterrestrial life will be discussed. May be taken for grades or on a pass-no pass basis. Lecture.

ASTR A102 3 Units (54 lecture hours)
Stellar Astronomy
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A detailed study of the formation, structure, and evolution of the sun and stars, including an overview of binary systems, variable stars, supernovae, white dwarfs, neutron stars, black holes, and other stellar phenomena. A survey of particle physics and special and general relativity will also be included. May be taken for grades or on a pass-no pass basis. Lecture.

ASTR A103 3 Units (54 lecture hours)
Cosmology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

An introduction to the origin and evolution of the Universe with emphasis on the cosmological models. Types of galaxies and their distribution in the universe, gravitational lensing, dark matter, and dark energy will be examined. An overview of particle physics and special and general relativity will be included. May be taken for grades or on a pass-no pass basis. Lecture.

ASTR A104 3 Units (54 lecture hours)
Galactic Astronomy
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

An overview of the origin, structure, and dynamical nature of the Milky Way. An emphasis on the different types of galaxies and their evolution through time. Observational techniques used to study galaxies and the evidence for supermassive black holes, quasars, and dark matter. May be taken for grades or on a pass-no pass basis. Lecture.

ASTR A110 2 Units (18 lecture hours; 54 lab hours)
Observational Astronomy
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

An introduction to the methods and techniques of observational astronomy, telescope principles, and operations as applied to public viewing of astronomical phenomena. This course is designed for students to operate the telescopes and assist the public in observing objects in the night sky. May include field trips to nearby observatories, planetaria, and public science facilities. May be taken for grades or on a pass-no pass basis.
ASTR A200
Introduction to Astrophysics
4 Units (72 lecture hours)
Prerequisite(s): PHYS A185 or PHYS A185H.
Advisory: PHYS A285.
Grading Mode: Standard Letter
An introduction to astrophysics for science students. Emphasis on applying physical principles to gain a quantitative understanding of astrophysical phenomena. Topics covered include celestial mechanics; electromagnetic radiation; spectroscopy; stellar structure, evolution, and remnants; galaxies; and cosmology. Transfer Status: CSU, UC.

ASTR A200H
Introduction to Astrophysics Honors
4 Units (72 lecture hours)
Prerequisite(s): PHYS A185 or PHYS A185H.
Advisory: PHYS A285.
Grading Mode: Standard Letter
An introduction to astrophysics for science students. Emphasis on applying physical principles to gain a quantitative understanding of astrophysical phenomena. Topics covered include celestial mechanics; electromagnetic radiation; spectroscopy; stellar structure, evolution, and remnants; galaxies; and cosmology.

Athletics (ATHL)

ATHL A109
Sports Conditioning
0.5-2.5 Units (4.5-27 lecture hours; 13.5-63 lab hours)
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
This course is designed to develop fundamental skills and techniques specifically for athletic competition. Workouts and drills are held on athletic fields and in the fitness facilities. This course may be taken four times.

ATHL A119
Athletic Team Training
0.5-5 Units (4.5-45 lecture hours; 13.5-135 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Course designed for students who are interested in improving their skills for competitive athletic performance. May be taken for grades or on a pass-no pass basis. This course may be taken four times.

ATHL A129
Fitness for Performance
0.5-2.5 Units (4.5-27 lecture hours; 13.5-63 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Designed to enhance all components of physical fitness: muscular strength and endurance, cardio-respiratory endurance, flexibility, and reduce body fat while reducing the risk of injury by using a variety of fitness regimens in order to improve performance. May be taken for grades or on a pass-no pass basis. This course may be taken four times.

ATHL A222
Pep Squad
3 Units (180 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Practice, participation and competition on cheer, dance and stunt teams for OCC. Includes development of skills, both individual and group, for successful public performance. May be taken for grades or on a pass-no pass basis. This course may be taken four times.

ATHL A235
Basketball Team - Women's
3 Units (180 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC
This course is for students who have successfully auditioned for the OCC Intercollegiate Women's basketball team; eligibility auditions will be held during the first week of class. May be taken for grades or on a pass, no-pass basis. Students may enroll in this course four times.

ATHL A236
Cross Country Team - Women's
3 Units (180 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Eligibility auditions will be held during the first week of class. May be taken for grades or on a pass, no-pass basis. This course may be taken four times.

ATHL A238
Crew Team - Women's
3 Units (180 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Eligibility auditions will be held during the first week of class. May be taken for grades or on a pass, no-pass basis. This course may be taken four times.

ATHL A239
Golf Team - Women's
3 Units (180 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Eligibility auditions will be held during the first week of class. May be taken for grades or on a credit-no credit basis.

ATHL A240
Soccer Team - Women's
3 Units (180 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Eligibility auditions will be held during the first week of class. May be taken for grades or on a pass, no-pass basis. This course may be taken four times.
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<thead>
<tr>
<th>Course Code</th>
<th>Name</th>
<th>Units (Lab Hours)</th>
<th>Grading Mode:</th>
<th>Transfer Credit:</th>
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<tbody>
<tr>
<td>ATHL A241</td>
<td>Fastpitch Team</td>
<td>3 Units (180 lab hours)</td>
<td>Standard Letter, Pass/No Pass</td>
<td>CSU; UC.</td>
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<td>ATHL A242</td>
<td>Swimming Team - Women's</td>
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<td>Standard Letter, Pass/No Pass</td>
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<td>ATHL A243</td>
<td>Tennis Team - Women's</td>
<td>3 Units (180 lab hours)</td>
<td>Standard Letter, Pass/No Pass</td>
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<td>ATHL A244</td>
<td>Track and Field Team - Women's</td>
<td>3 Units (180 lab hours)</td>
<td>Standard Letter, Pass/No Pass</td>
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<td>ATHL A245</td>
<td>Volleyball Team - Women's</td>
<td>3 Units (180 lab hours)</td>
<td>Standard Letter, Pass/No Pass</td>
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<td>ATHL A246</td>
<td>Water Polo Team - Women's</td>
<td>3 Units (180 lab hours)</td>
<td>Standard Letter, Pass/No Pass</td>
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<td>Eligibility auditions will be held during the first week of class. May be taken for grades or on a pass, no-pass basis. This course may be taken four times.</td>
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<tr>
<td>ATHL A247</td>
<td>Sand Volleyball Team - Women's</td>
<td>3 Units (180 lab hours)</td>
<td>Standard Letter, Pass/No Pass</td>
<td>CSU; UC.</td>
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<td>Eligibility auditions will be held during the first week of class. This course is designed for advanced sand volleyball players with a desire to participate on the intercollegiate sand volleyball team. May be taken for grades or on a pass, no-pass basis. This course may be taken four times.</td>
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<tr>
<td>ATHL A250</td>
<td>Baseball Team</td>
<td>3 Units (180 lab hours)</td>
<td>Standard Letter, Pass/No Pass</td>
<td>CSU; UC.</td>
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<tr>
<td>ATHL A251</td>
<td>Basketball Team - Men's</td>
<td>3 Units (180 lab hours)</td>
<td>Standard Letter, Pass/No Pass</td>
<td>CSU; UC.</td>
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<td>This course is for students who have successfully auditioned for the OCC Intercollegiate Men’s basketball team; eligibility auditions will be held during the first week of class. May be taken for grades or on a pass, no-pass basis. Students may enroll in this course four times.</td>
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<td>ATHL A252</td>
<td>Crew Team - Men's</td>
<td>3 Units (180 lab hours)</td>
<td>Standard Letter, Pass/No Pass</td>
<td>CSU; UC.</td>
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<td>ATHL A253</td>
<td>Cross Country Team - Men's</td>
<td>3 Units (180 lab hours)</td>
<td>Standard Letter, Pass/No Pass</td>
<td>CSU; UC.</td>
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<td>ATHL A254</td>
<td>Football Team</td>
<td>3 Units (180 lab hours)</td>
<td>Standard Letter, Pass/No Pass</td>
<td>CSU; UC.</td>
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ATHL A255 3 Units (180 lab hours)
Golf Team - Men's
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Eligibility auditions will be held during the first week of class. May be taken for grades or on a credit-no credit basis. This course may be taken four times.

ATHL A257 3 Units (180 lab hours)
Soccer Team - Men's
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Eligibility auditions will be held during the first week of class. May be taken for grades or on a credit-no credit basis. This course may be taken four times.

ATHL A258 3 Units (180 lab hours)
Swimming Team - Men's
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Eligibility auditions will be held during the first week of class. May be taken for grades or on a credit-no credit basis. This course may be taken four times.

ATHL A259 3 Units (180 lab hours)
Tennis Team - Men's
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Eligibility auditions will be held during the first week of class. May be taken for grades or on a credit-no credit basis. This course may be taken four times.

ATHL A260 3 Units (180 lab hours)
Track and Field Team - Men's
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Eligibility auditions will be held during the first week of class. May be taken for grades or on a credit-no credit basis. This course may be taken four times.

ATHL A261 3 Units (180 lab hours)
Volleyball Team - Men's
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Eligibility auditions will be held during the first week of class. May be taken for grades or on a credit-no credit basis. This course may be taken four times.

ATHL A263 3 Units (180 lab hours)
Water Polo Team - Men's
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Eligibility auditions will be held during the first week of class. May be taken for grades or on a pass, no-pass basis. This course may be taken four times.

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**Aviation Maintenance Tech (AMT)**

**AMT A140** 3 Units (54 lecture hours)
Helicopter Theory and Operations
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Rotary wing aircraft development, technology, and construction. Federal Aviation Administration (FAA) requirements for operation and maintenance. Survey of helicopter industry. May be taken for grades or on a pass-no pass basis.

**AMT A150** 4 Units (36 lecture hours; 90 lab hours)
General Maintenance Records - FAA
Grading Mode: Standard Letter
Transfer Credit: CSU.
Mechanic's privileges and limitations, maintenance forms and records, non-destructive testing, precision measurement, record keeping, and ground operation.

**AMT A151** 3 Units (36 lecture hours; 72 lab hours)
General Electricity - FAA
Grading Mode: Standard Letter
Transfer Credit: CSU.
Aircraft basic electricity, basic troubleshooting, and aircraft batteries.

**AMT A152** 2 Units (18 lecture hours; 72 lab hours)
General Airframe & Powerplant Fuel Systems - FAA
Grading Mode: Standard Letter
Transfer Credit: CSU.
Theory and practical experience in a variety of aircraft math, physics, and weight and balance calculations, and varied problems. Practical experience in weight and balance of aircraft.

**AMT A153** 3 Units (27 lecture hours; 94.5 lab hours)
General Materials, Processes & Welding - FAA
Grading Mode: Standard Letter
Transfer Credit: CSU.
Materials used in aircraft, cleaning of parts, hardware and other fastener identification, and aircraft welding.

**AMT A154** 3 Units (54 lecture hours; 9 lab hours)
General Weight & Balance, Math & Physics - FAA
Grading Mode: Standard Letter
Transfer Credit: CSU.
Theory and practical experience in a variety of aircraft math, physics, and weight and balance calculations, and varied problems. Practical experience in weight and balance of aircraft.

**AMT A155** 2 Units (27 lecture hours; 27 lab hours)
General Blueprint Reading & Drafting - FAA
Grading Mode: Standard Letter
Transfer Credit: CSU.
Fundamental theory of aviation blueprints and drafting. Practical experience in blueprint reading, drawing, sketches of repairs, alterations, schematics, and varied uses of graphs and charts.
AMT A160  6 Units (72 lecture hours; 144 lab hours)
Airframe & Powerplant Electricity - FAA
Advisory: AMT A151.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Fundamental theory relating to aircraft electrical systems, ice and rain, and fire protection systems. Practical experience in disassembly, repair, overhaul, inspection, testing of electrical components and systems.

AMT A161  5.5 Units (54 lecture hours; 144 lab hours)
Airframe Sheet Metal & Composite Structural Repair - FAA
Advisory: AMT A153.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Fundamental theory relating to aircraft structures. Practical experience in sheet metal, composites, wood, riveting, fabric, inspection, and painting.

AMT A162  3 Units (36 lecture hours; 81 lab hours)
Airframe Assembly & Rigging, Pneumatics & Environmental Control Systems - FAA
Advisory: AMT A153.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Fundamental theory of assembly, cabin control systems, and rigging. Practical experience in rigging, assembly, disassembly, repair, overhaul, testing, inspection, and operation of component parts.

AMT A163  4.5 Units (36 lecture hours; 126 lab hours)
Airframe Hydraulics and Landing Gear - FAA
Advisory: AMT A150 and AMT A152.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Fundamental theory of hydraulic, pneumatic, and landing gear systems. Practical experience in disassembly, repair, overhaul, test, inspection, and operation of component parts.

AMT A170  6 Units (54 lecture hours; 171 lab hours)
Powerplant Reciprocating Engines FAA
Advisory: AMT A150 and AMT A153.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Fundamental theory of aircraft reciprocating engines. Practical experience in overhauling, repair, assembly, testing, and troubleshooting various powerplants.

AMT A171  4 Units (45 lecture hours; 90 lab hours)
Powerplant Fuel Metering, Exhaust & Induction Systems FAA
Advisory: AMT A152.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Aircraft reciprocating engine fuel metering, induction, cooling, and exhaust systems.

AMT A172  4 Units (45 lecture hours; 108 lab hours)
Powerplant Propeller and Lubricating Systems FAA
Advisory: AMT A170.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Fundamental theory of propellers and lubrication system components. Practical experience in overhauling, repairing, testing, and troubleshooting different types of systems and components.

AMT A173  6 Units (63 lecture hours; 180 lab hours)
Powerplant Gas Turbine Engines - FAA
Advisory: AMT A150 and AMT A153.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Fundamental theory and overhaul of turbine engines, starting systems, and system components. Practical experience in disassembly, repair, overhaul, inspection, and testing of turbine engines and components.

AMT A174  2.5 Units (27 lecture hours; 54 lab hours)
Powerplant Ignition Systems - FAA
Advisory: AMT A151.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Fundamental theory of ignition systems and practical experience in disassembly, repair, overhaul, inspection, and testing of ignition components.

AMT A180  2.5 Units (31.5 lecture hours; 45 lab hours)
Airframe and Powerplant Instrumentation FAA
Grading Mode: Standard Letter
Transfer Credit: CSU.
A survey and limited practical experience of basic instrumentation systems used in private, corporate, and commercial aircraft. Included are aircraft nomenclature, acronyms, and use of computer-based training systems.

AMT A181  2 Units (27 lecture hours; 31.5 lab hours)
Airframe Communication and Navigation Systems - FAA
Advisory: AMT A180.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Survey of avionic systems used in navigation and communication and use of computer-based flight management systems, flight deck orientation, and theory of flight.
AMT A182  
Avionics Installation Practices  
Advisory: AMT A151.  

Grading Mode: Standard Letter  
Transfer Credit: CSU.  

Schematic reading, use of multimeter, Series and parallel circuits. Avionics terminology, system interfacing. Avionics install standard practices. Diagnostic test equipment and fault finding logic tree techniques to a systems level.

AMT A184  
Avionics Installations and Troubleshooting  
Advisory: AMT A182.  

Grading Mode: Standard Letter  
Transfer Credit: CSU.  

A course in aircraft radio navigational and communication systems. Bench test, installation and ramp test of transmitter and receiver systems and their operating principles. Systems include VHF Comm, VOR, ILS, and Transponder. Students are required to bring hand tools.

AMT A188  
G.R.O.L. and Avionics Rules and Regulations  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  

Federal Communication Commission general radiotelephone operations license (G.R.O.L.) exam preparation. Federal Aviation Administration rules and regulations as they apply to the maintenance of avionic systems.

AMT A290  
Helicopter Maintenance  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  

Maintenance of helicopters, helicopter rotor systems, power trains, unique system features, instrumentation, and design construction. Practical experience in dismantling, inspection, repair, assembly, testing, and troubleshooting a variety of helicopters and system components.

Aviation Pilot Training (APT)  

APT A110  
Introduction to Airport Operations  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  

This course provides students with an introduction to airport operations and operations management. Students will learn about the daily responsibilities of airport operations managers to include airfield inspections, aircraft ramp handling, passenger terminal operations, airport security and cargo handling. In addition the student will be introduced to airport licensing requirements, airport operational administration and performance and environmental planning factors to include noise abatement.

APT A115  
Introduction to Flight Operations  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  

This course provides an introduction to airline and corporate flight operations and operations management to include the economic structure of the airlines, airline organization and management, forecasting, scheduling, marketing and fleet selection. In addition, corporate flight operations and the impact of general aviation on the nation's air transportation system are explored. The course also introduces the student to the world of flight operations management to include dispatch, crew scheduling, airframe scheduling and flight following.

APT A120  
Private Pilot Flight Lab  
Grading Mode: Pass/No Pass  
Transfer Credit: CSU.  

During this course the student obtains the foundation for all future aviation training. The student will receive training in the maneuvers and procedures necessary for him/her to meet the standards contained in the FAA Private Pilot Practical Test Standards. Additionally, the student will receive training in safety awareness, crew resource management, and aeronautical decision-making. At the successful completion of this course the student will have gained the aeronautical experience necessary to attain a Private Pilot Certificate with an Airplane Single Engine Land Rating. Lab. NOTE: Instructor permission is required for enrollment in this class.

APT A121  
Instrument Pilot Flight Lab  
Grading Mode: Pass/No Pass  
Transfer Credit: CSU.  

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the FAA Instrument Rating Practical Test Standards. Additionally, the student will receive training in safety awareness, crew resource management, and aeronautical decision-making. At the successful completion of this course the student will have gained the aeronautical experience necessary to attain the addition of an Instrument Rating for the Private Pilot Certificate. This course is offered on a pass/no-pass basis only. Lab.

APT A122  
Commercial Pilot Flight Lab  
Grading Mode: Pass/No Pass  
Transfer Credit: CSU.  

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the FAA Commercial Pilot Practical Test Standards. Additionally, the student will receive training in safety awareness, crew resource management, and aeronautical decision-making. At the successful completion of this course, the student will have gained the aeronautical experience necessary to attain the Commercial Pilot Certificate. Lab.
### APT A123
**Private Pilot Advanced Flight Lab**
- **Grading Mode:** Pass/No Pass
- **Transfer Credit:** CSU.

Flight training in selected areas for the purpose of gaining proficiency in required pilot operations for various certificates and ratings. All training is conducted in accordance with Federal Aviation Regulation (FAR) Part 61 and Part 141. All flight training labs are conducted in accordance with an approved FAR Part 141 syllabus. In addition, flight lab courses allow the student to accrue the necessary flight hours for certification and licensing as a commercial, instrument pilot.

### APT A124
**Advanced Commercial Pilot Flight Lab**
- **Prerequisite(s):** Private Pilot Certificate (will be verified by Instructor on first class meeting).
- **Grading Mode:** Pass/No Pass
- **Transfer Credit:** CSU

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the FAA Commercial Pilot Practical Test Standards. Additionally, the student will receive training in safety awareness, crew resource management, and aeronautical decision-making. At the successful completion of this course, the student will have gained the aeronautical experience necessary to attain the addition of an Commercial Rating for the Private Pilot Certificate. All training is conducted in accordance with CFR 14, Federal Aviation Regulation Part 61 and under a syllabus of instruction approved under CFR 14, Federal Aviation Regulation Part 141. This course is offered on a pass/no pass basis only.

### APT A126
**Multi-Engine Aircraft Operations Lab**
- **Grading Mode:** Standard Letter
- **Transfer Credit:** CSU

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the Commercial Practical Test Standards Airplane Multi-Engine Land. Additionally, the student will receive training in safety awareness, crew resource management, and aeronautical decision making. At the successful completion of this course, the student will have gained the aeronautical experience necessary to attain the additional rating of Commercial Pilot, Airplane Multi-Engine Land. This course will be offered on a pass/no-pass basis only.

### APT A127
**Advanced Instrument Pilot Flight Lab**
- **Grading Mode:** Pass/No Pass
- **Transfer Credit:** CSU.

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the FAA Instrument Rating Practical Test Standards. Additionally, the student will receive training in safety awareness, crew resource management, and aeronautical decision-making. At the successful completion of this course, the student will have gained the aeronautical experience necessary to attain the addition of an Instrument Rating for the Private Pilot Certificate. This lab course is offered on a pass/no-pass basis only.

### APT A128
**Flight Instructor Flight Lab**
- **Grading Mode:** Pass/No Pass
- **Transfer Credit:** CSU.

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the FAA Certified Flight Instructor Practical Test Standards. Additionally, the student will receive training in fundamentals of instructions, safety awareness, crew resource management, and aeronautical decision-making. At the successful completion of this course, the student will have gained the aeronautical experience necessary to attain the Flight Instructor - Airplane Rating. All training is conducted in accordance with CFR 14, Federal Aviation Regulation Part 61 and under a syllabus of instruction approved under CFR 14, Federal Aviation Regulation Part 141. This course will be offered on a pass/no-pass basis only.

### APT A129
**Advanced Flight Instructor Flight Lab**
- **Grading Mode:** Pass/No Pass
- **Transfer Credit:** CSU.

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the FAA Certified Flight Instructor Practical Test Standards. Additionally, the student will receive training in fundamentals of instructions, safety awareness, crew resource management, and aeronautical decision-making. At the successful completion of this course, the student will have gained the aeronautical experience necessary to attain the Flight Instructor - Airplane Rating. All training is conducted in accordance with CFR 14, Federal Aviation Regulation Part 61 and under a syllabus of instruction approved under CFR 14, Federal Aviation Regulation Part 141. This course will be offered on a pass/no-pass basis only.

### APT A130
**Private Pilot Aviation Ground School**
- **Grading Mode:** Standard Letter
- **Transfer Credit:** CSU.

Entry level course for commercial pilot training program. Covers basic aerodynamics, aircraft performance, Federal Aviation Regulations, aviation weather factors and cross country navigation procedures. Provide introductory material on radio navigation, radio communications procedures, human factors and aviation safety. Meets the preparation requirements for the FAA Private Pilot computerized knowledge examination. All training is conducted in accordance with Federal Aviation Regulation (FAR) Part 61.
APT A131  
Introduction to Unmanned Aircraft Systems  
3 Units (54 lecture hours)  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

This course provides an overview of Unmanned Aircraft Systems (UAS). Topics include the development and history of UAS, current and upcoming operational regulations, airspace classifications, sources of weather, loading and performance, radio communications, airport operations, maintenance and inspection procedures, industry and societal implications, career outlooks, ethical considerations, and basic components required to operate a UAS. The course will also introduce hands-on UAS flight and operation principles through PC-based simulation. All training is conducted in accordance with Federal Aviation Regulations (FAR) Part 107.

APT A132  
Aviation Navigation  
3 Units (54 lecture hours)  
Prerequisite(s): APT A130; current Private Pilot Certificate (verified by the instructor at the first class meeting).  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

This course provides academic background for pilots preparing for the FAA Commercial Pilot license and FAA Instrument rating. The course will cover basic visual navigation, instrument navigation, use of Global Positioning Systems and an introduction to Flight Management Computers. Current Private Pilot Certificate will be verified by the Instructor at the first class meeting. Three hours.

APT A133  
Aviation-Meteorology  
3 Units (54 lecture hours)  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Entry level course for commercial pilot training program. This course will cover the forces which generate and affect weather, weather systems, aviation weather services and cross country weather planning procedures. The course will also provide detailed material on aviation weather hazards and aviation meteorological reports.

APT A134  
Instrument Pilot Aviation Ground School  
3 Units (54 lecture hours)  
Prerequisite(s): APT A130 or current Private Pilot Certificate (verified by the instructor at the first class meeting).  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Provides academic background for Private Pilots preparing for the FAA Instrument Rating. Covers principles of instrument flight, aircraft performance, Federal Aviation Regulations, aviation weather factors and IFR cross country navigation procedures. Provides material on Instrument Approach Procedures, IFR operational procedures, human factors and aviation safety. All training is conducted in accordance with Federal Aviation Regulation (FAR) Part 61. All flight training labs are conducted in accordance with an approved FAR Part 141 syllabus. Meets the preparation requirements for the FAA Instrument rating computerized knowledge examination. Current Private Pilot Certificate will be verified by the instructor at the first class meeting. Three hours.

APT A138  
Aerodynamics  
3 Units (54 lecture hours)  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Course covers the basic principles of flight theory in both low and high speed regimes. Airflow theory, airfoil design, high lift devices, induced and parasitic drag, stall patterns, climb and sink performance, thrust and power, control & stability in the subsonic, transonic, and supersonic conditions. Extensive discussion of stall/spin aerodynamics and recovery techniques.

APT A139  
Commercial Pilot Aviation Ground School  
3 Units (54 lecture hours)  
Prerequisite(s): APT A130 or current Private Pilot Certificate with Instrument rating; Students satisfying the Pilot Certificate prerequisite must present proof to the instructor at the first week of the course.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Provides academic background for Private Pilots preparing for the FAA Commercial Pilot license. Covers transport category aircraft performance considerations, advanced weight and balance, multi-engine aerodynamics, and Federal Aviation Regulations applicable to Commercial pilots. Meets the preparation requirements for the FAA Commercial Pilot computerized knowledge examination.

APT A140  
Flight Instructor Ground School  
3 Units (54 lecture hours)  
Advisory: APT A139.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Academic preparation for written and practical examinations for Certificated Flight Instructor, Airplane. Covers basic aerodynamics, aircraft performance, Federal Aviation Regulations, aviation weather factors and cross country navigation procedures. Provides in depth instruction in the fundamentals of teaching and learning and ground and in-flight instructional techniques. Meets the preparation requirements for the FAA Flight Instructor computerized knowledge examination and Fundamentals of Learning computerized knowledge examination. All training is conducted in accordance with Federal Aviation Regulation (FAR) Part 61 and Part 141. Students satisfying the pilot certificate prerequisite must present proof to the instructor during the first week of the course.

APT A141  
Instrument Flight Simulator Lab  
2 Units (18 lecture hours; 36 lab hours)  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Course provides simulator instruction to be given concurrent with instrument flight lessons contained in APT A134. Course provides preparation for the Federal Aviation Agency (FAA) practical examination for the Instrument Rating. This course is offered on a pass/no-pass basis only. Lab.
Transfer Credit:

Grading Mode:

Co-requisite(s):

Advisory:

APT A130 and APT A134 and APT A139.

Co-requisite(s): APT A132 and APT A145.

This course covers air transport topics assessed in the FAA Aircraft Dispatcher Knowledge examinations. It includes a detailed review and practical applications of the skills and knowledge required for Aircraft Dispatcher certification. Topics covered in this course will be Federal Aviation Regulations on airline operations, airline communications and meteorology, analyzing and/or calculating various flight factors such as weather reports and NOTAMs, aircraft/runway performance, weight and balance, ATC preferred routes, and distance and fuel needs to create and/or update flight plans. Meets requirements of 14 CFR 65.53.

APT A151

Unmanned Aircraft Systems Lab

Co-requisite(s): APT A131.

Grading Mode: Standard Letter

Transfer Credit: CSU.

Commercial UAS operators are becoming a new occupation within the aviation industry. The purpose of UAS is widespread and may decrease unnecessary risks to pilots in certain environments. The Unmanned Aircraft Systems industry is expected to generate an estimated 100,000 jobs and $82.1 billion in economic impact in the next decade according to the Association for Unmanned Vehicle Systems International (AUVSI). Additionally, the Federal Aviation Administration (FAA) predicts 10,000 unmanned aircraft systems could be airborne in the U.S. skies by 2020.

APT A180

Basic Air Transportation

Grading Mode: Standard Letter

Transfer Credit: CSU.

Provides an analysis of the airline industry by providing historical background information on the evolution of the United States air transportation system along with a current analysis of the airlines, air traffic control system, business aviation and general aviation. The goal is to prepare students for entry into the airline industry through an analysis of market factors that influence airline operations as well as fleet planning, route planning, strategic planning and labor issues.

APT A192

Human Factors and Crew Resource Management

Grading Mode: Standard Letter

Transfer Credit: CSU.

Course encompasses a wide range of knowledge, skills and attitudes including communications, situational awareness, problem solving, decision making, and teamwork; together with the entire attendant sub-disciplines which each of these areas entails. CRM can be defined as a management system which makes optimum use of all available resources - equipment, procedures and people - to promote flight safety and enhance the efficiency of flight operations. This course may also be offered online.

Biology (BIOL)

BIOL A020

Making Connections in Cell and Molecular Biology

Co-requisite(s): BIOL A180.

Grading Mode: Pass/No Pass

This course complements Biology A180 lecture and laboratory and will provide essential additional opportunities for students to develop study skills in cell and molecular biology. The curriculum is designed to improve critical thinking, content application, and science writing. Opportunities to work in a collaborative environment will also be provided in order to reinforce this aspect of scientific inquiry. Speakers from and/or field trips to visit laboratories from transfer institutions may be provided to allow students to see direct application of the skill set promoted in Biology A180. This course will be the equivalent to the one hour study skills/discussion section that most four-year universities offer. Not applicable to AA or AS degree.
**BIOL A100**
4 Units (54 lecture hours; 54 lab hours)
Introduction to Biology
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
A general study of life processes with emphasis on biological chemistry, cells, molecular biology, heredity, ecology, evolution, and the diversity of life. Suitable as a general education elective for the non-science major. This course may also be offered online.

**BIOL A100H**
4 Units (54 lecture hours; 54 lab hours)
Introduction to Biology Honors
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
A general study of life processes with emphasis on biological chemistry, cells, molecular biology, heredity, ecology, evolution, and the diversity of life. Suitable as a general education elective for the non-science major.

**BIOL A101**
4 Units (54 lecture hours; 54 lab hours)
The Biology of Cooking
Advisory: CHEM A100 or AP Chemistry.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Ever wondered why grilled meat tastes so good? Why meringues are made with egg whites and not egg yolks? Why tomatoes are considered a fruit instead of a vegetable? These questions (and more!) will be answered in demonstration-filled classes as we use the reagents of the kitchen to teach the basic principles of biology and the scientific method.

**BIOL A114**
2 Units (18 lecture hours; 18 lab hours)
Basic Microbiology
Grading Mode: Standard Letter
Transfer Credit: CSU.
Microbiology as applied to disease, treatment, immunity and the environment. Introduction to history, theory, and techniques of microbiology as applied to microbial nutrition, disease, immunity, control and the environment.

**BIOL A115**
3 Units (54 lecture hours)
Introduction to the Biology of Animals
Grading Mode: Standard Letter
Transfer Credit: CSU
Introduces the diversity and biology of animals in a manner appropriate for students who have little to no background in science. Topics include an introduction to the anatomy, physiology, ecology, evolutionary biology, systematics, life history, and cell biology of animals. Suitable as a non-lab general education elective for the non-science major.

**BIOL A120**
1 Unit (18 lecture hours)
Anatomy Discussion
Advisory: enrollment in BIOL A220.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Student-centric discussion of topics covered within BIOL A220 (Human Anatomy): structural organization of the human body, gross and microscopic structure of the integumentary, skeletal, muscular, nervous, sensory, endocrine, cardiovascular, lymphatic, respiratory, digestive, excretory, and reproductive systems from cellular to organ system levels of organization. Taught from a functional perspective, it emphasizes the relationship of structure (Anatomy) to function (Physiology). This course is primarily intended for students concurrently enrolled in BIOL A220 (Human Anatomy), as well as nursing, allied health, kinesiology, and other health-related majors.

**BIOL A125**
3 Units (54 lecture hours)
Human Biology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
A transferable general education biology course for students not majoring in the life sciences. Emphasis on relationships of biology to human beings with emphasis on molecular genetics, heredity, major body systems, disease, and human interactions with the environment. May be taken for grades or on a pass-no pass basis.

**BIOL A172**
2 Units (36 lecture hours)
Nature of Birds
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
An introductory course to bird identification, their life, and their habitats. Emphasis will be on the physical characteristics of birds, how birds evolved, their classification, diet, behavior, reproduction strategies, flight mechanics, migration patterns, and characteristics of their natural habitat. There will be at least four field trips. May be taken for grades or on a pass-no pass basis.

**BIOL A180**
4 Units (63 lecture hours; 45 lab hours)
Introduction to Biology for Majors 1: Cell and Molecular Biology
Prerequisite(s): Completion of CHEM A130 or concurrent enrollment in one of the following: CHEM A180 or CHEM A185 or CHEM A220 or CHEM A225.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Designed for the major in the biological sciences and pre-health profession majors. Emphasizing central concepts of biology, including biochemistry, cell biology, membrane dynamics, molecular genetics, classical genetics, and biotechnology. CHEM A180 qualifying exam does not substitute for CHEM A130 prerequisite or CHEM A180 corequisite. Non-native speaking students must be eligible to enter ESL A031 and ESL A035. C-ID: BIOL 190.
Biology (BIOL)

**Biol A182**  
3 Units (54 lecture hours)  
Zoology  
Prerequisite(s): MATH A030.  
Advisory: BIOL A180; Any college level Biology and/or Chemistry course.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
Includes basic aspects of phylogeny, morphology, physiology and behavior of vertebrate and invertebrate animals. Emphasizes comparing the variety of mechanisms animals have evolved to solve common biological problems. C-ID: BIOL 150 when BIOL A182L is also completed.

**Biol A182H**  
3 Units (54 lecture hours)  
Zoology Honors  
Prerequisite(s): MATH A030.  
Advisory: BIOL A180; Any college level Biology and/or Chemistry course.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Includes basic aspects of phylogeny, morphology, physiology and behavior of vertebrate and invertebrate animals. Emphasizes comparing the variety of mechanisms animals have evolved to solve common biological problems.

**Biol A182L**  
1 Unit (9 lecture hours; 45 lab hours)  
Zoology Lab  
Prerequisite(s): BIOL A182 or BIOL A182H, or concurrent enrollment.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
A laboratory course emphasizing animal phylogeny, anatomy, and physiology using representative types.

**Biol A183**  
3 Units (54 lecture hours)  
Botany  
Prerequisite(s): MATH A030.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
Includes the dynamics of plants and their processes with particular emphasis on the structure and function of living plants. C-ID: BIOL 155 when BIOL A183L is also completed.

**Biol A183L**  
1 Unit (54 lab hours)  
Botany Lab  
Prerequisite(s): BIOL A183 or concurrent enrollment; and MATH A030 or higher (or appropriate placement).  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
A course in the dynamics of plants and their processes with particular emphasis on the structure and function of living things. Field Trip Required. Lab.

**Biol A185**  
5 Units (54 lecture hours; 108 lab hours)  
Introduction to Biology for Majors 2: Ecology, Evolution, Diversity, and Physiology  
Prerequisite(s): BIOL A180.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
An introduction to the evolution, ecology, physiology, anatomy, and life history of all major groups of organisms, including bacteria, archaea, fungi, plants, animals, other eukaryotes, and viruses. Students also develop their scientific experimentation skills, including statistical data analysis and writing. Field trip required. C-ID: BIOL 140.

**Biol A200**  
2 Units (16 lecture hours; 64 lab hours)  
Advanced Anatomy Practicum  
Prerequisite(s): BIOL A220.  
Co-requisite(s): BIOL A225.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Advanced exploration and discussion of topics and concepts within Human Anatomy, which include: structural organization of the human body; gross and microscopic structure of the integumentary, skeletal, muscular, nervous, sensory, endocrine, cardiovascular, lymphatic, respiratory, digestive, excretory, and reproductive systems from cellular to organ system levels of organization. Taught from a functional perspective, it emphasizes the relationship of structure (Anatomy) to function (Physiology). Laboratory participation and instructor shadowing are required. This course is primarily intended for students who have successfully completed BIOL A220 (Human Anatomy) and desire to further their knowledge and understanding of Human Anatomy, while being mentored by instructors in laboratory discussion and presentation, and instructing, mentoring and tutoring current anatomy students. BIOL A200 students will be expected to assist BIOL A220 (Human Anatomy) students utilizing newly acquired educational techniques in the following: dissection; identification of specimens and structures on both the micro- and macroscopic level.

**Biol A210**  
5 Units (54 lecture hours; 108 lab hours)  
General Microbiology  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
Fundamentals of bacteriology, mycology, protozoology, and virology. Includes food, water and medical microbiology, factors in resistance, infection, and disease. Human normal flora and the immune response are included. Microbial ecology, genetics, and bioenergetics are covered. Recommended for biological science majors.
BIOL A220  5 Units (54 lecture hours; 108 lab hours)
Human Anatomy
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Structural organization of the human body: gross and microscopic structure of the integumentary, skeletal, muscular, nervous, sensory, endocrine, cardiovascular, lymphatic, respiratory, digestive, excretory, and reproductive systems from cellular to organ system levels of organization. Taught from a functional perspective, it emphasizes the relationship of structure (Anatomy) to function (Physiology). Laboratory participation is required. This course is primarily intended for nursing, allied health, kinesiology, and other health-related majors. C-ID: BIOL 110B.

BIOL A221  4 Units (54 lecture hours; 54 lab hours)
Anatomy-Physiology
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Anatomy and physiology as a combined discipline. Designed for Career and Certificate Programs. Suitable as a general education elective for the non-science major. This course may also be offered online.

BIOL A225  5 Units (54 lecture hours; 108 lab hours)
Human Physiology
Prerequisite(s): CHEM A110 or CHEM A130.
Advisory: BIOL A220 or BIOL A221.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This course studies the physiological principles, function, integration and homeostasis of the human body at all levels of biological organization with an emphasis on the relationship of structure (Anatomy) and function (Physiology). Basic concepts and practical applications are stressed. Laboratory participation is required. This course meets requirements for pre-nursing, physical therapy and physical education majors. C-ID: BIOL 120B.

BIOL A281  2 Units (36 lecture hours)
Biochemistry
Prerequisite(s): BIOL A180 and CHEM A220.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

An introduction to the chemistry of biology. This course is designed to satisfy transfer requirements for some biology majors.

BIOL A282  2 Units (36 lecture hours)
Molecular Biology
Prerequisite(s): BIOL A180 and CHEM A220.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

An introduction to molecular biology emphasizing gene structure and function. This course is designed to satisfy transfer requirements for biology majors.

BIOL A283  4 Units (72 lecture hours)
Genetics
Prerequisite(s): BIOL A180 and CHEM A180.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This course covers the principles of Mendelian inheritance; gene transmission in prokaryotes and eukaryotes; recombination and mutation; gene regulation, replication, and expression; cell division; and biochemical genetics. Additional emphasis is placed on problem solving.

Broadcasting (BRCT)

BRCT A105  3 Units (45 lecture hours; 27 lab hours)
Broadcast Journalism
Grading Mode: Standard Letter
Transfer Credit: CSU.

An overview of television news, broadcast production and writing. Practical in studio experience with on-air news reporting and on-camera interview techniques.

BRCT A205  3 Units (36 lecture hours; 54 lab hours)
Remote Broadcasting
Prerequisite(s): FILM A155.
Advisory: FILM A194 and BRCT A105.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This advanced course provides students with real-world broadcast production experience through the use of remote live television production equipment. Students will gain a hands-on approach to producing both live and recorded productions. Studio and location shooting of multi-camera productions and video editing activities are performed in this course.
BUS A100 3 Units (54 lecture hours)
Introduction to Business
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
A survey of the many dimensions of business with a focus on careers: organization, management, marketing, legal aspects, international business, business climate, financial operations, the banking system, and investments. This course may also be offered online. C-ID: BUS 110

BUS A100H 3 Units (54 lecture hours)
Introduction to Business Honors
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
A survey of the many dimensions of business with a focus on careers: organization, management, marketing, legal aspects, international business, business climate, financial operations, the banking system, and investments. C-ID: BUS 110

BUS A101 3 Units (54 lecture hours)
Social Media for Business
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course is designed to understand social media concepts and strategies to promote an idea or business. This course includes a review of basic marketing concepts, social media methods and the development of a social media strategy. Course may be offered online and taken for a grade or on a pass-no pass basis.

BUS A110 3 Units (54 lecture hours)
Business Law
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Focuses on the legal and regulatory environment of business and management, including the legal system and methods of resolving disputes. The court system, trials and appeals, the Constitution, crimes and torts, contracts, product liability, employment, antitrust, law and ethics, corporate social responsibility, stakeholder relationships, ethical decision making, sole proprietorships, partnerships, limited partnerships, limited liability partnerships, limited liability companies, corporations, corporate structure and governance and international perspectives will be examined. Case studies will be presented. This course may also be offered online. C-ID: BUS 125.

BUS A110H 3 Units (54 lecture hours)
Business Law Honors
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Focuses on the legal and regulatory environment of business and management, including the legal system and methods of resolving disputes. The court system, trials and appeals, the Constitution, crimes and torts, contracts, product liability, employment, antitrust, law and ethics, corporate social responsibility, stakeholder relationships, ethical decision making, sole proprietorships, partnerships, limited partnerships, limited liability partnerships, limited liability companies, corporations, corporate structure and governance and international perspectives will be examined. Case studies will be presented. This course may also be offered online.

BUS A118 3 Units (54 lecture hours)
Introduction to International Business
Grading Mode: Standard Letter
Transfer Credit: CSU
Provides an overview of international business. Explores political, financial, and legal environments of selected countries and their impacts on firms' international business activities. Emphasis is given to business practices and comparative cultural topics. This course may also be offered online.

BUS A118H 3 Units (54 lecture hours)
Introduction to International Business Honors
Grading Mode: Standard Letter
Transfer Credit: CSU
Provides an overview of international business. Explores political, financial, and legal environments of selected countries and their impacts on firms' international business activities. Emphasis is given to business practices and comparative cultural topics.

BUS A120 3 Units (54 lecture hours)
Personal Financial Success
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU
Personal financial planning addressing the fundamentals of career planning, budgeting, investments, housing, insurance, taxation, estate planning, retirement planning, consumer credit, and spending. May be taken for grades or on a pass-no pass basis.

BUS A134 2 Units (36 lecture hours)
Excel 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU
Topics include spreadsheet concepts, model building, formula development, formula functions, charts, and list functions. Provides preparation for students seeking Microsoft Office Specialist (MOS) core certification. Same as Computer Information Systems A134. Students completing Business A134 may not receive credit for Computer Information Systems A134. This course may also be offered online. May be taken for grades or on a pass-no pass basis.
BUS A138  3 Units (54 lecture hours)
Business English
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU
Principles of editing written communication applicable to business. Emphasis on fundamentals of grammar and sentence structure. Recommended for all business majors. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

BUS A139  3 Units (54 lecture hours)
Business Communication
Prerequisite(s): ENGL A100.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Designed to develop writing skills necessary for effective business communications. Emphasizes skill in applying, planning, writing, and verbalizing business communication techniques. Students will need a fundamental knowledge of English and the mechanics of writing. This course may also be offered online. C-ID: BUS 115

BUS A141  3 Units (54 lecture hours)
Introduction to Entrepreneurship
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course helps students explore, identify, and develop feasible business opportunities and innovations. Students will determine the feasibility of opportunities through evaluating the marketplace, the product/service, profitability, financial requirements, and possible outcomes. Students could start and operate a business where a business plan is not required. This course may also be offered online. May be taken for a grade or on a pass-no pass basis.

BUS A185  3 Units (54 lecture hours)
Public Relations
Advisory: ENGL A100.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Introduction to the basic principles, components, and techniques of effective public relations. Topics include publicity and promotion, advertising, media and community relations, and approaches to problem solving. Same as CMST A185. Students completing Business A185 may not receive credit for Communication Studies 185.

BUS A186  3 Units (54 lecture hours)
Not for Profit Management
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
A course utilizing the many dimensions of business in conjunction with regulatory issues required for the challenges and opportunities of Not-for-Profit entities with a focus on communication and critical thinking skill development for leaders. Explores areas of strategic planning, financial management, capacity building, program evaluation, data management and analysis, legal and ethical issues of compliance, fundraising, governance practices, and volunteer and board development in their relation to the accountability, transparency, and persuasiveness of a Not-for-Profit entity. Topics will also include community outreach, endowments and grants, reporting obligations and other legal considerations.

BUS A187  3 Units (54 lecture hours)
Not for Profit Marketing
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
A survey of the major marketing and branding topics especially for Not-for-Profit entities and new to mid-level professionals. Explores external communications, message development, and conveying the message and mission of the Not-for-Profit. Topics will include communication across a variety of platforms, social and digital media, public events, and one-on-one networking, and fundraising.

BUS A200  3 Units (54 lecture hours)
Business Finance
Advisory: ACCT A101 or ACCT A101H.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Provides students with the fundamentals of financial management. The course addresses financial organizations, financial analysis and planning, working capital, the budgeting process, sources of financing, mergers and acquisitions, and cash flow analysis.

BUS A210  3 Units (54 lecture hours)
Securities Investment
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Basic concepts of investing in stocks and bonds with emphasis on market mechanics, types of orders, role of market professionals, margin accounts, selling short, commissions, and choosing a broker. Comprehensive study of approaches to price patterns, value investing, and the development of a rational investment philosophy. May be taken for grades or on a pass-no pass basis.
**BUS A212**

**3 Units (54 lecture hours)**

**Practical Investment Management**

*Grading Mode*: Standard Letter, Pass/No Pass  
*Transfer Credit*: CSU

Modern stock and bond portfolio management practices and techniques. Focus is on risk management strategies, ethical issues, and industry standards as they relate to conflicts of interest, performance measurement, and presentation of results. May be taken for grades or on a pass-no pass basis.

**BUS A234**

**2 Units (36 lecture hours)**

**Excel 2**

*Advisory*: BUS A134 or CIS A134.  
*Grading Mode*: Standard Letter, Pass/No Pass  
*Transfer Credit*: CSU.

Create templates and macros using Visual Basic for Applications to automate Excel tasks, formula auditing, data validation, complex problem solving, importing data, routing changes, PivotCharts, PivotTables, and trendlines. Provides preparation for students seeking Microsoft Office Specialist (MOS) certification. Same as CIS A234. Students completing Business A234 may not receive credit for Computer Information Systems A234. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

**BUS A239**

**3 Units (54 lecture hours)**

**Professional Communication**

*Grading Mode*: Standard Letter, Pass/No Pass  
*Transfer Credit*: CSU.

Study of communication functions, choices, and roles for professionals in business. Practice in using verbal, nonverbal, and writing skills to communicate one-on-one, electronically, and in groups. Same as Management A239. Students completing Business A239 may not receive credit for Computer Information Systems A239. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

**BUS A240**

**3 Units (54 lecture hours)**

**Entrepreneurship**

*Grading Mode*: Standard Letter, Pass/No Pass  
*Transfer Credit*: CSU.

This course examines essential activities required for launching a new business venture. Some of the topics students are exposed to include: feasibility analysis, components of a business plan, business model, intellectual property, marketing, ethics, taxes, break-even analysis, and etc. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

**CVT A100**

**2 Units (36 lecture hours)**

**Introduction to Electrocardiography**

*Prerequisite(s)*: BIOL A221; or BIOL A220 and BIOL A225.  
*Grading Mode*: Standard Letter  
*Transfer Credit*: CSU

Electrocardiographic interpretation and testing procedures for the ECG technician. Includes anatomy and electrophysiology of the cardiac conduction system; basic cardiac arrhythmias including sinus, atrial, junctional, and ventricular arrhythmias and heartblocks.

**CVT A130**

**3 Units (54 lecture hours)**

**Introduction to Invasive Cardiology**

*Grading Mode*: Standard Letter  
*Transfer Credit*: CSU

Introduction to the concepts of cardiac catheterization primarily for diagnosis of coronary artery disease. Includes hemodynamics, cardiovascular radiologic safety, aseptic and sterile field maintenance, pressure monitoring equipment, catheters, and contrast used for catheterization. Catheterization techniques, drug pharmacology used in the procedures and complications of cardiac catheterization.  
*Prerequisite*: CVT A160.

**CVT A150**

**2 Units (36 lecture hours)**

**Advanced Electrocardiography**

*Prerequisite(s)*: CVT A100.  
*Grading Mode*: Standard Letter  
*Transfer Credit*: CSU

Advanced procedures in electrocardiographic testing, including stress testing, Holter monitoring, and pacemakers. Advanced arrhythmias including ventricular conduction disturbances effects of drugs, electrolyte imbalances, myocardial infarction, and cardiac pharmacology.

**CVT A160**

**3 Units (54 lecture hours)**

**Cardiac Anatomy/Pathophysiology**

*Prerequisite(s)*: ALH A111 or concurrent enrollment; and BIOL A221.  
*Grading Mode*: Standard Letter  
*Transfer Credit*: CSU.

Cardiac anatomy, physiology, and pathology. Includes cardiovascular structures, hemodynamics, cardiac output and blood pressure, coronary artery disease and myocardial infarction, valvular diseases, infectious diseases, cardiac tumors and myopathies, and congenital heart disease.

**CVT A170**

**5 Units (18 lecture hours; 288 other hours)**

**ECG Clinical Experience**

*Prerequisite(s)*: ALH A115 and CVT A160.  
*Grading Mode*: Pass/No Pass  
*Transfer Credit*: CSU.

Assigned clinical practice within a health care facility in areas of routine ECG testing, stress testing, monitor technician, Holter monitoring, and pacemaker evaluation. Offered on a pass-no pass basis only.
CVT A190
Introduction to Sonography and Imaging Physics
3 Units (54 lecture hours)
Prerequisite(s): CVT A160.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to ultrasound physics & instrumentation for cardiac and vascular anatomy, visualized on 2-dimensional and 3-dimensional ultrasound imaging.

CVT A200
Introduction to Echocardiography
3 Units (54 lecture hours)
Co-requisite(s): CVT A205.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Theory, equipment, and procedures for echocardiography to include M-mode, 2D, and Doppler. Recognition of specific echocardiographic patterns and abnormalities. Relates anatomical cardiac images to echocardiographic images. PREREQUISITE: CVT A160.

CVT A205
Introduction to Echocardiography Lab
1 Unit (54 lab hours)
Co-requisite(s): CVT A200.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Skill development in using echocardiographic imaging equipment, machine adjustments, and obtaining correct views on M-mode, 2-dimensional, Doppler and color flow echocardiograms under direct supervision. Includes exercises in recognition of cardiac anatomy and pathology found in diagnostic ultrasound imaging evaluation for cardiac function.

CVT A210
Echocardiography Clinical Lab 1
5 Units (18 lecture hours; 432 other hours)
Prerequisite(s): CVT A160.
Co-requisite(s): CVT A200 and CVT A205.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Experience in echocardiography in a clinical facility to include conferences or lectures by physicians, sonographers, and guest lecturers to relate patient clinical presentations to diagnostic findings. Offered on a pass-no pass basis only.

CVT A220
Ultrasound Sonographic Physics and Instrumentation
3.5 Units (54 lecture hours; 36 lab hours)
Prerequisite(s): CVT A150.
Grading Mode: Standard Letter
Transfer Credit: CSU.

The study of physical principles and instrumentation of diagnostic medical sonography, echocardiography, vascular ultrasound and peripheral vascular ultrasound. It includes sonographic equipment design, instrumentation and sonographic imaging application.

CVT A220L
Ultrasound Sonographic Physics and Instrumentation Lab
0 Units (36 lab hours)
Grading Mode: Not Graded
Transfer Credit: CSU.

Ultrasound Sonographic Physics and Instrumentation Lab. Must also be enrolled in CVT A220.

CVT A240
Invasive Cardiology Clinical Lab 1
5 Units (400 other hours)
Co-requisite(s): CVT A130.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Clinical practice within a cardiac catheterization laboratory to include performances of patient monitoring, data collection, and recognition of anatomical and hemodynamic abnormalities for coronary artery disease. Course includes one hour of discussion-seminar with physician lecturers each week. Offered on a pass-no pass basis only.

CVT A250
Advanced Echocardiography
3 Units (54 lecture hours)
Co-requisite(s): CVT A255.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Advanced theory, equipment, and procedures in echocardiography, including Doppler, color flow Doppler in adults, pediatric and fetal echocardiography. Further development of techniques and evaluation of disease states using exercise stress, TEE, pharmacological stress, and contrast echocardiographic studies. PREREQUISITE: CVT A200 and CVT A205.

CVT A255
Advanced Echocardiography Lab
1 Unit (54 lab hours)
Co-requisite(s): CVT A200 and CVT A205.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Skill development in advanced echocardiographic techniques under direct supervision. Includes spectral Doppler, color flow Doppler, pediatric, stress/pharmacological stress, TEE, and further evaluation of adult echocardiography. Computer lab modules for advanced echocardiographic techniques and Registry Exam Review.

CVT A260
Cerebrovascular and Peripheral Ultrasound
2.5 Units (36 lecture hours; 27 lab hours)
Prerequisite(s): CVT A200.
Co-requisite(s): CVT A250 and CVT A255.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Diagnosis and scanning techniques in the evaluation of cerebrovascular disease by ultrasound and Doppler testing. Includes normal anatomy and physiology of the cerebrovasculature, ultrasound instrumentation, and examination techniques relating to pathologies. Upper and lower vascular extremity anatomy and imaging evaluation for diagnostic quality. Imaging demonstrations and direct student scanning.
CVT A265 6 Units (18 lecture hours; 486 other hours)
Echocardiography Clinical Lab 2
Prerequisite(s): CVT A210.
Co-requisite(s): CVT A250 and CVT A255.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.
Experience in echocardiography and cerebral vascular ultrasound in an assigned clinical facility to include conferences, physician lectures, and seminars relating to actual patient situations or examinations for diagnostic findings. Successful clinical performance evaluation and submission of written patient case study. Offered on a pass-no pass basis only.

**Chemistry (CHEM)**

CHEM A020 1 Unit (18 lecture hours)
Problem Solving in Organic Chemistry 1
Co-requisite(s): CHEM A220.
Grading Mode: Pass/No Pass
This course covers problem-solving skills and strategies that enhance success in Chemistry A220. Topics include problems in organic chemical structure, nomenclature, reactions and reaction mechanisms.

CHEM A025 1 Unit (18 lecture hours)
Problem Solving in Organic Chemistry 2
Co-requisite(s): CHEM A225.
Grading Mode: Pass/No Pass
This course covers problem-solving skills and strategies that enhance success in Chemistry A225. Topics include problems in organic chemical structure, nomenclature, reactions and reaction mechanisms.

CHEM A100 3 Units (54 lecture hours)
Principles of Chemistry
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Non-mathematical chemistry for students not majoring in science. Emphasis on relationship of chemistry to the human body with particular attention to drugs of all kinds, food, metabolism, cancer and environmental contaminants. Includes concepts of structure of matter, bonding, acid-base chemistry, organic chemistry and thermodynamics. May be taken for grades or on a pass-no pass basis.

CHEM A110 5 Units (81 lecture hours; 45 lab hours)
Introduction to Chemistry
Prerequisite(s): MATH A010 or higher.
Co-requisite(s): CHEM A010N.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Principles of inorganic, organic, and bio-chemistry. Not for those who will take CHEM A180 or CHEM A130. May be taken for grades or on a pass-no pass basis. C-ID: CHEM 102.

CHEM A130 4 Units (63 lecture hours; 45 lab hours)
Preparation for General Chemistry
Prerequisite(s): MATH A030 or higher (or appropriate placement).
Co-requisite(s): CHEM A030N.
Advisory: Eligibility for ESL A060 or ENGL A099.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Introduction to the principles, calculations, and laboratory techniques of chemistry for students planning to take CHEM A180. May be taken for grades or on a pass-no pass basis.

CHEM A180 5 Units (72 lecture hours; 90 lab hours)
General Chemistry A
Prerequisite(s): MATH A030 or MATH A045, and CHEM A130.
Co-requisite(s): CHEM A080N.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
This course studies gases, solutions, reactions, bonding theories, acid-base, and redox theory. C-ID CHEM 110.

CHEM A185 5 Units (72 lecture hours; 90 lab hours)
General Chemistry B
Prerequisite(s): CHEM A180.
Co-requisite(s): CHEM A085N.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Study of non-ideal solutions, chemical equilibria, thermodynamics, kinetics and nuclear chemistry. C-ID: CHEM 120S as CHEM A180 and CHEM A185.

CHEM A220 3 Units (54 lecture hours)
Organic Chemistry A
Prerequisite(s): CHEM A185.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
A study of organic compounds and their reactions from the standpoint of structure, mechanisms and kinetics. Introduction to spectroscopic methods of identification. C-ID: CHEM 150 when CHEM A220L is also completed.

CHEM A220L 2 Units (18 lecture hours; 90 lab hours)
Organic Chemistry A Lab
Prerequisite(s): CHEM A185.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Theory and techniques of separation, purification, synthesis, and analysis of organic compounds including instrumental methods of chromatography and spectroscopy.
CHEM A225  3 Units (54 lecture hours)
Organic Chemistry B
Prerequisite(s): CHEM A220.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Further study of the structures, reactions, mechanisms and kinetics of organic compounds. Introduction to biologically important compounds and natural products.

CHEM A225L  2 Units (18 lecture hours; 90 lab hours)
Organic Chemistry B Laboratory
Prerequisite(s): CHEM A220 and CHEM A220L.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Further applications of laboratory theory and techniques in the synthesis and analysis of organic compounds including instrumental methods of chromatography.

Chinese (CHIN)

CHIN A180  5 Units (90 lecture hours)
Elementary Chinese 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Mandarin Chinese, with an introduction to cultures related to the Chinese language. This course is equivalent to two years of high school Chinese.

CHIN A185  5 Units (90 lecture hours)
Elementary Chinese 2
Prerequisite(s): CHIN A180 or completion of two years of high school Chinese with a grade of ‘C’ or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Continuation of Chinese A180, with further development of listening, speaking, reading and writing proficiency, and additional exploration of cultures related to the Chinese language. This course is equivalent to three years of high school Chinese. May be taken for grades or on a pass-no pass basis.

Communication Studies (CMST)

CMST A105  3 Units (54 lecture hours)
Intrapersonal Communication
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Designed to teach students effective communication processes with and about oneself. Emphasis is on developing a greater self-awareness and self-esteem by studying cognitive science, whole brain learning, language and symbolic processing, perception, and nonverbal communication skills. May be taken for grades or on a pass-no pass basis.

CMST A109  3 Units (54 lecture hours)
Social Media Strategies
Grading Mode: Standard Letter
Transfer Credit: CSU.
Students will gain the knowledge and skills to effectively meet the growing need for Social Media technology within organizations. Students will learn the basics of content creation; determine which platform best meets the needs of organizations and their targeted audiences; and, learn how to measure social media success. Students will analyze, think critically, discuss, research, and develop social media technology while understanding while understanding ethics and etiquette.

CMST A110  3 Units (54 lecture hours)
Public Speaking
Advisory: CMST A110 or CMST A220.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Designed to teach students how to overcome stage fright and to develop organizational, research, and delivery skills. Students will learn to outline, write, and deliver various types of speeches. An emphasis is placed on speaking, listening, and critical thinking skills. C-ID: COMM 110.

CMST A120  3 Units (54 lecture hours)
Reader’s Theater and Oral Interpretation
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Explores the oldest performance tradition, storytelling, and focuses on the principles and methods of effective oral interpretation. Through analysis of poetry, plays and stories, in both individual and group performance, the student will learn to edit and construct a script, and to perform successfully.

CMST A150  1-4 Units (9-36 lecture hours; 27-108 lab hours)
Forensics Workshop
Grading Mode: Standard Letter
Transfer Credit: CSU.
Competitive forensics. May be taken for 1, 2, 3 or 4 units depending on the number of hours and the number of events in which the student participates. This course may be taken four times. C-ID: COMM 160B.
CMST A155  
Intercultural Communications  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  

The study, practice, and application of communication theories as they relate to different cultural, subcultural, ethnic, and racial groups. Emphasis on interpersonal effectiveness, including skills in nonverbal processing, assessment of different cultural interactional patterns, and the reduction of racism and ethnocentrism. May be taken for grades or on a pass-no pass basis. C-ID: COMM 150.

CMST A165  
Men, Women, and Communication  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Major issues will be addressed regarding communication behaviors and communication conflicts between men and women of all gender orientations. Study will focus on problem analysis specific to gender self-awareness, gender conflict and how gender is communicated and constructed in our daily lives. Same as Gender Studies A165. Students completing Communication Studies A165 may not receive credit for Gender Studies A165.

CMST A170  
Nonverbal Communication  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

The analysis and application of nonverbal cues and their effect on interpersonal and intercultural communication. Emphasis is on developing effective communication skills as they relate to physical appearance and dress, body movement, face and eye communication, vocal cues which accompany spoken words, and the use of environment and space. May be taken for grades or on a pass-no pass basis.

CMST A180  
Introduction to Mass Communications  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  

A survey of major mass mediums and their influence on the artistic and cultural expression of contemporary society. Appreciate the aesthetics of and evaluate radio, television, film, print media, and Internet. Advertising, PR, media law and ethics are covered. Students learn analytical skills to help become critical consumers/developers of media. C-ID: JOUR 100.

CMST A185  
Public Relations  
Advisory: ENGL A100.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Introduction to the basic principles, components, and techniques of effective public relations. Topics include publicity and promotion, advertising, media and community relations, and approaches to problem solving. Same as BUS A185. Students completing CMST A185 may not receive credit for BUS A185.

CMST A220  
Essentials of Argumentation  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.

Theory and practice of argumentation and persuasion with emphasis on critical thinking skills as they apply in listening, speaking, and writing. May be taken for grades or on a pass-no pass basis. C-ID: COMM 120.

CMST A236  
Directed Practice for Social Media Strategist  
Prerequisite(s): CMST A109; MKTG A100; ENGL A123; and CMST A185 or BUS A185 or FASH A225.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

A supervised internship classroom-based learning and experience in a work setting where social media is an essential component of the overall organizational strategy. This 120-hour unpaid, or 150-hour paid work experience course is designed to assist students to acquire the knowledge and skills to analyze, create, implement, and evaluate social media technology. At least 4 courses within the Social Media Strategist career program must be taken prior to enrolling in this course.

CMST A240  
Media Literacy  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  

An introduction to the critical consumption of media. Focuses on ability to access, analyze, and evaluate media messages. Develop tools to evaluate credibility, truth and accuracy through critical examination of news, opinion, advertising, PR, entertainment, and social media. Explore political/economic/social contexts of media production and consumption. May be offered online.

Computer Use in Technology  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

An introduction to the current state of computer hardware and software and software technology for the student enrolled in technical courses. An overview for the person who wants to understand computers and automation in industry. Not a programming course.

Computer Information Systems (CIS)  
CIS A090  
Beginning Computer Keyboarding 1  
Grading Mode: Pass/No Pass  
The student will develop basic keyboarding skills on a computer keyboard using correct stroking techniques on letter, number, and symbol keys. Emphasis on developing accuracy and speed. No credit will be given to students who can already type 30 words per minute. This course may also be offered online. Offered on a pass-no pass basis only.
CIS A091 1.5 Units (18 lecture hours; 27 lab hours)
**Keyboarding Speed and Accuracy**
Prerequisite(s): CIS A090.

**Grading Mode:** Pass/No Pass
Development of keyboarding skill on a microcomputer for students who know how to type by touch. Speed and accuracy development using a variety of learning aids and software for diagnostic, prescriptive drills. May be taken concurrently with another typing course if desired. Offered on a pass-no pass basis only. This course may also be offered online.

CIS A092 1.5 Units (18 lecture hours; 27 lab hours)
**Beginning Computer Keyboarding 2**
Prerequisite(s): CIS A090.

**Grading Mode:** Pass/No Pass
Keyboarding on the computer for students who can type by touch control and know alphabetic, numeric, and symbolic keys presented in Computer Information Systems A090. Emphasis on speed and accuracy on straight copy material, introduction to MS Word, formatting of memos, personal letters, business letters, one-page reports, and simple tables. This course may also be offered online. Offered on a pass-no pass basis only.

CIS A100 3 Units (54 lecture hours)
**Introduction to Computer Applications**
Advisory: CIS A090 or equivalent.

**Grading Mode:** Standard Letter
**Transfer Credit:** CSU; UC.

Introductory computer course for MS Windows and applications. Students learn about the computer operating system and software applications for word processing, spreadsheets, databases, multimedia presentations, the Internet, and social networking tools. Provides preparation for students seeking Microsoft Certified Application Specialist (MCAS) certification. This course may also be offered online. Offered on a pass-no pass basis only.

CIS A106 3 Units (45 lecture hours; 27 lab hours)
**Introduction to Linux: LPI Certification**
Advisory: CIS A110 or IT A110.

**Grading Mode:** Standard Letter, Pass/No Pass
**Transfer Credit:** CSU.

This course provides an overview of the Linux operating system through the basic administration level. The student will be introduced to the configuration of Linux software and hardware, User and Group creation and management, process management, Linux rights and security. This course prepares the student for the Linux Professional Institute Linux Server Professional Server Certification.

CIS A110 4 Units (54 lecture hours; 36 lab hours)
**PC Concepts: A+ Certification Preparation**
**Grading Mode:** Standard Letter, Pass/No Pass
**Transfer Credit:** CSU.

Introduces the hardware and operating system concepts of a personal computer and the broad range of hardware and software technologies. Provides preparation for students seeking A+ Certification sponsored by the Computing Technology Industry Association and certifies the competency of entry-level service technicians in the computer industry. May be taken for grades or on a pass-no pass basis.
CIS A132
Business Multimedia and Graphics
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

The student will use Adobe Studio MX and Adobe PhotoShop to create, modify, implement and manage Web pages and sites that utilize multimedia interactivity and graphics for personal, business and educational use. May be taken for grades or on a pass-no pass basis.

CIS A133
PowerPoint
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU

Demonstrates how proven, effective presentation techniques can blend with the technology of computer-generated graphics to create dynamic, colorful, and exciting multimedia presentations. Provides preparation for students seeking Microsoft Office Specialist (MOS) certification. May be taken for grades or on a pass-no pass basis. This course may also be offered online.

CIS A134
Excel 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU

Topics include spreadsheet concepts, model building, formula development, formula functions, charts, and list functions. Provides preparation for students seeking Microsoft Office Specialist (MOS) core certification. Same as Business A134. Students completing Computer Information Systems A134 may not receive credit for Business A134. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

CIS A135
Introduction to Microsoft Access
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An introductory course in database management using Microsoft Access. Concepts include creating and managing tables, query techniques, creating forms and reports, and integrating Access with other programs. Provides preparation for students seeking Microsoft Office Specialist (MOS) certification. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

CIS A137
Microsoft Outlook
Advisory: Keyboarding competency of 25 words a minute for 3 minutes with no more than 1 error per minute.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU

The basics of communicating by email. Students will use basic computer concepts for learning Microsoft Outlook. Other topics include the use of the calendar, weather, management of contacts, tasks, notes, appointments, mail merge, scheduling, integrating Outlook with other applications, and working in the cloud. Provides preparation for students seeking Microsoft Office Specialist (MOS) certification. May be offered online. May be taken for grade or on a pass-no pass basis.
CIS A163
Windows Desktop Administration
Advisory: CIS A110 or IT A110.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Provides students with the knowledge required to work in enterprise environments that use Microsoft Windows desktop operating systems. Students will learn to install, deploy, and upgrade the Windows operating system, including ensuring hardware and software compatibility, configure pre-installation and post-installation system settings, security features, network connectivity applications and mobile computing. Students will also be able to maintain systems, including monitoring for and resolving performance and reliability issues. Will help prepare students for the Microsoft Certified IT Professional (MCITP) exams. This course may also be offered online.

CIS A171
Introduction to JavaScript
Advisory: CIS A123.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
For students who already know how to create Web pages using HTML, this course introduces the fundamentals of JavaScript, a scripting language used to create interactive Web pages. Students will create dynamic Web pages using dialog boxes, forms, menus, rollover buttons, and image manipulation. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

CIS A176
Database Design and Data Warehousing
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Covers the terminology, technology and software used to design and implement a Microsoft SQL Server database. Students will learn to design, create and maintain a database to handle LOB (Line of Business) and DW (Data Warehousing) applications. May be taken for grades or on a pass-no pass basis.

CIS A177
Business Intelligence and Data Mining
Advisory: CIS A176 or IT A176.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Covers the terminology, technology and software used to build a data warehouse model and prepare that model for data mining. Students will learn how to design and process a data warehouse database using SSIS (SQL Server Integration Services), and format a cube in SSAS (SQL Server Analysis Services) in preparation for data mining operations. May be taken for grades or on a pass-no pass basis. This course may also be offered online.

CIS A191
Network and Communications Technologies
Advisory: CIS A110 or IT A110.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Provides an introduction to an overview of the field of networking, data communications and connectivity, with an emphasis on terminology, hardware, and software associated with the various components of a network. Provide preparation for students seeking the Network + Certification. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

CIS A192
Network Systems Administration
Advisory: CIS A110 or IT A110; and CIS A191 or IT A191.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Covers terminology, technology, topologies and software used in the Microsoft Windows servers. Students will learn to create user accounts, implement different levels of security, apply diagnostics and back up and maintain the software. Will help prepare students for the Microsoft Certified Systems Engineer (MCSE) exams. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

CIS A193
Network Infrastructure Administration
Advisory: CIS A192 or IT A192.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Provides students with knowledge required to setup, configure, and support network infrastructures using the TCP/IP protocol. Topics include IP addresses, point-to-point tunneling protocols, DNS and DHCP services. Will help prepare students for the Microsoft Certified Systems Engineer (MCSE) exams. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

CIS A194
Network Directory Services Administration
Advisory: CIS A192 or IT A192.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Provides a study of the procedures necessary to plan, implement, and troubleshoot directory service infrastructures, including forests and domains, DNS, site topology and replication, and directory strategies. Will help prepare students for Microsoft Windows Microsoft Certified Systems Engineer (MCSE) exams. This course may also be offered online. May be taken for grades or on a pass-no pass basis.
CIS A196
Network Enterprise Administration
Advisory: CIS A192 or IT A192.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Provides the knowledge and skills to design a security framework for small, medium, and enterprise networks. It focuses on providing secure access for local and remote users accessing resources using both public and private networks. Helps prepare students for Microsoft Windows Microsoft Certified Systems Engineer (MCSE) exams. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

CIS A197
Introduction to Networking (Cisco 1)
Advisory: CIS A191 or IT A191.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamental of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. This course provides preparation for students seeking the Cisco CCENT/CCNA Certification. May be taken for grades or on a pass-no pass basis. C-ID: IT IS 150.

CIS A198
Routing and Switching Essentials (Cisco 2)
Advisory: CIS A197 or IT A197.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. This course covers Cisco’s CCNA content and provides preparation for students seeking the Cisco CCNA Certification. May be taken for grades or on a pass-no pass basis.

CIS A199
Current Topics in Computer Applications
Grading Mode: Standard Letter, Pass/No Pass

Covers topics currently receiving attention in the computer industry. Units vary according to topic selected, semester offered, and the number of meetings scheduled. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

CIS A223
JavaScript 2
Advisory: CIS A129 and CIS A171.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

For students who already know how to create web pages using HTML and understand JavaScript, this course covers advanced features of Front-End development. Topics include closures, advanced Javascript OOP patterns, utilizing jQuery, manipulating Document Object Model (DOM), and writing AJAX scripts.

CIS A227
JavaScript 3
Advisory: CIS A223.

Grading Mode: Standard Letter
Transfer Credit: CSU.

For students with advanced Javascript knowledge. The course will cover the latest technology to build complex Web apps. Topics include TypeScript foundations and AngularJS 2. This course may also be offered online.

CIS A232
Digital Video for Business: Adobe Premiere Pro
Advisory: CIS A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Using Adobe Premiere Pro, Photoshop and After Effects students will acquire practical and current knowledge to acquire, modify and implement digital video, audio, multimedia and graphics for business, educational personal use. Includes: video, audio and digital acquisition methods, hardware and software evaluation and output to varied media. May be taken for grades or on a pass-no pass basis.

CIS A234
Excel 2
Advisory: CIS A134 or BUS A134.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Create templates and macros using Visual Basic for Applications to automate Excel tasks, formula auditing, data validation, complex problem solving, importing data, routing changes, PivotCharts, PivotTables, and trendlines. Provides preparation for students seeking Microsoft Office Specialist (MOS) certification. Same as Business A234. Students completing Computer Information Systems A234 may not receive credit for Business A234. This course may also be offered online. May be taken for grades or on a pass-no pass basis.
CIS A261 3 Units (45 lecture hours; 27 lab hours)
Fundamentals of Wireless Networking
Advisory: CIS A197 or IT A197; and CIS A198 or IT A198.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course provides a complete foundation of knowledge for entering into or advancing in the wireless networking industry. This course covers Cisco's Wireless LAN certification content and provides preparation for students seeking a Cisco Wireless certification. May be taken for grades or on a pass-no pass basis.

CIS A262 3 Units (45 lecture hours; 27 lab hours)
Fundamentals of Voice over IP Protocols
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An introduction to Voice over IP (VoIP). Topics include VoIP architecture, components and functionality. Additional focus will be given to VoIP signaling, call control, voice dial plans, configuring voice interfaces and dial-peers, and implementing quality of service technologies in a VoIP environment. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

CIS A263 3 Units (45 lecture hours; 27 lab hours)
Introduction to the Internet of Things
Advisory: CIS A110 or IT A110; and CIS A191 or IT A191.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

The Internet of Things (IoT) is the network of physical objects or 'things' embedded with electronics, software, sensors and connectivity to enable it to achieve greater value and service by exchanging data with the manufacturer, operator and/or other connected devices. Each thing is uniquely identifiable through its embedded computing system but is able to interoperate within the existing Internet infrastructure. This course will prepare students to install, configure and maintain these devices. This course may also be offered online. Lecture/Lab.

CIS A265 3 Units (45 lecture hours; 27 lab hours)
Enterprise Router Configurations 1
Advisory: CIS A198 or IT A198.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

The course focuses on advanced installation, configuration, and troubleshooting routers. Student will be introduced to routing protocols using Juniper Networks routing platforms. Students develop real-world case studies. Significant time will be allocated for hands-on experience. Provides preparation for students seeking Juniper certification. This course may also be offered online.

CIS A267 3 Units (45 lecture hours; 27 lab hours)
Scaling Networks- Cisco 3
Advisory: CIS A198 or IT A198.

Grading Mode: Standard Letter, Pass/No Pass

Describes the architecture, components, and operations of routers and switches in a large and complex network. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network. This course provides preparation for students seeking the Cisco CCENT/CCNA Certification. May be taken for grades or on a pass-no pass basis.

CIS A268 3 Units (45 lecture hours; 27 lab hours)
Connecting Networks (Cisco 4)
Advisory: CIS A267 or IT A267.

Grading Mode: Standard Letter, Pass/No Pass

Discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and LAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students also develop the knowledge and skills needed to implement IPSec and virtual private network (VPN) operations in a complex network. This course provides preparation for students seeking the Cisco CCENT/CCNA Certification.

CIS A280 3 Units (45 lecture hours; 27 lab hours)
Information and Storage Management
Advisory: CIS A110, IT A110, CIS A191, or IT A191.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

The course provides a comprehensive introduction to information storage technology which enables students to make more informed decisions in an increasingly complex IT environment. It builds a strong understanding of underlying storage technologies and prepares Student to learn advanced concepts, technologies and products. This course may also be offered online.

CIS A281 3 Units (45 lecture hours; 27 lab hours)
Cloud Infrastructure & Services
Advisory: CIS A110, IT A110, CIS A191, or IT A191.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course educates students about cloud deployment and service models, cloud infrastructure, and the key considerations in migrating to cloud computing. The course covers technologies required to build classic, virtualized, and cloud data center environments. These technologies include compute, storage, networking, desktop and application virtualization. Additional areas of focus are backup/recovery, business continuity, security, and management. Students will learn about the key considerations and steps involved in transitioning from the current state of a data center to a cloud computing environment.
CIS A282 3 Units (45 lecture hours; 27 lab hours)
Ethical Hacking and Network Defense
Advisory: CIS A261 or IT A261; and CIS A191 or IT A191.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Students will learn how hackers attack computers and networks, and how to protect Windows and Linux systems. Legal restrictions and ethical guidelines will be taught and enforced. Students will perform many hands-on labs: attacking and defending, using port scans, footprinting, buffer overflow exploits, SQL injection, privilege escalation, Trojans, and backdoors. This course may also be offered online.

CIS A285 3 Units (45 lecture hours; 27 lab hours)
VMware View: Installation, Configuration & Management
Advisory: CIS A110, IT A110, CIS A191, or IT A191.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Students will learn the concepts and capabilities of virtual desktops with a focus on the installation, configuration, and management of virtual desktops and thin clients using tools such as VMware. This course will provide applications-oriented administrators with the knowledge and skills to virtualize applications with VMware ThinApp, modify parameters to handle special circumstances, and choose the best deployment and updating processes for organizational environments.

CIS A286 3 Units (45 lecture hours; 27 lab hours)
VMware vSphere: Installation, Configuration & Management
Advisory: CIS A110, IT A110, CIS A191, or IT A191.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Students will learn the concepts and capabilities of virtual architecture with a focus on the installation, configuration, and management of virtual infrastructure using tools such as VMware®. This course covers fundamentals of virtual network design and implementation, fundamentals of storage area networks, virtual switching, virtual system management, and engineering for high availability.

CIS A290 3 Units (45 lecture hours; 27 lab hours)
Small/Home Office: Case Study 1
Advisory: CIS A191, IT A191, CIS A261, or IT A261; and CIS A263 or IT A263.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Challenges students to apply network concepts learned in previous courses to a case-study based problem in Small Office / Home Office environments. Includes various responsibilities and tasks required for a service engineer to design and execute a successful implementation. Prepares individuals for careers as a Network Engineer in the IT industry.
CS A170 4 Units (63 lecture hours; 27 lab hours)
Java Programming 1
Advisory: CIS A090; and CIS A100 or CIS A111.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A first Computer Science course taught using the Java programming language. Students will build Java applications. Emphasis will be placed on programming fundamentals such as variables, selection and loops as well as object-oriented programming concepts including classes and inheritance. This course may also be offered online. May be taken for grades or on a pass-no pass basis. C-ID: COMP 122.

CS A200 4 Units (90 lecture hours)
Data Structures
Prerequisite(s): CS A250.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A study of data abstraction and algorithm analysis. Data structures include lists, stacks, queues, trees, tables, and graphs. Algorithms include searching, sorting, pattern-matching, tree traversal, and balancing. This is a core course for students who want to study advanced programming, computer science, or engineering. May be taken for grades or on a pass-no pass basis.

CS A216 4 Units (90 lecture hours)
Computer Architecture
Prerequisite(s): CS A150 and CS A170.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A course in the architecture of computers. Topics will include Boolean algebra and computer arithmetic, digital logic, micro and macro architecture, Assembly language, performance, datapath and control, memory hierarchies, interfacing and peripherals, and multiprocessing. May be taken for grades or on a pass-no pass basis. Five hours.

CS A220 4 Units (90 lecture hours)
Software Engineering
Prerequisite(s): CS A150 and CS A170.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introduction to the concepts, methods, and current practice of software engineering. Study the lifecycle of a software system. Employ engineering methods, processes, techniques, and measurement. Use of tools to manage software development. Project work is required to illustrating the various elements. May be taken for grades or on a pass-no pass basis.

CS A231 4 Units (63 lecture hours; 27 lab hours)
Python Programming II
Prerequisite(s): CS A131.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Advanced Python programming. Covers classes, modules, using the Python standard library and using third-party libraries.

CS A250 4 Units (90 lecture hours)
C++ Programming Language 2
Prerequisite(s): CS A150; and CS A131 or CS A140 or CS A170.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Second course in ANSI/ISO Standard C++ programming language. Topics include sorting and searching, data structures, operator overloading, memory management, exception handling, name scope management, polymorphism, templates, STL containers, STL algorithm and iterators, and functional programming. May be taken for grades or on a pass-no pass basis.

CS A257 3 Units (54 lecture hours)
Boolean Algebra and Logic
Prerequisite(s): CS A131, CS A140, CS A150, or CS A170.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

An introduction to the discrete structures used in Computer Science. Topics include basic logic, proof techniques, relations, Boolean algebra, logic gates, languages and grammars, finite-state machines, and Turing machines.

CS A262 3 Units (36 lecture hours; 54 lab hours)
Discrete Structures
Prerequisite(s): CS A131, CS A140, CS A150, or CS A170.

Grading Mode: Standard Letter
Transfer Credit: CSU, UC.

An introduction to the discrete structures used in Computer Science with an emphasis on their applications. Topics covered include functions, relations, sets, basic logic, proof techniques, basics of counting, graphs, trees, and discrete probability. C-ID: COMP 152.

CS A263 4 Units (63 lecture hours; 27 lab hours)
Probability and Statistics for Computer Science
Prerequisite(s): CS A262 and MATH A180.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introduction to probability and statistics with an emphasis on their applications in Computer Science. Topics include continuous and discrete probability distributions, linear and logistic regression, creating models to use for predictive inference, and programmatic analysis of data.
CS A272
Java Programming 2
Prerequisite(s): CS A170.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

A second course in Java programming language. Topics include object-oriented design, inheritance, interfaces, abstract and anonymous inner classes, I/O & exceptions, generics, regular expressions, databases, XML, GUI construction, graphics and multimedia, Java collections, data structures, lambda expressions and multithreading. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

CS A273
Mobile Application Development in Android
Prerequisite(s): CS A250; or CS A272 or concurrent enrollment.

Grading Mode: Standard Letter
This course covers how to develop applications for smartphones and tablets with the Android open-source platform. Topics include the Model-View-Controller architecture, designing and handling user input, defining activity layouts, application events, displaying images, managing navigation and core device features, such as GPS, accelerometers and touch gestures. Students will leverage and expand their Java programming knowledge to build mobile applications from start to finish. Transfer Status: CSU, UC.

CS A280
Current Topics in Computing
Prerequisite(s): CS A170.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Course covers topics currently receiving attention by the computer industry. This course may also be offered online. May be taken for grades or on a pass-no pass basis. This course may be taken four times.

Construction Technology (CNST)

CNST A100
Principles of Construction
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An introductory course to construction covering, hand and power tools, building code development and applications, blueprints, license and contract law, jobsite safety and construction trades. May be taken for grades or on a pass/no-pass basis.

CBST A112
Stair Framing
Advisory: CNST A180 or CNST A240.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Topics of instruction include stair design, building codes, calculations, layout and construction. Practical instruction is given in the use of tools and materials through construction laboratory work. May be taken for grades or on a pass/no-pass basis.

CNST A114
Cabinet Making
Prerequisite(s): CNST A126.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to wood as a building material. Introduction to basic wood and machine tools to bring forth the structural and visual potential of the material. The basic skill set includes two-dimensional design and drawing concept development, furniture history, and studio practices. Two items are p.m. selected by the staff as a platform for skill mastery demonstration.

CNST A116
Furniture Making and Design
Prerequisite(s): CNST A126.

Grading Mode: Standard Letter
Transfer Credit: CSU.

The student will design, construct, and manufacture furniture and related products. Same as Art A116. Students completing Construction A116 may not receive credit for Art A116.

CNST A125
Steel String Guitar Making and Design 1
Prerequisite(s): CNST A126.

Grading Mode: Standard Letter
Transfer Credit: CSU.

This course teaches the theories, design, methods, and means of building a steel string acoustic guitar. Focus is on the primary aspects of guitar design and the structural elements. Students will also learn the more intricate details involving the process of guitar making and finishing strategies. Lecture/Lab.

CNST A127
Steel String Guitar Making and Design 2
Prerequisite(s): CNST A126.

Grading Mode: Standard Letter
Transfer Credit: CSU.

This course teaches the theories, design, methods, and means of building a steel string acoustic guitar. Focus is on the primary aspects of guitar design and the structural elements. Students will also learn the more intricate details involving the process of guitar making and finishing strategies. Lecture/Lab.

CNST A150
Electronics for Electricians
Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to basic DC and AC circuits and electronic devices. Covers history of electronics, basic electricity, math, circuit theory, circuit components, digital electronics, schematics, test equipment. Labs will cover practical applications of all covered topics.
CNST A154 1.5 Units (18 lecture hours; 27 lab hours)
Drywall & Taping
Grading Mode: Standard Letter
Transfer Credit: CSU.

The study of various aspects of interior drywall, including layout and installation of drywall, cornerbead and bullnose trim. Students will learn how to estimate drywall projects. They will tape the interior of a house using hand tools. Students will be introduced to professional tools such as bazooka™s, 7 & 12 inch boxes, corner angles and corner finishers, mud runners and hand tools, texture application using a 10 gallon texture sprayer and smaller hoppers. Students will apply several different textures such as knockdown, orange peel, splatter and roller finish. Patch and drywall repair to match existing finishes.

CNST A155 2 Units (18 lecture hours; 54 lab hours)
Intro to Home Automation
Advisory: CNST A275.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Wiring for interior low voltage systems, including layout and construction methods, code requirements, both sizing and installation standards, emphasis on material conservation practices and compliance with the National Electrical Code.

CNST A156 2 Units (36 lecture hours)
National Electrical Code
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course is designed to provide those currently working in the electrical field with training that will keep them current with NEC standards that are updated every three years. Hours earned in this course may be applied toward the mandatory 32 hours of training required for license renewal.

CNST A157 4 Units (36 lecture hours; 72 lab hours)
Photovoltaic System Installation
Grading Mode: Standard Letter
Transfer Credit: CSU

Presents principles of Photovoltaic Systems and incorporates hands on activities for all topics. Solar Energy fundamentals and applications, electricity and safety basics, PV modules, system components, system sizing, electrical design, mechanical design and performance analysis and troubleshooting.

CNST A158 4 Units (45 lecture hours; 51 lab hours)
Photovoltaic System Installation 2
Prerequisite(s): CNST A157.
Grading Mode: Standard Letter
Transfer Credit: CSU

Presents principles of Photovoltaic Systems and incorporates hands on activities for all topics. Solar Energy fundamentals and applications, electricity and safety basics, PV modules, system components, system sizing, electrical design, mechanical design and performance analysis and troubleshooting.

CNST A159 1.5 Units (27 lecture hours)
Blueprint Reading
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Develop blueprint reading skills in all aspects of residential construction to acquire realistic understanding of prints and sketches as a means of communication in construction.

CNST A161 4 Units (36 lecture hours; 72 lab hours)
Solar Water and Pool Heating Installation
Grading Mode: Standard Letter
Transfer Credit: CSU.


CNST A165 3 Units (54 lecture hours)
Construction Safety/CAL OSHA
Grading Mode: Standard Letter
Transfer Credit: CSU.

Regulations related to general construction safety. Meets the requirements and follows the guidelines for 30-hour OSHA Construction Outreach Training. U.S. Department of Labor cards will be issued upon successful completion of this course.

CNST A170 3 Units (54 lecture hours)
Introduction to Construction
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Fundamentals of the construction industry; terminology and procedures; an overview of trades, skills, and processes. May be taken for grades or on a pass-no pass basis.

CNST A180 5 Units (54 lecture hours; 108 lab hours)
Building Construction 1
Grading Mode: Standard Letter
Transfer Credit: CSU.

Technical and practical experience to complete floor and wall framing of a building including wall layout, wall construction, ceiling joists and an introduction to roof framing. Estimating of materials and basic building layout are also covered.

CNST A185 5 Units (54 lecture hours; 108 lab hours)
Building Construction 2
Advisory: CNST A180 or entry level residential construction experience.
Grading Mode: Standard Letter
Transfer Credit: CSU.

The study of roof design and cutting. The use of the framing square in roof layout. Pre-fabrication techniques in housing with field research assignments. Frame estimating for the building trades and the application of various roofing materials are also covered.

CNST A189 1.5 Units (27 lecture hours)
Blueprint Reading
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Develop blueprint reading skills in all aspects of residential construction to acquire realistic understanding of prints and sketches as a means of communication in construction.
CNST A190  
Blueprint Reading and Drafting  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Develop blueprint reading and drafting skills in all aspects of residential construction to acquire realistic understanding of prints and sketches as a means of communication in construction.

CNST A194  
Introduction to Building Codes  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

An introductory course in Building Codes. Covers building code development from model codes to state code adoptions. Topics include residential building, plumbing, mechanical and green codes.

CNST A195  
Residential Code  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

A complete analysis of the Residential Code and city and county related building codes. Special ordinances and land usage are also covered.

CNST A196  
Green Building Codes  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU

A complete analysis of the California Green Building Code. Special local Green Building ordinances are also covered along with a comparison of the International Green Building Code. Same as Architecture A196; students completing Construction Technology A196 may not receive credit for Architecture A196. May be taken for grades or on a pass/no-pass basis.

CNST A197  
California Energy Code  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU

A complete analysis of the California Energy Code. Special local Energy Code ordinances are also covered along with a comparison of the International Energy Code. Explanation of the State’s energy and compliance forms. Same as Architecture A197; students completing Construction Technology A197 may not receive credit for Architecture A197. May be taken for grades or on a pass/no-pass basis.

CNST A198  
Energy Audit  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

This course introduces the student to energy conservation methods for residential HVAC systems. It covers energy auditing procedures used to analyze the performance of residential buildings and the relationship to HVAC system design, including installation techniques, system performance, and potential energy efficiency gains. It will focus on developing the student's knowledge and skills to better understand the concept of whole building performance, and will demonstrate current technologies utilized to measure and verify system performance of HVAC equipment for the purpose of meeting local, state, and federal requirements for improved energy efficiency. The use of specialized tools, instruments and diagnostic procedures for system performance testing of space conditioning equipment is covered.

CNST A199  
Current Topics in Construction Technology  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

Current issues in the field of construction technology, rotating through a variety of topics, such as residential/commercial/industrial electrical wiring, structured wiring, and general carpentry. This course may be taken four times. May be taken for grades or on a pass/no pass basis.

CNST A209  
Concrete Flatwork  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

Concrete flatwork, hands on forming, placement and a variety of concrete finishes.

CNST A210  
Concrete Construction  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Concrete flatwork and foundations, hands-on surveying, forming and finishing concrete; poured-in-place reinforced concrete, concrete stairs; estimating concrete.

CNST A211  
Decorative Concrete  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

An introductory course in decorative concrete. Topics covered include: stamped concrete, decorative borders, staining, stencils, engraving, polishing, and overlays. May be taken for grades or on a pass/no-pass basis.
CNST A220  Construction Estimating
Grading Mode: Standard Letter
Transfer Credit: CSU.

Construction estimating including bid preparation, material quantity take-off and analysis, subcontractor bids, bidding practices and final bid form compilation and submittal.

CNST A225  Land and Building Development
Grading Mode: Standard Letter
Transfer Credit: CSU.

A general survey of land development principles and procedures used prior to the actual construction of structures. Site analysis and planning, regulatory controls, obtaining entitlements, grading, road and street designs, utility systems, principles of real property, and project financing will be covered. Same as Architectural Technology A225. Students completing Construction Technology A225 may not receive credit for Architectural Technology A225.

CNST A230  Construction Inspection
Grading Mode: Standard Letter
Transfer Credit: CSU.

Inspection procedures and techniques of testing. A study of the various building code requirements in the International Residential Code, and Title 24 of the California State Code. Plans, specifications, earthwork, grading foundations, concrete and framing are covered.

CNST A240  Specialty Trades
Grading Mode: Standard Letter
Transfer Credit: CSU.

This introductory course covers interior and exterior building finishes and stairs, including layout fabrication and installation of stairs; an introduction to framing, pre hung door and window installation; drywall, and stucco plastering. Building codes are included. Transfer Credit: CSU.

CNST A241  Finish Carpentry
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course covers interior and exterior building finishes, including door materials, construction, hardware and installation; interior and exterior millwork; molding, cabinetry and exterior siding.

CNST A250  Construction Supervision and Project Management
Grading Mode: Standard Letter
Transfer Credit: CSU.

The combination of designing, estimating, contracting, financing and building must be understood and practiced. Leadership in this field means being responsible for many people, their work and their safety.

CNST A252  Business Law for Contractors
Grading Mode: Standard Letter
Transfer Credit: CSU.

Legal aspects of the formation, operation, regulatory requirements, financing, and contracts for successfully operating a construction contracting business in California.

CNST A260  Masonry Construction
Grading Mode: Standard Letter
Transfer Credit: CSU.

Covers masonry materials, construction and blueprint reading with estimating, construction masonry block walls, paving, veneering, brick and stone pilasters, brick walls and planter boxes, stucco over masonry.

CNST A261  Masonry Construction II
Advisory: CNST A260.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An advanced course in masonry. Covers flatwork with brick, stone and pavers, masonry stairs, arches, and advanced masonry veneer projects.

CNST A265  Plumbing 1
Grading Mode: Standard Letter
Transfer Credit: CSU.

A course designed to provide students with entry-level instruction involving the theory and skills of residential plumbing systems. Knowledge of basic principles, functions and design, as well as the physical ability to install and test the rough-in plumbing in a single family dwelling.

CNST A266  Plumbing 2
Grading Mode: Standard Letter
Transfer Credit: CSU.

A course designed to provide students with entry-level instruction involving the theory and skills of residential plumbing systems. Topics include basic principles, function, and design, as well as the installation of finish plumbing, repair and service of plumbing systems, and the installation of solar, spa, and sprinkler systems in a single family dwelling.

CNST A270  Contractor's License Law
Grading Mode: Standard Letter
Transfer Credit: CSU.

Preparation for the California State Contractor Examination in any classification. Includes state license law, civil code, civil procedure, labor law, contract law, and asbestos regulations.
CNST A275  5 Units (54 lecture hours; 108 lab hours)  
Residential Electrical Wiring  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Residential electrical construction, wiring principles and practices, study and application of NEC code to comply with building requirements.

CNST A285  2.5 Units (27 lecture hours; 54 lab hours)  
Light Steel Frame Construction  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

An introductory hands-on course that covers the fundamentals of utilizing light frame steel for residential framing in place of wood. Raised floor construction, wall framing and trussed roof fabrication and installation including applicable building codes, blueprint reading, estimating, and inspections are covered.

Consumer Studies (COS)

COS A180  3 Units (54 lecture hours)  
Life Management  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

This course develops skills in value clarification, goal setting, resource allocation, decision-making priority management, money management, workplace management, communication skills and healthy habits.

Counseling (COUN)

COUN A100  1 Unit (18 lecture hours)  
Introduction To College  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

Introduces new students to college services and facilities, academic policies and various segments of higher education in California. Includes time management, study skills, and academic planning. May be taken for grades or on a pass-no pass basis.

COUN A101  1 Unit (18 lecture hours)  
New Horizons for Adults Returning to College  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

An orientation course designed to assist adults re-entering academic life. Orientation to O.C.C. and higher education will be offered. Topics will include career development, career change, study skills, time management, life transitions, job skills, self-esteem, assertion, and communication skills. May be taken for grades or on a pass-no pass basis.

COUN A104  3 Units (54 lecture hours)  
Career & Life Planning: A Holistic Approach  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

In depth career and life planning: Designed primarily for students uncertain about educational-occupational plans. Standardized tests of interests, personality characteristics, and values are utilized to develop a systemic approach to career and life development. This course emphasizes the importance of taking personal responsibility for one’s educational, career and personal decisions to achieve satisfaction through work and life balance. This course may also be offered online.

COUN A105  3 Units (54 lecture hours)  
Strategies for College Success  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.

This is a course designed to integrate personal growth, critical and creative thinking, problem solving and academic and career success. Topics include study techniques, orientation to higher education and resources, life skills, academic planning, and personal development. For all students wishing to improve their success in college. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

COUN A107  3 Units (54 lecture hours)  
Chicana/o & Latina/o Experience and Success in Higher Education  
Advisory: ENGL A099.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.

Counseling practices will be applied to explore factors that contribute to a successful experience in higher education for Chicana/o and Latina/o students. An examination of the educational experience of the Chicana/o and Latina/o community in the United States. Emphasis on understanding the background of Chicana/o and Latina/o students in relation to current educational conditions and trends.

COUN A107H  3 Units (54 lecture hours)  
Chicana/o & Latina/o Experience and Success in Higher Education Honors  
Advisory: ENGL A099.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.

Counseling practices will be applied to explore factors that contribute to a successful experience in higher education for Chicana/o and Latina/o students. An examination of the educational experience of the Chicana/o and Latina/o community in the United States. Emphasis on understanding the background of Chicana/o and Latina/o students in relation to current educational conditions and trends.
COUN A109
Developing and Understanding Happiness
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Study of current research and the practical application of research to attain sustainable increases in well-being in order to live a fulfilling life. Will explore such questions as: What is happiness? How do we measure it? What is the evolutionary significance of positive emotion? Topics include the role of happiness, love, spirituality, relationships, forgiveness, and mindfulness. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

COUN A110
Applied Stress Management
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

This course is designed to respond to the need to understand and manage personal stress. Symptom identification and management techniques will be emphasized. Offered on a pass-no pass basis only.

COUN A120
Career Decision Making/Accelerated
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

An accelerated class designed for students who are uncertain about their educational-occupational plans. Career inventories are used along with non-test data to evaluate occupational choices. This course may also be offered online. Offered on a pass-no pass basis only.

COUN A135
Principles of Effective Parenting
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU

Designed for students who are interested in improving parenting skills and promoting healthy functioning in the context of all relationships. The course focuses on developing healthier interpersonal relationships that ultimately increase self-awareness and self-esteem which are essential to effective parenting and personal success. May be taken for grades or on a pass-no pass basis.

COUN A170
College Major Search
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Course is designed to facilitate students’ exploration and selection of a college major. Students will examine and apply a decision making process in identifying their academic interests and develop an educational plan based on a major selection. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

COUN A199
Topics In Counseling
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Present, discuss, and study personal development issues. Introduce student to campus resources. Topics will change each semester. Offered on a pass-no pass basis only.

COUN A205
Transfer Success Seminar
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

The course is designed to help Transfer Opportunity Program students develop the skills necessary to navigate the transfer process. Topics include career selection and academic planning from a transfer perspective, overview, of potentially complex transfer issues and transfer admissions representative speakers as well as financial planning and fund acquisition for transfer students. Student success strategies will be further developed, with emphasis on new skills and characteristics including emotional intelligence, educational grit, independence, and behavioral change. A comprehensive educational plan for transfer will be completed as part of this course.

Culinary Arts (CA)

CA A100
Introduction to the Hospitality Industry
Grading Mode: Standard Letter
Transfer Credit: CSU.

Overview of the hospitality industry. Same as Food Service Management A100 and Hospitality, Travel & Tourism A100. Students completing Culinary Arts A100 may not receive credit for Food Service Management A100 or Hospitality, Travel & Tourism A100.

CA A120
Culinary Principles 1
Prerequisite(s): FSM A160 or concurrent enrollment.
Grading Mode: Standard Letter
Transfer Credit: CSU.

The class focus is on the fundamentals of food preparation, emphasizing quality standards of production and the basic cooking methods as used in the modern commercial kitchen. Laboratory work includes knife skill, vegetable cuts, and preparation of vegetables, soups, stocks, and sauces. High standards of professionalism, sanitation, and proper work habits will also be emphasized. Class requires purchase of a set of knives. Students will be required to follow hospitality department dress standards.
CA A122  3 Units (27 lecture hours; 81 lab hours)
Culinary Principles 2
Prerequisite(s): CA A120.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Focus on the basic cooking methods as they apply to the major cuts of beef, veal, lamb, pork, poultry, and seafood. Portion control and proper boning techniques will be demonstrated and practiced. Quality standards of food presentation and achieving proper flavor through the correct application of the principles and processes of modern cookery will be practiced. High standards of professionalism, sanitation, and proper work habits will also be emphasized. Course requires purchase of a set of knives. Students will be required to follow hospitality department dress standards. Lecture/Lab.

CA A124  2 Units (18 lecture hours; 72 lab hours)
Principles of Baking 1
Prerequisite(s): FSM A160 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Study the fundamentals of baking, including ingredient composition and function, preparation and evaluation of yeast, roll-in yeast, and quick breads, biscuits and muffins, cookies, shortened cakes, pies, custards, and recipe conversion. Students will be required to follow hospitality department dress standards.

CA A126  2 Units (18 lecture hours; 72 lab hours)
Principles of Baking 2
Prerequisite(s): CA A124.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Advanced course in pastry arts production, including puff pastry, foam cakes, classical European tortes, pastry fillings, merengues, cake decorating, chocolate handling, glazes, icings, tarts, and pate a choux. Students will be required to follow hospitality department dress standards.

CA A131  3 Units (27 lecture hours; 81 lab hours)
Principles of Artisan
Prerequisite(s): CA A124.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Study in fundamentals of bread development. Analysis of ingredient composition and function of natural and manufactured yeasts as it interacts with pre-ferments, levains, sourdough rye, and straight doughs. Bakers' percentages and recipe conversions will be examined with international weight standards. Students will be required to follow hospitality department dress standards. Field trips required.

CA A149  2 Units (18 lecture hours; 54 lab hours)
Pantry
Prerequisite(s): FSM A160 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Methods of pantry and breakfast preparation, including proper use of cook's knife, preparation and presentation of salad and salad dressings, proper vegetable and fruit cuts, and vegetable and fruit identification. Basic cooking methods applied in breakfast service will be covered. Students will also learn to use standardized recipes and practice quantity food preparation. Students will be required to follow hospitality department dress standards.

CA A170  1-4 Units (9-18 lecture hours; 27-162 lab hours)
Culinary Team Competition
Grading Mode: Standard Letter
Transfer Credit: CSU.

Team members are selected through an application process arranged by the Program Coordinator for Culinary Arts. Students will participate in weekly and bi-weekly practice sessions and ultimately compete in the American Culinary Federation's Student Team Competition. PREREQUISITES: CA A120, CA A124, and CA A149.

CA A199  0.5-1.5 Units (9-27 lecture hours)
Current Issues in Culinary Arts
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Deals with current issues in the field of culinary arts and food service management, rotating through a variety of topics such as culinary skills and innovations, sanitation, safety, nutrition, management. May be taken for grades or on a pass-no pass basis.

CA A200  2 Units (18 lecture hours; 54 lab hours)
Garde Manger 1
Prerequisite(s): FSM A160, and CA A149.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Duties and skills required of the Garde Manger (cold food) chef, including the proper execution of the basic cooking methods. The course will explore the artistic side of food presentation. Topics include buffet salads, cold sauces and dressings, smoking and curing of meats, hors d'oeuvre, pate, terrine, ice carving, salt dough, tallow sculpture, and cheeses. Students will be required to follow hospitality department dress standards.
CA A210 2 Units (6 lecture hours; 120-150 other hours)
Directed Practice for Culinary Arts 1
Prerequisite(s): CA A120, CA A124 and CA A149.

Advisory: CA A122.

Grading Mode: Standard Letter
Transfer Credit: CSU.

This is a directed practice opportunity for Culinary Arts which includes practical training in the OCC cafeteria operation. Students will rotate through the major areas in the kitchen in supervised settings. Students will be required to follow Culinary Department dress standards. TB clearance required.

CA A215 2 Units (6 lecture hours; 120-150 other hours)
Directed Practice for Culinary Arts 2
Prerequisite(s): CA A122 and CA A210.

Grading Mode: Standard Letter
This course is primarily a directed-practice (work experience) in an off-site kitchen. Examples of work sites include restaurants, hotels, country clubs or other commercial facilities and are approved by the program coordinator. Students will practice proper interview techniques, develop a resume, career goals and action plan. Students will be required to follow dress standards and company policies of conduct, set by the facility in which they are working.

CA A226 3 Units (27 lecture hours; 90 lab hours)
Principles of Pastry Arts
Prerequisite(s): CA A126.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Advanced course of pastry arts emphasizing chocolate artistry and confections, sugar work, marzipan, and decorated cakes. Students will also learn applications of cutout, stencils, and molds for decorated plated desserts and specialty cakes. Note: TB CLEARANCE REQUIRED. Lecture/Lab.

CA A236 2 Units (6 lecture hours; 120 other hours)
Directed Practice for Baking and Pastry 1
Prerequisite(s): CA A124.

Advisory: CA A126.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A directed opportunity for on-the-job baking and pastry training that includes practical training at OCC bakery in quantity bakery production. Students will be required to follow dress standards and company policies of conduct, set by the facility in which they are working. Six hours of seminar, 120 work hours arranged.

CA A237 2 Units (6 lecture hours; 120-150 other hours)
Directed Practice for Baking and Pastry 2
Prerequisite(s): CA A236.

Advisory: CA A126.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A directed opportunity for on-the-job baking and pastry training. Includes on-the-job training at approved institutional or commercial facilities. Students will be required to follow dress standards and company policies of conduct, set by the facility in which they are working. Six hours of seminar, 120 work hours arranged (unpaid) or 150 work hours arranged (paid).

CA A245 3 Units (27 lecture hours; 81 lab hours)
Culinary Principles 3
Prerequisite(s): CA A122, CA A124, and CA A149.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Students will prepare a variety of American Regional Cuisine for service to customers in the OCC Captain's Table Restaurant. Cuisines from around the United States will be explained and discussed. Focus for the class will be on station readiness and implementation of the basic cooking methods in a volume, banquet style format while emphasizing the elements of quality presentation. Students will be required to follow hospitality department dress standards.

CA A255 2 Units (18 lecture hours; 54 lab hours)
Garde Manger 2
Prerequisite(s): CA A200.

Grading Mode: Standard Letter
Transfer Credit: CSU.

This course applies previously learned Garde Manger techniques and skill in practical situations. Weekly themes will highlight different cuisine in a buffet format. Foods prepared will emphasize classical cooking with a modern approach to nutrition, service, and presentation. Also, charcuterie (sausage making), cheese making, and meat preservation will also be explored. Students will be required to follow hospitality department dress standards.

CA A265 2 Units (18 lecture hours; 72 lab hours)
Ala Minute Continental Cooking
Prerequisite(s): CA A245.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Students prepare menu offerings in the college's Captain's Table restaurant for the dining public. Emphasis is on station readiness (under strict time constraints), implementation of basic cooking methods, quality of presentation, and an exploration of a variety of cuisines from around the world in a cook-to-order format. Student will be required to follow hospitality department dress standards.
DANC A101 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Modern Dance 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Offers instruction in movement vocabulary and technical skills necessary to prepare the body as an instrument of expression in modern dance. This dance style began in the United States in the early 1930's as a "modern expression" of American themes, personal and artistic ideas. The style has continued to evolve to include dance themes expressive of contemporary times. This course offers instruction at the beginning level. May be taken for grades or on a pass-no pass basis. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A102 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Modern 2
Advisory: DANC A101 or successful audition.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Offers instruction in movement vocabulary and technical skills necessary to prepare the body as an instrument of expression in modern dance. This dance style began in the United States in the early 1930's as a "modern expression" of American themes, personal and artistic ideas. The style has continued to evolve to include dance themes expressive of contemporary times. This course offers instruction at the intermediate level. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A106 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Strength and Stretch
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Strength and flexibility exercises and their application to dance technique will be selected to target major muscle groups that need maximum efficiency and range of motion. The course will address both the adaptation of exercises to the individual for maximum benefit and application to movement patterns. Also applicable to any sport. May be taken for grades or on a pass-no pass basis. This course may be taken two times.

DANC A107 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Conditioning for Dance
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A program combining skills from dance and exercise designed to improve alignments, strength, flexibility, coordination, balance and endurance for greater technical ability in dance and other athletic studies. May be taken for grades or on a pass-no pass basis. This course may be taken four times.

DANC A108 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Pilates Mat Work
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A course in alignment and correctives work based on concepts and exercises developed by Joseph H. Pilates. The focus is on mat work exercises for improved body alignment, strength, flexibility, control, coordination, and breathing. May be taken for grades or on a pass-no pass basis.

DANC A110 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Ballet 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introduces and develops movement principles and skills necessary for the study of classical ballet. Course will include ballet terminology, use of 'turnout' positions of feet and legs, alignment of spine and placement of weight at the barre, in center floor and traveling patterns. Instruction is at the beginning level. May be taken for grades or on a pass-no pass basis. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A111 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Ballet 2
Advisory: DANC A110 or successful audition.

Grading Mode: Standard Letter, Pass/No Pass, Conversion
Transfer Credit: CSU; UC.

Introduces and develops movement principles and skills necessary for the study of classical ballet. Course will include ballet terminology, use of "turnout" positions of feet and legs, alignment of spine and placement of weight at the barre, in center floor and traveling patterns. Instruction is at the intermediate level. May be taken for grades or on a pass-no pass basis. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.
DANC A113 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Pointe Work
Advisory: Intermediate level ballet technique, validated in class during the first week of the course.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
A course teaching the technique and movement skills needed to perform classical ballet on ‘pointe’. Includes preparation and care of pointe shoes. May be taken for grades or on a pass-no pass basis.

DANC A115 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Yoga For Dancers
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Using traditional yoga postures and breathing techniques, this course is designed for the needs of the training dancer. Yoga postures to increase strength and flexibility, as well as restorative postures will be taught in order to bring about improvement in the execution of dance movements. Instruction at the beginning, intermediate, and intermediate/advanced levels is offered. May be taken for grades or on a pass-no pass basis.

DANC A116 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Latin Dance Styles I
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
An introductory course in Latin dance styles designed to teach cha-chas, merengue, tango, salsa, and other Latin dances. Course will emphasize steps, styling, partnering, rhythm, cultural background materials. The beginning level is appropriate for students of all ages and training. May be taken for grades or on a pass-no pass basis.

DANC A117 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
American Social Dance Styles
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
An introductory course in American social dance styles designed to teach foxtrot, waltz, swing, and Lindy hop. Course will emphasize steps, styling, partnering, rhythm, and cultural background material. Beginning level is appropriate for students of all ages and training. May be taken for grades or on a pass-no pass basis.

DANC A118 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Movement for Longevity
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Designed to develop strength, flexibility, ease of motion for the maturing body. The course will address bone density and balance through dance and movement practices. Appropriate for non-dancers as well as dancers. May be taken for grades or on a pass-no pass basis.

DANC A119 3 Units (54 lecture hours)
Kinesiology For Dance
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course is designed to introduce students to the basic principles of kinesiology focusing on the key body joints including the spine, shoulder, hip, knee, ankle, and foot. It addresses the specific needs of dancers and Pilates students. May be taken for grades or on a pass-no pass basis.

DANC A120 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Jazz Dance 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
A technique course in the study of various jazz styles. Emphasizes the use of energy, rhythm, improvisation while emphasizing body control, alignment, use of weight changes and quality within a jazz dance movement vocabulary. Instruction at the beginning level. May be taken for grades or on a pass-no pass basis. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A121 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Jazz Dance 2
Advisory: DANC A120 or successful audition.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
A technique course in the study of various jazz styles. Emphasizes the use of energy, rhythm, improvisation while emphasizing body control, alignment, use of weight changes and quality within a jazz dance movement vocabulary. Instruction at the intermediate level. May be taken for grades or on a pass-no pass basis. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A125 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Tap 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Tap dance techniques based on the style known as rhythm tap emphasizing fundamental skills and rhythms, time steps, flash footwork, short combinations, and styling. Instruction at the beginning level. May be taken for grades or on a pass-no pass basis. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.
DANC A126 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Tap 2
Advisory: DANC A125 or successful audition.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Tap dance techniques based on the style known as rhythm tap emphasizing fundamental skills and rhythms, time steps, flash footwork, short combinations, and styling. Instruction at the intermediate level. Course may be taken for grades or on a pass-no pass basis. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A129 3 Units (54 lecture hours; 18 lab hours)
Pilates Methodology
Advisory: Intermediate to advanced level skills in Pilates technique, validated during the first week of the course.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Designed for Pilates students to learn how to teach classes in Pilates techniques and dance conditioning for adults or teens in a variety of settings. This class covers assessment, goal setting, lesson plans, communication, cueing, precautions, and modifications for Pilate’s clients. May be taken for grades or on a pass-no pass basis.

DANC A130 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Mid-Eastern Dance 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
A technique course emphasizing the social and stage dances from the region designated as the Near and Middle East. Incorporates choreography, improvisation, movement vocabulary and styling, and finger cymbal playing. Instruction at the beginning and intermediate levels. May be taken for grades or on a pass-no pass basis.

DANC A133 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Intro To World Dance
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
An introductory course designed to survey dances of selected world dance cultures. Through movement experiences and lecture, students will gain the technique and understanding necessary to perform the selected dances. May be taken for grades or on a pass-no pass basis.

DANC A137 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Classical Danc of India
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
A beginning level course that teaches the footwork, gestures, movement, music and history of Bharata Natyam dance style from Southern India. Includes lectures and field trips to introduce students to Indian culture and rituals. For dancers and non-dancers. May be taken for grades or on a pass-no pass basis.

DANC A138 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
African Dance and Drumming I
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
A movement course designed to teach traditional and contemporary dances of various African cultures. Includes rhythms, song forms, use of costume pieces, and information on the integral link between dance, chant and social/religious aspects of African cultures. May be taken for grades or on a pass-no pass basis.

DANC A139 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Gyrokinetics
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Designed for beginning level students, this course will present an introduction to Gyrokinesis®, an important component of the Juliu Horvath Method. The entire body is worked through fluid exercises focusing on the natural directions of spinal movements and joint articulations. The course will involve participatory labs and skills demonstrations. May be taken for grades or on a pass-no pass basis.

DANC A142 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Folk Dance
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Emphasis on the knowledge of folk dance and the background which shapes the origins, themes and style of the dance. Fundamental elements of dance, rhythms and information about the link between dance and its cultural background. One particular culture will be focused on each semester. Topics may include folk dances from South America, North America, Europe, the Middle East and Asia. May be taken for grades or on a pass-no pass basis.
DANC A143  2 Units (18 lecture hours; 54 lab hours)
Jazz Dance III
Advisory: DANC A121 or successful audition.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

This course offers Jazz dance instruction for dancers at the high intermediate level. It includes thorough warm up exercises, technique, vocabulary skills and concepts to prepare the body as an instrument of expression in Jazz dance, with emphasis on lyrical and contemporary techniques. Students should be prepared to participate at the first class meeting. May be taken for grades or on a pass-no pass basis. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A144  2 Units (18 lecture hours; 54 lab hours)
Ballet III
Advisory: DANC A111 or successful audition.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A technique course in classical ballet, emphasizing movement skills at the barre, in center floor and traveling patterns. Instruction is at the high intermediate level. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A145  2 Units (18 lecture hours; 54 lab hours)
Modern Dance III
Advisory: DANC A102 or successful audition.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

This course offers modern dance instruction for dancers at the high intermediate level. It includes thorough warm up exercises, technique, vocabulary skills and concepts to prepare the body as an instrument of expression in modern dance, with emphasis on traditional and contemporary techniques. Course may be taken for a letter grade or on a pass-no pass basis. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A146  1 Unit (9 lecture hours; 27 lab hours)
Tap III
Advisory: DANC A126 or successful audition.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

This course offers tap dance instruction at the high intermediate level, teaching techniques based on the style known as rhythm tap, emphasizing low to the ground, syncopated footwork, fundamental skills and rhythms, time steps, short combinations, and styling. Students should be prepared to participate at the first class meeting. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A147  0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Flamenco Dance 2
Advisory: DANC A135 or successful audition, validated in class during the first week of the course.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A technique course in the study of various dance forms and rhythms in flamenco dance. Emphasizes on proper alignment, rhythm, footwork and arm work within a flamenco dance movement form at an intermediate and advanced level. May be taken for grades or on a pass-no pass basis.

DANC A148  0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Mid-Eastern Dance 2
Advisory: DANC A130 or successful audition, validated in class during the first week of the course.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A technique course emphasizing the social and stage dances from the region known as the Near and Middle East. Incorporates choreography, improvisation, movement vocabulary and styling, and finger cymbal playing. Instruction at the high intermediate/advanced levels are offered. May be taken for grades or on a pass-no pass basis.

DANC A149  0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Hip-Hop Dance I
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Instruction in the movement vocabulary and technical skills that are needed for the dance style known as Hip-Hop. Explores the use of space, energy, rhythm, and improvisation while emphasizing body control, alignment, balance, and use of weight changes. Instruction at the beginning and intermediate levels. May be taken for grades or on a pass-no pass basis.

DANC A150  1 Unit (9 lecture hours; 27 lab hours)
Dance Improvisation I
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Directed exploration of dance movement including use of space, dynamics, and rhythm as expressed through individual movement vocabulary. Designed for all levels. Appropriate for the non-dancers. Students should be prepared to participate at the first class meeting. May be taken for grades or on a pass-no pass basis.

DANC A151  1 Unit (18 lecture hours)
Pilates as a Profession
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

For students planning a career in Pilates, including Pilates-related career options, and resumes, contracts, fees, insurance and other aspects of Pilates as a business. May be taken for grades or on a pass-no pass basis.
DANC A152 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Pilates Apparatus & Mat Work Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC

A course emphasizing alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates using apparatus and mat work. Focus is on improved body alignment, strength, flexibility, control, coordination, and breathing.

DANC A153 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Pilates Apparatus & Mat Work Level 2
Advisory: DANC A152 or equivalent skill level.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An intermediate course emphasizing alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates using apparatus and mat work. Focus is on improved body alignment, strength, flexibility, control, coordination, and breathing.

DANC A154 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Contemporary Commercial Dance
Grading Mode: Standard Letter, Pass/No Pass

This course provides a study in beginning contemporary commercial dance, principles and terminology. This includes technical warm-up, progressions and beginning styled dance combinations center floor. This technique course will focus on contemporary dance styles made popular from the television, film and video industry. The course content explores but not limited to dance conditioning, body awareness, flexibility and performance skills. Students are required to attend a live dance performance. Maybe taken for grade or pass-no pass basis. Transfer credit: CSU; UC.

DANC A155 1 Unit (9 lecture hours; 27 lab hours)
Latin Dance Styles II
Advisory: DANC A116 or successful audition, validated during the first week of the course.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC

An intermediate course in Latin dance styles designed to teach intermediate patterns and choreography of merengue, bachata, and salsa, and/or other Latin dances. Course will emphasize basic lifts and dips, styling, partnering, rhythm, cultural background material and choreography. May be taken for grades or on a pass-no pass basis.

DANC A156 1 Unit (9 lecture hours; 27 lab hours)
Polynesian Dance
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC

A beginning level course in Polynesian dances designed to teach footwork, gestures, hip and body movements within the genre. Students will learn and be able to perform choreography as well as improvisation to selected music and drumbeats.

DANC A158 1 Unit (9 lecture hours; 27 lab hours)
African Dance and Drumming II
Advisory: DANC A138 or successful audition, validated during the first week of the course.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This intermediate level African dance course focuses on traditional African dances, drumming and songs from Guinee, West Africa. Each class is accompanied by live drumming, an integral, dynamic support to African dance. Additionally students will study Afro Haitian and/or Afro Cuban dances, songs and drumming. The course includes information about the integral link between dance and the social/religious aspects of African culture.

DANC A159 1 Unit (9 lecture hours; 27 lab hours)
Hip-Hop Dance II
Advisory: DANC A149 or successful audition, validated during the first week of the course.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Instruction in the movement vocabulary and technical skills that are needed for the dance style known as Hip-Hop. Explores the use of space, energy, rhythm, and improvisation while emphasizing body control, alignment, balance, and use of weight changes. The focus of this course will be floor work vocabulary, aerials, turns improvisation and choreography. Instruction is at the intermediate level. May be taken for grades or on a pass-no pass basis.

DANC A160 3 Units (54 lecture hours; 18 lab hours)
Dance Composition/Choreography I
Advisory: Intermediate to Advanced technique levels in modern dance or jazz or ballet.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

A composition course for dancers with intermediate to advanced technique levels in modern dance, jazz or ballet. This course emphasizes basic skills in dance composition, problem solving and exploration of dance elements: space, shape, time and energy. Students will learn to analyze choreography, create short dance studies and learn about established choreographers through a variety of assignments. Students should be prepared to dance the first day.
DANC A162  
Dance Composition/Choreography II  
Prerequisite(s): DANC A160.  
Advisory: Intermediate to Advanced technique levels in modern dance or jazz or ballet; This will be validated in class during the first week of the course.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.

A composition course designed for dancers with intermediate and advanced technique levels in modern dance, ballet and jazz. This course explores dance composition elements and methods for crafting movement phrases and short dances. Through a variety of assignments students will learn how to develop themes and motifs, choose music, direct rehearsals, collaborate and learn about established choreographers and their work. May be taken for a letter grade or on a pass/no-pass basis.

DANC A165  
Latin Dance Styles III  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU, UC.

An Intermediate/Advanced course in Latin Dance Styles designed to teach intermediate/advanced patterns and choreography of Cha-Cha, Tango, Salsa and/or other Latin Dances. The course will emphasize intermediate lifts and dips, styling, partnering, complex rhythm patterns and choreography. May be taken for grade or on a pass-no-pass basis.

DANC A168  
African Dance and Drumming III  
Advisory: DANC A138.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU, UC.

This intermediate/advanced level African dance course focuses on traditional and ritual West African dances, drumming, rhythms and songs from Guinea ("Kakilambe"), Senegal ("Sunu") and Burkina Faso ("Folangoto") and/or others. Each class is accompanied by live drumming, an integral, dynamic support to African dance. Additionally, students will create and perform short group compositions, "village dances" based on vocabulary and rhythms learned in class. The course includes information about the integral link between dance and the social/religious aspects of African culture. May be taken for a letter grade or on a pass/no-pass basis.

DANC A169  
Hip-Hop Dance III  
Advisory: DANC A149.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU, UC.

Instruction in the movement vocabulary and technical skills that are needed for the dance style known as Hip-Hop. Explores the use of space, energy, rhythm and improvisation while emphasizing body control, alignment, balance, and use of weight changes. This course will focus on further developing the understanding of movement vocabulary, dynamics, performance techniques, and choreographic principles related to the dance style known as Hip-Hop. Instruction is at the intermediate/advanced level. May be taken for grades or on a pass-no pass basis.

DANC A170  
Music for Dancers  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU, UC.

Assists the dancer-choreographer (non-musician) in building a knowledge of the fundamentals of music through the limited study of theory, terminology and notation. The course is designed to present the development of music and dance in historical perspective, to develop through listening an awareness of the musical literature available, to train dancer and musician to work together through development of a common vocabulary and a working knowledge of each other's craft. May be taken for grades or on a pass-no pass basis.

DANC A171  
Modern Dance Basics  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU, UC.

This course is designed for students with no previous modern dance experience. It will focus on basic modern dance techniques: alignment, articulations of the spine and extremities, floor exercises, movement vocabulary, creative exercises and explorations of space, time, energy and weight/gravity – in order to prepare the body as an instrument of expression. Modern dance is a barefoot dance style that began in the United States in the early 1930's as a rebellion against ballet's upright torso, ethereal lines and literal storytelling themes. This course will continue the modern dance tradition of exploring abstract, structured dance movement, incorporating artistic concepts and personal expression. This course may be taken one time.

DANC A172  
Ballet Dance Basics  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU, UC.

A course designed for students without previous knowledge of ballet. This course introduces movement principles and concepts of classical ballet technique. Attention is focused on correct body alignment of the spine, the proper use of 'turn out' at the hip and the correct placement and use of feet. The course presents basic ballet terminology, barre, ballet stretches, center floor and traveling patterns. Instruction is at the most basic level. May be taken for grades or on a pass-no pass basis.  
NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.
DANC A173 2 Units (18 lecture hours; 54 lab hours)
Jazz Dance Basics
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

A technique course in the study of jazz dance basics. Emphasizes the use of energy, rhythm, body control, alignment, use of weight changes, coordinations and dynamics within a jazz dance movement vocabulary. Instruction at the basic level. May be taken for grades or on a pass-no pass basis. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A174 1 Unit (9 lecture hours; 27 lab hours)
Tap Dance Basics
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This tap dance course is designed for students with no previous tap dance experience. It will focus on basic rhythm exercises, music listening, tap dance techniques and tap history. Emphasis will be placed on correct execution of tap dance rudiments, coordination, shifts of weight, basic time steps, short combinations, and styling. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A180 3 Units (54 lecture hours)
Dance Wellness and Injury Prevention
Grading Mode: Standard Letter, Pass/No Pass
This course is designed to give practical information on all aspects of safe dance practice. Alignment, nutrition, injury prevention, physical and psychological wellness concepts are among the topics covered. May be taken for grades or on a pass-no-pass basis. Transfer credit: CSU

DANC A191 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Classical Technique and Variation Workshop
Advisory: Intermediate level ballet technique; This advisory will be validated in class during the first week of the course.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This course is designed to offer classical technique and variations of a selected period and style for the intermediate and advanced ballet dancer. Students should be prepared to participate at the first class meeting. Offered on a pass-no-pass basis only.

DANC A199 0.5-3 Units (9-27 lecture hours; 18-81 lab hours)
Current Dance Topics
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Movement and lecture/discussion of topics and issues of current interest in dance.

DANC A200 3 Units (54 lecture hours)
Appreciation Of Dance
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Designed for students to view dance of all styles, including world dance and entertainment forms of dance through viewing videos, lecture/discussion, and attendance at live dance performances. Students will attend a minimum of two live dance performances. Expense for tickets is the student's responsibility; student rates are available. This course may also be offered online. May be taken for grades or on a pass-no-pass basis.

DANC A201 1 Unit (9 lecture hours; 27 lab hours)
Rehearsal and Performance I
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Structured dance rehearsal time on stage in the theatre for a large ensemble choreography, including spacing rehearsals, lighting rehearsals, dress rehearsals, culminating in main stage performances in the OCC student dance concert. Lecture/Lab/Arranged Lab.

DANC A202 1 Unit (9 lecture hours; 27 lab hours)
Rehearsal and Performance II
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Structured dance rehearsal time on stage in the theatre for a small group choreography, including spacing rehearsals, lighting rehearsals, dress rehearsals, culminating in main stage performances in the OCC student dance concert. Student must be enrolled in an OCC technique class in modern dance, jazz, ballet or the dance style being used by the DANCE A212 choreographer. Lecture/Lab/Arranged Lab.

DANC A203 3 Units (27 lecture hours; 81 lab hours)
Performing Dance Ensemble I
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC

Performing Dance Ensemble provides an opportunity for intermediate and advanced level dancers to improve their performing skills in structured rehearsal time, culminating in performances for public schools and the community. May be taken for a letter grade or on a pass-no-pass basis. Intermediate dance skills are required in jazz or ballet or modern or tap or world dance forms. This skill level will be validated in class during the first week of the course or by the recommendation of the instructor. Lecture/Lab/Arranged Lab.

DANC A204 1 Unit (9 lecture hours; 27 lab hours)
Rehearsal and Performance III
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Structured dance rehearsal time on stage in the theatre for a choreography created by OCC faculty or a guest artist, including spacing rehearsals, lighting rehearsals, dress rehearsals, culminating in main stage performances in the OCC student dance concert. Lecture/Lab/Arranged Lab.
DANC A205  2 Units (36 lecture hours)
Dance as a Profession Seminar
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
For students planning a career in dance, including dance-related career options, auditions, resumes, photos, video presentations, contracts, choreography and performance fees, resources, and other aspects of professional dance. May be taken for grades or on a pass-no pass basis.

DANC A207  1 Unit (9 lecture hours; 27 lab hours)
Rehearsal and Performance IV
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU
Structured dance time on stage in the theatre for a solo choreography including spacing rehearsals, lighting rehearsals, dress rehearsals, culminating in main stage performance in the OCC student dance concert. Lecture/Lab/Arranged Lab.

DANC A208  1.5-3 Units (22.5-45 lecture hours; 13.5-27 lab hours)
Pilates 3-4
Advisory: DANCE A108; Intermediate level skills in Pilates mat and reformer work; This will be validated in class during the first week of the course.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Designed for students with intermediate to advanced-level Pilates skills. This course will present advanced-level Pilates skills, principles of movement facilitation, core stabilization, and re-education applied to mat work and to the equipment used in teaching the Pilates Method. May be taken for grades or on a pass-no pass basis.

DANC A210  3 Units (54 lecture hours; 18 lab hours)
Dance Methodology
Advisory: DANCE A150 or DANCE A160; Intermediate to advanced level skills in dance technique (either modern dance, jazz or ballet).
Grading Mode: Standard Letter
Transfer Credit: CSU.
Designed for dance students to learn how to teach classes in dance technique and creative movement for adults or youth in a variety of settings.

DANC A211  1-4 Units (9-36 lecture hours; 27-108 lab hours)
Repertoire I
Co-requisite(s): Student must be enrolled in an OCC technique class in modern dance, jazz, ballet or the dance style being used by the dance choreographer.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Designed to introduce students to the creative process for the development of a full-length ensemble dance, including unison and counterpoint dance sequences, studio rehearsals, critiques, performance skills and production responsibilities. This course provides an opportunity for a dancer to learn and perform, or choreograph and direct, choreography for a large ensemble. Lecture/Lab/Arranged Lab.

DANC A212  1-4 Units (9-36 lecture hours; 27-108 lab hours)
Repertoire II
Prerequisite(s): DANC A211.
Grading Mode: Standard Letter, Pass/No Pass
Designed to introduce students to the creative process and unique considerations for the development of a full-length dance for two to five dancers, including lifts and partnering, cause and effect relationships, studio rehearsals, critiques, performance skills and production responsibilities. This course provides an opportunity for a dancer to learn and perform, or choreograph and direct, choreography for duet, trio or small group. Student must be enrolled in any beginning through advanced level Tap, Modern, Middle Eastern, African, or Ballet class. Lecture/Lab/Arranged Lab. Transfer status: CSU, UC.

DANC A213  1-4 Units (9-36 lecture hours; 27-108 lab hours)
Repertoire III
Prerequisite(s): DANC A212.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Designed to introduce students to the creative process of a faculty member or guest artist for the development of a full-length dance, including studio rehearsals, critiques, performance skills and production responsibilities. This course provides an opportunity for students to learn and perform choreography by a professional choreographer, an OCC faculty member, or guest artist in modern dance, ballet, jazz, tap, hip hop, or world dance styles. Student must be enrolled in an OCC technique class in modern dance, jazz, ballet or the dance style being used by the dance choreographer. Lecture/Lab/Arranged Lab.

DANC A214  1-4 Units (9-36 lecture hours; 27-108 lab hours)
Repertoire IV
Prerequisite(s): DANC A213.
Co-requisite(s): Student must be enrolled in an OCC technique class in modern dance, jazz, ballet or the dance style being used by the dance choreographer.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Designed to introduce dance students with high intermediate to advanced level skills to the creative process for the development of a full-length solo dance, including studio rehearsals, critiques, performance skills and production responsibilities. This course provides an opportunity for dancers to learn and perform, or choreograph and direct solo choreography for a mainstage performance, and provides preparation for university dance major solo auditions. Lecture/Lab/Arranged Lab.

DANC A215  1 Unit (62 other hours)
Pilates Internship I
Advisory: DANCE A108 and DANCE A152 or DANCE A153 or concurrent enrollment.
Grading Mode: Standard Letter
A supervised internship related to classroom-based learning at a Pilates-related work site and for the Pilates/Dance Conditioning Instructor. Recommendation: Ideally, the first level of internship should be taken at the same time as DANC A129 Pilates Methodology.
DANC A217 1 Unit (62 other hours)
Dance Internship II
Advisory: DANC A129 or DANC A153 or DANC A215.
Grading Mode: Standard Letter
Transfer Credit: CSU.
A supervised internship related to classroom-based learning at a Pilates-related work site. Students will teach Pilates classes at one or more sites using lesson plans that they have developed. Recommendation: Ideally, the second level of internship should be taken after or at the same time as DANC A129 Pilates Methodology.

DANC A218 1 Unit (62 other hours)
World Dance Internship I
Prerequisite(s): DANC A147 or concurrent enrollment or DANC A148 or concurrent enrollment.
Grading Mode: Standard Letter
Transfer Credit: CSU.
A supervised internship related to classroom-based learning at a world dance related work site. Students should be in or have taken DANC A147 or DANC A148. Recommendation: Ideally, the first level of internship should be taken at the same time as DANC A210, Dance Methodology.

DANC A219 1 Unit (62 other hours)
World Dance Internship II
Prerequisite(s): DANC A147 or concurrent enrollment or DANC A148 or concurrent enrollment or DANC A218.
Grading Mode: Standard Letter
Transfer Credit: CSU.
A supervised internship related to classroom-based learning at a world dance-related work site. Students should be ready to teach world dance classes and must have taken DANC A147 or DANC A148. Recommendation: Ideally, students in the second level of internship should have taken DANC A210, Dance Methodology.

DANC A220 1 Unit (62 other hours)
Dance Internship I
Prerequisite(s): DANC A143 or concurrent enrollment or DANC A144 or concurrent enrollment or DANC A145 or concurrent enrollment; This prerequisite will be validated in class during the first week of the course.
Grading Mode: Standard Letter
Transfer Credit: CSU.
A supervised internship related to classroom-based learning at a dance-related work site. Recommendation: Ideally, the first level of internship should be taken at the same time as DANC A210, Dance Methodology.

DANC A221 1 Unit (62 other hours)
Dance Internship II
Prerequisite(s): DANC A143 or concurrent enrollment or DANC A144 or concurrent enrollment or DANC A145 or concurrent enrollment or DANC A244 or concurrent enrollment or DANC A245 or concurrent enrollment.
Grading Mode: Standard Letter
Transfer Credit: CSU.
A supervised internship related to classroom-based learning at a dance-related work site. Students will teach dance classes at one or more sites using lesson plans that they have developed. Students should be in or have taken a level III or higher course in Ballet, Jazz or Modern. Recommendation: Ideally, the internship should be taken after or at the same time as DANC A210 Dance Methodology.

DANC A223 3 Units (27 lecture hours; 81 lab hours)
Performing Dance Ensemble II
Prerequisite(s): DANC A203.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Performing Dance Ensemble (Small Group) provides an opportunity for intermediate and advanced level dancers to improve their performing skills in structured rehearsal time, culminating in Lecture-Demonstration performances for the public schools and the community. An emphasis will be placed on small group choreography.

DANC A230 3 Units (54 lecture hours)
World Dance and Culture
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC
Designed for students to view dance of diverse cultures from around the world through viewing videos, lecture/discussion and attendance at live dance concerts. The course examines dance forms in relation to their specific cultural contexts. Students will attend a minimum of two live dance performances. Expense of tickets is the student’s responsibility. May be taken for a grade or on a pass-no pass basis.

DANC A233 3 Units (27 lecture hours; 81 lab hours)
Performing Dance Ensemble III
Prerequisite(s): DANC A223.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Performing Dance Ensemble (Guest Choreographer) provides an opportunity for intermediate and advanced level dancers to improve their performing skills in structured rehearsal time, culminating in lecture-demonstration performances touring the public schools and the community. An emphasis will be placed on directing, choreography, and solo/duet performances. May be taken for grades or on a pass-no pass basis.
DANC A243 2 Units (18 lecture hours; 54 lab hours)
Jazz IV
Prerequisite(s): DANC A143 and/or successful audition; This prerequisite will be validated in class during the first week of the course.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This course offers instruction at the high intermediate and advanced levels in jazz dance techniques and it focuses on developing individual style and integrating personal and artistic phrasing and expression. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A244 2 Units (18 lecture hours; 54 lab hours)
Ballet IV
Prerequisite(s): DANC A144 or successful audition; This prerequisite will be validated in class during the first week of the course.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

An advanced technique course in classical ballet, emphasizing movement skills at the barre, in center floor and traveling patterns. Complex movement combinations, extensive ballet terminology and diverse rhythms will be introduced throughout the semester. Students should be prepared to participate at the first class meeting. May be taken for grades or on a pass-no pass basis. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A245 2 Units (18 lecture hours; 54 lab hours)
Modern IV
Prerequisite(s): DANC A145; This prerequisite will be validated in class during the first week of the course.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This course offers instruction at the high intermediate and advanced levels in modern dance, emphasizing traditional and contemporary techniques. It includes thorough warm up exercises, technique, vocabulary skills, creative work, and integrates personal phrasing and expression. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A246 1 Unit (9 lecture hours; 27 lab hours)
Tap IV
Prerequisite(s): DANC A146 or successful audition.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This course offers tap dance instruction at the high intermediate and advanced levels, emphasizing advanced footwork skills, complex rhythms, traveling time steps, flash footwork, traveling combinations, and historic tap repertoire with total body integration and appropriate styling. Students should be prepared to participate at the first class meeting. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A247 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Flamenco Dance 3
Advisory: DANC A135 and DANC A147.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

An advanced course in the technique, dance forms and rhythms of flamenco dance. Emphasis is placed on proper body alignment, arm and footwork precision and artistry, rhythm and improvisational skills at a high intermediate/advanced level. May be taken for a grade or on a pass-no pass basis.

DANC A248 1 Unit (9 lecture hours; 27 lab hours)
Mid-Eastern Dance 3
Prerequisite(s): Successful audition; this prerequisite will be validated in the class during the first week of the course.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A technique course emphasizing the social and stage dances from the region known as the Near and Middle East. Incorporates choreography, improvisation, movement vocabulary, styling, music and finger cymbal playing, use of various props, and costuming. Instruction at the high intermediate/advanced levels are offered. May be taken for grades or on a pass-no pass basis.

DANC A250 1 Unit (9 lecture hours; 27 lab hours)
Dance Improvisation II
Prerequisite(s): DANC A150.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This dance improvisation course is designed for instruction at the intermediate level for any student who has successfully completed DANC A150. The focus will be on contact improvisation, partnering, weight and support, shape, design, exploration of imagery and props, theatrical contexts, various music styles, rhythm, phrasing and other themes. Directed improvisation assignments and problem solving lead to free exploration of movement expressed through individual movement vocabulary. Students should be prepared to participate at the first class meeting.

DANC A253 2 Units (18 lecture hours; 54 lab hours)
Preparation for Audition - Jazz
Prerequisite(s): DANC A243 or successful audition.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course offers instruction at the advanced level in Jazz dance, emphasizing contemporary Jazz technique and current vocabularies, with a focus on rhythmic challenges, athleticism, strength, endurance, phrasing and personal expression. The course is designed specifically to prepare the serious dancer for successful audition and university transfer as a dance major. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.
DANC A254 2 Units (18 lecture hours; 54 lab hours)
Preparation for Audition - Ballet
Prerequisite(s): DANC A244 or successful audition.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
An advanced course in classical ballet intended to improve the technique and performance qualities of dance majors who plan on auditioning for university transfer and/or stage performance experience in the professional field. The class guides students who will seek a career in teaching by attention to alignment corrections and use of intricate movement combinations, diverse rhythms and extensive ballet vocabulary. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A255 2 Units (18 lecture hours; 54 lab hours)
Preparation for Audition - Modern
Prerequisite(s): DANC A245 or successful audition.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course offers instruction at the advanced level in modern dance, emphasizing release technique and current vocabularies, with a focus on rhythmic challenges, athleticism, strength, endurance, phrasing and personal expression. The course is designed specifically to prepare the serious dancer for successful audition and university transfer as a dance major. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A256 1 Unit (9 lecture hours; 27 lab hours)
Preparation for Audition - Tap
Prerequisite(s): DANC A246 or successful audition.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course offers tap instruction at the advanced level in traditional and contemporary tap styles, including tap improvisation and presentation skills needed for successful auditions for university musical theatre programs, and to gain employment in the commercial dance field for stage, television, touring productions and films. Areas of focus include tap dance techniques to enhance speed, weight changes, athletic "flash" steps and spatial patterns and turns. NOTE: This course is one of a family of courses in this subject matter. Enrollment may be limited due to State regulations. Please consult your academic counselor for clarification.

DANC A262 3 Units (54 lecture hours; 18 lab hours)
Dance Composition/Choreography III
Prerequisite(s): DANC A162.
Advisory: DANC A102 or DANC A111 or DANC A121.
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
A composition course designed for dancers with intermediate and advanced technique levels in modern dance, ballet and jazz. Through a variety of assignments this course explores choreographic structures and forms, and emphasizes production elements: staging, costumes, lighting, marketing, as well as learning about post modern and avant garde choreographers and their work.

DANC A263 3 Units (27 lecture hours; 81 lab hours)
Performing Dance Ensemble IV
Advisory: DANC A233.
Grading Mode: Standard Letter, Pass/No Pass
Performing Dance Ensemble IV provides an opportunity for advanced level dancers to improve their performing and career skills through rehearsals culminating in performances on campus and in the R. B. Moore Theatre. There may be additional performances and lecture-demonstrations in public schools and the community. This is the culmination of the Performing Dance Ensemble so includes Individualized assignments and responsibilities in the rehearsing, choreographing, staging, costuming, publicizing and promoting concerts and performances.

DANC A264 1 Unit (9 lecture hours; 27 lab hours)
Mid-Eastern Dance 4
Prerequisite(s): Successful audition; this prerequisite will be validated in class during the first week of the course.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
A technique course emphasizing the social and stage dances from the region known as the Near and Middle East. Incorporates choreography, improvisation, movement vocabulary, styling, music and finger cymbal playing, the use of various props, and costuming. Instruction at the advanced level is offered. May be taken for grades or on a pass-no pass basis.

DANC A267 1 Unit (9 lecture hours; 27 lab hours)
Flamenco Dance 4
Advisory: DANC A247.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
An advanced course in technique, dance forms and rhythms of flamenco dance. Emphasis is placed on proper body alignment, arm and footwork precision and artistry, rhythm and improvisational skills with live musicians at a high intermediate/advanced level.
DANC A269
Hip Hop 4
1 Unit (9 lecture hours; 27 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Instruction in the movement vocabulary and technical skills that are needed for the dance style known as Hip-Hop. This course will focus on further developing the understanding of movement vocabulary, dynamics, performance techniques, and choreographic principals related to the dance style known as Hip-Hop. The course will focus on developing individual style and integrating personal and artistic phrasing and expression within the Hip Hop genre of dance. Instruction is at the advanced level.

Dental Assisting (DA)

DA A100
Dental Anatomy
2 Units (36 lecture hours)
Prerequisite(s): ALH A111.
Grading Mode: Standard Letter
Transfer Credit: CSU.


DA A110
Chairside Techniques 1
3 Units (36 lecture hours; 54 lab hours)
Co-requisite(s): DA A120.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Four handed dentistry. History of the dental profession, Dental Practice Act, law and ethics. Charting, infection control protocols, sterilization procedures, use and maintenance of dental operatory equipment. Laboratory experience includes basic application of operative procedures. Course requires purchase of an appropriate clinical uniform and patient care safety goggles.

DA A115
Chairside Techniques 2
2 Units (28 lecture hours; 42 lab hours)
Co-requisite(s): DA A110.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This is a continuation of DA A110 Chairside Techniques 1 with an emphasis on dental specialties, and application of coronal polish for state certification.

DA A120
Dental Materials
3 Units (27 lecture hours; 54 lab hours)
Co-requisite(s): DA A110.
Grading Mode: Standard Letter
Transfer Credit: CSU.

A comprehensive study of materials, including composition and characteristics. Emphasis on use of restorative dental materials and gypsum products. Lab exercises include manipulation of materials, taking impressions, pouring casts and trimming models. Construction of acrylic and metal temporaries and bleaching trays.

DA A125
Expanded Functions
2 Units (21 lecture hours; 42 lab hours)
Co-requisite(s): DA A110 and DA A120.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Emphasis on expanded functions for the registered dental assistant. Laboratory practice and preclinical evaluations. Students will practice mock written and practical examinations in preparation for state licensing board examinations. Lecture/Lab.

DA A130
Preventive and Community Dentistry
1 Unit (18 lecture hours)
Co-requisite(s): DA A110.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Discussion of current concepts of preventive dentistry. Etiology of dental disease, nutrition, oral hygiene techniques, and home care are covered in detail. Applied psychology for the dental patient is presented. Includes community dental project.

DA A140
Dental Radiography 1
3 Units (36 lecture hours; 54 lab hours)
Co-requisite(s): DA A110.
Grading Mode: Standard Letter
Transfer Credit: CSU.

A study of the principles of x-ray production and physics, biological effects, radiation safety procedures, and monitoring. Film identification, processing and mounting procedures and introduction to the bitewing, bisection, and paralleling techniques and practical application are presented.
DA A145  2 Units (18 lecture hours; 54 lab hours)
Specialized Practices
Prerequisite(s): DA A140.
Co-requisite(s): DA A165.
Grading Mode: Standard Letter
Transfer Credit: CSU.

In-depth study of bisecting and paralleling techniques employed in patient intraoral radiographs. Analysis and correction of techniques and processing errors, clinical laboratory experience exposing x-rays on patients utilizing bisecting, and paralleling techniques including film processing and mounting for various radiographic examinations. Pit and Fissure sealant laboratory practice. Preclinical and Clinical performance and evaluations of pit and fissure sealant placement.

DA A150  2 Units (36 lecture hours)
Biomedical Sciences
Co-requisite(s): DA A125 and DA A165.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Specialized Practice in chairside dental assisting, including microbiology of the oral cavity, oral pathology, and the State Dental Practice Act and regulations.

DA A160  1 Unit (8 lecture hours; 64 lab hours)
Clinical Experience 1
Co-requisite(s): ALH A115, DA A110, DA A120, DA A130 and DA A140.
Grading Mode: Standard Letter
Transfer Credit: CSU.

The first clinical experience in the practice of dental assisting. Each student will be assigned to UCLA School of Dentistry or in dental office. Students are required to follow the dress code standards set up by the program, UCLA School of Dentistry, dental office, and Cal-DOSH mandates. Eight hours weekly for eight weeks with one hour seminar weekly.Offered on a grade basis only.

DA A163  1 Unit (64 other hours)
Clinical Experience 2
Prerequisite(s): DA A160.
Grading Mode: Standard Letter
Transfer Credit: CSU.

The second in a series of opportunities for clinical practice of concepts in dental assisting. Each student will be assigned to a dental office for either general dentistry or a specialty practice. Students are required to follow the dress code standards set up by the program according to ADA guidelines and OSHA mandates. Offered on a pass-no pass basis only. Sixty-four hours clinical.

DA A165  2.5 Units (14 lecture hours; 112 other hours)
Clinical Experience 3
Co-requisite(s): DA A115, DA A125, DA A145, AND DA A163.
Grading Mode: Standard Letter
Transfer Credit: CSU.

The third in a series of opportunities for clinical practice of concepts in dental assisting. Each student will be assigned to a dental office for either general dentistry or a specialty practice. Students are required to follow the dress code standards set up by the program according to ADA guidelines and OSHA mandates. Lecture, 112 hours clinical.

DA A168  1 Unit (1 lecture hours; 54 other hours)
Clinical Experience 4
Prerequisite(s): DA A165 or concurrent enrollment.
Grading Mode: Standard Letter
Transfer Credit: CSU.

The fourth clinical rotation in which the students will be placed in a general dentistry and/or dental specialty setting. Students are required to follow the dress code standards required by the program according to ADA guidelines and OSHA mandates. One hour seminar, thirty-two hours weekly for two weeks.

DA A175  1.5 Units (28 lecture hours)
Principles of Business and Practice Management
Prerequisite(s): DA A100.
Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to dental office administration, including dental records and charting, HIPAA regulations, communication skills, financial management appointment scheduling, payroll, and insurance claim processing. Students will be trained to use Dentrix Dental Software program to become knowledgeable in all areas of practice management utilizing the computer. This course may also be offered online.

Design (DSGN)

DSGN A105  2 Units (36 lecture hours)
Design Careers and Lifestyles
Grading Mode: Standard Letter
Transfer Credit: CSU.

A career exploration course designed to help students choose a career in a design-related discipline such as art, architecture, graphics, fashion, interiors, theater, industrial, or furniture. Emphasis on personal, educational, and professional qualifications required for entry into a design-related career.
Diagnostic Medical Sonography (DMS)

DMS A110  1.5 Units (18 lecture hours; 27 lab hours)
Introduction to Sonography
Prerequisite(s): BIOL A221 and ALH A010 and ALH A111.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course is a required prerequisite for all students entering the Diagnostic Medical Sonography (DMS) Program. Basic sonographic theory is taught with an emphasis on instrumentation, patient exam presets and scan planes. Basic cross-sectional and sonographic anatomy, as well as scan protocols are taught.

DMS A123  4 Units (54 lecture hours; 54 lab hours)
Sectional Anatomy for Medical Imaging
Prerequisite(s): BIOL A221; or BIOL A220 and BIOL A225.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This is a study of specific areas of the human body in serial sections. Designed for diagnostic medical sonography and radiologic imaging technology. Emphasis is on structures observable on diagnostic medical sonography, computerized tomography and related imaging studies.

DMS A126  4 Units (72 lecture hours)
OB/GYN Sonography
Prerequisite(s): DMS A123 and DMS A150.
Grading Mode: Standard Letter
Transfer Credit: CSU.

A cross-sectional anatomical and sonographic study of the female reproductive system including the non-gravid pelvis as well as the gravid pelvis; includes specific study of embryology, fetal biometric data, normal and abnormal fetal anatomy, placenta, amniotic fluid, umbilical cord, menstrual cycle and pathology of the female non-gravid pelvis. Topics of discussion will include appropriate laboratory tests, ultrasound scan protocols of the American Institute of Ultrasound in Medicine (AIUM) and other imaging modalities utilized in OB/GYN.

DMS A150  3.5 Units (54 lecture hours; 36 lab hours)
Sonographic Physics and Instrumentation for DMS
Prerequisite(s): RADT A100.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This is the study of physical principles and instrumentation of diagnostic medical sonography. It includes equipment design, instrumentation and application.

DMS A155  2.5 Units (36 lecture hours; 36 lab hours)
Introduction to Vascular Ultrasound
Prerequisite(s): DMS A150.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course is an introduction to vascular ultrasound including Doppler physical principles and instrumentation. The venous system of the upper and lower extremities is emphasized this semester.

DMS A161  3 Units (54 lecture hours)
Pathophysiology
Prerequisite(s): DMS A123.
Co-requisite(s): DMS A165.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Specific study of pathophysiological mechanisms related to diagnostic medical sonography.

DMS A165  3 Units (36 lecture hours; 54 lab hours)
Introduction to Scanning Practice
Prerequisite(s): DMS A123 and DMS A150.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to sonographic scanning protocol as applied to clinical practice. Course includes environment of ultrasound department, emphasis on professionalism, student behavior, medico-legal aspects, and humanistic approach to patients.

DMS A166  2 Units (128 lab hours)
DMS Clinical Experience 1
Prerequisite(s): ALH A115.
Co-requisite(s): DMS A165.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Introduction to the clinical environment and exposure to departmental organization, patient flow, PACS procedures, observation of techniques, policies and procedures of clinical cases. Offered on a pass-no pass basis only.

DMS A167  5 Units (320 lab hours)
DMS Clinical Experience 2
Prerequisite(s): DMS A166.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Continuation of clinical experience. Exposure to departmental organization, patient flow, PACS, observation of techniques employed, policies and procedures of clinical cases, beginning hands on experience, and equipment set up. Offered on a pass-no pass basis only.
DMS A255 2.5 Units (36 lecture hours; 36 lab hours)
Advanced Vascular Ultrasound
Prerequisite(s): DMS A155.
Grading Mode: Standard Letter
Transfer Credit: CSU.
This is an advanced vascular course with laboratory exercises. It includes physiological arterial testing of the lower and upper extremities with pathological correlation.

DMS A271 7 Units (512 lab hours)
DMS Clinical Experience 3
Prerequisite(s): DMS A167.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.
Clinical experience in ultrasound. Equipment handling and patient management. Departmental operation and scope. Offered on a pass-no pass basis only.

DMS A274 3 Units (54 lecture hours)
Abdominal Sonography
Prerequisite(s): DMS A165.
Co-requisite(s): DMS A271.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Interpretation of normal and abnormal sonographic anatomy, comparing disease processes and identification of structures in sonographic images of the abdomen and superficial structures.

DMS A275 3 Units (54 lecture hours)
Sonographic Review
Prerequisite(s): DMS A274.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Review of advanced scanning techniques and other ultrasound topics including physics and instrumentation. Interpretation of normal and abnormal sonography.

DMS A276 2 Units (160 lab hours)
DMS Clinical Experience 4
Co-requisite(s): DMS A271.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.
Intermediate clinical experience. Studies in the abdominal, obstetrical, pelvic, scrotal, thyroid and vascular anatomical areas. Variety of real-time equipment, anatomical pathology recognition. Offered on a pass-no pass basis only.

DMS A281 9 Units (16 lecture hours; 560 lab hours)
DMS Clinical Experience 5
Prerequisite(s): DMS A276.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.
Advanced clinical experience in the ultrasound department practicing in a variety of Sonographic studies with emphasis on the abdomen and pelvis. Advanced recognition of pathology and scan interpretation. Offered on a pass-no pass basis only.

Digital Media Arts & Design (DMAD)

DMAD A115 3 Units (36 lecture hours; 54 lab hours)
Typography I
Prerequisite(s): DMAD A181.
Grading Mode: Standard Letter
Transfer Credit: CSU.
A study of the design and use of basic letter forms, typographic contrast, hierarchy of information, major type families and characteristics, history of design and typographic grids. This course will cover the history, theory and practice of letterforms and typography as they apply to graphics, advertising and other areas of design and visual communication. Projects cover principles of typography, letter structure, typeface selection, fundamentals of computer typesetting, and typographic layout.

DMAD A116 3 Units (36 lecture hours; 54 lab hours)
Typography II
Prerequisite(s): DMAD A181.
Advisory: DMAD A115.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Expands the investigation of typographic form, function and meaning within the context of contemporary visual language. Students will build conceptualization skills while further experimenting with the aesthetic, formal and functional role typography plays in the creation of meaning, as well as, focus on the design of multiple pages, an introduction to publication design, basic typographic systems, and typographic hierarchy. Typography 2 will build on the experiences gained in Typography 1, with further emphasis on the design of the word, the line, the paragraph and the page.

DMAD A117 3 Units (36 lecture hours; 54 lab hours)
Rapid Illustration Techniques
Grading Mode: Standard Letter
Transfer Credit: CSU.
Course expands upon freehand drawing skills. Rapid illustration methods of determining design solutions and as final presentations. Techniques drawn from areas of graphic and advertising design, industrial design, and interior design. Emphasis on acquiring art suitable for student's portfolio. Recommended for Digital Media Arts and Design majors, as well as practicing professionals.
DMAD A151 3 Units (54 lecture hours)
History of Graphic Design
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course will cover the history and development of graphic design from written communication to current trends as professional and artistic endeavors. The influence of graphic design upon the prevailing culture and the influence of culture upon graphic design will be explored.

DMAD A181 3 Units (36 lecture hours; 54 lab hours)
Introduction to Computer Graphics
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course is designed to effectively and creatively introduce Photoshop, Illustrator and InDesign. The programs will be approached from an application perspective. Course may include guest speakers and field trips. May be taken for grades or on a pass-no pass basis. This course may also be offered online. C-ID: ARTS 250.

DMAD A182 3 Units (36 lecture hours; 54 lab hours)
Graphic Design
Advisory: DMAD A190, DMAD A193.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course applies the elements of design, spatial relationships, typography and imagery with a practical approach to design solutions. Students employ graphic design skills using both traditional and digital tools, materials, and software used in the graphic design industry. The focus will be on finding creative visual solutions to communication problems using technical skills.

DMAD A183 3 Units (36 lecture hours; 54 lab hours)
InDesign for Design
Prerequisite(s): DMAD A181.
Advisory: DMAD A190, DMAD A193.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Using industry-standard hardware and software, students will create digital files that, once output, will print correctly on a printing press.

DMAD A190 3 Units (36 lecture hours; 54 lab hours)
Illustrator for Design
Prerequisite(s): DMAD A181.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Adobe Illustrator is a versatile tool for creating illustrations, logos, and graphics for both print and the Web. Students will learn to produce detailed and scalable vector art, while applying the principles of color and design. Students will learn the tools of Adobe Illustrator to create graphic designs and illustrations.

DMAD A193 3 Units (36 lecture hours; 54 lab hours)
Photoshop for Design
Prerequisite(s): DMAD A181.
Grading Mode: Standard Letter
Adobe Photoshop is the world’s most popular graphics and digital photo-editing software program. This course integrates photography, art, and design to introduce the skills and techniques needed for digital visual communication. Students will learn the tools and features of Photoshop, allowing students to work more efficiently and creatively.

DMAD A200 3 Units (36 lecture hours; 54 lab hours)
Designing for the Web
Prerequisite(s): DMAD A181.
Advisory: DMAD A190 and DMAD A193.
Grading Mode: Standard Letter
Transfer Credit: CSU.

In this course students will learn the fundamentals of the Web and how to design and publish Web sites. Learn to design prototypes and how user experiences (UX) and user interface (UI) effects Web design. Student will learn basic HTML and CSS for designers necessary to work with developers. Students will also build and publish responsive Websites using content management systems that do not require coding.

DMAD A202 2 Units (9 lecture hours; 119 other hours)
Studio Internship
Grading Mode: Standard Letter
Transfer Credit: CSU.

Studio DMAD is an internship in an on-campus graphic design firm producing work for clients both on-campus and in the community. Students will complete work directly with clients and create designs based off of client creative briefs and contracts. It is a supervised internship related to classroom-based learning and applies the skills obtained in the DMAD program to the industry. This an advanced course is open to students who have completed a portfolio of graphic and web design work. Students portfolios will be verified during first week of class.

DMAD A203 3 Units (36 lecture hours; 54 lab hours)
UX/UI Design
Prerequisite(s): DMAD A181.
Advisory: DMAD A190 and DMAD A193.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Interaction Design focuses on UX and UI to ensure that products are appealing, effective and intuitive for their users. Students will design and prototype for a range of platforms including the web, mobile, and tangible systems such as wearables and connected products. Students will conceptualize, solve problems, and understand the importance of the user and of user experience in design.
DMAD A212 2 Units (9 lecture hours; 119 other hours)
Advanced Studio Internship
Prerequisite(s): DMAD A202.

Grading Mode: Standard Letter
Transfer Credit: CSU.

The Advanced Studio Internship is for students looking to complete a second semester in Studio DMAD, the on-campus graphic design firm. Students taking an advanced role in this course will move from junior to senior designers. Studio DMAD is a supervised internship related to classroom-based learning and applies the skills obtained in the DMAD program to the industry. This course is open to students who have completed DMAD 202. Students portfolios will be verified during the first week of class.

DMAD A263 3 Units (36 lecture hours; 54 lab hours)
Motion Graphics and Video Compositing with Adobe After Effects
Prerequisite(s): DMAD A181 and DMAD A193.

Advisory: DMAD A190.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Develop skills in the art of animated graphics and digital video compositing, which are used in film and television titles and advertisements, music videos, web sites, multimedia concerts and fashion shows. Create original artwork with complex layers of graphics, video, text, photography, and audio using masking, keying, layering, transparency, effects, sweeping camera paths and 3D elements.

DMAD A280 3 Units (36 lecture hours; 54 lab hours)
2D Animation
Prerequisite(s): DMAD A181.

Advisory: ART A120 and DMAD A190.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An investigation into the theory and practice of computer generated 2-D animation. Lectures, demonstrations, and graphic examples introduce students to the technical and creative aspects of 2-D animation as seen in communication media. Through classroom assignments students will investigate both commercial and fine art applications.

DMAD A281 3 Units (36 lecture hours; 54 lab hours)
3D Computer Graphics Animation
Advisory: DMAD A181 or FILM A110.

Grading Mode: Standard Letter
Transfer Credit: CSU

Investigation into the practice of 3-D temporal image handling utilizing computer graphics technology. Students will explore artistic applications in various fields. Instruction is offered at beginning and advanced levels.

DMAD A288 3 Units (36 lecture hours; 54 lab hours)
Digital Portfolio Development
Advisory: DMAD A181, DMAD A182, DMAD A190, DMAD A193 and DMAD A200.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course provides the student with an opportunity to prepare themselves for the workplace. During the course, students will refine a body of design work and publish their portfolio in both print (optional) and web formats. Students will design and develop their own personal brand including—visual identity, resume, cover letter, and business cards in preparation for job interviews and/or college. They will also spend the quarter researching potential employers and learn about each company, agency, and/or studio so that they can strategically tailor their application process. This course should be taken in the final semester of any Digital Media Art & Design program.

Display & Visual Presentation (DVP)

DVP A180 3 Units (54 lecture hours)
Introduction to Display and Visual Presentation
Grading Mode: Standard Letter
Transfer Credit: CSU.

Provides an opportunity to learn display and exhibit design for business and museum/gallery. Areas covered include trade show, hard-line product, themed design, space development for store planning, museum exhibition, advertising, and all aspects of visual presentation, to include: windows, point of purchase, websites, and packaging.

Early Childhood (EC)

EC A126 3 Units (54 lecture hours)
Teaching in a Diverse Society
Grading Mode: Standard Letter
Transfer Credit: CSU.

Examination of the development of social identities in diverse societies as they apply to young children, families, programs, classrooms, and teaching. Various classroom strategies will be explored emphasizing culturally and linguistically appropriate anti-bias approaches. C-ID: ECE 230.

EC A127 3 Units (54 lecture hours)
Health, Safety, and Nutrition
Prerequisite(s): HMDV A180 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to the laws, regulations, standards, policies and procedures and early childhood curriculum related to child health, safety, and nutrition. The key components that ensure physical health, mental health and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. Focus on integrating the concepts into everyday planning and program development for all children. C-ID: ECE 220.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units (Hours)</th>
<th>Title</th>
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<tbody>
<tr>
<td>EC A130</td>
<td>3 (54 lecture)</td>
<td>Language Arts for Children</td>
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<td>Grading Mode: Standard Letter</td>
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<td>Transfer Credit: CSU.</td>
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<td>Development of literacy skills in children ages birth to 5 years. Included are activities such as book selection, storytelling, finger plays, flannel stories, language centers, early writing, alphabetic and phonemic awareness.</td>
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<tr>
<td>EC A131</td>
<td>3 (54 lecture)</td>
<td>Creativity for Children</td>
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<td>Grading Mode: Standard Letter</td>
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<td>Transfer Credit: CSU.</td>
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<td>Methods for fostering creativity in children and teachers. Emphasis will be on cultivating music and art expression through application of developmental theory. Note: TB CLEARANCE REQUIRED.</td>
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<tr>
<td>EC A132</td>
<td>3 (54 lecture)</td>
<td>Science and Math for Young Children</td>
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<td>Grading Mode: Standard Letter</td>
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<td>Transfer Credit: CSU.</td>
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<td>Physical and natural science activities that encourage children's thinking and problem solving skills. Emphasis on the development of programs and materials that allow for exploration and/or experimentation.</td>
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<tr>
<td>EC A155</td>
<td>3 (54 lecture)</td>
<td>Principles &amp; Practices of Teaching Young Children</td>
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<td>Prerequisite(s): HMDV A180 or concurrent enrollment.</td>
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<td>An examination of the underlying theoretical principles of developmentally appropriate practices applied to programs, environments, relationships and teaching strategies in supporting all areas of development for all children. Emphasis on the value of play in supporting all areas of children's development. C-ID: ECE 120.</td>
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<tr>
<td>EC A156</td>
<td>2 (18 lecture; 54 lab)</td>
<td>Early Childhood Laboratory</td>
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<td>Prerequisite(s): EC A155 or concurrent enrollment.</td>
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<td>Grading Mode: Standard Letter</td>
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<td>Transfer Credit: CSU.</td>
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<td>Beginning practical experiences that focus on establishing relationships with children and developing guidance, observation, play entry, and collaboration techniques in facilitating learning. TB clearance required. Fingerprint, criminal record and child abuse index check required. Contact EC Lab School PRIOR to enrolling to arrange hours. Hours are arranged on a first come, first served basis.</td>
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<tr>
<td>EC A157</td>
<td>3 (54 lecture)</td>
<td>Guidance for Young Children</td>
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<td>Prerequisite(s): EC A155 or concurrent enrollment.</td>
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<td>Grading Mode: Standard Letter</td>
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<td>Transfer Credit: CSU.</td>
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<td>Course covers theories of behavior, guidance techniques, and parent communication. Emphasis on developing an understanding of children's behavior and encouraging positive esteem while helping the child work toward self-control.</td>
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<tr>
<td>EC A165</td>
<td>3 (54 lecture)</td>
<td>Observing and Recording Child Behavior</td>
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<td>Prerequisite(s): EC A155 and HMDV A180.</td>
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<td>Transfer Credit: CSU.</td>
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<td>This course focuses on the appropriate use of assessment and observation strategies to document development, growth, play and learning to join with families and professionals in promoting children's success. Recording strategies, rating systems, portfolios, and multiple assessment tools are explored. C-ID: ECE 200.</td>
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<tr>
<td>EC A174</td>
<td>3 (54 lecture)</td>
<td>Building Partnerships with Families</td>
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<td>Grading Mode: Standard Letter</td>
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<td>Transfer Credit: CSU.</td>
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<td>Practical approaches to building relationships with parents through effective communication techniques and supporting families of children with identified or suspected special needs.</td>
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<tr>
<td>EC A199</td>
<td>0.5-2 (9-36 lecture)</td>
<td>Current Issues in Early Childhood</td>
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<td>Grading Mode: Pass/No Pass</td>
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<td>Transfer Credit: CSU.</td>
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<td>Current issues in the field of early childhood education, rotating through a variety of topics, such as working with parents, public policy, and curriculum updates. Offered on a pass-no pass basis only.</td>
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<tr>
<td>EC A200</td>
<td>3 (54 lecture)</td>
<td>Early Childhood Programs-The Curriculum</td>
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<td>Prerequisite(s): EC A155.</td>
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<td>Grading Mode: Standard Letter</td>
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<td>Transfer Credit: CSU.</td>
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<td>Curriculum planning for preschool programs based on the individual developmental needs of the preschool child. Emphasis on the importance of observations, schedule, routines and parent communication. Introduction to the philosophy and history of early childhood education. C-ID: ECE 130.</td>
</tr>
</tbody>
</table>
EC A201        3 Units (36 lecture hours; 108 other hours)
Early Childhood Practicum - Field Experience
Prerequisite(s): EC A200 or concurrent enrollment; EC A156 and EC A165.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Practical experiences in preschool programs that focus on the individualized curriculum that addresses all areas of development, routines, and the role of the teacher. Course also covers observation and evaluation of children in play situations, the development of indoor and outdoor environments, positive guidance and staff relationships. C-ID: ECE 210.

EC A220        3 Units (54 lecture hours)
Infant/Toddler Programs
Prerequisite(s): HMDV A184 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Various kinds of programs for infants and toddlers, including philosophies and program emphasis, appropriate routine learning experiences, environments, and provisions for the health and safety of infants and toddlers. Focus on the role of the teacher in facilitating the child's growth through play.

EC A221        3 Units (36 lecture hours; 108 lab hours)
Infant/Toddler Field Experience
Prerequisite(s): HMDV A184, EC A156, ECA165, and EC A220 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Participation in daycare and half-day programs for infants and toddlers. Please contact the EC Lab School PRIOR to enrolling in this class to arrange hours. Hours are arranged on a first come, first served basis. Note: TB CLEARANCE REQUIRED.

EC A240        1 Unit (18 lecture hours)
Inclusion of Children with Disabilities
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course will explore the inclusion of infants, toddlers, and children with special needs in early childhood settings. Topics will include foundations of inclusive practices, collaborating with specialists, and specific strategies for the classroom. PREREQUISITE OR CONCURRENT ENROLLMENT: Human Development A210.

EC A261        0.5 Units (9 lecture hours)
Learning Title 22
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Point by point discussion of California Code of Regulations, Title 22, Division 12, Chapters 1 and 2 regulations for child care program. Offered on a pass-no pass basis only.

EC A262        0.5 Units (9 lecture hours)
Disaster Preparedness for Child Care
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

A study of considerations of natural or man-made disasters to assist child care providers in the development of a comprehensive plan to ensure an effective response to emergency situations. Offered on a pass-no pass basis only.

EC A263        0.5 Units (9 lecture hours)
Child Abuse I.D. and Referral
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Ways to identify children who are abused and programs to assist both the child and the offender. Discussion of state mandated reporting system and procedures in record keeping for the teacher and director in a child care program. Offered on a pass-no pass basis only.

EC A275        3 Units (54 lecture hours)
Early Childhood Administration-Program
Grading Mode: Standard Letter
Transfer Credit: CSU.

Supervision and administration of an early childhood program with emphasis on theories, principles, concepts of program and curriculum development, legal, financial, and administrative policies, and program evaluation.

EC A276        3 Units (54 lecture hours)
Early Childhood Management
Grading Mode: Standard Letter
Transfer Credit: CSU.

Supervision and administration of an early childhood program with emphasis on leadership, personnel management, communication, problem solving, working with parents, financial, and ethical issues.

EC A277        2 Units (36 lecture hours)
Adult Supervision in Early Childhood Programs
Grading Mode: Standard Letter
Transfer Credit: CSU.

Methods and principles of supervising adults in early childhood programs. Emphasis on the role of experienced teachers who function as mentors while simultaneously addressing the needs of children, parents, and staff.

Economics (ECON)

ECON A100      3 Units (54 lecture hours)
Economics: General Concepts
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Provides the student with a general understanding of the concepts, principles, and methods of microeconomics and macroeconomics at the introductory level. May be taken for grades or on a pass-no pass basis.
ECON A110  
Consumer Economics  
3 Units (54 lecture hours)  
Grading Mode: Standard Letter, Pass/No Pass  
An applied approach to the problems and possibilities confronting the consumer in today's economy. Emphasis is placed on the development of skills in personal financial planning: decision making, use of credit and principles of saving and investment. Attention is given to the problems in housing, transportation, health services, and insurance. Issues of personal taxation, government regulation, and environmental protection are considered in relation to consumer interest. May be taken for grades or on a pass-no pass basis.

ECON A170  
Microeconomics  
3 Units (54 lecture hours)  
Prerequisite(s): MATH A010 or higher.  
Advisory: MATH A030.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
An introduction to the principles and problems of microeconomics. Covers economic concepts and principles as applied to markets, analysis of costs, consumer behavior, determining consumer optimum conditions, behavior of producers, determining the producers optimum in the goods and services market and in the factors markets, the structure of markets and how they influence and limit competition, labor, capital, information and entrepreneurship, public goods, and international economics. This course may also be offered online. C-ID: ECON 201.

ECON A170H  
Microeconomics Honors  
3 Units (54 lecture hours)  
Prerequisite(s): MATH A010 or higher.  
Advisory: MATH A030.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  
An introduction to the principles and problems of microeconomics. Covers economic concepts and principles as applied to markets, analysis of costs, consumer behavior, determining consumer optimum conditions, behavior of producers, determining the producers optimum in the goods and services market and in the factors markets, the structure of markets and how they influence and limit competition, labor, capital, information and entrepreneurship, public goods, and international economics.

ECON A175  
Macroeconomics  
3 Units (54 lecture hours)  
Prerequisite(s): MATH A010 or higher.  
Advisory: ECON A170 or ECON A170H; and MATH A030.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
An introduction to the principles and problems of macroeconomics. Covers economic concepts and principles as applied to markets, national income, unemployment, inflation, economic growth, fiscal and monetary policy, banking, the Federal Reserve System, and international economics. This course may also be offered online. C-ID: ECON 202.

ECON A175H  
Macroeconomics Honors  
3 Units (54 lecture hours)  
Prerequisite(s): MATH A010 or higher.  
Advisory: ECON A170 or ECON A170H; and MATH A030.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
An introduction to the principles and problems of macroeconomics. Covers economic concepts and principles as applied to markets, national income, unemployment, inflation, economic growth, fiscal and monetary policy, banking, the Federal Reserve System, and international economics.

Education (EDUC)  
EDUC A200  
3 Units (45 lecture hours; 45 other hours)  
The Teaching Profession  
Transfer Credit: ENGL A100 and HMDV A180.  
Grading Mode: Standard Letter, Pass/No Pass  
Advisory: ENGL A100 and HMDV A180.  
Examination of opportunities, requirements, responsibilities, and rewards in teaching. Skills needed and problems encountered in the classroom will be covered. May be taken for grades or on a pass-no pass basis. Course includes 45 hours arranged fieldwork. C-ID: EDUC 200.

Electronics Technology (ELEC)  
ELEC A047  
Electronic Problem Solving  
3 Units (54 lecture hours)  
Grading Mode: Standard Letter  
A project-based, interactive course that teaches skills for college success, such as: project management, study skills, and effective personal learning strategies. Applications from Science Technology, Engineering, & Math (STEM) careers are used to help the student master complex concepts with a deeper understanding of how to apply theory, and to discover creative solutions to complex problems. These applications are integrated into the study of a wide range of math concepts including: numbering systems, fractions, ratios, statistics, probabilities, spreadsheet calculations, introduction to symbolic logic, Boolean Algebra, Algebra 1, geometry, and an introduction to trigonometry: vectors, rectangular and polar graphing techniques.

ELEC A101  
Robotics 1 Mechanics & Design  
4 Units (54 lecture hours; 54 lab hours)  
Transfer Credit: CSU.  
Advisory: High School Physics; ELEC A170 and ELEC A047 or concurrent enrollment.  
Grading Mode: Standard Letter  
Design a robot to tournament specifications, with analysis, diagnosis, modification, calibration and documentation of prototype. Course will focus on mechanical structures in robot design, function, and the physical laws that govern design. Integrated electronics applied to the robotic system will also be explored.
ELEC A135 4 Units (54 lecture hours; 54 lab hours)
Symbolic Logic with Digital Applications
Advisory: Math placement above MATH A030, ELEC A047 or concurrent enrollment, and ELEC A173.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to logic as it applies to discrete Boolean mathematics, deductive reasoning, and digital applications including computer programming, architecture, and embedded systems. An in-depth study of obverse, inverse, AND/OR logical operations. Boolean algebra techniques are applied to simplify complex equations. Students will build, measure, test, analyze and troubleshoot series, parallel and complex circuits. Reading documentation commonly found in industry, i.e., schematics, specifications, assembly and test procedures, will also be included.

ELEC A140 3 Units (54 lecture hours)
Technical Electronics
Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to electricity and electronics for non-technicians. Vocabulary, power, voltage, current, resistance, safety, test equipment, circuits and devices are studied. Students will build, test, and troubleshoot circuits and devices. In addition, students will learn how to read documentation commonly found in industry, i.e., schematics, specifications, assembly and test procedures.

ELEC A146 3 Units (36 lecture hours; 54 lab hours)
Computer Hardware Configuration & Diagnostics
Advisory: Math placement above MATH A030; and ELEC A047 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Computer hardware installation, configuration, diagnostics and, troubleshooting. Topics include: installation and upgrade of peripherals, design systems & Local Area Networks, configuration, upgrade, build, test and, troubleshoot computer systems per client specifications; troubleshooting PC workstation to LAN installations; troubleshooting peripherals and internal components. Troubleshoot windows configuration and operation problems. Create a diagnostics and rescue kit for PC workstation. This course challenges the CompTIA A+ certified technician skills.

ELEC A150 3 Units (36 lecture hours; 54 lab hours)
D.C. Circuits
Advisory: ELEC A047 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Project-based, in-depth study of Direct Current (DC) circuits for technicians and engineers. Electro-magnetics, power, voltage, current, resistance, sensors & other devices, series, parallel, circuit analysis methods & applications. Laboratory: safety, test equipment, industry standard documentation (i.e. schematics, specifications, procedures etc.) assembly, diagnostics, & troubleshooting techniques. Lecture/Lab.

ELEC A155 3 Units (36 lecture hours; 54 lab hours)
A.C. Circuits
Advisory: placement in MATH A030 or higher; or ELEC A047 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A project-based in-depth study of Amplitude Changing & Alternating Current (AC) circuits for technicians and engineers. Applications from AC & DC power, audio, communications, network systems, industrial automation and, motor control. Topics include: Electro-magnetics, properties of waves, transformers, power factor, maximum power transfer, impedance, inductance, capacitance, RLC transient & filter circuits, phase shift, phasors, modulation, harmonics, resonance, spectrum analysis, bandwidth, thyristors, solid-state relays, & circuit analysis methods. Lecture/Lab.

ELEC A155L 0 Units (54 lab hours)
A.C. Circuits Lab
Grading Mode: Not Graded
A.C. Circuits Lab. Must also be enrolled in ELEC A155.

ELEC A170 1 Unit (9 lecture hours; 27 lab hours)
Safety, Assembly, Calibration
Grading Mode: Standard Letter
Transfer Credit: CSU.

First semester laboratory experience supplements, complements, or fulfills the laboratory requirement for courses in the Electronics Technology Program. Students will assemble, test calibrate, and troubleshoot electronic, electro-mechanical, instrumentation, robotics, and automation systems at a foundational level.

ELEC A172 1 Unit (54 lab hours)
Electronics Laboratory 2
Prerequisite(s): ELEC A150 or ELEC A201 or ELEC A246 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Second semester laboratory will reinforce safe shop practices, maintenance & instrument handling procedures, technical documentation, and workspace preparation. Student will work on AC and/or DC circuit projects. Mastery of theory, technical documentation, assembly skills, and teamwork skills will be emphasized.

ELEC A173 1 Unit (54 lab hours)
Electronics Laboratory 3
Prerequisite(s): ELEC A135, ELEC 155, ELEC A260 or concurrent enrollment.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Third semester laboratory will develop essential skills for a Test Technician: research, documentation, prototype construction, diagnostics methods and, critical thinking skills. Students will work on A/C circuit, robotics and/or semiconductor circuit for motor control projects. They will develop essential skills for a Test Technician: research, documentation, prototype construction, and diagnostics methods.
ELEC A174
Electronics Laboratory 4
Prerequisite(s): ELEC A245 or ELEC A253 or ELEC A260 or concurrent enrollment.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Fourth semester laboratory develops technical and leadership skills essential for the Industrial Automation Technician, including design, strategic planning, problem solving, and project management. Students will demonstrate the ability to oversee project through the entire process, from design through commissioning of complex systems per client specifications.

ELEC A201
Robotics 2 Motors, Transports & Motor Control
Advisory: ELEC A101, ELEC A150, and ELEC A172 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Design a robot drive and transport mechanism to compete, according to tournament criteria, against other teams. Analyze and modify the invention to improve original design. Course will focus on motors, transport mechanisms, motor control systems and variable speed drives in robot and automation designs.

ELEC A215
Communications Systems
Prerequisite(s): AMT A182.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A study of basic communications systems, including AM, FM, television, radar, antennas, and transmission lines.

ELEC A245
Advanced Digital Application
Advisory: ELEC A135.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An advanced course designed to develop hands-on skills and knowledge of integrated circuits commonly used in digital systems and microcomputers. Emphasis is on the Z80 microprocessor.

ELEC A246
Server Hardware and Industrial Networks
Advisory: ELEC A135; ELEC A146; ELEC A150; and ELEC A047 or math placement above MATH A030.

Grading Mode: Standard Letter
Introduction to Server hardware & network systems configuration to client specifications. Topics include: review of PC hardware, introduction to server hardware & network devices, servers types (gateway, game, & application), Topology (Buss, Star, & Ring), industrial controllers, industrial Ethernet, and SCADA systems.

ELEC A253
Automation 1 Programmable Logic Controller
Advisory: ELEC A135 and ELEC A155; Prior knowledge of logic and AC circuits is essential.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to Programmable Logic Control (PLC) operate, calibrate, diagnose, and tune open and closed loop systems. Hands-on project-based learning: analyze programs, design and build PLC systems using various input and output devices: ultra-sound, infra-red, temperature, proximity, limit switches, linear transducers, electro-mechanical and solid-state relays, transistors, thyristors, linear actuators and motors.

ELEC A260
Automation 2 Semiconductor Motor Control Circuits
Advisory: ELEC A047, ELEC A135, ELEC A150, and ELEC A173 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Diagnose semiconductor circuits for industrial motor control: power supplies, amplifiers, active filters, oscillators, solid state motor control, phase inverters, Variable Speed Drives (VSD).

ELEC A289
Internship
Prerequisite(s): ELEC A135 and ELEC A155.

Co-requisite(s): ELEC A170.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A supervised internship, as an assembler or technician, with scope of work related to classroom-based instruction previously completed. The student will research companies and prepare for internship interview. Course includes a directed study of the worksite environment, assigned duties, techniques and skills required for job performance. Student will complete objectives specified by the employer. May be taken for grades or on a pass-no pass basis.

ELEC A290
Electronic Troubleshooting
Prerequisite(s): ELEC A135 and ELEC A170.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A course focusing on the technician's approach to circuit fault diagnosis. Applications of various test equipment necessary to troubleshoot to component level will be discussed. Both single and multi-stage devices will be examined in analog and digital systems.
Emergency Medical Services (EMS)

EMS A100        4 Units (54 lecture hours; 36 lab hours)
Emergency Medical Responder
Grading Mode: Standard Letter
Transfer Credit: CSU.

Emergency Medical responder (advanced first aid and cardiopulmonary resuscitation. Students will receive an American Heart Association Healthcare Provider Card and a Course Completion certificate upon successful completion of the class.

EMS A145        1 Unit (22.5 lecture hours; 4.5 lab hours)
Emergency Medical Care - Pediatrics
Grading Mode: Standard Letter
Transfer Credit: CSU.

Adult, child and infant CPR and AED use, first aid, and preventative health and safety for the licensed child care provider. Completion qualifies the participant for CPR, first aid, and childcare, healthcare, and safety certification. Meets the California Child Care Standards in accordance with California Code of Regulations, Title 22, Division 12.

EMS A150        10 Units (180 lecture hours)
Emergency Medical Technician
Prerequisite(s): American Heart Association (AHA) BLS Provider CPR card; This will be validated on the FIRST day of class; Card must be BLS PROVIDER from the AHA, no other CPR card will be accepted.

Co-requisite(s): EMS A150L and EMS A151.
Grading Mode: Standard Letter
Transfer Credit: CSU.

An overview of the EMT's roles and responsibilities including the evaluation and treatment of medical and trauma emergencies. This would include extrication and transport of the sick, ill, and injured patient. Successful completion of all corequisite courses qualifies the graduating student to take the National Registry EMT certifying exam.

EMS A150L       1 Unit (80 lab hours)
Emergency Medical Services Laboratory
Co-requisite(s): EMS A150 and EMS A151.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Practical application of the theories and skills required for an Emergency Medical Technician to perform assessments, and provide care, life-saving measures, and employ safe techniques while effectively engaged in patient interactions.

EMS A151        1 Unit (48 other hours)
Emergency Medical Technician Clinical
Co-requisite(s): EMS A150 and EMS A150L.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Application and integration of skills and knowledge gained from EMT A150 in the emergency department of an acute hospital or other arranged clinical setting in accordance with California State Title 22, Section 9 regulations, and on a Basic Life Support ambulance unit. Offered on a pass-no pass basis only.

EMS A160        1 Unit (28 lecture hours)
EMT-1 Recertification
Prerequisite(s): Current EMT-1(Basic) certificate or certificate which has not expired by more than two years.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

New policies and procedures including the latest CPR techniques and procedures for new equipment, updates to the EMT-Basic's scope of practice within Orange County, the State and Federal guidelines, and review of the required EMT-Basic curriculum to the most up-to-date model. Provides 24 hours of Continuing Education as 24 Hour-Refresher Course. No skills testing provided. Offered on a pass-no pass basis only.

Engineering (ENGR)

ENGR A110       3 Units (54 lecture hours)
Introduction to Engineering and Design
Prerequisite(s): MATH A010 or equivalent.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This course is an introduction to the field of engineering and the engineering design. It explores various branches of engineering as regards to academic preparation, opportunities and career options. It explains the engineering education pathways and explores effective strategies for students to reach their academic potential. Emphasis is also on the realization of the regional and global problems of engineering nature and the methods to find responsible solutions. Students are introduced to the applied engineering concepts, methods and tools of problem solving and the engineering design process. Activities also include engineering design projects. Other topics include engineering ethics, professional and legal responsibilities of engineers as a member of the society, understanding of the global challenges and the engineer's role and responsibilities in finding possible solutions. C-ID: ENGR 110.
ENGR A110H 3 Units (54 lecture hours)
Introduction to Engineering and Design Honors
Prerequisite(s): MATH A010 or equivalent.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course is an introduction to the field of engineering and the engineering design. It explores various branches of engineering in regards to academic preparation, opportunities and career options. It explains the engineering education pathways and explores effective strategies for students to reach their academic potential. Emphasis is also on the realization of the regional and global problems of engineering nature and the methods to find responsible solutions. Students are introduced to the applied engineering concepts, methods and tools of problem-solving and the engineering design process. Activities also include engineering design projects. Other topics include engineering ethics, professional and legal responsibilities of engineers as a member of the society, understanding of the global challenges and the engineer's role and responsibilities in finding possible solutions.

ENGR A180 4 Units (54 lecture hours; 72 lab hours)
Engineering Graphics
Prerequisite(s): MATH A120.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This course covers the fundamentals of the graphic communication necessary for engineering design. Freehand sketching and Computer-Aided Design (CAD) are the main techniques utilized in this course. 2-D and 3-D visualization skills are developed through the analysis and practice of orthographic projections, principle of descriptive geometry, geometric dimensioning and tolerancing, working drawings and engineering design process. C-ID: ENGR 150.

ENGR A199 0.5-5 Units (9-72 lecture hours; 0-54 lab hours)
Current Topics in Engineering
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Current topics in Engineering may include cultural topics as well as engineering topics and could rotate through a variety of topics, such as field studies, design/build projects, design studies, and construction studies. May be taken for grades or on a pass-no pass basis.

ENGR A210 3 Units (54 lecture hours)
Engineering Materials
Prerequisite(s): CHEM A180 and PHYS A185.

Grading Mode: Standard Letter
Transfer Credit: CSU, UC.

This is an introductory course emphasizing the understanding of the structure and properties of the materials, and the design and selection of materials for engineering applications. Studies include analysis of ferrous and non-ferrous metals, ceramics, polymers, composites and semiconductors. Emphasis is on micro and macro structure, relationship between the structure and properties of materials, and effect of heat, stress, imperfections and chemical environments on material structure, properties and performance. Topics also include mechanical, thermal, electrical (including semiconductors), magnetic and optical properties and also corrosion and degradation of materials. C-ID: ENGR 140.

ENGR A220 4 Units (54 lecture hours; 54 lab hours)
Programming and Problem-Solving in MATLAB
Prerequisite(s): MATH A180 or MATH A180H.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This course utilizes the MATLAB environment to provide students with a working knowledge of computer-based problem-solving methods relevant to science and engineering. It introduces the fundamentals of procedural and object-oriented programming, numerical analysis, and data structures. Examples and assignments in the course are drawn from practical applications in engineering, physics, and mathematics. C-ID: ENGR 220.

ENGR A230 3 Units (54 lecture hours)
Dynamics
Prerequisite(s): ENGR A280.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This course is an introduction to kinematics and kinetics of particles and rigid bodies. Vector analysis and calculus are used extensively as the tool to describe the motion of the systems and also to study the kinetics of particles and rigid bodies. Topics involved are the geometry of the motion (kinematics), and the methods of analysis, which include second law of motion, work-energy and momentum-impulse methods as applied to particles, system of particles and the rigid bodies. The mechanical vibration of particles and the rigid bodies are also studied in detail. It includes free and forced vibration, with and without damping. C-ID: ENGR 230.
ENGR A240  
Mechanics of Materials  
Prerequisite(s): ENGR A280.  

Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU, UC.  

This course provides the engineering students with the means of analyzing and designing various structures and machines subjected to different loading conditions. Students develop the techniques of stress and strain analysis of the systems under axial, torsional, transverse loading and pure bending. It also includes the major topics of design of the beams, shafts and the columns. Analysis of systems using energy method, and deflection of beams by integration and moment-area methods are also introduced. C-ID: ENGR 240.

ENGR A280  
Statics  
Prerequisite(s): MATH A185 or MATH A185H or MATH A182H; and PHYS A185 or PHYS A185H.  

Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  

Vector mechanics, covering force diagrams, moment of forces and couples, two- and three-dimensional force systems, analysis of engineering structures at equilibrium (e.g. trusses and beams), distributed force, centroids and center of gravity, shear and bending moment diagrams, friction, are and mass moments of inertia. C-ID: ENGR 130.

ENGR A285  
Engineering Circuits  
Prerequisite(s): MATH A285 or MATH A285H (or concurrent enrollment); and PHYS A280.  

Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  

Analysis of electric circuits, including DC circuits, network theorems, energy sources, transient analysis, sinusoidal analysis, phasors, AC power, and frequency response of circuits. Lab will include connection of circuits and observation of circuit behavior using electronic instrumentation.

English (ENGL)  

ENGL A005  
Basic Reading Skills  
Grading Mode: Standard Letter, Pass/No Pass  
A sequence of reading lessons that will target reading rate growth, for students in the areas of vocabulary development and comprehension improvement. Not applicable to AA or AS degree.

ENGL A050  
Introduction to College Reading  
Grading Mode: Standard Letter, Pass/No Pass  
Theory and practice of fundamental reading skills, finding main idea, identifying supporting details, drawing inferences, and increasing rate. Special attention will be given to critical reading and to particular problems in content areas. Recommended for all students. May be taken for grades or on a pass-no pass basis. Not applicable to AA or AS degree.

ENGL A060  
Grammar  
Grading Mode: Standard Letter, Pass/No Pass  
Learn the fundamentals of standard English grammar usage, including sentence structure, part of speech, agreement, punctuation, and word choice. Apply concepts to written sentences and paragraphs. May be taken for grades or on a pass-no pass basis. Not applicable to AA or AS degree.

ENGL A099  
Confidence in Writing  
Grading Mode: Standard Letter, Pass/No Pass  
Apply the fundamentals of grammar, sentence structure, pre-compositional techniques, paragraph development, and essay construction. Practice in reading and textual analysis, critical thinking skills, and clear writing. Write structurally varied and grammatically correct sentences and clearly organized, appropriately detailed paragraphs leading to frequent practice in the construction of the expository essay. A minimum of five arranged hours of supplemental learning in the Success Center is required. NOTE: ALL STUDENTS ENROLLING IN ENGLISH A099 MUST BE PRESENT AT THE FIRST CLASS MEETING. ABSENT STUDENTS MAY LOSE THEIR SEATS IN THE CLASS. This course may also be offered online. May be taken for grades or on a pass-no pass basis. Not applicable to AA or AS degree.

ENGL A100  
Freshman Composition  
Prerequisite(s): ENGL A099 or ESL A099 or appropriate placement.  

Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  

Instruction and practice in essay writing, including using analytical thinking, choosing a thesis, assembling and organizing supporting evidence, and developing a clear tone and appropriate style. Includes reading and analysis of published essays, practice in basic research skills, and in-class essay writing. This course may also be offered in the hybrid format. Students will be required to take part in a minimum of three hours of revision activities outside of class by going to the OCC Writing Center; working with the instructor during office hours, or other activities as determined by the instructor. NOTE: All students enrolled in English A100 must be present at the first class meeting. Absent students may lose their seats in the class. C-ID: ENGL 100.

ENGL A101  
Critical Reasoning: Fiction  
Prerequisite(s): ENGL A100.  

Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  

Read, analyze, and write on literature applying critical thinking skills and research. Formulate and compose written arguments. Recognize logical fallacies, rhetorical strategies, implicit meaning, and use inductive/ deductive reasoning. This course may also be offered online. C-ID: ENGL110, 120.
ENGL A101H
Critical Reasoning: Fiction Honors
4 Units (72 lecture hours)
Prerequisite(s): ENGL A100.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Read, analyze, and write on literature applying critical thinking skills and research. Formulate and compose written arguments. Recognize logical fallacies, rhetorical strategies, implicit meaning, and use inductive/deductive reasoning. This course may also be offered online. C-ID: ENGL 110, 120.

ENGL A102
Critical Reasoning: Nonfiction
3 Units (72 lecture hours)
Prerequisite(s): ENGL A100.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Read, analyze and write on works of non-fiction applying critical thinking skills and research. Formulate and compose written arguments. Recognize logical fallacies, rhetorical strategies, implicit meaning, and use inductive and deductive reasoning. This course may also be offered online. C-ID: ENGL 105.

ENGL A102H
Critical Reasoning: Nonfiction Honors
3 Units (72 lecture hours)
Prerequisite(s): ENGL A100.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Read, analyze and write on works of non-fiction applying critical thinking skills and research. Formulate and compose written arguments. Recognize logical fallacies, rhetorical strategies, implicit meaning, and use inductive and deductive reasoning. C-ID: ENGL 105.

ENGL A109
Critical Reasoning and Writing for Science and Technology
3 Units (72 lecture hours)
Prerequisite(s): ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on works about science and technology applying critical thinking skills and research. Formulate and compose written arguments. Recognize logical fallacies, rhetorical strategies, and technical writing formats. May be taken for grades or on a pass-no pass basis. C-ID: ENGL 105.

ENGL A117
Narrative Journalism
3 Units (54 lecture hours)
Advisory: ENGL A100 and JOUR A110.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A writing workshop focusing on student writing and marketing in-depth non-fiction feature articles. Emphasis will be on guiding students and developing interesting non-fiction stories from the idea stage through publication and finding suitable markets for publication. Same as JOUR A117. Students completing ENGL A117 may not receive credit for JOUR A117. May be taken for grades or on a pass-no pass basis.

ENGL A119
Introduction to Creative Writing
3 Units (72 lecture hours)
Advisory: Eligibility for ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Familiarizes students with writing techniques in fiction, poetry, and scriptwriting through close reading in all three genres, careful text analysis with an emphasis on methods, and extensive writing practice. Students will produce original work in three genres, which they will revise based on detailed responses from instructor and peers. May be taken for a grade or on a pass /no pass basis. C-ID: ENGL 200.

ENGL A121
Short Story Workshop
3 Units (72 lecture hours)
Advisory: ENGL A100 and ENGL A119.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A workshop class in short fiction, centered on discussing and evaluating students’ original work. Includes practical strategies for generating strong prose, based on techniques of published writers. For beginning, intermediate, or advanced writers. Students will be given the opportunity to submit work for publication in the Orange Coast Review. May be taken for grades or on a pass-no pass basis.

ENGL A122
Novel Writing I
4 Units (72 lecture hours)
Advisory: ENGL A100 and ENGL A119.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A course focusing on student production in the novel form with emphasis on discussion, criticism and evaluation of student novel fragments or completed manuscripts. Designed for beginning, intermediate, and advanced writers seeking practice and guidance in the novel craft. Discussion, criticism, and evaluation of student work. May be taken for grades or on a pass-no pass basis.
ENGL A123  3 Units (54 lecture hours)
Writing for Social Media
Grading Mode: Standard Letter
Transfer Credit: CSU.

Students will develop writing skills for social media while exploring the design and impact of digital and social media technologies for professional application in a wide variety of organizational situations. Students will analyze, think critically, research, develop, write, and discuss multiple topics in social media.

ENGL A126  3 Units (54 lecture hours)
Poetry Writing
Advisory: ENGL A100 and ENGL A119.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Emphasizing student writing in poetic forms. Includes lectures and discussions on the theory and practice of poetry, focuses primarily on the discussion and evaluation of student work. Designed for beginning, intermediate and advanced writers seeking practice and guidance in poetry writing. May be taken for grades or on a pass-no pass basis.

ENGL A127  4 Units (72 lecture hours)
Scriptwriting I
Advisory: ENGL A100 and ENGL A119.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This is a writing workshop in which students gain professional insight into scriptwriting techniques for stage, television, and feature films. Students learn how to write a beginning and ending, synopsis, treatment, step outline, and a brief scene designated for the stage, as well as television or the movies. The class focuses on the discussion of student works and their evaluation by the instructor. May be taken for grades or on a pass-no pass basis.

ENGL A140  3 Units (54 lecture hours)
Introduction to Literature
Prerequisite(s): Eligibility for ENGL A100.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This course introduces representative works from major genres (fiction, novel, poetry and drama), develops students’ close reading and analytical writing skills, and promotes appreciation and critical understanding of the cultural, historical, and aesthetic qualities of literature. C-ID: ENGL 120.

ENGL A141  3 Units (54 lecture hours)
The Bible As Literature
Advisory: ENGL A100.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Read, analyze, and write on important Biblical works from both the Old and New Testament canon. Explore the historical, cultural, philosophical, and aesthetic implications of representative works, their origins and adoption. Formulate and produce written analysis of assigned works. Same course as RLST A180. Students completing ENGL A141 may not receive credit for RLST A180. May be taken for grades or on a pass-no pass basis.

ENGL A141H  3 Units (54 lecture hours)
The Bible As Literature Honors
Advisory: ENGL A100.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Read, analyze, and write on important Biblical works from both the Old and New Testament canon. Explore the historical, cultural, philosophical, and aesthetic implications of representative works, their origins and adoption. Formulate and produce written analysis of assigned works. Same course as RLST A180. Students completing ENGL A141H may not receive credit for RLST A180. May be taken for grades or on a pass-no pass basis.

ENGL A143  3 Units (54 lecture hours)
Children’s Literature
Advisory: ENGL A100.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Read, analyze, and write on important texts of children’s literature. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. C-ID: ENGL 180.

ENGL A143H  3 Units (54 lecture hours)
Children’s Literature Honors
Advisory: ENGL A100.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Read, analyze, and write on important texts of children’s literature. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. C-ID: ENGL 180.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Type</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A147</td>
<td>3 Units (54 lecture hours)</td>
<td>Introduction to Science Fiction</td>
<td>Read, analyze, and write on important works of science fiction. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works.</td>
</tr>
<tr>
<td>ENGL A147H</td>
<td>3 Units (54 lecture hours)</td>
<td>Introduction to Science Fiction Honors</td>
<td>Read, analyze, and write on important works of science fiction. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works.</td>
</tr>
<tr>
<td>ENGL A148</td>
<td>3 Units (72 lecture hours)</td>
<td>Film As Literature</td>
<td>Read, analyze, and write on international and American films. Critically examine the philosophical, cultural, mythic, religious, and/or historical elements related to film. Explore the styles in individual works and the commentary made on moral, social, and aesthetic issues. May be taken for grades or on a pass-no pass basis.</td>
</tr>
<tr>
<td>ENGL A148H</td>
<td>3 Units (72 lecture hours)</td>
<td>Film As Literature Honors</td>
<td>Read, analyze, and write on international and American films. Critically examine the philosophical, cultural, mythic, religious, and/or historical elements related to film. Explore the styles in individual works and the commentary made on moral, social, and aesthetic issues. May be taken for grades or on a pass-no pass basis.</td>
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<tr>
<td>ENGL A150</td>
<td>3 Units (54 lecture hours)</td>
<td>American Literature Before the 20th Century</td>
<td>Read, analyze, and write on texts by American writers, immigrant writers, and other writers that explore ethnicity, race, culture, sexuality, or ideology. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. C-ID: ENGL 130.</td>
</tr>
<tr>
<td>ENGL A150H</td>
<td>3 Units (54 lecture hours)</td>
<td>American Literature Before the 20th Century Honors</td>
<td>Read, analyze, and write on important early American literary works produced prior to the 20th Century. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. C-ID: ENGL 130.</td>
</tr>
<tr>
<td>ENGL A151</td>
<td>3 Units (54 lecture hours)</td>
<td>American Literature in the 20th Century</td>
<td>Read, analyze, and write on important American literary works from the early 20th century to the present. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. This course may also be offered online. Lecture. C-ID: ENGL 135.</td>
</tr>
<tr>
<td>ENGL A151H</td>
<td>3 Units (54 lecture hours)</td>
<td>American Literature in the 20th Century Honors</td>
<td>Read, analyze, and write on important American literary works from the early 20th century to the present. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. This course may also be offered online. Lecture. C-ID: ENGL 135.</td>
</tr>
<tr>
<td>ENGL A152</td>
<td>3 Units (54 lecture hours)</td>
<td>Race, Culture, and Identity in Literature</td>
<td>Read, analyze, and write on texts by American writers, immigrant writers, and other writers that explore ethnicity, race, culture, sexuality, or ideology. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. C-ID: ENGL 130.</td>
</tr>
</tbody>
</table>
ENGL A152H 3 Units (54 lecture hours)
Race, Culture, and Identify in Literature Honors
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on texts by American writers, immigrant writers, and other writers that explore ethnicity, race, culture, sexuality, or ideology. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis.

ENGL A156 3 Units (54 lecture hours)
California Literature
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on important texts of California Literature. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis.

ENGL A156H 3 Units (54 lecture hours)
California Literature Honors
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on important texts of California Literature. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis.

ENGL A160 3 Units (54 lecture hours)
World Literature Through Renaissance
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, interpret, and write on influential and significant early World literary works in translation produced from antiquity through the Renaissance. Works will be included from Europe, Asia, Africa, and the Middle East. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis.

ENGL A160H 3 Units (54 lecture hours)
World Literature Through Renaissance Honors
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, interpret, and write on influential and significant early World literary works in translation produced from antiquity through the Renaissance. Works will be included from Europe, Asia, Africa, and the Middle East. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis.

ENGL A161 3 Units (54 lecture hours)
World Literature Since Renaissance
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on important World literary works in translation from the Renaissance to the present. Explore the historical, cultural, philosophical, and aesthetic implications of representative works from Europe, Asia, Africa, South America, and the Middle East. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis.

ENGL A161H 3 Units (54 lecture hours)
World Literature Since Renaissance Honors
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on important World literary works in translation from the Renaissance to the present. Explore the historical, cultural, philosophical, and aesthetic implications of representative works from Europe, Asia, Africa, South America, and the Middle East. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis.

ENGL A165 3 Units (54 lecture hours)
Introduction to Irish Literature
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A survey of Irish literature including poetry, prose, and drama from the earliest periods to the present. May be taken for grades or on a pass-no pass basis. Three hours lecture.
ENGL A168 3 Units (54 lecture hours)
Popular Fiction
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Read, analyze, and write on important texts of Popular Fiction including popular novels, detective fiction, science fiction, fantasy, horror, young adult, romance, historical fiction, and graphic novel/comics. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis.

ENGL A170 3 Units (54 lecture hours)
Contemporary Literature
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on important contemporary literature. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no-pass basis.

ENGL A170H 3 Units (54 lecture hours)
Contemporary Literature Honors
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on important contemporary literature. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no-pass basis.

ENGL A172 3 Units (54 lecture hours)
Unique Topics in Literature
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on important texts chosen because of their timeliness and focus on a common theme, form, geographical area, or cultural group. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis.

ENGL A173 3 Units (54 lecture hours)
Women Writers
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Read, analyze, and write on important works by women writers. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis.

ENGL A173H 3 Units (54 lecture hours)
Women Writers Honors
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on important works by women writers. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis.

ENGL A176 3 Units (54 lecture hours)
World Mythology
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on myths and the literature based on mythic traditions. Examine the philosophical, cultural, mythic, religious, and/or historical elements related to these texts. Formulate and produce written analysis of assigned work. May be taken for grades or on a pass-no pass basis.

ENGL A176H 3 Units (54 lecture hours)
World Mythology Honors
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on myths and the literature based on mythic traditions. Examine the philosophical, cultural, mythic, religious, and/or historical elements related to these texts. Formulate and produce written analysis of assigned work. May be taken for grades or on a pass-no pass basis.

ENGL A179 3 Units (54 lecture hours)
Gender and Sexuality in Literature and Film
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on literature and films of different genres, periods, and cultures that focus on culturally constructed images of males and females. Examine the philosophical, cultural, mythic, religious, and/or historical elements related to these films and texts. May be taken for grades or on a pass-no pass basis.

ENGL A179H 3 Units (54 lecture hours)
Gender and Sexuality in Literature and Film Honors
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Read, analyze, and write on literature and films of different genres, periods, and cultures that focus on culturally constructed images of gender and sexuality. Examine the philosophical, cultural, mythic, and/or historical elements related to gender, sexuality and sexual identity. May be taken for grades or on a pass-no pass basis.
ENGL A181  Shakespeare  3 Units (54 lecture hours)
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on a range of Shakespearean texts including histories, comedies, tragedies, and problem plays. Examine the philosophical, cultural, mythic, religious, and/or historical elements related to these texts. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis.

ENGL A181H  Shakespeare Honors  3 Units (54 lecture hours)
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on a range of Shakespearean texts including histories, comedies, tragedies, and problem plays. Examine the philosophical, cultural, mythic, religious, and/or historical elements related to these texts. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis.

ENGL A187  Introduction to Literary Theory  3 Units (54 lecture hours)
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introduction to literary theory and interpretation with a focus on genre, textual analysis, and application of theoretical principles. Examines the influence of philosophy and history on perceptions of literature and will investigate relevant topics such as art, sexuality, economics, culture, power, and language. Some authors may include Barthes, Freud, Marx, Derrida, and Foucault. May be taken for grades or on a pass-no pass basis.

ENGL A187H  Introduction to Literary Theory Honors  3 Units (54 lecture hours)
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introduction to literary theory and interpretation with a focus on genre, textual analysis, and application of theoretical principles. Examines the influence of philosophy and history on perceptions of literature and will investigate relevant topics such as art, sexuality, economics, culture, power, and language. Some authors may include Barthes, Freud, Marx, Derrida, and Foucault. May be taken for grades or on a pass-no pass basis.

ENGL A222  Novel Writing II  3 Units (72 lecture hours)
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

For students who have completed at least fifty pages of an original novel, this intermediate level writing workshop focuses on planning and developing the novel into a full-length manuscript. The course explores theory, technique and the practical discipline of writing fiction, and examines models from various genres (literary classics, historical fiction, detective fiction, romance, science fiction and others). In addition, students learn to write critiques demonstrating a working knowledge of literary technique and terminology. May be taken for grades or on a pass-no pass basis.

ENGL A227  Scriptwriting II  4 Units (72 lecture hours)
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This is a course for students who have completed at least one act (30 pages) of an original play or screenplay. The emphasis this semester will be on analyzing dramatic strategies in film, television, and theatre, with special attention given to bringing a short project to completion (30-60 pages). May be taken for grades or on a pass-no pass basis.

ENGL A232  Novel Writing III  3 Units (72 lecture hours)
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This is an advanced writing workshop for students who have already completed more than 100 pages of an original novel. Students will focus on analysis of the elements of dramatic fictional structure through examination of works in progress. In addition to generating 50-100 new pages, students will read essays on craft and engage in research into the settings and circumstances of their characters in order to lend authenticity to the narrative. This course is designed to assist students in developing and revising manuscripts to meet contemporary publication standards. May be taken for grades or on a pass-no pass basis.

ENGL A237  Scriptwriting III  4 Units (72 lecture hours)
Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

An intermediate scriptwriting workshop for students who have completed at least 60 pages of an original work. The emphasis at this stage will be on the refinement of structure, tone, dialogue, and character, in service to the emerging themes of the work-in-progress. Students will read essays on craft and will engage in research into the circumstances and settings featured in their scripts. After generating 30-60 new pages, students will carefully revise and edit their work, resulting in the completion of a substantial portion of their full-length plays/screenplays. May be taken for grades or on a pass-no pass basis.
ENGL A242 4 Units (72 lecture hours)
Novel Writing IV
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This is a writing workshop for students who have completed more than 150 pages of an original novel. The course is designed to assist students in finishing their novels and prepare them to market professional manuscripts for publication. Students will research current standards for query letters and other submission procedures and apply them to the process of selling their work. Manuscripts submitted for workshop will meet contemporary publication standards. May be taken for grades or on a pass-no pass basis.

ENGL A270 3 Units (54 lecture hours)
Survey of British Literature Before 1800
Prerequisite(s): Eligibility for ENGL A100.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on important British literature from the Anglo-Saxon period to 1800. Explore the historical, cultural, philosophical and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. This course may also be offered online. C-ID: ENGL 160.

ENGL A275 3 Units (54 lecture hours)
Survey of British Literature After 1800
Prerequisite(s): Eligibility for ENGL A100.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on important British literary works after 1800. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. This course may also be offered online. C-ID: ENGL 165.

English as a Second Language (ESL)

ESL A011 4 Units (72 lecture hours)
Beginning Listening and Speaking
Grading Mode: Standard Letter, Pass/No Pass
Listening comprehension, oral communication, and pronunciation skills for beginning academic students who are non-native speakers of English. Practice in spontaneous conversation and small group discussion. May be taken for grades or on a pass-no pass basis. Not applicable to AA or AS degree.

ENGL A270H 3 Units (54 lecture hours)
Survey of British Literature Before 1800 Honors
Prerequisite(s): Eligibility for ENGL A100.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on important British literature from the Anglo-Saxon period to 1800. Explore the historical, cultural, philosophical and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. This course may also be offered online. C-ID: ENGL 160.

ENGL A275H 3 Units (54 lecture hours)
Survey of British Literature After 1800 Honors
Prerequisite(s): Eligibility for ENGL A100.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on important British literary works after 1800. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. This course may also be offered online. C-ID: ENGL 165.

ESL A015 4.5 Units (72 lecture hours; 36 lab hours)
Grammar, Reading and Writing 1
Prerequisite(s): Qualifying score on the ESL placement test administered through the OCC Assessment Center or approval of the ESL Advisor.
Grading Mode: Standard Letter, Pass/No Pass
Intensive introductory level of integrated basic grammar, reading, and writing of American English for non-native students who are pursuing college coursework. Includes work on sentence structure, questions, verb tenses, spelling and vocabulary. May be taken for grades or on a pass-no pass basis. (Not applicable to AA degree.) Also, qualifying score on the OCC ESL placement test for ESL A021 level or higher or concurrent enrollment in ESL A011.

ESL A022 4.5 Units (72 lecture hours; 36 lab hours)
Grammar, Reading, and Writing 2
Grading Mode: Standard Letter, Pass/No Pass
Integrates intensive study of grammar, reading, and writing for low-intermediate students who are non-native speakers of English. Introduction to writing basic responses to simplified texts. Extended writing practice for grammar and mechanics. Offered for grade or pass/no pass.
<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
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<tr>
<td>ESL A024</td>
<td>3 Units (54 lecture hours; 18 lab hours)</td>
<td>Listening and Speaking 2: Intermediate Oral Communication, Presentations, and Note-Taking Skills</td>
<td>ESL A011, concurrent enrollment in either ESL A022 or ESL A032, or appropriate placement.</td>
<td>Grading Mode: Standard Letter, Pass/No Pass</td>
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<tr>
<td>ESL A024</td>
<td>4.5 Units (72 lecture hours; 36 lab hours)</td>
<td>Advanced Academic Reading and Writing 1</td>
<td>ESL A032 or appropriate placement.</td>
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<td>ESL A032</td>
<td>4 Units (72 lecture hours)</td>
<td>Grammar, Reading and Writing 3</td>
<td>ESL A022 or appropriate placement.</td>
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<tr>
<td>ESL A032</td>
<td>4.5 Units (72 lecture hours; 36 lab hours)</td>
<td>Advanced Academic Reading and Writing 1</td>
<td>ESL A052 or concurrent enrollment or appropriate placement.</td>
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<tr>
<td>ESL A034</td>
<td>4 Units (72 lecture hours)</td>
<td>Listening and Speaking 3: High-Intermediate Oral Communication, Presentations, and Note-Taking Skills</td>
<td>ESL A024, concurrent enrollment in ESL A032 or ESL A052, or appropriate placement.</td>
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<tr>
<td>ESL A052</td>
<td>4.5 Units (72 lecture hours; 36 lab hours)</td>
<td>Advanced Academic Reading and Writing 2</td>
<td>ESL A034 or ESL A052 or appropriate placement.</td>
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<tr>
<td>ESL A054</td>
<td>4 Units (72 lecture hours)</td>
<td>Listening and Speaking 4: Advanced Oral Communication, Presentations, and Note-Taking Skills</td>
<td>ESL A052 or concurrent enrollment or appropriate placement.</td>
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<tr>
<td>ESL A034</td>
<td>4 Units (72 lecture hours)</td>
<td>Listening and Speaking 3: High-Intermediate Oral Communication, Presentations, and Note-Taking Skills</td>
<td>ESL A024, concurrent enrollment in ESL A032 or ESL A052, or appropriate placement.</td>
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<tr>
<td>ESL A052</td>
<td>4.5 Units (72 lecture hours; 36 lab hours)</td>
<td>Advanced Academic Reading and Writing 2</td>
<td>ESL A034 or ESL A052 or appropriate placement.</td>
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<tr>
<td>ESL A062</td>
<td>4.5 Units (72 lecture hours; 36 lab hours)</td>
<td>Advanced Academic Reading &amp; Writing 2</td>
<td>ESL A034 or ESL A052 or appropriate placement.</td>
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ESL A100 3 Units (36 lecture hours; 54 lab hours)
ESL College Composition
Advisory: ESL A034 or ESL A054, ESL A192 or appropriate placement.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This course is for second-language learners and is equivalent to ENGL A100. The emphasis is on in-class essay writing (thesis, body, and concluding paragraph development), applying analytical and critical thinking and research based papers, using annotated college-level readings as supporting evidence. An additional focus is on second-language grammar, syntactical structure, and academic vocabulary. Students will be required to spend three hours per semester in the OCC Writing Center or other equivalent revision activities as determined by the instructor. Note: Students enrolled in ESL A100 must be present at the first class meeting. Absent students may lose their seats in the class. Students should complete the guided self-placement form before the first semester enrolling in an ESL course to determine which ESL course they should enroll in. This can be found at https://occsssp.formstack.com/forms/esl_selfplacement.

ESL A192 4.5 Units (72 lecture hours; 27 lab hours)
Advanced Academic Reading and Writing 3
Advisory: Appropriate Placement.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

This course is the third in a series of advanced integrated ESL skills courses designed to improve the academic reading, writing, grammar, and interpersonal communication skills of non-native speakers. It integrates college-level reading, writing, and critical thinking skills with intensive practice in writing essays in response to college-level expository texts, using various methods of development and organization to prepare students for ENGL A100. Individual attention given to sentence structure and usage problems needed for ENGL A100 and other college-level courses by using readings emphasizing a cultural component, conferencing, computer applications, and self-revisions. Students will write approximately 6,000 instructor-evaluated words, including in-class essays and a research paper. This course may also be offered online. May be taken for grades or on a pass-no pass basis. Students should complete the guided self-placement form before the first semester enrolling in an ESL course to determine which ESL course they should enroll in. This can be found at https://occsssp.formstack.com/forms/esl_selfplacement.

Environmental Science/Ecology (ESEC)

ESEC A100 3 Units (54 lecture hours)
Introduction to Environmental Science
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

The physical and biological components of the environment, their interrelationships, and the human population influence on these components. Physical, biological, and political means of reversing environmental deterioration will be considered as well as conservation and management of natural resources. Suitable as a general education elective for the non-science major and for students in Environmental Science or other natural sciences. Field trip may be required. Same as ECOL A100, Human Ecology.

ESEC A100H 3 Units (54 lecture hours)
Introduction to Environmental Science Honors
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

The physical and biological components of the environment, their interrelationships, and the human population influence on these components. Physical, biological, and political means of reversing environmental deterioration will be considered as well as conservation and management of natural resources. Suitable as a general education elective for the non-science major and for students in Environmental Science or other natural sciences. Field trip may be required. Same as ECOL A100 - Human Ecology.

ESEC A101 3 Units (54 lecture hours)
Principles of Ecology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This introductory ecology course for non-science majors covers ecological principles and their relevance at several levels of organization. Includes principles governing classification of life, principles of evolution, conditions for life, adaptations to the environment, analysis of ecological niches, population, and community/ecosystem ecology. Field trips are required. Same as ECOL A101 - Principles of Ecology.

ESEC A110 3 Units (54 lecture hours)
Island Ecology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Islands are used as the platform to discuss Ecology, Evolution, Speciation, Biogeography, Geology, and Human History as it relates to islands. This course focuses on California’s Channel Islands and also covers the Hawaiian Islands, the Galapagos Islands, and many others. Field trip is required. May be taken for grades or on a pass-no pass basis. Same as ECOL A110 - Island Ecology.
ESEC A121  1 Unit (9 lecture hours; 27 lab hours)
Marine Intertidal Ecology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Ecology of the marine intertidal environment of Southern California. This is a field oriented laboratory experience for non-majors. May be taken for grades or on a pass-no pass basis. Same as Marine Science A121 and ECOL A121. Students completing Ecology A121 or ESEC A121 may not receive credit for Marine Science A121.

ESEC A124  1 Unit (9 lecture hours; 27 lab hours)
Ecology of the Gray Whale
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Ecology and natural history of the California Gray Whale and the Orange County Whale Watch program. Completion qualifies students as docents on whale watching boats. Field trip required. May be taken for grades or on a pass-no pass basis. Same as Marine Science A124 and Ecology A124. Students taking Ecology A124 or Environmental Science A124 may not receive credit for Marine Science A124.

ESEC A140  2 Units (18 lecture hours; 54 lab hours)
Mediterranean Biome Ecology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
The Mediterranean Biome includes chaparral and coastal sage scrub in North America, mallee scrub in Australia, matorral in South America, fynbos in Africa, and maquis in Europe. This course surveys this biome through an investigative approach. Field trips are required. Same as ECOL A140 - Mediterranean Biome Ecology.

ESEC A141  2 Units (18 lecture hours; 54 lab hours)
Desert Ecology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Deserts cover 20% of the Earth and provide wildlife habitat, as well as, economic and recreational value. This course will provide students an opportunity to learn and assess the ecological processes in various deserts on Earth including the deserts of Southwestern United States and Mexico. Field trips are required. Same as ECOL A141 - Desert Ecology.

ESEC A210  3 Units (54 lecture hours)
Wetlands Ecology and Management
Advisory: BIOL A100, BIOL A100H, ESEC A100, ESEC A100H, ESEC A101, GEOL A105, GEOL A105H, HORT A100, MRSC A100 or MRSC A100H.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course covers the biological, physical, chemical, and hydrological components of wetland ecosystems. Various types of wetland habitats are discussed including their ecological and economic value. Field-based assessments on wetland ecology are implemented throughout the course. Management practices are investigated including past and current methods, policies, restoration efforts and outcomes, and the effects of climate change on wetlands are examined. Same as ECOL A210 - Environmental Science & Ecology.

Ethnic Studies (ETHS)

ETHS A100  3 Units (54 lecture hours)
Contemporary Ethnic America
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
An examination of contemporary American dominant, ethnic and racial minority intergroup relations from historical, sociological and psychological perspectives. Addresses continuing issues of racism and discrimination.

ETHS A150  3 Units (54 lecture hours)
Ethnic Groups in the U.S.: Their Histories
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
A survey of the history of the many (40+) ethnic groups originating in Europe, Asia (including the American Indian), the Americas, the Pacific Islands, Africa, and the Middle East, that make up the population of the United States. Same as History A150. Students who enroll in Ethnic Studies A150 may not receive credit for History A150. May be taken for grades or on a pass-no pass basis.

ETHS A190  3 Units (54 lecture hours)
The Ethnic Family
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Ethnic and minority families in the United States today. Emphasis on family interaction, child training patterns, the family's relationship to society, and community helping agencies. Same as Sociology A190. Students completing Ethnic Studies A190 may not receive credit for Sociology A190. May be taken for grades or on a pass-no pass basis.

Fashion (FASH)

FASH A050  0.5-2 Units (27-108 lab hours)
Sewing Lab
Grading Mode: Pass/No Pass
A laboratory-based course to improve clothing construction skills. Students work independently according to a study plan they devise and complete, under the supervision of the course instructor. Includes periodic student-teacher conferences, completion of individualized lab assignments, and a final self-assessment report. Enrollment is open all semester. Offered on a pass-no pass basis only. (NOT APPLICABLE TO AA OR AS DEGREE).

FASH A100  1.5 Units (18 lecture hours; 36 lab hours)
Beginning Clothing Techniques
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course is an introduction to basic clothing construction. Students will learn basic clothing construction techniques, terminology, pattern layout, measuring and cutting, and complete multiple easy-to-sew projects.
FASH A102 2 Units (18 lecture hours; 54 lab hours)  
**Industrial Sewing Techniques**  
**Prerequisite(s):** FASH A100 or FASH A180 or FASH A183.  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.  
Advanced clothing construction techniques with emphasis on industrial equipment, techniques, use, and care.

FASH A105 3 Units (18 lecture hours; 108 lab hours)  
**Sewing Skills Assessment**  
**Advisory:** FASH A100 or FASH A180 or FASH A183.  
**Grading Mode:** Pass/No Pass  
**Transfer Credit:** CSU.  
Assessment of sewing skills and performance of specified clothing techniques required for FASH A100, FASH A180, and FASH A183. Offered on a pass-no pass basis only.

FASH A110 3 Units (54 lecture hours)  
**Applied Textiles and Design**  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU; UC.  
Selection, use, care, and performance standards for textile products for fashion apparel and interior textiles.

FASH A115 3 Units (54 lecture hours)  
**Introduction to the Fashion Industry**  
**Grading Mode:** Standard Letter  
Organization, structure, and interrelationship of industries and services that comprise the business of fashion, terminology, designers, trade organizations, and publications. Identification of current trends and fashion inspiration. Professional opportunities explored.

FASH A116 3 Units (54 lecture hours)  
**Fashion Styling**  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU.  
Principles of fashion styling. This course explores industry terms, styling types, building a styling kit, and working on a set. Examines methods and materials used for careers in fashion styling. Students will create a professional portfolio of work. May be taken for grade or on a pass-no pass basis.

FASH A118 3 Units (54 lecture hours)  
**Trend Forecasting**  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.  
Studies the techniques and procedures for identifying and forecasting fashion trends and evaluates current trends found in lifestyles, business, ready-to-wear, and home fashion. Students will learn to recognize and analyze predictive lifestyle and business trends that affect retail merchandising and marketing decisions.

FASH A120 1.5 Units (27 lecture hours)  
**History of Fashion**  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.  
A chronological study of costume designs from ancient times to the present. Emphasis is placed on the identification of apparel design details, the relation of recurring style trends to contemporary fashions, and sociological, economic, and political factors affecting clothing through the centuries.

FASH A121 1.5 Units (27 lecture hours)  
**Street Style**  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.  
This course explores the significant and dynamic role street style plays in the 21st Century and surveys how youth defies and influences the fashion establishment. The street's ascent as a fashion force will be traced from its historical inception to how it makes history.

FASH A130 1.5 Units (18 lecture hours; 36 lab hours)  
**Tailoring**  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.  
The student will construct a lined, tailored jacket using traditional and speed tailoring techniques; 48 basic clothing construction techniques will be featured.

FASH A135 2 Units (36 lecture hours; 18 lab hours)  
**Design Thinking**  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.  
Design problem solving and planning through the prototyping process. The study of the design process including inspiration, ideation, and implementation of design concepts.

FASH A137 2 Units (36 lecture hours; 18 lab hours)  
**Alterations**  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.  
Basic analysis and techniques related to fitting and altering ready-to-wear garments and commercial patterns.

FASH A145 2 Units (36 lecture hours)  
**Fashion Reporting and Analysis**  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.  
Topics include the creation of sales reports, product line sheets, spreadsheets, formula development and analysis of sales data for a fashion company using Microsoft Excel and current software.
FASH A150  3 Units (36 lecture hours; 54 lab hours)
Flat Pattern Techniques
Prerequisite(s): FASH A100 or FASH A180 or FASH A183.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Interpretation of clothing design through the use of flat pattern techniques. Basic principles involved in designing and manipulating patterns.

FASH A155  2.5 Units (36 lecture hours; 27 lab hours)
Tech-Packs
Prerequisite(s): FASH A100 or FASH A180 or FASH A183; and FASH A150; and FASH A255.

Grading Mode: Standard Letter
Transfer Credit: CSU.

The development of offshore technical packages. To include: garment knock-offs, pattern adjustments, appropriate fit, fabric qualities and package specifications.

FASH A170  3 Units (54 lecture hours)
Clothing Design and Selection
Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to the psychology of clothing and the study of art elements and principles as they relate to dress and personal appearance. Fashion vocabulary, recognition, and description of styles, and fashion cycles and trends are emphasized.

FASH A175  3 Units (36 lecture hours; 54 lab hours)
Applied Color and Design Theory
Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to color and design theory and application, including line, shape, value and color. Utilization of tools, materials, and equipment to develop a visual vocabulary and technical skills applicable to interior, architectural, and fashion related fields of design. Same as Interior Design A175. Students completing Fashion A175 may not receive credit for Interior Design A175.

FASH A177  3 Units (54 lecture hours)
Fashion Merchandising Concepts
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An introduction to the fashion merchandising industry will include vendors and products sold, as well as the various types of retail venues and the methods of merchandising apparel in each. The packaging and marketing of a product and the tracking of a fashion trends in several venues will also be included. May be taken for grades or on a pass-no pass basis.

FASH A180  3 Units (36 lecture hours; 72 lab hours)
Fundamental Principles of Clothing Construction 1
Prerequisite(s): FASH A100.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Fundamental principles of clothing construction are studied and applied to selected problems with an emphasis on expanding knowledge in a variety of techniques. Fulfills the lower division college transfer requirement in clothing for the family and consumer sciences major.

FASH A181  2 Units (120 other hours)
Fashion Internship
Co-requisite(s): FASH A200.

Advisory: At least four fashion Core courses must be taken or the equivalent; FASH A110, FASH A115, FASH A120, FASH A121, FASH A170, FASH A177.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A supervised internship including classroom-based learning and experience at a fashion-related work site. This 120-hour unpaid or 150-hour paid work experience course is designed to assist students to acquire career awareness, work habits, attitudes and skills for the fashion program. Credit for occupational work experience may be accrued at the rate of one to 8 units per semester for a total of sixteen units. Additionally, this course is for 2 units and students must work 75 paid hours or 60 non-paid hours per unit earned.

FASH A182  2 Units (36 lecture hours)
Professional Practices
Prerequisite(s): FASH A115 and FASH A255.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Course will include writing resumes and professional correspondence and developing a visual portfolio. This course should be taken in the final semester of the certificate program.

FASH A183  3 Units (36 lecture hours; 72 lab hours)
Fundamental Principles of Clothing Construction 2
Prerequisite(s): FASH A100.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An intermediate-level clothing construction class using the latest industry methods. Students will learn clothing construction techniques and complete two sewing projects.
FASH A190  3 Units (54 lecture hours)
Apparel Industry Sustainability: The Environment, Ethical Business Practices & the Law
Grading Mode: Standard Letter
An introduction to, and overview of, responsible business, also known as triple bottom line business, with a focus on environmental sustainability, responsible decision making, social impact, corporate social responsibility, regulatory compliance, certifications, and other emerging technologies. Students will examine current topics, concepts, trends, and rules that are driving the sustainability and responsible business movement and will develop an understanding of, and a lexicon for, what many consider the future of business.

FASH A191  3 Units (54 lecture hours)
Sustainability & Responsibility in Fashion Design, Manufacturing and Branding
Prerequisite(s): FASH A190.
Grading Mode: Standard Letter
Transfer Credit: CSU.
A look at environmental and social impacts the apparel manufacturing industry has had in the past and continues to have today. This class will explore the impacts associated with the process of developing and manufacturing apparel from fiber sourcing to warehousing, and sales to distribution. Additionally, this class will discuss innovative solutions that are in use today that counter those impacts.

FASH A192  3 Units (54 lecture hours)
Research and Development for Apparel Industry Sustainability
Prerequisite(s): FASH A190 and FASH A191.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Research, evaluate, and interpret sustainable fashion theory and current company processes. The course will review current sustainability programs companies are marketing, as well as assessing and evaluating their compliance programs. Through case studies and field trips you will apply knowledge and participate in the development and presentation of a brand or company that encapsulates ethical and sustainable practices.

FASH A199  0.5-1.5 Units (9-27 lecture hours)
Current Issues in Fashion
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Current issues in the field of fashion, rotating through a variety of topics, such as fashion design/production, apparel construction, fashion merchandising, and costume. May be taken for grades or on a pass-no pass basis. This course may be taken four times.

FASH A200  1 Unit (18 lecture hours)
Fashion Internship Lecture
Co-requisite(s): FASH A181.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Classroom-based learning includes 18 hours of company research preparation to include company culture and appropriate behavior; on-site interview skills and techniques; writing measurable learning objectives that are assessed at the end of the internship; and writing a reflective summary for each objective and developing a resource directory for employees, vendors, and services used at the field site.

FASH A225  3 Units (54 lecture hours)
Media, Events, and Promotions
Prerequisite(s): FASH A177.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Principles of fashion promotion and events coordination. Analysis of social media marketing related to the fashion industry. The course will include techniques and procedures for presenting fashion according to retail venue, target customer, type of merchandise, and type of theme, media, or event.

FASH A233  2 Units (36 lecture hours; 18 lab hours)
Couture Techniques
Prerequisite(s): FASH A180 or FASH A183.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Instruction and practice in techniques used to create couture and custom garments. Techniques of handling special and difficult fabrics, leather and furs. Features fine finishing details. Requires construction of one couture garment.

FASH A235  2 Units (36 lecture hours; 18 lab hours)
Draping
Prerequisite(s): FASH A180.
Grading Mode: Standard Letter
Transfer Credit: CSU.
The creative design of garments through draping techniques emphasizing fabric manipulation and design creation.

FASH A255  3 Units (36 lecture hours; 72 lab hours)
Fashion Illustrating Techniques 1
Grading Mode: Standard Letter
Transfer Credit: CSU.
Presentation and promotion of fashion and garment design through elementary trade sketching, use of the 'croqui', and current computer design software as used in the fashion industry.
Film & Television (FILM)

FASH A256  3 Units (36 lecture hours; 72 lab hours)
Fashion Illustrating Techniques 2
Prerequisite(s): FASH A255.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Use current computer software to design and refine fashion garment proportions, textile textures and shapes, and garment construction elements to gain a clear understanding of design standards in the fashion industry.

FASH A266  2 Units (36 lecture hours; 18 lab hours)
Computerized Pattern System
Advisory: FASH A110 and FASH A150.
Grading Mode: Standard Letter
Transfer Credit: CSU.

An introductory course on the operation of the current computer-assisted pattern-making software package, including the 3-D format. System management, digitizing, plotting, marker-making, pattern development, library structures of pattern data, development of pattern blocks, pattern design, grading, and drafting system features/functions will be covered.

Film & Television (FILM)

FILM A100  3 Units (54 lecture hours)
History and Appreciation of the Cinema
Grading Mode: Standard Letter
Transfer Credit: CSU; UC

Introduces the analysis of film form and content, aesthetics and meaning, and history and culture. Explores the diverse possibilities presented by the cinematic art form through an examination of a wide variety of productions, national cinemas, and film movements. Topics include modes of production, narrative and non-narrative forms, visual design, editing, sound, genre, ideology and critical analysis.

FILM A102  3 Units (54 lecture hours)
The Business of Film & Television
Advisory: FILM A110 and FILM A155.
Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction course to the business of film and television. Students will get a comprehensive and practical look at each aspect of the industry, including careers in development, current programming, broadcast standards and practices, networks, studios, casting, and production for film and television. This class will also address career strategies for advancement within the film, television and new media industries. Lecture.

FILM A104  3 Units (54 lecture hours)
The Great Directors of the Cinema
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Topics delving into aspects of film history, criticism and aesthetics which can be described as extensions of the film directors' point of view. The course is intended for film/video majors and other students with an interest in film/video. May be taken for grades or on a pass-no pass basis.

FILM A106  3 Units (54 lecture hours)
Introduction to Media Writing
Grading Mode: Standard Letter
Transfer Credit: CSU.

Basic introductory course in writing for the film and electronic media. Emphasis on preparing scripts in proper formats, including fundamental technical, conceptual and stylistic issues related to writing fiction and non-fiction scripts for informational and entertainment purposes in film and electronic media. Includes a writing evaluation component as a significant part of the course requirement.

FILM A107  3 Units (54 lecture hours)
History of Video Games
Grading Mode: Standard Letter
Transfer Credit: CSU; UC

Introduces the analysis of game art form and content, aesthetics and meaning, as well as history and culture. Explores the genesis of the gaming industry the business behind games as well as the diverse history of games and consoles. Topics include early computer game conception, arcade gaming, first generation consoles, gaming boom and bust of the 1980's, as well as the vast advance of the 1990's and 2000's.

FILM A109  3 Units (54 lecture hours)
Science Fiction Film
Grading Mode: Standard Letter
Transfer Credit: CSU.

Participants will explore the long history of Science Fiction film starting in early the 1900s to the modern era, to gain a deeper understanding of the genre, its social significance and underlying meaning for symbols and characters. Successful structure of a Science Fiction film, as well as key figures in the development of the genre will be explored.

FILM A109H  3 Units (54 lecture hours)
Science Fiction Film Honors
Grading Mode: Standard Letter
Transfer Credit: CSU.

Participants will explore the long history of Science Fiction film starting in early 1900s to the modern era, to gain a deeper understanding of the genre, its social significance and underlying meaning for symbols and characters. Successful structure of a Science Fiction film, as well as key figures in the development of the genera, will be explored.
FILM A110  3 Units (45 lecture hours; 27 lab hours)
Film Production 1
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.

The course provides an introduction to theory, terminology, operation of single camera video production, including composition and editing techniques, lighting, recording techniques, audio mixing and basic editing. This course focuses on the aesthetics and fundamentals of script writing, producing, on location, directing, postproduction, and final deliverables.

FILM A112  3 Units (54 lecture hours)
Project Development and the Pitch
Grading Mode: Standard Letter
Transfer Credit: CSU.

Students will learn how to plan a video, documentary, or television project and develop a business presentation for submission to commercial buyers. Topics will include development, marketing, packaging, release strategies, financing, publicity and advertising.

FILM A113  3 Units (36 lecture hours; 54 lab hours)
Audio Workshop
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course provides an introduction to the theory, terminology, and operation of audio recording. Which includes microphone selection as well as usage, location recording equipment and audio post-production editing techniques. This course focuses on the aesthetics and fundamentals of planning, producing, directing, postproduction audio fundamentals.

FILM A120  3 Units (45 lecture hours; 27 lab hours)
Event Productions
Advisory: FILM A110 and FILM A194.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Students gain hands-on experience in live event production and editing techniques while being introduced to the aesthetic concepts and basic skills used to produce live event productions such as theatrical, dance, corporate and weddings. Additionally, the course will cover basic business and marketing skills needed to start a live event/videography business in order to prepare students to enter the world of event productions.

FILM A155  3 Units (36 lecture hours; 72 lab hours)
Television Production 1
Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction, orientation, and use of digital television studio equipment and other basic tools in television production. The course will focus on theory, terminology, and operation of all television equipment and the responsibilities of television personnel. Students will be assigned projects to produce and will experience all major functions of the production team.

FILM A115  3 Units (54 lecture hours)
History of Radio & Television
Grading Mode: Standard Letter
Transfer Credit: CSU.

Overview and analysis of the radio, TV, and film industries in the U.S. with emphasis on the historical, cultural, and technical functions of each medium. Additionally, broadcast advertising, research, media law, and regulations are explored with the additional impact of global broadcasting, cable TV, Internet, and satellite technologies. This course may also be offered online.

FILM A193  3 Units (36 lecture hours; 54 lab hours)
Sound Design for Film & TV
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course serves as an introduction to the theory and practice of audio production for radio, television, film and digital recording applications. Students will learn the fundamentals of sound design and aesthetics, microphone use, and digital recording equipment. Students gain hands-on experience recording, editing, mixing and mastering audio. Upon completion, students will have basic knowledge of applied audio concepts, production workflow, equipment functions, and audio editing software.

FILM A196  3 Units (36 lecture hours; 54 lab hours)
Introduction to Visual Effects
Prerequisite(s): FILM A194.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Explore the principles, theory, and mechanics of visual effects editing using computers. Emphasis will be on visual effects editing techniques, sound effects, graphics, and titling. The class is designed for those interested in expanding their knowledge of areas including advanced editing, visual effects, graphics, post-production industries, studio and independent productions, broadcast, educational, corporate, and consumer markets.

FILM A197  3 Units (36 lecture hours; 54 lab hours)
Editing 1
Advisory: FILM A110.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Explore the principles, theory, and mechanics of digital film and video editing. Emphasis will be on digital editing techniques, effects, audio, graphics, and titling. The class is designed for those interested in entering the field of digital editing, graphic artists interested in expanding their knowledge base of the industry, and independent producers in the Broadcast, Educational, Corporate, and Consumer markets.
FILM A205 3 Units (36 lecture hours; 54 lab hours)
Remote Broadcasting
Prerequisite(s): FILM A155.
Advisory: BRCT A105 and FILM A194.
Grading Mode: Standard Letter
Transfer Credit: CSU.
This advanced course provides students with real-world broadcast production experience through the use of remote live television production equipment. Students will gain a hands-on approach to producing both live and recorded productions. Studio and location shooting of multi-camera productions and video editing activities are performed in this course.

FILM A210 3 Units (54 lecture hours)
Production Management
Prerequisite(s): FILM A110.
Grading Mode: Standard Letter
Transfer Credit: CSU.
This course will provide a comprehensive step-by-step overview of production management from pre-production through post-production in film, television and new media projects. This course will also cover production planning, budgeting, scheduling, as well as other essential skills and logistics of filmmaking.

FILM A215 3 Units (54 lecture hours; 18 lab hours)
Social Media Marketing
Advisory: FILM A110 or FILM A155.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Introduction to the role of social media marketing in entertainment and the practical applications of social media types. Students will learn to optimize career goals through social media; build and leverage a community of followers; create compelling content; and design and implement a multi-platform marketing campaign for an outside client.

FILM A219 3 Units (36 lecture hours; 54 lab hours)
Editing 2
Grading Mode: Standard Letter
Transfer Credit: CSU.
Students will dive deeper into the advanced technical features of editing while exploring the conceptual art of film editing such as tempo/pace of the edit, the importance of sound design and the feel of colorization. We will explore advanced digital editing techniques along with theory and concepts that make a successful edit. PREREQUISITES: FILM A194.

FILM A220 3 Units (45 lecture hours; 27 lab hours)
Introduction to Virtual Reality (VR)
Advisory: FILM A110, FILM A120, and FILM A194.
Grading Mode: Standard Letter
Transfer Credit: CSU.
An introduction to virtual reality media production, from simple 360-degree video capture, stitching, and editing, to the basic use of open-source, game engines to add 3-D graphic elements, spacial audio, and user-interactivity to create immersive videos and experiences. Students will learn key terminology, techniques, and current VR and related Immersive Media trends. Students will work together to produce 360-degree videos and basic immersive experiences, viewable on a variety of headset platforms.

FILM A221 3 Units (45 lecture hours; 27 lab hours)
Introduction to Augmented Reality (AR)
Advisory: CS A273 and FILM A220.
Grading Mode: Standard Letter
Transfer Credit: CSU.
An introduction to Augmented Reality development, from simple interactive graphics activated by a smart-phone, to the basic use of open-source, game engines to add 3D graphic elements, spacial audio, and user-interactivity to create immersive experiences integrated into AR-enabled publications, games, and AR goggle applications. Students will learn key AR terminology, techniques, and related immersive media technology trends. Students will work together to produce basic immersive experiences, viewable on a variety of handheld and headset platforms.

FILM A222 3 Units (45 lecture hours; 27 lab hours)
Introduction to Performance Capture
Advisory: FILM A220 and DMAD A281.
Grading Mode: Standard Letter
Transfer Credit: CSU.
An introduction to Performance Capture techniques used in animation for multiple industries, including Film & Television, Virtual & Augmented Reality, Animation, Acting, and Game Design, from both the technician and performer side of the production workflow. Students will learn key terminology, techniques, and current best practices related to the Performance Capture profession. Students interested in the tech side will operate the capture systems and work with performance data to animate computer-generated characters. Students interested in the performer side will wear the performance capture suits and equipment while learning how to effectively act and perform as virtual characters. Students will be able to complete the class choosing to specialize either in tech or performance techniques, or both. The class will work together to produce character animations for both flat and 360-degree VR animations.
An introduction to Video Game Design and Development as it applies to Immersive Media Technologies, such as Virtual and Augmented Reality (VR/AR), as well as traditional computer games and animated films. Students will learn basic 3D modeling and Game Engine techniques using very powerful design software which is widely used by professionals in the industry. Because most of this software is FREE to non-professionals, students can download and practice with it at home as well, optimizing their ability to learn these time-intensive technologies in 16-weeks.

FILM A225 2 Units (27 lecture hours; 27 lab hours)
360 Spatial Audio for Immersive Media
Advisory: FILM A193 and MUS A261.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Fundamentals and techniques of recording and post-production processing of 360-degree spatial audio specific to creating Immersive Media, such as VR/AR, Video Game Design, Sound Design for 360 Film & Television, and immersive music composing. Students will learn to use a variety of spatial microphones and recording techniques, including mono point-source, binaural and ambisonic, as well as industry-specific post-production software and plug-ins to handle 360 spatial audio mixdown in sync with immersive visuals. The techniques for spatial audio differs greatly from traditional stereo recording and mixing, making these skills absolutely necessary for creating 360 content or pursuing careers in Immersive Media.

FILM A226 3 Units (45 lecture hours; 27 lab hours)
Coding Basics for Immersive Media Applications
Advisory: FILM A220 or FILM A221; and FILM A223.

Grading Mode: Standard Letter
Transfer Credit: CSU.

In contrast to traditional coding classes offered in Computer Science departments, this course offers a very basic-level overview and training in multiple coding languages specific to Immersive Media and Game Design, and only to the level needed to address typical programming challenges that may come up in the building of VR/AR and related projects using Game Engines. Coding languages and software taught will reflect only the current industry standards for Immersive Media (which often change), but may likely include elements of C#, C++, Javascript, Swift, XCode, AR Kit, AR Core, and Vuforia. This course is meant to be a ‘primer’, as a supplement to other Immersive Media courses, and not designed to teach any one coding language extensively.

FILM A227 3 Units (36 lecture hours; 54 lab hours)
Drone Imaging for Immersive Media
Advisory: FILM A10 and FILM A220.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An overview of image capture techniques for Immersive and other media using drones and related Unmanned Autonomous Vehicles (UAVs). The concentration of this class will be centered mainly in the planning, collection, and use cases of visual imagery from drones as both a creative artform and a commercially-viable skill. So, it is open to students with or without Drone pilot licenses, although only those with proper certification will be allowed to actively operate aerial drones specifically. Ground rovers and other devices not requiring licenses will also be used, and all students will be able to take part in the collection and use of drone images. Students will work together to produce a range of projects, which may include 360-degree (VR) videos and photographs, basic immersive experiences, traditional (flat) videos and photographs, and sensor-based images, depending on equipment availability.

FILM A228 3 Units (36 lecture hours; 54 lab hours)
Photogrammetry and Volumetric Image Capture
Advisory: PHOT A123 and DMAD A281.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An overview of photogrammetry and volumetric image capture techniques used currently in Immersive Media (VR/AR), gaming, animation, and film production, exploring a wide range of potential equipment setups, from a single DSLR camera and free software, to synchronized multi-camera rigs, to drones and other UAVs. Using the techniques discussed, this class will focus on the basics of capturing existing 3D objects in physical space to translate them digitally into 3D computer generated objects that can be used and manipulated in a variety of media. Students will work independently and in groups to produce a range of visual projects, including potential cross-class collaborations, based on current offerings and equipment availability.

FILM A229 2 Units (36 lecture hours)
The Business of Immersive Media (VR/AR)
Advisory: FILM A220 and FILM A221.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction course to the business side of Immersive Media, including Virtual and Augmented Reality content creation and games, 360 Immersive Filmmaking, and related fields. Students will get an inside look at each aspect of the industry, including the vast array of ever-changing careers, desired skillsets and competencies, current trends, best practices, entrepreneurship, and the future direction of the industry as a whole. This class will also address soft-skills and developing career strategies for placement in entry-level jobs and internships.
FILM A231
Immersive Media Development Lab 1
2 Units (108 lab hours)
Prerequisite(s): FILM A220 and FILM A223.
Grading Mode: Standard Letter
Transfer Credit: CSU.

An auxiliary lab class for Intermediate to Advanced-level students in the Immersive Media (VR/AR) program. This lab-only course is designed to give additional access to VR/AR equipment and the development lab, under the guidance of an instructor, to allow students to work on their own self-guided Immersive Media project of a larger scope and/or higher level of difficulty than class exercises in previous or concurrent courses. Projects will be pitched and agreed on in the first 2 weeks of class, and turned in for a grade based on the pitch. This is NOT an ‘open lab’ for students outside the program. Special training in our Immersive Media courses is necessary prior to signing up for this course.

FILM A234
3 Units (45 lecture hours; 27 lab hours)
3D Modeling for Immersive Applications
Advisory: FILM A220 or FILM A221, and FILM A223.
Grading Mode: Standard Letter
Transfer Credit: CSU.

While traditional 3D modeling and animation courses focus on fundamentals, several do not focus on the optimization and texturing aspects of 3D creation of content for platforms related to mobile technologies and AR/VR platforms. This class will not only cover basic fundamentals of 3D Modeling and Development, but the optimization pipelines and processes relevant to creating content that is suitable for integration into game engine software. Core concepts regarding model retopology, engine integration, texture creation, and basic model rigging for integration into a game engine will be covered. Industry pipeline development concepts for this type of optimized asset creation will be extensively covered in addition. This course is meant to be a ‘primer’, as a supplement to other Immersive Media courses. It will serve to enhance student’s specific skillsets in the 3D modeling and texturing department specifically related to content suitable for immersive media applications.

FILM A240
3 Units (54 lecture hours; 18 lab hours)
Film Production 2
Prerequisite(s): FILM A110.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This course provides an introduction to the expanded theories, terminology, development of fictional storytelling structure, process of making and pre-producing materials for film and television. Topics include operation, function and creative uses of production and post production equipment, scriptwriting, cinematography, camera operation, shot composition, lighting, sound recording, mixing, editing, producing and directing. Lab.

FILM A253
3 Units (36 lecture hours; 72 lab hours)
Directing Theory
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course exposes students to the functions and responsibilities of a Director and Assistant Director. Students will further understand the process of reading a script, conceiving a vision, and communicating it to the cast and crew. Production hierarchy and responsibilities will also be covered in depth.

FILM A255
3 Units (36 lecture hours; 72 lab hours)
Television Production 2
Prerequisite(s): FILM A155.
Grading Mode: Standard Letter
Transfer Credit: CSU.

An advanced television studio production class emphasizing the role of the writer, producer and director. Students will produce programs designed for live and live to tape television formats in the Film/Video Department’s digital television studio, utilizing 16 x 9 widescreen cameras, switchers, lighting, and sound recording equipment. Each student will be assigned projects to produce and will experience all major functions of the production team.

FILM A258
2 Units (18 lecture hours; 54 lab hours)
Post production Finishing
Prerequisite(s): FILM A219.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course is designed to educate students on the last steps of the post production process to prepare the film for final distribution. Topics include finishing effects workflow, final color grading, working with a sound designer, output and distribution of multiple formats and media management.

FILM A260
2 Units (18 lecture hours; 54 lab hours)
Special Projects
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Assists students in developing specialized film/video related projects. Expanded focus in specific study areas enhancing knowledge and technical skills. Designed for advanced film/video majors. May be taken for grades or on a pass-no pass basis.

FILM A261
2 Units (18 lecture hours; 54 lab hours)
Television Studio Operations
Grading Mode: Standard Letter
Transfer Credit: CSU.

Participation in the production and technical support of special television programs for students interested in gaining further experience with television. Lecture/Lab/Arranged Lab.
FILM A262 Cinematography
3 Units (54 lecture hours)
Prerequisite(s): FILM A110.

Grading Mode: Standard Letter
Transfer Credit: CSU, UC.

This course is an exploration of cinematography through synergetic approach. The intent is to assist students in developing their moviemaking abilities generated by the current practice of the medium through advanced lighting techniques, camera movement, and concept development.

FILM A264 Editing 3
3 Units (36 lecture hours; 54 lab hours)
Prerequisite(s): FILM A194.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An advanced course in digital film and video editing techniques and styles using an industry standard editing interface. Covers the importing of editing material, compositing, effects, graphics, and exporting to a variety of sources. Designed for students interested in a career as a film/video editor.

FILM A265 Documentary Production
4 Units (54 lecture hours; 90 lab hours)
Prerequisite(s): FILM A110.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An advanced production class focused on the creation of field production and documentary storytelling. Topics include on-location video and field production, lighting, camera, sound and editing. Students will function as producers, directors, crew and editors. Projects will include equipment tests, a mini-documentary and a short documentary intended for use in portfolio.

FILM A270 Film Production 3
4.5 Units (54 lecture hours; 90 lab hours)
Prerequisite(s): FILM A240.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A production course in which traditional film based systems are compared against digital technologies. Topics include film vs. video, aspect ratios, formats, high definition cameras, post-production options, distribution and delivery systems. Students will produce a short digital movie after extensive pre-production and story development.

FILM A271 Portfolio Development
2 Units (18 lecture hours; 54 lab hours)
Grading Mode: Standard Letter
Transfer Credit: CSU.

Prepares students to enter the professional workforce. Aids in developing promotional material such as business card, letterhead, resume, website, show reel and other promotional material. Develop proper job search and interview methodology.

Food Service Management (FSM)

FSM A100 Introduction to the Hospitality Industry
3 Units (54 lecture hours)
Grading Mode: Standard Letter
Transfer Credit: CSU.

Overview of the hospitality industry. Same as Culinary Arts A100 and Hospitality, Travel & Tourism A100. Students completing Food Service Management A100 may not receive credit for Culinary Arts A100 or Hospitality, Travel & Tourism A100.

FSM A150 Principles of Quantity Food Preparation
4 Units (36 lecture hours; 108 lab hours)
Prerequisite(s): FSM A160 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

The fundamentals of food preparation, and application of these principles to quantity food production. Emphasis is placed on the use of quantity food preparation equipment, work simplification, and standardized production. Not required for Culinary Arts students. Hospitality dress standards and TB clearance required.

FSM A151 Food Production Management
2 Units (18 lecture hours; 63 lab hours)
Prerequisite(s): FSM A150; or all of the following; CA A120, CA A124, and CA A149.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Techniques and practice managing individuals responsible for producing food including supervision in planning, organizing, supervising, and controlling food production is discussed. Students will be required to follow hospitality department dress standards. TB clearance required.

FSM A160 Sanitation and Safety
3 Units (54 lecture hours)
Grading Mode: Standard Letter
Transfer Credit: CSU.

The basic principles of bacteriology, safety, equipment selection, and facility layout for food service operations. Includes cause and control of food-borne illnesses, cleaning materials and procedures, general safety regulations, food processing methods, first aid, and fire prevention. National food handler certification exam will be given. This course may also be offered online. C-ID: HOSP 110.

FSM A161 Basic Concepts in Sanitation
0.5 Units (10 lecture hours)
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

A short course in sanitation applied to the flow of food. The course is designed to meet current professional organization certification requirements and prepares the student for the national food handler certification examination (ServSafe). Offered on a pass-no pass basis only.
FSM A190  
Dining Room Service  
Prerequisite(s): FSM A160 or concurrent enrollment.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Orientation to all functions of restaurant dining room operations, including dishwashing, pot and pan washing, floor care, equipment maintenance, and line preparation techniques. Emphasis on dining room service techniques of table waiting and accompanying dining room skills. Students will be required to follow hospitality department dress standards. TB clearance required.

FSM A210  
Dining Room Management  
Prerequisite(s): FSM A190.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
How to manage and promote a profitable dining room. Emphasis on management activities of controlling and staffing a dining room. Students will be required to follow Hospitality Department Dress Code. TB clearance required.

FSM A240  
Food Service Math/Accounting  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Mathematical and accounting concepts applied to food service problems such as food costing, payroll computations, recipe adjusting, gross profit analysis, guest check mechanics, metric conversions, cost reports, financial statements, budgets, break-even analysis and general financial decision making problems.

FSM A250  
Menu Planning and Purchasing  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
The basic principles of menu planning and purchasing principles will include writing specifications for food and supplies and proper receiving/storage techniques, for restaurants and institutions. Emphasis on type of operation, psychological needs, available equipment, skill of the personnel, merchandising, menu pricing, and operating budget.

FSM A260  
Supervision and Training Techniques  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Developing personnel programs and desirable labor-management relations. Special emphasis placed on leadership skills of motivation, communication, and decision making. Same as Hotel Management A260. Students completing Food Service Management A260 may not receive credit for Hotel Management A260.

FSM A275  
Bar Management  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
How to manage a successful beverage operation. Entry level skills of preparing and serving beer, wine and spirits. Manage the bar for profitability to include cost controls, staffing, marketing, and regulations that affect operations.

FSM A280  
Catering  
Prerequisite(s): FSM A160 or concurrent enrollment.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
The theory and practice of managing a catering operation. Students will be required to follow hospitality department dress standards. TB clearance required.

FSM A285  
Restaurant Management  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
The principles of operating a food service facility. Characteristics unique to different segments are explored, including quick service, full service, and institutional operations. Management principles, marketing, financial management, site location, space allocations, legal considerations, and customer relations will be covered.

FSM A286  
Directed Practice in Food Service Management  
Prerequisite(s): FSM A283.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
A directed opportunity in food service or culinary arts to gain practical training. This directed practice is repeated for each option the student elects in order to earn a Certificate of Achievement in that option. Students will be required to follow dress standards and companies policies of conduct set by the facility in which they are working. TB clearance required.
Foods & Nutrition (FN)

**FN A100** 1 Unit (18 lecture hours; 9 lab hours)
CAREERS IN DIETETICS AND FOOD SCIENCE
Grading Mode: Standard Letter
Transfer Credit: CSU.

Exploration of the fields of Dietetics and Food Science/Culinology, including trends, future projections and employment opportunities. Guest speakers and field trips to nutrition services in health care and community agencies and food manufacturing plants are included. Same as Nutrition Care A100. Students completing Food and Nutrition A100 may not receive credit for Nutrition Care A100.

**FN A125** 1 Unit (9 lecture hours; 18 lab hours)
Vegetarian Nutrition
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Vegetarian diets are explored including information on healthy food choices, nutritional implications, and cooking techniques. Each class includes demonstrations and preparation of a wide variety of vegetarian foods. Vegetarian foods from different cultures are also included. May be taken for grades or on a pass-no pass basis.

**FN A136** 3 Units (54 lecture hours)
Nutrition, Fitness and Performance
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An applied nutrition course for individuals interested in health, fitness, and athletics. Principles of nutrition are studied and applied to the athlete and active individuals. Includes pre and post event food and fluid selection, nutrient requirements, supplements, muscle mass and body fat related to performance. Same as Health Education A136 and Kinesiology A283. Students completing Food and Nutrition A136 may not receive credit for Health Education A136 or Kinesiology A283. May be taken for grades or on a pass-no pass basis.

**FN A140** 2 Units (27 lecture hours; 27 lab hours)
Introduction to Nutrition Concepts
Grading Mode: Standard Letter
Transfer Credit: CSU

Practical approach to nutrition: includes basic nutrition, food product evaluation, menu modification, food and health issues, nutrition controversies, and food safety. Recommended for Culinary Arts and students wanting an overview of applied nutrition. This course may also be offered online.

**FN A144** 3 Units (54 lecture hours)
Life Cycle Nutrition
Advisory: FN A140 OR FN A170.
Grading Mode: Standard Letter
Transfer Credit: CSU.

An overview of nutrition for the mother during pregnancy and lactation (breast feeding). Nutritional recommendations for infants, including breast and/or bottle feeding and solid foods through the first year of life. Government assistance programs such as WIC will be explored.
FN A185 2 Units (27 lecture hours; 27 lab hours)
Cultural Foods
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Exploration of America's diverse micro-cultures through food including origins, customs, psychological acceptance and nutrition information. Emphasis is placed on food preparation techniques, utensils, food service, and creation of an authentic atmosphere. Meets AA Cultural Diversity Requirement. May be taken for grades or on a pass-no pass basis.

FN A195 4 Units (54 lecture hours; 72 lab hours)
Food Science
Grading Mode: Standard Letter
Transfer Credit: CSU.
Food science is the scientific study of raw food materials and their behavior during formulation, processing, packaging, storage, and includes evaluation as consumer food products. Meets the AS Laboratory Science requirement. Lecture/Lab.

FN A196 4 Units (54 lecture hours; 72 lab hours)
Food Science Quality Control
Prerequisite(s): FN A195.
Grading Mode: Standard Letter
Transfer Credit: CSU.
The purpose of this class is to prepare students to work in a Food Manufacturing Quality Control lab. Multiple Food Manufacturing Quality Control Principles will be examined. Each examined principle will have multiple lecture and lab components. Students will use real world Quality Control lab techniques to analyze products found in the market place and correlate that product to a homemade one.

FN A199 0.5 Units (9 lecture hours)
Current Issues in Food, Nutrition, and Food Science
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Study and review of current issues in the field of food, nutrition, food science, and dietetics, including a variety of topics, such as general nutrition, food research and technology, cook/chill, and nutrition related to health and disease, wellness, the life cycle, and fraud. May be taken for grades or on a pass-no pass basis.

FN A286 2 Units (6 lecture hours; 120-150 other hours)
Directed Practice for Culionology®/Food Science
Prerequisite(s): FN A195 and FSM A160.
Grading Mode: Standard Letter
Transfer Credit: CSU.
On-the-job training at approved institutional or commercial facilities working with a food scientist or culinologist in the development of new products or quality assurance. Students will be required to follow dress standards and company policies of conduct, set by the facility in which they are working. Ten hours paid, eight hours unpaid, plus six hours seminar.

French (FREN)

FREN A180 5 Units (90 lecture hours)
Elementary French 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
The focus is on development of elementary proficiency in listening, speaking, reading, and writing in French, with an introduction to cultures related to the French language. This course is equivalent to two years of high school French. May be taken for grades or on a pass-no pass basis.

FREN A180H 5 Units (90 lecture hours)
Elementary French 1 Honors
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
The focus is on development of elementary proficiency in listening, speaking, reading, and writing in French, with an introduction to cultures related to the French language. This course is equivalent to two years of high school French.

FREN A185 5 Units (90 lecture hours)
Elementary French 2
Prerequisite(s): FREN A180, FREN A180H, or completion of two years of high school French with a grade of 'C' or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Continuation of FREN A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the French language. This course is equivalent to three years of high school French. May be taken for grades or on a pass-no pass basis.

FREN A185H 5 Units (90 lecture hours)
Elementary French 2 Honors
Prerequisite(s): FREN A180, FREN A180H, or completion of two years of high school French with a grade of 'C' or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Continuation of FREN A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the French language. This course is equivalent to three years of high school French. May be taken for grades or on a pass-no pass basis.

FREN A190 3 Units (54 lecture hours)
Conversational French
Prerequisite(s): FREN A185 or FREN A185H or higher, or three years of high school French with a grade of 'C' or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Designed to develop the student's ability at any level to comprehend and communicate in French: reading, writing and cultural components are included. May be taken for grades or on a pass-no pass basis.
FREN A199 1-5 Units (18-90 lecture hours)
Current Topics in French
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Development of the French language skills: listening, speaking, reading and writing. Extensive exposure to the cultures related to the French language through authentic materials and group discussions on a variety of topics ranging from current events to global issues. Emphasis on cross-cultural understanding. May be taken for grades or on a pass-no pass basis.

FREN A280 4 Units (72 lecture hours)
Intermediate French 1
Prerequisite(s): FREN A185, FREN A185H, or three years of high school French with a grade of 'C' or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Continuation of FREN A185, with further development of language skills at the intermediate level and exploration of cultures related to the French language. Additional emphasis on reading and writing, with an introduction to selected literary works. May be taken for grades or on a pass-no pass basis.

GENDR A100 3 Units (54 lecture hours)
Introduction to Gender Studies
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
An interdisciplinary approach to understanding the role of gender in influencing experiences in society. Focus is on the role of gender in all levels of society and in all social institutions, including family, business, education, health, and religion. The perspective will be both historical and cross-cultural. C-ID: SOCI 140.

GENDR A130 3 Units (54 lecture hours)
Women, Politics, and Inequality
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
Perspectives on women and their participation in resisting and reproducing inequality in national and international contexts. Examines the gendered character of societal institutions and politics from the bedroom to the boardroom by focusing on gender, race, ethnicity, class, and sexuality in education, work, politics, the household, and activism.

GENDR A165 3 Units (54 lecture hours)
Men, Women, and Communication
Grading Mode: Standard Letter
Transfer Credit: CSU.
Major issues will be addressed regarding communication behaviors and communication conflicts between men and women of all gender orientations. Study will focus on problem analysis specific to gender self-awareness, gender conflict and how gender is communicated and constructed in our daily lives. Same as CMST A165. Students completing GENDR A165 may not receive credit for CMST A165.

GENDR A187 3 Units (54 lecture hours)
Women in History
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Provides a broad overview of the experiences of women in the history of the world from hunter-gatherer societies to the present. It examines how women's political, economic, social, and cultural experiences have been shaped by gender and affected by place, time, class, and race. Same as HIST A187. Students receiving credit for GENDR A187 may not receive credit for HIST A187.

Geography (GEOG)

GEOG A100 3 Units (54 lecture hours)
World Regional Geography
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
An introduction to the regions and nations of the world. The major countries, including their population, resources, general development, and physical setting will be investigated. C-ID: GEOG 125.

GEOG A100H 3 Units (54 lecture hours)
World Regional Geography Honors
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
An introduction to the regions and nations of the world. The major countries, including their population, resources, general development, and physical setting will be investigated. C-ID: GEOG 125.

GEOG A101 3 Units (40.5 lecture hours; 40.5 lab hours)
Regional Field Studies in Latin America
Grading Mode: Standard Letter
Transfer Credit: CSU.
Field studies of the geography of Latin America. Physical and cultural processes, characteristics and landscapes will be observed and analyzed. Specific content will vary by geographic region. Class will meet on campus prior to departure and following return. Students will spend three weeks in the Latin American country.
GEOG A102  4 Units (40.5 lecture hours; 40.5 lab hours)
Regional Field Studies in Europe
Grading Mode: Standard Letter
Transfer Credit: CSU.
Field studies of the geography of Europe. Physical and cultural processes, characteristics and landscapes will be observed and analyzed. Specific content will vary by geographic region. Student will be responsible for all travel costs.

GEOG A130  3 Units (54 lecture hours)
Introduction to Weather & Climate
Advisory: GEOG A180 OR GEOG A180H.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Introduction to the earth's atmosphere and processes. Topics include: atmospheric structure and composition, solar radiation, energy budget, temperature, seasonal changes, atmospheric moisture, clouds and fog, precipitation, circulation systems, air masses and fronts, weather forecasting, climate and climate change. Lecture. C-ID: GEOG 130.

GEOG A150  3 Units (54 lecture hours)
California Geography
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
A survey of California's physical and cultural environment and patterns. Topics will include physiography, vegetation, climate, resources, population, migration, ethnic diversity, economics, urbanization and current issues related to geographic factors. Field trips may be required. C-ID: GEOG 140.

GEOG A180  3 Units (54 lecture hours)
Physical Geography
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
A study of the basic physical elements of geography and their integrated patterns of world distribution. Particular emphasis is given to climate, land forms, soils, and natural vegetation. C-ID: GEOG 110.

GEOG A180L  1 Unit (54 lab hours)
Physical Geography Lab
Prerequisite(s): GEOG A180 or GEOG A180H or concurrent enrollment.
Advisory: MATH A010.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
This course is designed to provide supplemental exercises in topics covered in GEOG A180. Lab experience will include map analysis and interpretation, weather prognostication, landform processes and evolution, tectonics, biogeography, and habitat analysis. C-ID: GEOG 111.

GEOG A185  3 Units (54 lecture hours)
Cultural Geography
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
A study of the basic cultural elements of geography and their correlation with the physical elements. Particular emphasis is given to population distribution, land use patterns, and trade. C-ID: GEOG 120.

GEOG A190  3 Units (54 lecture hours)
Digital Mapping: Introduction to GIS
Advisory: CIS A100.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Provides a theoretical basis for understanding the use of Geographic Information Systems (GIS) in spatial analysis and decision making for a variety of applications. Learn fundamental concepts of cartographic presentation and the skills for working with spatial data, database design, data conversion, information retrieval and spatial analysis. Laboratory exercises provide students with applications from various fields including business, environmental, geography, geology, marketing and planning. C-ID: GEOG 155.

GEOG A197  2 Units (27 lecture hours; 27 lab hours)
Desert Field Studies in Geography
Grading Mode: Standard Letter
Transfer Credit: CSU.
Field studies of the geography of selected desert regions. Physical and cultural processes, characteristics and landscapes will be observed and analyzed. Specific content will vary by geographic region.

GEOG A198  2 Units (27 lecture hours; 27 lab hours)
Regional Field Studies in Geography
Grading Mode: Standard Letter
Transfer Credit: CSU.
Field studies of the geography of selected regions. Physical and cultural processes, characteristics and landscapes will be observed and analyzed. Specific content will vary by geographic region. C-ID: GEOG 160.
Geology (GEOL)

GEOL A101 4 Units (54 lecture hours; 54 lab hours)
Age of the Dinosaurs
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

The course focuses on the origin, evolution and extinction of dinosaurs with emphasis on paleobiology and paleoecology. Covers fundamentals of dinosaur anatomy and behavior, hot/cold-blooded debate, relationships to birds, diversity and exploits of dinosaur hunters. Extended field trip required. Intended for science and non-science majors.

GEOL A105 3 Units (54 lecture hours)
General Geology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Composition and structure of the earth and the processes which modify the crust and the surface and their effect on man. Not open to students who are taking or have successfully completed GEOL A110. One field trip required. May be taken for grades or on a pass-no pass basis. This course may also be offered online. C-ID: GEOL 100.

GEOL A105H 3 Units (54 lecture hours)
General Geology Honors
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Composition and structure of the earth and the processes which modify the crust and the surface and their effect on man. Not open to students who are taking or have successfully completed Geology A110. One field trip required during semester. May be taken for grades or on a pass-no pass basis.

GEOL A105L 1 Unit (54 lab hours)
General Geology Laboratory
Prerequisite(s): GEOL A105 or GEOL A105H or concurrent enrollment.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

A laboratory study of materials and processes in the earth. A beginning laboratory course for the non-science major. May be taken for grades or on a pass-no pass basis.

GEOL A105M 1 Unit (54 lab hours)
General Geology Laboratory Honors
Prerequisite(s): GEOL A105 or GEOL A105H or concurrent enrollment.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

A laboratory study of materials and processes in the earth. A beginning laboratory course for the non-science major. May be taken for grades or on a pass-no pass basis.

GEOL A106 4 Units (54 lecture hours; 54 lab hours)
Earth Science for Teachers
Grading Mode: Standard Letter
Transfer Credit: CSU.

A broad-based study of earth science, including geology, oceanography, meteorology, and solar system astronomy. Topics are aligned with the California State Science Standards for K-12 and will prepare future teachers to teach these subjects. C-ID: GEOL 121.

GEOL A110 4 Units (54 lecture hours; 54 lab hours)
Physical Geology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A study of materials and processes in the earth. A beginning course in physical geology for science and engineering majors and students desiring a science emphasis. One extended field trip required during the semester. May be taken for grades or on a pass-no pass basis. C-ID: GEOL 101.

GEOL A115 3 Units (54 lecture hours)
California Geology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

The study of a geologic showcase—California. The geologic framework of our state and its corresponding geologic provinces; geologic factors which have influenced California's human history. The intimate interrelationships of geology with our agriculture, transportation, construction, mining, oil and gas industry, recreation and public welfare. Field trip required. May be taken for grades or on a pass-no pass basis. C-ID: GEOL 200.

GEOL A131 3 Units (54 lecture hours)
Weather and Climate
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

A survey in meteorology, emphasizing atmospheric composition and variability as well as interactions between atmosphere, oceans and continents to produce our weather. Includes the terminology and tools that meteorologists employ to observe, study and predict storm systems, storm fronts, thunderstorms, tornadoes and wind-driven ocean waves. Current topics such as air pollution and climate change will also be addressed.

GEOL A132 2 Units (18 lecture hours; 54 lab hours)
Geologic Field Studies - Death Valley
Advisory: GEOL A105, GEOL A105H.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the Death Valley region. This course includes a multi-day field excursion to various locales of geological interest and may involve camping in primitive wilderness environments. Topics include the volcanic, tectonic and hydrologic history of the region. OR GEOL A110.
GEOL A133 4 Units (18 lecture hours; 162 lab hours)
Geologic Field Studies - Colorado Plateau
Advisory: GEOL A105 or GEOL A105H or GEOL A110.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the Colorado Plateau. This course includes a multi-day field excursion to study the geology of the Colorado Plateau region. Emphasis is on the stratigraphy, tectonic evolution and geologic history of the parks of the Southwest, including the Grand Canyon, Canyonlands, Arches, Capitol Reef, Bryce and Zion National Parks. 18 hours lecture, 18 hours scheduled lab, 144 hours field study lab.

GEOL A134 4 Units (18 lecture hours; 162 lab hours)
Geologic Field Studies - Cascade Range
Advisory: GEOL A105 or GEOL A105H or GEOL A110.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the Cascade Range of Northern California, Oregon and Washington. The course combines classroom and field studies of Pacific Northwest geology with an emphasis on the volcanic and geothermal features of Mt. Lassen, Mt. Shasta, Crater Lake, Medicine Lake and Lava Beds National Monument. This course includes a multi-day field excursion to various locales of geological interest and may involve camping in primitive wilderness environments. 18 hours lecture, 18 hours scheduled lab, 144 hours field study lab.

GEOL A135 3 Units (54 lecture hours)
Geology of the Natural Parks and Monuments
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Geology of national parks, seashores and monuments and its influence on land forms, climate and human history. Classes will vary each semester in order to develop particular skills in interpreting field problems and relationships unique to a given area. Approximate locations will be selected from one of four geologic provinces—The Mojave Desert, Basin and Range, Sierra Nevada, or Colorado Plateau. Field trip required. May be taken for grades or on a pass-no pass basis.

GEOL A136 1 Unit (9 lecture hours; 27 lab hours)
Geologic Field Studies - San Andreas Fault
Advisory: GEOL A105 OR GEOL A105H OR GEOL A110.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the San Andreas Fault Zone. This course includes a multi-day field excursion to various locales of geological interest and may involve camping in primitive wilderness environments.

GEOL A137 4 Units (54 lecture hours; 54 lab hours)
Introductory Field Geology
Prerequisite(s): GEOL A105 or GEOL A105H or GEOL A110.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Provides intensive field experience in application of field geology equipment, methods, techniques and maintenance procedures. Emphasizes a 'hands-on' approach to the interpretation of geologic data in the field. Includes use of Brunton compass and tape, aerial photos, global positioning system, and geographical mapping.

GEOL A138 2 Units (9 lecture hours; 81 lab hours)
Geologic Field Studies - Yosemite National Park
Advisory: GEOL A105 or GEOL A105H or GEOL A110.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the Sierra Nevada mountains with an emphasis on the geologic origin and evolution of Yosemite National Park, California. Introductory lectures complement direct field observations, field data collection, analyses and interpretation. This course includes a multi-day field excursion to various locales of geological interest and may involve camping in primitive wilderness environments. 9 hours lecture, 18 hours scheduled lab, 63 hours field study lab.

GEOL A139 2 Units (18 lecture hours; 54 lab hours)
Geologic Field Studies - Eastern Sierra Nevada
Advisory: GEOL A105 or GEOL A105H or GEOL A110.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the faults, volcanoes, glaciers, mining and tectonic history of the Eastern Sierra Nevada Mountains. This course includes a multi-day field excursion to various locales of geological interest and may involve camping in primitive wilderness environments. 18 hours lecture, 18 hours scheduled lab, 36 hours field study lab. May be taken for grades or on a pass/no-pass basis.

GEOL A141 2 Units (18 lecture hours; 54 lab hours)
Geologic Field Studies - Mojave Desert
Advisory: GEOL A105 or GEOL A105H or GEOL A110.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

The Mojave Desert is a major economic and recreational resource for southern California. Provides students an opportunity to learn about the geologic processes which have created and shaped the region. Studies the origin, evolution, and geology of the Mojave Desert and adjacent areas. 18 hours lecture, 18 hours scheduled lab, 36 hours field study lab. May be taken for grades or on a pass/no-pass basis.
GEOL A142 2.5 Units (9 lecture hours; 108 lab hours)
Geologic Field Studies - Hawaii Volcanology
Advisory: GEOL A105 or GEOL A105H or GEOL A110.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, structural, plutonic and volcanic features of the Hawaiian Islands with special emphasis on Kilauea volcano. Kilauea's long-documented eruptive history and easy accessibility make it a training ground for USGS volcanologists. Focuses on the history and features of the volcano and its interactions with the people that live on it. This course includes a multi-day field excursion to various locales of geological interest and may involve camping in primitive wilderness environments. 9 hours lecture, 18 hours scheduled lab, 90 hours field study lab. Course may be taken for grades or on a pass/no-pass basis.

GEOL A160 4 Units (54 lecture hours; 54 lab hours)
Environmental Geology
Prerequisite(s): ENGL A100 or concurrent enrollment.
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
The study of natural environments and the impact of humans on geologic systems and will focus on studies of environmental problems associated with soils, water resources and pollution, energy and mineral utilization, coastal erosion, natural geologic hazards, and global atmospheric changes. Principles of sound management of the geologic environment will be emphasized. C-ID: GEOL 131.

GEOL A165 3 Units (54 lecture hours)
Natural Disasters
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
This course explores those natural disasters that affect human activities. Topics include earthquakes, floods, landslides, volcanoes, hurricanes, tornados, and asteroid/meteor impacts. The consequences of pollution and population growth will also be explored. Hypothetical and case histories of natural disasters will also be studied. Class discussion will focus on aspects of regional planning, environmental laws and the interaction between science and society.

GEOL A185 3 Units (54 lecture hours)
Evolution of the Earth
Advisory: GEOL A105 OR GEOL A105H or GEOL A110.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Geologic evolution of the earth as shown by the changing patterns of land and sea, and by the succession of fauna and flora. A second course in geology for science majors. May be taken for grades or on a pass-no pass basis. C-ID: GEOL 110.

GEOL A185H 3 Units (54 lecture hours)
Evolution of the Earth Honors
Advisory: GEOL A105 or GEOL A105H or GEOL A110.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Geologic evolution of the earth as shown by the changing patterns of land and sea, and by the succession of fauna and flora. A second course in geology for science majors. May be taken for grades or on a pass-no pass basis. C-ID: GEOL 110.

GEOL A185L 1 Unit (54 lab hours)
Evolution of the Earth Lab
Prerequisite(s): GEOL A165 or GEOL A185H or concurrent enrollment.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Laboratory and field exercises to learn how the geologic history of the earth may be determined. Extended weekend field trip required. May be taken for grades or on a pass-no pass basis.

GEOL A185M 1 Unit (54 lab hours)
Evolution of the Earth Lab Honors
Prerequisite(s): GEOL A185 or GEOL A185H or concurrent enrollment.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Laboratory and field exercises to learn how the geologic history of the earth may be determined. Extended weekend field trip required. May be taken for grades or on a pass-no pass basis.

GEOL A280 4 Units (54 lecture hours; 54 lab hours)
Introduction to Mineralogy
Advisory: CHEM A110 or CHEM A130.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Introduction to basic concepts of mineralogy, crystallography, crystal and mineral chemistry, beginning optics, paragenesis of economic minerals, and plate tectonics of mineral resources. May be taken for grades or on a pass-no pass basis.

GEOL A285 4 Units (54 lecture hours; 54 lab hours)
Petrology
Prerequisite(s): GEOL A280.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Origin, occurrence, identification, and classification of rocks and rock-forming minerals. Emphasis on hand lens/microscopic identification and field occurrences.
### German (GRMN)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units (Lecture Hours)</th>
<th>Title</th>
<th>Prerequisite(s)</th>
<th>Grading Mode</th>
<th>Transfer Credit</th>
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<tbody>
<tr>
<td>GRMN A180</td>
<td>5 (90)</td>
<td>Elementary German 1</td>
<td></td>
<td>Standard Letter, Pass/No Pass</td>
<td>CSU; UC.</td>
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<td></td>
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<td>The focus is on development of elementary proficiency in listening, speaking, reading, and writing in German, with an introduction to cultures related to the German language. This course is equivalent to two years of high school German. May be taken for grades or on a pass-no pass basis.</td>
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<tr>
<td>GRMN A185</td>
<td>5 (90)</td>
<td>Elementary German 2</td>
<td>GRMN A180 or completion of two years of high school German with a grade of 'C' or better.</td>
<td>Standard Letter, Pass/No Pass</td>
<td>CSU; UC.</td>
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<td>Continuation of GRMN A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the German language. This course is equivalent to three years of high school German. May be taken for grades or on a pass-no pass basis.</td>
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<tr>
<td>GRMN A280</td>
<td>4 (72)</td>
<td>Intermediate German 1</td>
<td>GRMN A185.</td>
<td>Standard Letter, Pass/No Pass</td>
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<td>Continuation of GRMN A185, with further development of language skills at the intermediate level and exploration of cultures related to the German language. Additional emphasis on reading and writing, with an introduction to selected literary works. May be taken for grades or on a pass-no pass basis.</td>
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<td>Continuation of GRMN A280, with further refinement of language skills at the intermediate level and investigation of cultures related to the German language in preparation for higher level specialized work. May be taken for grades or on a pass-no pass basis.</td>
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### Global Studies (GLST)

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<tr>
<th>Course Code</th>
<th>Units (Lecture Hours)</th>
<th>Title</th>
<th>Prerequisite(s)</th>
<th>Grading Mode</th>
<th>Transfer Credit</th>
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</thead>
<tbody>
<tr>
<td>GLST A101</td>
<td>3 (54)</td>
<td>Introduction to Global Studies</td>
<td></td>
<td>Standard Letter</td>
<td>CSU; UC.</td>
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<td>Advisory: ENGL A100.</td>
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<td>An introduction to the interdisciplinary study of the global community and the complex forces that shape it. Explores globalization by examining its economic, political, cultural, and environmental effects.</td>
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<tr>
<td>GLST A102</td>
<td>3 (54)</td>
<td>Introduction to Global Issues</td>
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<td>Standard Letter</td>
<td>CSU; UC.</td>
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<td>Advisory: ENGL A100.</td>
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<td>An introduction to the issues and problems confronting the global community, including global population trends, economic development and global inequality, basic human needs and human rights, international conflict and security, and environmental problems with an emphasis on global governance and transnational solutions. C-ID: GLST 102.</td>
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### Health Education (HLED)

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<tr>
<th>Course Code</th>
<th>Units (Lecture Hours)</th>
<th>Title</th>
<th>Prerequisite(s)</th>
<th>Grading Mode</th>
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<tbody>
<tr>
<td>HLED A100</td>
<td>3 (54)</td>
<td>Personal Health Education</td>
<td>ENGL A099 or equivalent.</td>
<td>Standard Letter, Pass/No Pass</td>
<td>CSU; UC.</td>
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<td>This course focuses on the exploration of major health issues and behaviors in the various dimensions of health. Emphasis is on positive health behaviors and personal responsibility. Topics include mental health, stress, drugs, alcohol, smoking, exercise, nutrition, weight control, chronic and infectious diseases, sexuality, consumer health, violence, aging and environmental health. This course may also be offered online. May be taken for grades or on a pass-no pass basis. Lecture. C-ID: PHS 100.</td>
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HLED A122
Drugs, Health and Society
3 Units (54 lecture hours)
Advisory: ENGL A099 or equivalent.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Examination of the use, misuse and abuse of drugs, both licit and illicit, in American society and the pharmacologic, neurologic and physiologic effects of selected substances on the human brain. Includes psychosocial, legal, historical, political, social, economic and health related aspects; drug dependency, treatment, rehabilitation, and prevention education. Focuses on the impact of psychoactive drugs on the individual and society, including the epidemiology and toxicology of substance abuse and its relevance to personal and public health. Epidemiologic data on the prevalence, incidence, and trends of smoking, alcohol, prescription and other drug dependencies in the U.S. will be covered, as well as risk factors associated with the use and abuse of these substances. Current options for recovery and a survey of local resources will be reviewed. May be taken for grades or on a pass-no pass basis. This course may also be offered online. Lecture. C-ID: PHS 103.

HLED A160
Peer Health Education - Level 1
2 Units (18 lecture hours; 72 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
This course prepares students to serve as a member of the Peer Health Action Team (PHAcT) at OCC. Topics covered include strategies for behavior change, referrals, programming, presentation and group success. Students will be certified as Peer Health Educators through BACCHUS national certification exam. 36 hours in classroom; 54 hours arranged.

HLED A220
Concepts in Public Health
3 Units (54 lecture hours)
Advisory: ENGL A099 or equivalent.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
The factors that influence health and disease from a population based perspective, with focus on basic concepts and terminologies of public health and the history and accomplishments of public health officials and agencies. An overview of the functions of various public health professions and institutions, and an in-depth examination of the core public health disciplines is covered. Topics will include: history; health promotion; determinants of health and burden of disease; legal and ethical issues; epidemiology of communicable and non-communicable disease; environmental health; community organizing and health promotion programming; environmental health and safety; global health; and healthcare policy and management. and career opportunities in public health. May be taken for grades or on a pass-no pass basis. Lecture. C-ID: PHS 101.

HLED A260
Peer Health Education - Level 2
2 Units (18 lecture hours; 72 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU
Second semester course for students who have complete HLED A160 and have been certified as peer health educators by BACCHUS. Students will continue their development of skills related to health promotion program planning and implementation. Emphasis will be on leadership and organizational skills, bystander intervention and health topic content, i.e., alcohol, sleep, nutrition, exercise, etc. Students will serve as members of the Peer Health Action Team (PHAcT) at OCC. 36 hours in the classroom; 54 hours arranged.

HLED A270
Fitness and Health
3 Units (54 lecture hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Theory and benefits of physical activity to fitness-related health. The study of human adaptation to exercise includes cardiovascular conditioning, neuromuscular training, body composition, nutrition for performance, stretching, sports injuries, and aging. Same as Kinesiology A270. Students completing Health Education A270 may not receive credit for Kinesiology A270. May be taken for grades or on a pass-no pass basis.

Heating & Air Conditioning (HVAC)

HVAC A100
Air Conditioning and Refrigeration Principles
3 Units (45 lecture hours; 36 lab hours)
Grading Mode: Standard Letter
Transfer Credit: CSU.
Course covers heat principles, heat loads, refrigeration cycle, system components, refrigerant properties, system operation, soldering and oxy-acetylene brazing.

HVAC A101
Basic Electrical for HVAC-R
3 Units (45 lecture hours; 36 lab hours)
Grading Mode: Standard Letter
Transfer Credit: CSU.
Basic electrical theory & application. Students will build a variety of series and parallel circuits using switches, contactors, relays, thermostats, transformers and other controls used in the HVAC-R field in addition to using miscellaneous electrical components.
HVAC A103 3 Units (45 lecture hours; 36 lab hours)
Air Conditioning Service
Prerequisite(s): HVAC A100 and HVAC A101.

Advisory: HVAC A105.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Operation, maintenance, diagnosis and repair of air conditioning systems and their components for proper function.

HVAC A104 3 Units (45 lecture hours; 36 lab hours)
Air Balance
Prerequisite(s): HVAC A100 and HVAC A101.

Advisory: HVAC A103 and HVAC A105.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Operation and maintenance of air conditioning and heating ducts and their controls; various methods of distribution and the means to deliver proper airflow.

HVAC A105 3 Units (45 lecture hours; 36 lab hours)
Air Conditioning and Refrigeration Controls
Prerequisite(s): HVAC A100 and HVAC A101.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Controls used in the Heating, Air Conditioning and Refrigeration that include temperature, pressure, overload and safety controls. This course may be taken two times.

HVAC A106 3 Units (45 lecture hours; 36 lab hours)
Non-Residential Applications for HVAC
Prerequisite(s): HVAC A100 and HVAC A101.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Fundamentals of operation, maintenance, and trouble shooting of non-residential equipment and systems. Topics include but are not limited to chillers, centrifugal, reciprocal, absorption, and other current systems.

HVAC A110 3 Units (45 lecture hours; 36 lab hours)
Pneumatic Controls
Prerequisite(s): HVAC A100 and HVAC A101.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Students will operate, maintain, diagnose and repair basic pneumatic controls from installation to service requirements. May be taken for grades or on a pass-no pass basis.

HVAC A111 3 Units (45 lecture hours; 36 lab hours)
Ice Machine Service & Repair
Prerequisite(s): HVAC A100 and HVAC A101.

Advisory: HVAC A102.

Grading Mode: Standard Letter
Transfer Credit: CSU.

The operation, diagnostics, repair, and service of current ice machines. Course to include hands-on training with tools of the trade, i.e., gauges, electrical meters and all hand tools used for service and repair.

HVAC A140 3 Units (45 lecture hours; 36 lab hours)
Building Automation
Prerequisite(s): HVAC A100 and HVAC A101.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Fundamental applications and design of building automation systems for HVACR.

History (HIST)

HIST A101 3 Units (54 lecture hours)
Afro-American History
Prerequisite(s): HVAC A100 and HVAC A101.

Advisory: HVAC A102.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Political, legal, economic and social themes of blacks in the United States. Emphasis is given to the Afro-American experience from African origins, through slavery, into the 20th Century. May be taken for grades or on a pass-no pass basis.

HIST A140 3 Units (54 lecture hours)
The California Experience
Prerequisite(s): HVAC A100 and HVAC A101.

Advisory: HVAC A102.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

This introductory course surveys the uniqueness of the California experience. It explains the state’s history with emphasis on the Indians, Spanish missions, Mexican ranchos, Gold Rush, transcontinental railroads, global population, colorful figures, 20th century contributions to atomic and space developments, and multinational corporations. Recommended for elementary education majors. May be taken for grades or on a pass-no pass basis.

HIST A141 3 Units (54 lecture hours)
History of the Americas 1
Prerequisite(s): HVAC A100 and HVAC A101.

Advisory: HVAC A102.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course is a comprehensive survey of Latin America, the United States, and Canada from the development of its earliest human communities; the subsequent encounters with European civilizations, the formation of colonial empires, and the emergence of independent nations through 1850. May be taken for grades or on a pass-no pass basis.
HIST A142 3 Units (54 lecture hours)
History of the Americas 2
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course presents a comprehensive survey of the distinct national identities of Latin America, the United States, and Canada as they developed and matured during the nineteenth and twentieth centuries. The course focuses on a comparative analysis of North and South America. May be taken for grades or on a pass-no pass basis.

HIST A145 3 Units (54 lecture hours)
History of Mexico
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Mexican history from the Pre-Colombian period to the present. Social, political, economic, and cultural growth of the Mexican nation. Emphasis on Indian, Spanish, and European contributions. May be taken for grades or on a pass-no pass basis.

HIST A150 3 Units (54 lecture hours)
Ethnic Groups of the United States: Their Histories
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A survey of the history of the many (40+) ethnic groups originating in Europe, Asia (including the American Indian), the Americas, the Pacific Islands, Africa, and the Middle East, that make up the population of the United States. Same as Ethnic Studies A150. Students who enroll in History A150 may not receive credit for Ethnic Studies A150. May be taken for grades or on a pass-no pass basis.

HIST A151 3 Units (54 lecture hours)
History of the Middle East to 1500
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU

A survey of political, social, economic, and cultural history of the Middle East from the Bronze Age through the rise of the Ottoman Empire. Emphasis is placed on the contributions of Near Eastern and Classical civilizations - Mesopotamia, Egypt, Persia, Israel, Greece, and Rome - to the development of the Islamic world, and the expansion of Islam and its interaction with the pre-Islamic Middle Eastern societies and the world until 1500 CE.

HIST A152 3 Units (54 lecture hours)
History of the Middle East Since 1500
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A survey of the political, social, economic, and cultural history of the Middle East from 1500 CE to the present. Emphasis is placed on the development and decline of the Ottoman and Safavid Empires, the impact of European imperialism and modernity, the rise of nationalism and creation of nation-states, the Arab-Israeli conflicts, and Islamic revivalist movements.

HIST A161 3 Units (54 lecture hours)
World History 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

The history of world civilizations from the earliest beginnings to the 17th century, giving a general outline of political, social, economic, and cultural institutions. May be taken for grades or on a pass-no pass basis. C-ID: HIST 150.

HIST A161H 3 Units (54 lecture hours)
World History 1 Honors
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

The history of world civilizations from the earliest beginnings to the 17th Century, giving a general outline of political, social, economic, and cultural institutions. May be taken for grades or on a pass-no pass basis. C-ID: HIST 150.

HIST A162 3 Units (54 lecture hours)
World History 2
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

The history of world civilizations since the 17th century, giving a general outline of political, social, economic, and cultural institutions. May be taken for grades or on a pass-no pass basis. C-ID: HIST 160.

HIST A162H 3 Units (54 lecture hours)
World History 2 Honors
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

The history of world civilizations since the 17th Century, giving a general outline of political, social, economic, and cultural institutions. May be taken for grades or on a pass-no pass basis. C-ID: HIST 160.

HIST A170 3 Units (54 lecture hours)
History of the United States to 1876
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A survey of American historical development from the founding of the English colonies to 1876. Emphasis is placed on the evolution of the nation's political and economic institutions, social and intellectual history, and foreign policy. Satisfies the state college requirement in American History. This course may also be offered online. May be taken for grades or on a pass-no pass basis. C-ID: HIST 130.

HIST A170H 3 Units (54 lecture hours)
History of the United States to 1876 Honors
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A survey of American historical development from the founding of the English colonies to 1876. Emphasis is placed on the evolution of the nation's political and economic institutions, social and intellectual history, and foreign policy. May be taken for grades or on a pass-no pass basis. C-ID: HIST 130.
HIST A175
History of the United States Since 1876
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A continuation of the survey of American history development since 1876. Satisfies the state college requirement of American History. May be taken for grades or on a pass-no pass basis. C-ID: HIST 140.

HIST A175H
History of the United States Since 1876 Honors
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A continuation of the survey of American history development since 1876. May be taken for grades or on a pass-no pass basis. C-ID: HIST 140.

HIST A176
Women in U.S. History
Grading Mode: Standard Letter, Pass/No Pass
A survey of the history of women in the United States from the pre-contact period to the present, emphasizing significant events, individuals, and movements that have contributed to the nation's development and women's changing roles. The course investigates how factors like geographic location, class, ethnicity, race, industrialization, sexual orientation, and notions of family have affected the lives of American women. Transfer Status: CSU, UC.

HIST A180
Western Civilization 1
Grading Mode: Standard Letter, Pass/No Pass
The development of present day Western culture from the earliest beginnings to 1715, giving a general outline of the development of social, economic, political, and cultural institutions that have had a major impact upon our civilization. May be taken for grades or on a pass-no pass basis. C-ID: HIST 170.

HIST A180H
Western Civilization 1 Honors
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

The development of present day Western culture from the earliest beginnings to 1715, giving a general outline of the development of social, economic, political, and cultural institutions that have had a major impact upon our civilization. May be taken for grades or on a pass-no pass basis. C-ID: HIST 170.

HIST A185
Western Civilization 2
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A study of Western culture from 1715 to the present with particular emphasis on the persons, ideas, movements, and institutions which help to interpret our present day civilization. May be taken for grades or on a pass-no pass basis. C-ID: HIST 180.

HIST A185H
Western Civilization 2 Honors
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A study of Western culture from 1715 to the present with particular emphasis on the persons, ideas, movements, and institutions which help to interpret our present day civilization. May be taken for grades or on a pass-no pass basis. C-ID: HIST 180.

HIST A187
Women in History
Grading Mode: Standard Letter
Provides a broad overview of the experiences of women in the history of the world from hunter-gatherer societies to the present. It examines how women's political, economic, social, and cultural experiences have been shaped by gender and affected by place, time, class, and race. Same as Gender Studies A187. Students receiving credit for History A187 may not receive credit for Gender Studies A187.

HIST A195
History of England and Greater Britain
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Survey of British history with an emphasis on the development of Anglo-American institutions. May be taken for grades or on a pass-no pass basis.

HIST A198
The World at War
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Political, military, diplomatic, economic, social, and cultural developments of World War II. Emphasis on the role of the United States. May be taken for grades or on a pass-no pass basis.

Horticulture (HORT)

HORT A100
Horticulture Science
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

The science and culture of plants upon which man's very existence depends. The principles and practices used to grow plants for food and environmental enhancement will be emphasized. May be taken for grades or on a pass-no pass basis.

HORT A101
Current Topics in Horticulture
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Current issues in the field of Ornamental Horticulture. May be taken for grades or on a pass-no pass basis. Formerly Ornamental Horticulture A101.
HORT A105  Botany for Gardeners  3 Units (54 lecture hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

The world of garden plants, their structure, form and how they function. A course for the plant professional and plant enthusiasts. May be taken for grades or on a pass-no pass basis.

HORT A109  Knowing Your Soils  3 Units (54 lecture hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A nontechnical study of the fundamental concepts of soil science. Methods of investigations for the managements of soils and soil substitutes. May be taken for grades or on a pass-no pass basis.

HORT A111  Landscape Drafting Techniques  1 Unit (9 lecture hours; 18 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Basic landscape drafting practices, lettering, line work, symbols, sheet composition and dimensioning. May be taken for grades or on a pass-no pass basis.

HORT A115  Landscape Graphics  3 Units (18 lecture hours; 108 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course begins exploring drawing techniques necessary to perform tasks related to communicating design concepts in landscape design. The emphasis is on easy, time-saving techniques that build from understanding perspective to rapid sketching skills. Field sketching is also a vital communication skill in environmental design, as it enables designers to quickly record ideas whether simply for their own use, or to share with a client to gather early feedback on usability, form, and aesthetic. Using both indoor and outdoor venues around the campus, students will learn to communicate their thoughts visually and integrate their sketching into the design process.

HORT A116  Digital Design  3 Units (18 lecture hours; 108 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course provides an introduction to digital techniques while explaining the processes associated with describing and designing the landscape. In addition, this course guides the student through from their first impression of a site, through concept and schematic design and presentation to construction and site drawings, concluding with a case study that shows the final result. The designer needs to know about digital tools and use them at the various stages of a concept development. In the journey from concept to realization, it is important to have the right tools and methods of representation and use them in an intelligent and skillful way.

HORT A150  Landscape Maintenance  3 Units (54 lecture hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Maintenance of residential and small commercial landscapes to include: small tree and shrub trimming, all aspects of lawn care, soil amending, fertilizing, sprinkler adjustments, watering, pest inspections, and scheduling. May be taken for grades or on a pass-no pass basis.

HORT A151  Introduction to Tree Care  2 Units (36 lecture hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An introduction to the many aspects of tree care. May be taken for grades or on a pass-no pass basis.

HORT A170  Pest Control Applicators and Gardeners P.C.O. Certification  1 Unit (18 lecture hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Preparation for California Certification Exam as Pesticide Applicator and Gardeners Maintenance Pest Control Operators. Emphasis on safe use of pesticides, alternative pest management. Ornamental, turf grass, industrial, right-of-way and seed treatment control. May be taken for grades or on a pass-no pass basis.

HORT A181  Ornamental Trees  3 Units (36 lecture hours; 54 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Identification, habits of growth, culture, propagation, and use of ornamental trees in landscape design for Southern California. May be taken for grades or on a pass-no pass basis.

HORT A182  Ornamental Shrubs  3 Units (36 lecture hours; 54 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Habits of growth, culture, propagation, and use in landscape design for Southern California. Identification will be emphasized. May be taken for grades or on a pass-no pass basis.

HORT A183  Plant Propagation  3 Units (36 lecture hours; 54 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Principles and practice of propagation of horticultural plants. Propagation from seed, cuttings, layering, and grafting. May be taken for grades or on a pass-no pass basis.
HORT A184 3 Units (36 lecture hours; 54 lab hours)
Greenhouse and Nursery Science
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A survey of the nursery industry. Nursery structures and equipment, construction, operation and use in the production of commercial crops. Cultural aspects of crop production. May be taken for grades or on a pass/no pass basis.

HORT A188 1.5 Units (27 lecture hours)
Plant Diseases
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Common diseases of plants, emphasis on ornamentals grown in Southern California. Their symptoms and control of salinity, air pollutants, fungi, bacteria, virus, nematodes and other causal agents of plant diseases. May be taken for grades or on a pass-no pass basis.

HORT A186 1.5 Units (18 lecture hours; 27 lab hours)
Pests of Ornamentals
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Common mite, insect, and other animal pests of ornamental plants and common weeds of Southern California are described and identified and ways to prevent and treat infestations are discussed. May be taken for grades or on a pass-no pass basis.

HORT A187 2 Units (36 lecture hours)
Interior Plantscaping
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Identification, selection, installation, care and maintenance of plants for interior situations. May be taken for grades or on a pass-no pass basis.

HORT A189 1.5 Units (18 lecture hours; 27 lab hours)
Weeds and Their Control
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Recognition of landscape control of weeds in the landscape and in nurseries with emphasis on practical applications. May be taken for grades or on a pass-no-pass basis.

HORT A190 2 Units (36 lecture hours)
California Friendly Landscape
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Developing new and retrofitting existing landscapes with California friendly plant material. May be taken for grades or on a pass-no pass basis.

HORT A191 1.5 Units (27 lecture hours)
Cacti and Succulents
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

How to use the plants from the deserts of the world in the Southern California landscape. Identification, growth habits, culture, propagation, design considerations, and conservation. May be taken for grades or on a pass-no pass basis.

HORT A192 1 Unit (18 lecture hours)
Urban Container Planting
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Container gardening knowledge is in high demand, particularly in urban settings. Container gardening requires specialized knowledge to achieve quality results. Learn the basics for planting and maintaining a healthy outdoor and indoor container garden: materials and styles of containers, customized potting mixes, fertilization, pests and watering requirements.

HORT A200 3 Units (54 lecture hours)
Chronicles of Garden Design through the Ages
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This introduction course is a historical survey of the development of designed landscapes from ancient times through the 21st century. The course will emphasize the cultural, social, and economic contexts that have shaped and informed historic landscapes, broadly defined, and the influence of environmental concerns, horticultural techniques, and technological innovations.

HORT A230 2 Units (36 lecture hours)
Calculations for Horticulture and Landscape Professionals
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An applied calculations course geared for Landscape, Horticulture and Construction students. This course is necessary to effectively, safely, and economically manage a Landscape Construction operation. Examples of what a student will learn: determining area and volume, application of fertilizers, pesticides, and growth regulators, preparing design and installation cost estimates. Students will develop confidence when they perform the common mathematical tasks required of green industry professionals.

HORT A231 2 Units (36 lecture hours)
Business of Landscape Design and Construction
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course examines aspects of landscape design and construction practice for professional services, the legal and financial contexts in which it operates, and the documentation and delivery of projects. This course introduces students to the legal and contractual issues, technical specification, financial, project management, starting and managing a business and preparing for the C-27 licensing.
HORT A283  2 Units (36 lecture hours)
Therapeutic Gardens: Design for Healing Spaces
Grading Mode: Standard Letter
This course will introduce and broadly explore how Therapeutic Gardens and the field of Horticultural Therapy incorporates the use of plants and gardening activities to promote health and wellness for people of many ages, backgrounds, and abilities. Topics will include people/plant relationship theories, horticultural therapy as a specialized field, Therapeutic Gardens and their use, and the societal impacts of Horticultural Therapy and research that supports it. Transfer Status: CSU.

HORT A284  1.5 Units (9 lecture hours; 54 lab hours)
Portfolio Development
Grading Mode: Standard Letter, Pass/No Pass
This course provides the strategy, skills, and techniques necessary for constructing a professional portfolio and provides students with an opportunity to understand the full potential of the portfolio within the profession.

HORT A285  3 Units (36 lecture hours; 54 lab hours)
Introduction to Landscape Design
Advisory: HORT A111 or concurrent enrollment.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Landscape design, circulation, form, materials, scale. Preparation of landscape design plans. May be taken for grades or on a pass-no pass basis.

HORT A286  2 Units (36 lecture hours)
Landscape Design Elements
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Design of basic garden elements (i.e. walls, arbors, pools, steps, fences). Reviews construction materials and their inherent qualities. Preparation of construction drawings. May be taken for grades or on a pass-no pass basis.

HORT A287  2 Units (36 lecture hours)
Planting Design
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Design and preparation of landscape planting plans. Emphasis on ecological and aesthetic considerations. May be taken for grades or on a pass-no pass basis.

HORT A288  2 Units (36 lecture hours)
Sprinkler Irrigation Systems Design
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
How to design irrigation sprinkler systems for small areas, such as residential properties and small industrial sites. May be taken for grades or on a pass-no pass basis.

HORT A289  1 Unit (9 lecture hours; 18 lab hours)
Installation of Residential Irrigation Systems
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
A hands-on experience with the installation of a residential irrigation system to include: materials lists, layout, trenching, gluing and fitting lines, sprinklers and nozzles, valve manifolds, and clocks. Emphasis on planning, layout, and time saving practical methods. To include one Saturday installation. May be taken for grades or on a pass-no pass basis.

HORT A290  1.5 Units (27 lecture hours)
Low-Voltage Landscape Lighting
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
An interactive, hands-on LED landscape lighting course for those seeking to increase their knowledge and installation of low-voltage (12 volt) LED landscape lighting. This course provides detailed instruction and hands-on training across a range of topics to sharpen your skills and become proficient in this field. The design and installation of an actual LED lighting system including best practices for how to layout the lighting design and an explanation of fixture placement.

HORT A296  3 Units (54 lecture hours)
Grading and Drainage for Landscape Design
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course covers the basic grading and drainage techniques used in every landscape architecture project. Students learn the skills necessary to grade a site of moderate complexity while considering public health, safety, and welfare. Includes the design and installation of drainage elements per site requirements. Introduces tools and methods for grading landscape sites based on design documents and field measurements. Basic grading formulas and cut and fill calculations are presented.

HORT A297  2 Units (36 lecture hours)
Garden Pools, Fountains and Waterfalls in the Landscape
Grading Mode: Standard Letter, Pass/No Pass
Design and installation of landscape water features including ponds, garden streams, fountains and container water gardens. Students learn current construction techniques through an on-site installation.

Hospitality, Travel & Tourism (HTT)

HTT A100  3 Units (54 lecture hours)
Intro Hospitality Indus
Grading Mode: Standard Letter
Overview of the hospitality industry. Same as Culinary Arts A100 and Food Service Management A100. Students completing Hospitality, Travel & Tourism A100 may not receive credit for Culinary Arts A100 or Food Service Management A100. Transfer credit: CSU.
This course presents students with service learning opportunities where they practice the conceptual theories of their course work. Students develop public contact and service skills as they host campus, community, civic, and travel related events. Students improve their social, professional demeanor and critical thinking skills considered essential in the airline, hotel, travel and tourism industries. This course may also be offered online.

HTT A118  3 Units (54 lecture hours)
Hospitality Accounting
Grading Mode: Standard Letter
This course provides a basis for understanding hospitality accounting concepts and procedures, the processing of hospitality financial data, and the flow of financial information in the accounting cycle resulting in the production of financial statements. This course is certified through the American Hotel & Lodging Association. Transfer credit: CSU.

HTT A120  3 Units (54 lecture hours)
Housekeeping/Prop Oper
Grading Mode: Standard Letter
Examines the technical functions and coordination between hotel housekeeping and maintenance departments. The fundamentals of management are emphasized through proper communication, training, detailed work methods, and quality assurance techniques. This course is certified through the American Hotel & Lodging Association. Transfer credit: CSU.

HTT A125  3 Units (54 lecture hours)
Destination the Americas
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course provides information for maximizing the travel experience to include regional accents, dialects, culture, shopping, historical and recreational tourist destinations for Canada, Mexico, Caribbean, Central, South, and Northern America. This course may also be offered online.

HTT A127  3 Units (54 lecture hours)
Destination Eastern Europe
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Provides the traveler and industry employee with information for maximizing the travel experience to include regional accents and dialects, shopping, historical and recreational tourist destinations, and regional culture and cultural diversity for Russia and Baltic countries, Czech Republic, Slovakia, Hungary, Poland, former Yugoslavia Countries, Romania, and Albania. This course may also be offered online.

HTT A128  3 Units (54 lecture hours)
Destination Africa/Pacific
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course provides information for maximizing the travel experience to include regional accents, dialects, culture, shopping, historical and recreational tourist destinations, for Africa, the Middle East, Asia, and the Pacific Islands. This course may also be offered online.
This course is an introduction to APOLLO, the computer reservations system used by United Airlines and one of the two major systems used by travel consultants. Students will learn how to build PNR’s (passenger name records), quote fares, and calculate prices through hands-on applications on computers. This course may also be offered online.

**HTT A130**  
**Cultural Tourism**  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU

This course examines the implications of cultural tourism in the United States and the world. The course will consider the struggle of people to preserve their cultural identity relative to the role of the U.S. tourism industry in protecting cultural heritage. The course studies the complexities of policy making in cultural tourism and world travel. Curriculum includes: values, historical beliefs and religion, plus cultural etiquette including social practices, gestures, body language, eating and drinking practices, and business behavior. This course may also be offered online.

**HTT A131**  
**Computer Reservation Systems - SABRE**  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU

This course is an introduction to SABRE, the computer reservations system used by American Airlines and one of the two major systems used by travel consultants. Students will learn how to build PNR’s (passenger name records), quote fares, and calculate prices through hands-on applications on computers. This course may also be offered online. Transfer credit: CSU.

**HTT A132**  
**Cultural Awareness**  
**Grading Mode:** Standard Letter  
**Advisory:** ENGL A099.

This course will provide the student with awareness and insight into the cultures of the world. Curriculum includes: values, historical beliefs and religion, plus cultural etiquette including social practices, gestures, body language, eating and drinking practices, and business behavior.

**HTT A133**  
**Success Strategies**  
**Advisory:** ENGL A099.

Career readiness and workplace development are important to be competitive and successful in the workplace. Students have an opportunity to create and change their habits and vision allowing themselves to have a rich, full, and rewarding personal, scholastic, and professional life through the adoption of positive strategies and techniques. This course may also be offered online.

**HTT A134**  
**Computing for Hospitality, Travel, and Tourism**  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.

Travel industry computer systems using various industry applications such as: reservations, operations management, ticketing, training, home based communication and crew scheduling.

**HTT A135**  
**Homeland Security**  
**Advisory:** ENGL A099.

**Grading Mode:** Standard Letter  
Introductory study of domestic and international threats of terrorism. Examines the concepts, definitions and contemporary issues of modern terrorism. Includes law enforcement issues for first-responders relating to terrorism, particularly with regard to Homeland Protection and counter terrorist measures. This course may also be offered online. Transfer credit: CSU. Two hours lecture.

**HTT A138**  
**Sharing the Travel Experience**  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.

In this course you will learn the critical nature of translating what you see, hear, taste, touch, smell, feel and experience into blogging, tweeting, Facebook posts and journaling. You will learn how to capture the attention of follower’s and build a reputation of storytelling. You will understand the methods needed to sell material in today’s competitive market. If you have a desire to write and a yen to travel, you’re a perfect candidate for this class. So pack your sense of adventure, organize your determination and put your keyboard in a comfortable position. This course may also be offered online.

**HTT A140**  
**Revenue Management**  
**Advisory:** HTT A110.

**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.

This course provides a model for understanding the revenue management process and reveals four basic building blocks to revenue management success. It addresses elements of a risk management program including, developing forecasts for room revenue and occupancy, evaluating revenue opportunities, and tracking future room availabilities to achieve maximum revenue from the sale of perishable assets. This course may also be offered online.

**HTT A150**  
**Travel and Tourism Career Development**  
**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.

Survey of the travel and tourism industry and its component segments: airlines, cruises, hotels, tour operators, retail travel agencies, tour wholesalers, receptive ground operators, and other miscellaneous new segments of the industry. Review of each segment and analysis of type of careers, background education, and entry skill preparation, expected salary scale, and travel benefits. This course may also be offered online.
HTT A152  1.5 Units (27 lecture hours)
Corporate Travel
Grading Mode: Standard Letter
An introduction to the activities and responsibilities of the corporate travel arranger and manager. Operational techniques and financial plans and management are identified, proposals and contracts are discussed and the complete corporate travel process is presented. This course may also be offered online. Transfer credit: CSU.

HTT A153  1.5 Units (27 lecture hours)
Selling Vacation Packages and Tours
Grading Mode: Standard Letter
Students will learn the essentials of selling vacation packages and tours, including the latest trends, itinerary planning, and the technologies available to travel/tourism consultants in the leisure, recreational, and corporate travel markets. This course may also be offered online. Transfer credit: CSU. One and one-half hours lecture.

HTT A154  1.5 Units (27 lecture hours)
Cruise Industry
Advisory: HTT A150 or concurrent enrollment.
Grading Mode: Standard Letter
Cruising is one of the fastest growing segments of the travel industry. Learn the basics of the cruise product including ship and cruise line terminology, applications and selling techniques. Cruise line ships and their destinations are identified, as well as, individual and group booking procedures. Does not train to work aboard ship. Transfer credit: CSU.

HTT A155  1.5 Units (27 lecture hours)
Tour Escorting and Management
Grading Mode: Standard Letter
This course introduces the roles and expectations of a tour escort and manager. The student will learn to research, plan and incorporate itineraries, promote the “package”, attract clients, and manage the operational aspects of a group. The responsibilities and characteristics of a tour escort will also be discussed. This course may also be offered online. Transfer credit: CSU.

HTT A156  3 Units (54 lecture hours)
Cruising and Vacation Packages
Advisory: ENGL A099 or equivalent.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Cruising is one of the fastest growing segments of the travel industry. Learn the basics of the cruise product including ship and cruise line terminology, applications and selling techniques. Cruise lines, ships and their destinations are identified. Students will learn the essentials of selling vacation packages and tours, including the latest trends, itinerary planning, and the technologies available to travel/tourism consultants in the leisure, recreational, and corporate travel markets. Does not train to work aboard ship. This course may also be offered online.

HTT A157  3 Units (54 lecture hours)
Tour Escorting and Group Travel
Advisory: ENGL A099 or equivalent.
Grading Mode: Standard Letter
Transfer Credit: CSU.
This course introduces the roles and expectations of a tour escort and manager. The student will learn to research, plan and incorporate itineraries, promote the group travel package, attract clients, and manage the operational aspects of a group. The responsibilities and characteristics of a tour escort will also be discussed. This course may also be offered online.

HTT A158  3 Units (54 lecture hours)
Luxury, Incentive, and Corporate Travel
Advisory: ENGL A099 or equivalent.
Grading Mode: Standard Letter
Transfer Credit: CSU.
This course leads you on a path toward developing an intimate knowledge of the luxury and incentive travel product, sales process, and unique needs of the affluent consumer. You will be introduced to the corporate travel market and understand how they share expectations. Explore the distinct types of consumers and how to focus sales and marketing efforts to attract and keep them coming back. This course may also be offered online.

HTT A160  1.5 Units (27 lecture hours)
Introduction to Spa and Hospitality Operations
Grading Mode: Standard Letter
Gain an understanding of the operational and administrative procedures in spas, private clubs, and the hospitality industry. You will develop an understanding of unique sensitivities required in managing and operating in the increasingly lucrative and complex spa industry. This course may also be offered online. Transfer credit: CSU.

HTT A165  1.5 Units (27 lecture hours)
Spa Industry Services and Treatments
Grading Mode: Standard Letter
As the industry evolves, day spas, hotel spas, destination spa resorts, and spas with medical services are becoming more specialized. Understanding the services and treatments making each different is an important element to the success of a business. This course will take you through the fundamentals of spa therapies, equipment, and products and projections for future trends. This course may also be offered online. Transfer credit: CSU.

HTT A170  1.5 Units (27 lecture hours)
Spa Industry Finance
Grading Mode: Standard Letter
This course provides spa supervisors and operation managers techniques toward successful financial management. This course may also be offered online. Transfer credit: CSU.
HTT A175 | 1.5 Units (27 lecture hours)
Spa Marketing and Retail Management
Grading Mode: Standard Letter
In this course the student will learn to develop effective marketing and retailing to increase sales, and promote branding opportunities for a spa. This course may also be offered online. Transfer credit: CSU.

HTT A180 | 3 Units (54 lecture hours)
Enhancing Guest Service
Advisory: HTEL A110 or HTT A100 or concurrent enrollment.
Grading Mode: Standard Letter
This course is designed to convey the importance of guest relation skills in a competitive market. Students will develop the skills expected of each employee, supervisor, and manager based on wants, needs, and expectations of the guest while developing a personal service style. This course may also be offered online. Transfer credit: CSU.

HTT A185 | 3 Units (54 lecture hours)
Interviewing and Professional Development
Advisory: ENGL A099 or equivalent.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Students will learn how professional communication skills can make the difference in achieving their personal career success. This course is an examination of the employment process in the Hospitality and Travel industries. The course analyzes interview techniques, employment tests, and interviewers’ questions leading toward employment in all aspects of the Tourism industry. Reviews oral and written career communication skills, including the development of a personal portfolio. This course may also be offered online.

HTT A199 | 0.5-1.5 Units (9-27 lecture hours)
Current Issues in Hospitality, Travel and Tourism
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course deals with current issues in the field of hospitality, travel and tourism. Topics vary. Open entry/open exit on a space available basis with instructor approval.

HTT A221 | 4 Units (9 lecture hours; 210, 262.5 other hours)
Meeting/Event Management Internship
Prerequisite(s): HTT A105 and HTT A284.
Advisory: ENGL A099 or equivalent.
Grading Mode: Standard Letter
Advanced internship for students enrolled in Management programs at Orange Coast College to increase their level of expertise in the area of specialization which they expect to graduate. Students will be required to follow standards set by the company in which they are working. 9 hours lecture and 210 hours work hours (unpaid) or 262.5 work hours (paid). This course may also be offered online. Transfer credit: CSU.

HTT A225 | 4 Units (9 lecture hours; 210, 262.5 other hours)
Travel and Tourism Internship
Prerequisite(s): HTT A105 and HTT A284.
Advisory: ENGL A099 or equivalent.
Grading Mode: Standard Letter
Advanced internship for students enrolled in Travel and Tourism programs at Orange Coast College to increase their level of expertise in the area of specialization which they expect to graduate. Students will be required to follow standards set by the company in which they are working. 9 hours lecture and 210 hours work hours (unpaid) or 262.5 work hours (paid). This course may also be offered online. Transfer credit: CSU.

HTT A226 | 4 Units (9 lecture hours; 210, 262.5 other hours)
Airline Internship
Prerequisite(s): HTT A105 and HTT A284.
Advisory: ENGL A099 or equivalent.
Grading Mode: Standard Letter
Advanced internship for students enrolled in Airline Travel programs at Orange Coast College to increase their level of expertise in the area of specialization which they expect to graduate. Students will be required to follow standards set by the company in which they are working. 9 hours lecture and 210 hours work hours (unpaid) or 262.5 work hours (paid). This course may also be offered online. Transfer credit: CSU.

HTT A227 | 4 Units (9 lecture hours; 210, 262.5 other hours)
Hotel Internship
Prerequisite(s): HTT A105 and HTT A284.
Advisory: ENGL A099 or equivalent.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Advanced internship for students enrolled in Hotel Management programs at Orange Coast College to increase their level of expertise in the area of specialization which they expect to graduate. Students will be required to follow standards set by the company in which they are working. 9 hours lecture and 210 hours work hours (unpaid) or 262.5 work hours (paid). This course may also be offered online.

HTT A240 | 3 Units (54 lecture hours)
Hospitality and Tourism Marketing
Advisory: ENGL A099 or equivalent.
Grading Mode: Standard Letter
This course will provide students an understanding and application of E-Marketing and Sales in the hospitality and tourism sectors. This course may also be offered online. Transfer credit: CSU.

HTT A265 | 1.5 Units (27 lecture hours)
Principles of Event and Meeting Management
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course addresses successful business practices in event and meeting management. It provides knowledge essential effectiveness and profitability as an event or meeting manager. It is strongly recommended that all students enroll in this course first as it provides a foundation for future coursework. This course may also be offered online.
HTT A266 1.5 Units (27 lecture hours)
Organize and Manage Events and Meetings
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
A comprehensive, fast-paced, hand-on course in managing a professional event/meeting, including the practical skills and tools needed for successful planning. This course may also be offered online.

HTT A267 1.5 Units (27 lecture hours)
Managing Business Risks
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course provides a thorough and systematic approach to risk management that ensures the understanding and use of safeguards to produce safe and successful meetings or events. This course may also be offered online.

HTT A268 1 Unit (18 lecture hours)
Incentive Travel
Advisory: HTT A265, HTT A266, HTT A267, and HTT A270.
Grading Mode: Standard Letter
The course is designed to give the student an understanding of Incentive Travel and how it differs from all other forms of travel. It outlines the type of client and sales person who is likely to find Incentive Travel a motivational tool, why it is effective, how to return on investment (ROI) makes these programs popular. Transfer credit: CSU.

HTT A269 1 Unit (18 lecture hours)
Destination Management
Grading Mode: Standard Letter
Get the most comprehensive guide to destination management. From tours to transportation, from entertainment to local rules of etiquette, the Destination Management Company (DMC) is the premier resource that finds the right venue, location, speaker, and vendor to ensure a highly professional and successful program. This course may also be offered online. Transfer credit: CSU.

HTT A270 1.5 Units (27 lecture hours)
Meeting and Event Marketing and Sales
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course examines essential techniques for successful promotion of products and services. An emphasis is placed on the hotel, meeting, and event environments. Creative ideas and practical tools learned will help increase the effectiveness of the marketing dollar. This course may also be offered online.

HTT A271 1 Unit (18 lecture hours)
Corporate Meetings & Events
Grading Mode: Standard Letter, Pass/No Pass
Review of the most successful techniques for managing trade shows, sales promotion events, staff meetings, and other corporate events. Focus is placed on how to produce meetings/events with creative flair while staying within a budget. This course may also be offered online.

HTT A272 1 Unit (18 lecture hours)
Meeting and Conference Practices
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course provides the tools necessary to successfully plan and manage local, national and international meetings and conferences. Prepares students to take the nationally recognized International Special Event Society (ISES), Certified Special Events Professional (CSEP), and Certified Meeting Professional (CMP) examinations. This course may also be offered online.

HTT A273 1 Unit (18 lecture hours)
Sport Event Management
Grading Mode: Standard Letter
Transfer Credit: CSU.
Promoting and managing large and small sporting events including event logistics, sponsorship, successful marketing strategies and professional management skills. This course may also be offered online.

HTT A274 1 Unit (18 lecture hours)
Establish and Operate an Event Business
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course covers the practical skills necessary to launch, operate, and grow a successful event management business. Focus is placed on how to develop a business plan, manage finances, market, and approach event management as a small profit-making business. This course may also be offered online.

HTT A275 1 Unit (18 lecture hours)
Event Fund-Raising and Sponsorship
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Provides a comprehensive plan for identifying, evaluating, soliciting, selling, managing, and coordinating long-term fund-raising and/or sponsorship deals. Develop skills to manage events and work successfully as a staff professional or volunteer. This course may also be offered online.

HTT A276 1 Unit (18 lecture hours)
Expo and Trade Show Management and Promotion
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU
This course provides information for designing and managing projects from a trade show exhibit to planning and coordinating an entire exposition. Focus is placed on the growing role of expositions and trade shows in the marketing and sales processes both nationally and internationally. This course may also be offered online.
HTT A277 1 Unit (18 lecture hours)
Wedding Planning as a Business
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course will assist in developing elements of design, coordination, and execution in preparing and planning weddings. Career opportunities in the lucrative bridal industry will also be discussed. This course may also be offered online.

HTT A278 1.5 Units (27 lecture hours)
Catering Design and Management
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course addresses elements of successful catering operations. Students will explore the catering industry and learn to work with catering professionals to improve quality while reducing costs. This course may also be offered online.

HTT A279 4 Units (9 lecture hours; 210, 262.5 other hours)
Spa Internship
Prerequisite(s): HTT A105 and HTT A284.
Advisory: English A099 or equivalent.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Advanced internship for students enrolled in Spa Management programs at Orange Coast College to increase their level of expertise in the area of specialization which they expect to graduate. Students will be required to follow standards set by the company in which they are working. 9 hours lecture and 210 hours work hours (unpaid) or 262.5 work hours (paid). This course may also be offered online.

HTT A281 2 Units (36 lecture hours)
Leadership Development
Prerequisite(s): HTT A282 or concurrent enrollment.
Grading Mode: Standard Letter
An in-depth study of the skills required to be an effective manager. This course covers the roles, responsibilities, situations, and personal styles of decision-making in hospitality, airline, travel, and tourism industries while putting quality management tools into action to enhance service and improve business. This course may also be offered online. Transfer credit: CSU.

HTT A282 1.5 Units (27 lecture hours)
Supervisory Skill Dev
Advisory: HTEL A110 or HTT A288 or concurrent enrollment.
Grading Mode: Standard Letter
Designed to provide supervisory principles and skills to individuals wishing to advance into or hold a supervisory or management position within the hospitality, airline, spa, travel, or tourism industries. Transfer credit: CSU.

HTT A284 3 Units (54 lecture hours)
Leadership and Strategic Management
Advisory: ENGL A099 or equivalent.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course is designed to provide a basic introduction to leadership by focusing on what it means to be a good leader. Emphasis is on the practice of leadership. We will examine topics such as: the nature of leadership, recognizing leadership traits, developing leadership skills, creating vision, setting the tone, listening to our group members, handling conflict, overcoming obstacles, and addressing ethics in leadership. Attention will be given to helping students to understand and improve their own leadership performance. This course may be offered online.

HTT A285 3 Units (54 lecture hours)
Hospitality Operations
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course is designed to acquaint students with leadership, management, and quality issues facing today's hospitality industry. Focus is placed on the Malcolm Baldrige National Quality Award, continuous improvement, empowerment, goal setting, high-performance teams, diversity, managing organizational change, and strategic career planning. This course may also be offered online.

HTT A286 3 Units (54 lecture hours)
Hosp/Travel/Tour Law
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course provides an awareness of the rights and responsibilities the law grants to or imposes upon hospitality, travel and tourism businesses. Illustrations of possible consequences for failure to satisfy legal obligations are used. Legal issues raised by the Internet and the hospitality industry are discussed. This course is certified through the American Hotel & Lodging Association. This course may also be offered online. Lecture.

HTT A288 3 Units (54 lecture hours)
Human Resource Management
Grading Mode: Standard Letter
This course presents a systematic approach to human resources management in the hospitality industry. Students will analyze contemporary issues and practices, as well as employment laws that have an impact on the way people are managed. This course is certified through the American Hotel & Lodging Association. Transfer credit: CSU.

HTT A290 3 Units (54 lecture hours)
California Employment Law
Advisory: HTT A288.
Grading Mode: Standard Letter
California labor and employment law including legislation, court cases and regulatory requirements. Organized to make complex laws understandable. Topics include Unemployment Insurance, State Disability, Family/Medical and Sick Leaves, Workers' Compensation, Training, Personnel Records, Privacy, Wage & Hour Laws, Compensation, Exempt/Non-Exempt. This course may also be offered online. Transfer credit: CSU.
HTT A299
Certified Travel Associate
Grading Mode: Standard Letter
Transfer Credit: CSU.

The Certified Travel Associate (CTA) program teaches skills to become a front-line travel industry professional, such as how to close more sales, improve efficiency, expand geography knowledge and fine-tune customer service skills, all while earning widely recognized industry credentials. This course may also be offered online.

Hotel Management (HTEL)

HTEL A110
Front Office Operations
Grading Mode: Standard Letter
Study of front-office procedures from reservations through checkout including the night audit and the property management system and their impacts on other lodging operations. Special emphasis placed on guest-employee relations. This course may also be offered online. Transfer credit: CSU.

HTEL A130
Guest Services
Advisory: HTEL A110 or concurrent enrollment.
Grading Mode: Standard Letter
This course educates students on how concierge, bell, valet, courtesy van staff, and security personnel make guests feel safe and at home. Dramatizes how to promote your property's revenue-generating facilities and increase job performance while by increasing professionalism. This course may also be offered online. This course is certified through the American Hotel & Lodging Association. Transfer credit: CSU.

HTEL A260
Supervision and Training Techniques
Grading Mode: Standard Letter
Developing personnel programs and desirable labor-management relations. Special emphasis on leadership skills of motivation, communication, and decision making. Same as Food Service Management A260. Students completing Hotel Management A260 may not receive credit for Food Service Management A260. Transfer credit: CSU.

Human Development (HMDV)

HMDV A180
Child Growth and Development
Advisory: ENGL A099.
Grading Mode: Standard Letter
A study of growth and development from conception through adolescence. Emphasis on theories of physical, cognitive, and psychosocial development using standard research methodologies and identifying typical and atypical development. Analyze how cultural, economic, political, and historical contexts affect children's development. Observations directed to further insight into change during childhood years. This course may also be offered online. Lecture. Transfer credit: CSU; UC. C-ID: CDEV 100.

HMDV A182
Middle Childhood Development and Guidance
Grading Mode: Standard Letter
Growth and development of the child from 5-12 years of age including physical, cognitive, and psychosocial development, and techniques for guidance of the school age child. Focus is on identifying common developmental qualities of school-age children and find positive approaches to individual, group, and environmental management. Transfer credit: CSU.

HMDV A184
Infant Development and Relationships
Grading Mode: Standard Letter
Growth and development of the child from birth to two years: current theories and adult-infant relationships along with practical applications for relating to and caring for infants. Transfer credit: CSU.

HMDV A190
Family, School, and Community Partnerships
Grading Mode: Standard Letter
Examines the connections between the homes, schools, and communities in which children live. Explores historical, legal, social, political, and cultural influences affecting the development of children, pre-school through high school, educational access and equity. Introduces the various models and approaches for building meaningful partnerships with culturally and linguistically diverse families and communities. Transfer credit: CSU; UC. C-ID: CDEV 110.

HMDV A210
Introduction to the Exceptional Child
Grading Mode: Standard Letter
Introduction to the exceptional child including the gifted, developmentally delayed, emotionally disturbed, speech and hearing impaired, visually impaired, orthopedically and neurologically impaired. The role of the teacher in supporting these children and their families and vocational opportunities are discussed. Transfer credit: CSU.

Humanities (HUM)

HUM A100
Introduction to the Humanities
Grading Mode: Standard Letter, Pass/No Pass
A survey of the European humanities (history, philosophy, literature, and the fine arts) and their contribution to artistic, cultural, and social expression in Western civilization. May be taken for grades or on a pass-no pass basis. Transfer credit: CSU; UC.

HUM A101H
Themes in Humanities Honors
Grading Mode: Standard Letter, Pass/No Pass
An examination of how literature, philosophy, history, and the arts intersect to explore the problems of man; how the humanities have viewed significant aspects of the human and his culture over widely separated points of time. May be taken for grades or on a pass-no pass basis. Transfer credit: CSU; UC.
Information Technology (IT)

IT A106  
Introduction to Linux: LPI Certification  
Advisory: IT A110 or CIS A110.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
This course provides an overview of the Linux operating system through the basic administration level. The student will be introduced to the configuration of Linux software and hardware, User and Group creation and management, process management, Linux rights and security. This course prepares the student for the Linux Professional Institute Linux Server Professional Server Certification. Same as CIS A106. Students who have taken CIS A106 may not take IT A106.

IT A110  
PC Concepts: A+ Certification Preparation  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
Introduces the hardware and operating system concepts of a personal computer and the broad range of hardware and software technologies. Provides preparation for students seeking A+ Certification sponsored by the Computing Technology Industry Association and certifies the competency of entry-level service technicians in the computer industry. Same as CIS A110. Students who have taken CIS A110 may not take IT A110. May be taken for grades or on a pass-no pass basis.

IT A162  
Fundamentals of Information Security  
Advisory: IT A110, CIS A110, IT A191, or CIS A191.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
This course provides the fundamental knowledge necessary for a student to become proficient in the field of Information Security. This course will prepare the student for a wide variety of security responsibilities. The curriculum covers a wide range of security concepts, including: General Security Concepts, Communication Security, Infrastructure Security, Basics of Cryptography, and Operational and Organizational Security. This course covers CompTIA™’s Security+ content and provides preparation for students seeking the CompTIA Security+ Certification. Same as CIS A162. Students who have taken CIS A162 may not take IT A162.

IT A163  
Windows Desktop Administration  
Advisory: IT A110 or CIS A110.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
Provides students with the knowledge required to work in enterprise environments that use Microsoft Windows desktop operating systems. Students will learn to install, deploy, and upgrade the Windows operating system, including ensuring hardware and software compatibility, configure pre-installation and post-installation system settings, security features, network connectivity applications and mobile computing. Students will also be able to maintain systems, including monitoring for and resolving performance and reliability issues. Will help prepare students for the Microsoft Certified IT Professional (MCITP) exams. Same as CIS A163. Students who have taken CIS A163 may not take IT A163.

IT A176  
Database Design and Data Warehousing  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
Covers the terminology, technology and software used to design and implement a Microsoft SQL Server database. Students will learn to design, create and maintain a database to handle LOB (Line of Business) and DW (Data Warehousing) applications. May be taken for grades or on a pass-no pass basis. Same as CIS A176. Students who have taken CIS A176 may not take IT A176.

IT A177  
Business Intelligence and Data Mining  
Advisory: IT A176 or CIS A176 or equivalent.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
Covers the terminology, technology and software used to build a data warehouse model and prepare that model for data mining. Students will learn how to design and process a data warehouse database using SSIS (SQL Server Integration Services), and format a cube in SSAS (SQL Server Analysis Services) in preparation for data mining operations. Same as CIS A177. Students who have taken CIS A177 may not take IT A177.

IT A191  
Network and Communications Technologies  
Advisory: IT A110 or CIS A110.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
Provides an introduction to an overview of the field of networking, data communications and connectivity, with an emphasis on terminology, hardware, and software associated with the various components of a network. Provide preparation for students seeking the Network+ Certification. May be taken for grades or on a pass-no pass basis. Same as CIS A191. Students who have taken CIS A191 may not take IT A191.
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<thead>
<tr>
<th>Course</th>
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<th>Description</th>
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| IT A192    | 4     | Network Systems Administration<br>Advisory: IT A110 or CIS A110, and IT A191 or CIS A191.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
Covers terminology, technology, topologies and software used in the Microsoft Windows servers. Students will learn to create user accounts, implement different levels of security, apply diagnostics and back up and maintain the software. Will help prepare students for the Microsoft Certified Systems Engineer (MCSE) exams. Same as CIS A192. Students who have taken CIS A192 may not take IT A192. |  |
| IT A193    | 3     | Network Infrastructure Administration<br>Advisory: IT A192 or CIS A192.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
Provides students with knowledge required to setup, configure, and support network infrastructures using the TCP/IP protocol. Topics include IP addresses, point-to-point tunneling protocols, DNS and DHCP services. Will help prepare students for the Microsoft Certified Systems Engineer (MCSE) exams. Same as CIS A193. Students who have taken CIS A193 may not take IT A193. |  |
| IT A194    | 3     | Network Directory Services Administration<br>Advisory: IT A192 or CIS A192.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
Provides a study of the procedures necessary to plan, implement, and troubleshoot directory service infrastructures, including forests and domains, DNS, site topology and replication, and directory strategies. Will help prepare students for Microsoft Windows Microsoft Certified Systems Engineer (MCSE) exams. Same as CIS A194. Students who have taken CIS A194 may not take IT A194. |  |
| IT A196    | 4     | Network Enterprise Administration<br>Advisory: IT A192 or CIS A192.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
Provides the knowledge and skills to design a security framework for small, medium, and enterprise networks. It focuses on providing secure access for local and remote users accessing resources using both public and private networks. Helps prepare students for Microsoft Windows Microsoft Certified Systems Engineer (MCSE) exams. Same as CIS A196. Students who have taken CIS A196 may not take IT A196. |  |
| IT A197    | 3     | Introduction to Networking (Cisco 1)<br>Advisory: IT A191 or CIS A191.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
Introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. This course provides preparation for students seeking the Cisco CCENT/CCNA Certification. May be taken for grades or on a pass-no pass basis. Same as CIS A197. Students who have taken CIS A197 may not take IT A197. |  |
| IT A198    | 3     | Routing and Switching Essentials (Cisco 2)<br>Advisory: IT A197 or CIS A197.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
Describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. This course covers Cisco's CCNA content and provides preparation for students seeking the Cisco CCNA Certification. May be taken for grades or on a pass-no pass basis. Same as CIS A198. Students who have taken CIS A198 may not take IT A198. |  |
| IT A261    | 3     | Fundamentals of Wireless Networking<br>Advisory: IT A197 or CIS A197; and IT A198 or CIS A198.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
This course provides a complete foundation of knowledge for entering into or advancing in the wireless networking industry. This course covers Cisco's Wireless LAN certification content and provides preparation for students seeking a Cisco Wireless certification. May be taken for grades or on a pass-no pass basis. Same as CIS A261. Students who have taken CIS A261 may not take IT A261. |  |
| IT A262    | 3     | Fundamentals of Voice over IP Protocols<br>Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
An introduction to Voice over IP (VoIP). Topics include VoIP architecture, components and functionality. Additional focus will be given to VoIP signaling, call control, voice dial plans, configuring voice interfaces and dial-peers, and implementing quality of service technologies in a VoIP environment. May be taken for grades or on a pass-no pass basis. Same as CIS A262. Students who have taken CIS A262 may not take IT A262. |  |
IT A263  3 Units (45 lecture hours; 27 lab hours)
Introduction to the Internet of Things
Advisory: IT A110 or CIS A110; and IT A191 or CIS A191

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

The Internet of Things (IoT) is the network of physical objects or ‘things’ embedded with electronics, software, sensors and connectivity to enable it to achieve greater value and service by exchanging data with the manufacturer, operator and/or other connected devices. Each thing is uniquely identifiable through its embedded computing system but is able to interoperate within the existing Internet infrastructure. This course will prepare students to install, configure and maintain these devices. Same as CIS A263. Students who have taken CIS A263 may not take IT A263.

IT A265  3 Units (45 lecture hours; 27 lab hours)
Enterprise Router Configurations 1
Advisory: IT A198 or CIS A198.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

The course focuses on advanced installation, configuration, and troubleshooting routers. Student will be introduced to routing protocols using Juniper Networks routing platforms. Students develop real-world case studies. Significant time will be allocated for hands-on experience. Provides preparation for students seeking Juniper certification. This course may also be offered online. Same as CIS A265. Students who have taken CIS A265 may not take IT A265.

IT A267  3 Units (45 lecture hours; 27 lab hours)
Scaling Networks - Cisco 3
Advisory: IT A198 or CIS A198.

Grading Mode: Standard Letter, Pass/No Pass
Describes the architecture, components, and operations of routers and switches in a large and complex network. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network. This course provides preparation for students seeking the Cisco CCENT/CCNA Certification. May be taken for grades or on a pass-no pass basis. Same as CIS A267. Students who have taken CIS A267 may not take IT A267.

IT A268  3 Units (45 lecture hours; 27 lab hours)
Connecting Networks - Cisco 4
Advisory: IT A267 or CIS A267.

Grading Mode: Standard Letter, Pass/No Pass
Discusses the WAN technologies and network services required for converged applications in a complex network. The course enables students to understand the selection criteria of network devices and LAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students also develop the knowledge and skills needed to implement IPsec and virtual private network (VPN) operations in a complex network. This course provides preparation for students seeking the Cisco CCENT/CCNA Certification. Same as CIS A268. Students who have taken CIS A268 may not take IT A268.

IT A280  3 Units (45 lecture hours; 27 lab hours)
Information and Storage Management
Advisory: IT A110, CIS A110, IT A191, or CIS A191.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

The course provides a comprehensive introduction to information storage technology which enables students to make more informed decisions in an increasingly complex IT environment. It builds a strong understanding of underlying storage technologies and prepares Student to learn advanced concepts, technologies and products. Same as CIS A280. Students who have taken CIS A280 may not take IT A280.

IT A281  3 Units (45 lecture hours; 27 lab hours)
Cloud Infrastructure & Services
Advisory: IT A110, CIS A110, IT A191, or CIS A191.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course educates students about cloud deployment and service models, cloud infrastructure, and the key considerations in migrating to cloud computing. The course covers technologies required to build classic, virtualized, and cloud data center environments. These technologies include compute, storage, networking, desktop and application virtualization. Additional areas of focus are backup/recovery, business continuity, security, and management. Students will learn about the key considerations and steps involved in transitioning from the current state of a data center to a cloud computing environment. Same as CIS A281. Students who have taken CIS A281 may not take IT A281.

IT A282  3 Units (45 lecture hours; 27 lab hours)
Ethical Hacking and Network Defense
Advisory: IT A191 or CIS A191; and IT A261 or CIS A261.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Students will learn how hackers attack computers and networks, and how to protect Windows and Linux systems. Legal restrictions and ethical guidelines will be taught and enforced. Students will perform many hands-on labs; attacking and defending, using port scans, footprinting, buffer overflow exploits, SQL injection, privilege escalation, Trojans, and backdoors. Same as CIS A282. Students who have taken CIS A282 may not take IT A282.
IT A286 3 Units (45 lecture hours; 27 lab hours)  
VMware vSphere: Installation, Configuration & Management  
Advisory: IT A110 or CIS A110; and IT A191 or CIS A191.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

Students will learn the concepts and capabilities of virtual architecture with a focus on the installation, configuration, and management of virtual infrastructure using tools such as VMware®. This course covers fundamentals of virtual network design and implementation, fundamentals of storage area networks, virtual switching, virtual system management, and engineering for high availability. Same as CIS A286. Students who have taken CIS A286 may not take IT A286.

IT A290 3 Units (45 lecture hours; 27 lab hours)  
Small Office / Home Office: Case Study 1  
Advisory: IT A191 or CIS A191, or IT A261 or CIS A261; and IT A263.  
Grading Mode: Standard Letter, Pass/No Pass  
Challenges students to apply network concepts learned in previous courses to a case study-based problem in Small Office / Home Office environments. Includes various responsibilities and tasks required for a service engineer to design and execute a successful implementation. Prepares individuals for careers as a Network Engineer in the IT industry. Same as CIS A290. Students who have taken CIS A290 may not take IT A290.

Integrative Health (INHL)  
INHL A100 3 Units (36 lecture hours; 54 lab hours)  
Integrative Health Coach Principles & Practice  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

Prepares students for work as Integrative Health Coaches in clinics, hospitals, and other health provider locations. The course emphasizes skill development in areas of client-centered theory and practice. Topics include the role of the IHC in the delivery of medical care and services as related to client-centered professional skills, behavior change theory, goal setting, and motivation. Students will also explore professional practices related to self-care teamwork, ethics, and conflict resolution.

INHL A115 2.5 Units (36 lecture hours; 36 lab hours)  
Clinical Skills for the Integrative Health Coach  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

This course provides students with an understanding of basic clinical skills to be effective liaisons between medical clinicians and patients. Topics covered include listening skills, common screening assessments, legal and ethical issues in health care, death and dying, and professional burnout. Students will also be trained in cardiopulmonary resuscitation and receiving AHA CPR certification.

INHL A210 3 Units (36 lecture hours; 54 lab hours)  
Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs  
Grading Mode: Standard Letter, Pass/No Pass  
This course provides students with an understanding of the U.S. healthcare system and health insurance options to provide for efficient navigation through the healthcare system. Topics include the history of health insurance in the U.S. and the role of government in healthcare; the U.S. healthcare workforce; basic health insurance terminology; types of insurance and the healthcare marketplace; different types of care, including outpatient, ambulatory and long-term care; public assistance programs and disability programs; and ethical and bioethical issues.

INHL A220 3 Units (54 lecture hours)  
Techniques and Topics in Health Education  
Grading Mode: Standard Letter, Pass/No Pass  
This course will provide students with the skills and knowledge to be successful health educators in both group and individual settings. Topics will include the principles and practice in the planning, facilitation, and evaluation of public health education and training. This course covers basic theories and participatory training methods, with a focus on meeting the needs of diverse communities and adult learners.

INHL A225 3 Units (54 lecture hours)  
Introduction to Complementary and Alternative Medicine  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

This course will focus on the role of alternative medicine in health behavior, disease, treatment, coping, and healing. Topic covered will include history, philosophy, development, and use of CAM modalities to treat and manage disease. Traditional/alternative medical systems, such as Chinese, Tibetan, and Ayurvedic medicine, will be examined.

INHL A230 3 Units (54 lecture hours)  
Assessing and Analyzing Health Information  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

This course prepares students to perform the information-related duties of an Integrative Health Coach, health educator, and other public health professions. Students develop skills and knowledge required to locate and critically appraise online health information; review measurements and methods to access public health data located in surveillance systems and vital records, and provide an overview of public health informatics. Same as PUBH A230.
INHL A250  
2 Units (4.5 lecture hours; 120 other hours)  
Integrative Health Coach Internship  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

Supervised internship for the student who is completing the Integrative Health Coach certificate. Job site experience will train the student in additional job skills that will enhance academic learning. The internship may be either a paid or unpaid position; students must work 75 paid hours or 60 non-paid hours per unit earned (150 hours paid/120 hours non-paid for this 2 unit course).

Interior Design (ID)

ID A050  
0.5-2 Units (27-108 lab hours)  
Interior Design Lab  
Grading Mode: Pass/No Pass  
A laboratory based course to improve interior design skills. Students work independently according to a self-designed study plan they complete under the supervision of the course instructor. Periodic student teacher conferences and a final self assessment report are part of the course. Enrollment is open all semester. Students should be enrolled in an interior design course. Offered on a pass-no pass basis only. Not applicable to AA or AS degree.

ID A100  
3 Units (54 lecture hours)  
Fundamentals of Interior Design  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Application of design principles and elements in planning of total interior environments that meet individual, functional, legal, and environmental needs. Selection of materials and products used in interior environments will be emphasized for functional, economic, and aesthetic qualities. Evaluation of color theories, space planning, floor plans, lighting, environmentally responsible design, accessibility, and the design process will be introduced.

ID A105  
3 Units (36 lecture hours; 54 lab hours)  
Interior Design Studio 1  
Prerequisite(s): ID A100 or concurrent enrollment.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

This studio course will apply concepts and theories presented in the lecture course, Interior Design A100. Therefore, it is recommended that this course be taken concurrently. Emphasis is placed on the application of design principles and elements and the design process in developing solutions for residential interior design projects.

ID A110  
2 Units (18 lecture hours; 54 lab hours)  
Design Communications 1: Design Graphics  
Grading Mode: Standard Letter  
This introductory course in design communication techniques will emphasize the importance of visual communication and three-dimensional design graphics for two-dimensional media. Course content will include subject matter and technique presentations in hand-drawn graphics. Design communications shall include orthographic projections, paralines, plan views, elevations, sections, basic perspective drawing, rendering and tonal value applications. Included in this coursework will be introductory applications of 3-D software as well integration with hand drawings.

ID A120  
1 Unit (18 lecture hours)  
Interior Design Careers  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

A survey of the interior design profession, industry, related occupations and work sites. The course will emphasize personal, educational, and professional qualifications required for entry into the interior design profession.

ID A130  
3 Units (36 lecture hours; 54 lab hours)  
Design Communication 2: CAD 2D  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

This course introduces Computer Aided Drafting (CAD) as used to produce 2-dimensional design drawings. PCs with Autodesk Architecture or other Industry standard software will be used and instruction will focus on computer drawing a simple project to include the following drawing types: floor plan, site plan, elevations, and enlarged section/details. Students should have basic knowledge of computer operation and file management.

ID A150  
3 Units (54 lecture hours)  
Interior Materials and Products  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Analysis, application and evaluation of products and materials used in interior design. Includes interior textiles, furnishings, and finish materials and products.

ID A170  
3 Units (36 lecture hours; 54 lab hours)  
Space Planning  
Prerequisite(s): ID A110.  
Advisory: ID A100.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

The application of programming, theory, and techniques in residential and commercial space planning. Drawing and planning process techniques are emphasized in the studio.
ID A175  3 Units (36 lecture hours; 54 lab hours)
Applied Color and Design Theory
Grading Mode: Standard Letter
Transfer Credit: CSU.

Basic design theory and application. Utilization of tools, materials, and
equipment to develop technical skills applicable to interior, architectural,
and other related fields of design. Same as FASH A175. Students
completing ID A175 may not receive credit for FASH A175.

ID A180  3 Units (54 lecture hours)
History of Interior Architecture and Furnishings 1
Grading Mode: Standard Letter
Transfer Credit: CSU.

The historical relationship between the decorative arts, period furniture,
and interior architecture is illustrated in this overview of design heritage
from Antiquity through the 19th century in France. Emphasis on style
development as it relates to social, economic, and political influences.

ID A190  3 Units (54 lecture hours)
Hist Arch/Furnishings 2
Grading Mode: Standard Letter
Transfer Credit: CSU.

The historical relationship between the decorative arts, period furniture,
and interior architecture is illustrated in this overview of design heritage.
This course begins with 16th century England and America and analyzes
the influences and changes in design to the present. Style development
as it relates to social, economic, and political forces is emphasized.

ID A199  0.5-1.5 Units (9-27 lecture hours)
Current Issues in Interior Design
Advisory: ID A100.

Grading Mode: Standard Letter, Pass/No Pass
Current issues in the field of Interior Design, rotating through a variety
of topics relating to exploration and preparation for the Interior Design
profession. May be taken for grades or on a pass-no-pass basis. Transfer:
Credit: CSU.

ID A200  3 Units (36 lecture hours; 54 lab hours)
Design Communication 3: Illustration
Prerequisite(s): ID A105 and ID A110.
Advisory: ID A175.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Application of the methods, techniques, and tools used for illustrating
interior spaces and products.

ID A210  3 Units (54 lecture hours)
Fundamentals of Lighting
Prerequisite(s): ID A100 and ID A110.
Advisory: ID A170.

Grading Mode: Standard Letter
Transfer Credit: CSU.

The fundamentals of lighting, design, theory, and application including
color and vision, incandescent and fluorescent lamps, lighting techniques
for interior designers, codes, and energy efficient lighting practices.

ID A215  3 Units (36 lecture hours; 54 lab hours)
Interior Design Studio 2
Prerequisite(s): ID A170.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Develop, analyze, and apply design concepts to interior environments.
Advanced space planning, lighting systems, interior components,
architectural elements, sustainable design and specification writing
will be integrated into research projects emphasizing a problem solving
approach.

ID A220  3 Units (36 lecture hours; 54 lab hours)
Interior Design Construction Documents
Prerequisite(s): ID A110 and ID A130 or concurrent enrollment.
Advisory: ID A215.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A drafting course emphasizing the legal nature and scope of construction
drawings, specifications, codes, products, materials, and equipment used
for interior design projects.

ID A230  3 Units (54 lecture hours)
Business and Professional Practice
Advisory: ID A100 and ID A120.

Grading Mode: Standard Letter
Transfer Credit: CSU.

The business and professional management of an interior design practice
including legal issues, project management, and business practices.

ID A240  2 Units (120 other hours)
Interior Design Internship
Prerequisite(s): ID A210 and ID A215 or concurrent enrollment.
Advisory: ID A130.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A supervised internship related to classroom-based learning at a fashion-
related work site.
ID A245  2 Units (36 lecture hours)
Portfolio Development
Prerequisite(s): ID A210 or concurrent enrollment and ID A215 or concurrent enrollment.

Advisory: ID A130.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A comprehensive portfolio of Interior Design coursework developed in digital and print media. Course will include digital presentation skills and portfolio development. This course should be taken in the final semester of Level 2.

ID A250  3 Units (54 lecture hours)
Codes and Building Systems
Prerequisite(s): ID A215.

Advisory: ID A215.

Grading Mode: Standard Letter
Transfer Credit: CSU.

This course examines the building code relative to Interior Design and Architecture. Construction materials and building systems including structural, mechanical, electrical, plumbing and lighting are analyzed in conjunction with the code. This course may also be offered online.

ID A260  3 Units (36 lecture hours; 54 lab hours)
Design Communication 4: Digital Visualization
Prerequisite(s): ID A130 and ID A170.

Advisory: ID A130 and ID A170.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Application of the methods, techniques, and tools used for illustrating interior spaces two and three-dimensionally through the use of technology/software programs. Students should have basic knowledge of computer operation, CAD and file management.

ID A265  3 Units (36 lecture hours; 54 lab hours)
Studio - Project Specialization
Prerequisite(s): ID A215.

Advisory: ID A210 and ID A260.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Analysis and application of the design process to the space planning, materials and finish choices, codes application, and selection of specialized equipment unique to planning specialized spaces. Students will work with instructor to choose design focus area which may include: Corporate Office, Hospitality, Healthcare, Retail or Mixed-Use options.

ID A275  3 Units (36 lecture hours; 54 lab hours)
Interior Design Studio 4
Prerequisite(s): ID A215.

Advisory: ID A210 and ID A260.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Analysis and application of the design process to space planning, materials and finish choices, codes application, and selection of specialized equipment unique to planning hospitality spaces. Design solutions for hospitality to be developed in the studio.

ID A280  2 Units (18 lecture hours; 54 lab hours)
Interior Design Studio - Bath Design
Prerequisite(s): ID A170.

Advisory: ID A260.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Analysis and application of the design process to the space planning, materials and finish choices, codes application, and selection of specialized items, fixtures, and equipment unique to the bath space. Design solutions for residential bathrooms will be developed in the studio.

ID A285  2 Units (18 lecture hours; 54 lab hours)
Interior Design Studio - Kitchen Design
Prerequisite(s): ID A170.

Advisory: ID A260.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Analysis and application of the design process to the space planning, materials and finish choices, codes application, and selection of specialized items, fixtures, and equipment unique to the kitchen space. Design solutions for residential kitchens will be developed in the studio.

Intern (ITRN)

ITRN A392  1-4 Units (63-297 other hours)
Internship Academy-Level 2
Prerequisite(s): Concurrent enrollment in a course related to the student's identified major.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Supervised internship for the student who has identified a major area of study. Job site experience will train the student in additional job skills that will enhance academic learning. Courses in the career field will be taken concurrently with the student's job site experience. May be either a paid or unpaid position.
**Italian (ITAL)**

**ITAL A393**  
1-4 Units (63-297 other hours)  
Internship Academy-Level 3  
Prerequisite(s): Advanced standing in career program.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Supervised internship related to classroom-based learning at an on-the-job learning site related to student’s career goal. This is an advanced internship course. May be either a paid or unpaid position.

**ITAL A180**  
5 Units (90 lecture hours)  
Elementary Italian 1  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  
The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Italian, with an introduction to cultures related to the Italian language. This course is equivalent to two years of high school Italian. May be taken for grades or on a pass-no pass basis.

**ITAL A185**  
5 Units (90 lecture hours)  
Elementary Italian 2  
Prerequisite(s): ITAL A180 or completion of two years of high school Italian with a grade of 'C' or better.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  
Continuation of ITAL A180, with further development of language skills at the intermediate level and exploration of cultures related to the Italian language. Additional emphasis on reading and writing, with an introduction to selected literary works. May be taken for grades or on a pass-no pass basis.

**ITAL A199**  
1-5 Units (1-90 lecture hours)  
Current Topics in Italian  
Prerequisite(s): One semester of college-level Italian.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
Development of listening, speaking, reading, and writing proficiency in Italian. Extensive exposure to cultures related to the Italian language through authentic materials and group discussions on a variety of topics ranging from current events to global issues. Emphasis on cross-cultural understanding. Content differs each time. May be taken for grades or on a pass-no pass basis.

**ITAL A280**  
5 Units (90 lecture hours)  
Intermediate Italian 1  
Prerequisite(s): ITAL A185 or completion of three years of high school Italian with a grade of 'C' or better.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  
Continuation of ITAL A185, with further development of language skills at the intermediate level and exploration of cultures related to the Italian language. Additional emphasis on reading and writing, with an introduction to selected literary works. May be taken for grades or on a pass-no pass basis.

**ITAL A285**  
5 Units (90 lecture hours)  
Intermediate Italian 2  
Prerequisite(s): ITAL A280 or completion of four years of high school Italian with a grade of 'C' or better.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  
Continuation of ITAL A280, with further refinement of language skills at the intermediate level and investigation of cultures related to the Italian language in preparation for higher level specialized work. May be taken for grades or on a pass-no pass basis.

**Japanese (JAPN)**

**JAPN A180**  
5 Units (90 lecture hours)  
Elementary Japanese 1  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  
The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Japanese, with an introduction to cultures related to the Japanese language. This course is equivalent to two years of high school Japanese. May be taken for grades or on a pass-no pass basis.

**JAPN A180H**  
5 Units (90 lecture hours)  
Elementary Japanese 1 Honors  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU, UC.  
The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Japanese, with an introduction to cultures related to the Japanese language. This course is equivalent to two years of high school Japanese. May be taken for grades or on a pass-no pass basis.
JAPN A185  5 Units (90 lecture hours)
Elementary Japanese 2
Prerequisite(s): JAPN A180 or JAPN A180H or completion of two years of high school Japanese with a grade of 'C' or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Continuation of JAPN A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Japanese language. This course is equivalent to three years of high school Japanese. May be taken for grades or on a pass-no pass basis.

JAPN A185H  5 Units (90 lecture hours)
Elementary Japanese 2 Honors
Prerequisite(s): JAPN A180 or JAPN A180H or completion of two years of high school Japanese with a grade of 'C' or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Continuation of JAPN A180H, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Japanese language. This course is equivalent to three years of high school Japanese. May be taken for grades or on a pass-no pass basis.

JAPN A280  5 Units (90 lecture hours)
Intermediate Japanese 1
Prerequisite(s): JAPN A185 or JAPN A185H or completion of three years of high school Japanese with a grade of 'C' or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Continuation of JAPN A185, with further development of language skills at the intermediate level and exploration of cultures related to the Japanese language. Additional emphasis on reading and writing. May be taken for grades or on a pass-no pass basis.

JAPN A285  5 Units (90 lecture hours)
Intermediate Japanese 2
Prerequisite(s): JAPN A280 or completion of four years of high school Japanese with a grade of 'C' or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Continuation of JAPN A280, with further refinement of language skills at the intermediate level and additional investigation of cultures related to the Japanese language. Continued emphasis on reading and writing. May be taken for grades or on a pass-no pass basis.

Journalism (JOUR)

JOUR A110  3 Units (54 lecture hours)
News Writing and Reporting
Prerequisite(s): ENGL A100 or concurrent enrollment.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Beginning journalists will acquire the skills to write practical news stories under deadline pressure with a focus on accuracy, balance, and style. Writing assignments will include police stories, obituaries, speech coverage, round-ups, and feature stories. May be taken for grades or on a pass-no pass basis. C-ID: JOUR 110.

JOUR A113  1 Unit (18 lecture hours)
Social Media for Print and Online Journalists
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course is for any student enrolled in the student newspaper and will help them understand the issue of social media as a vital part of news gathering and reporting. The course will allow journalism students to create and maintain both a professional personal presence on social media as well as work to maintain the paper's presence on social media including Facebook, Twitter, Instagram, and YouTube.

JOUR A115  4 Units (54 lecture hours; 90 lab hours)
Newspaper Production Level 1
Advisory: ENGL A100; and Journalism A110 or concurrent enrollment.
Grading Mode: Standard Letter, Pass/No Pass
Assist in all aspects of newspaper planning, writing, design and production. Requires writing news and feature stories on deadline, commentary, writing headlines, designing pages, editing, and layout techniques. Students will use state-of-the-art computer design, graphics, and word processing software in a professional setting. May be taken for grades or on a pass-no pass basis. C-ID: JOUR 130.

JOUR A116  3 Units (36 lecture hours; 90 lab hours)
Multi-Media Reporting and Producing
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Students will acquire the skills needed to research, write and produce multi-media stories for posting online, including online newspaper sites. Students will gain a basic understanding of digital photography, videography, and photo editing software. May be taken for grades or on a pass-no pass basis. Lecture, Lab. C-ID: JOUR 120.
Narrative Journalism
Advisory: JOUR A110 and ENGL A100, or concurrent enrollment.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A writing workshop focusing on student writing and marketing in-depth non-fiction feature articles. Emphasis will be on guiding students and developing interesting non-fiction stories from the idea stage through publication and finding suitable markets for publication. Same as ENGL A117. Students completing JOUR A117 may not receive credit for ENGL A117. May be taken for grades or on a pass-no pass basis.

Social Media for Print and Online Journalists Level 2
Prerequisite(s): JOUR A125 or JOUR A135 or JOUR A145.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course will build on the basics of social media for students enrolled in the student newspaper. Students will use social media planning software to post stories and photographs on various platforms and help drive traffic to the campus newspaper’s website. An introduction to social media etiquette will also be reinforced.

Newspaper Production Level 2
Prerequisite(s): JOUR A115.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Assist in all aspects of newspaper planning and writing. Requires writing news and feature stories on deadline, along with commentaries, sports and arts and culture stories and reviews. Students will continue to practice basic newswriting and feature writing skills while expanding background to include sports and arts stories. May be taken for grades or on a pass-no pass basis.

Multi-Media Reporting and Producing Level 2
Prerequisite(s): JOUR A116.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Students will acquire the skills needed to research, write and produce multi-media stories for posting on CoastReportOnline.com. Students will also cover news judgment and advanced editing and hardware and software skills specific to news websites. May be taken for grades or on a pass-no pass basis.

Newspaper Production Level 3
Prerequisite(s): JOUR A125.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Assist in all aspects of newspaper planning, writing, design and production. Requires writing headlines, designing pages, editing, and layout techniques. Students will use state-of-the-art computer design, graphics, and word processing software in a professional setting. May be taken for grades or on a pass-no pass basis.

Newspaper Production Level 4
Prerequisite(s): JOUR A135.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Assist in all aspects of newspaper planning, writing, design and production. Requires writing news and features stories on deadline, commentary, writing headlines, designing pages, editing, and layout techniques. Students will use state-of-the-art computer design, graphics, and word processing software in a professional setting. Students will also use social media to promote readership. May be taken for grades or on a pass-no pass basis.

Covers the fundamentals of photojournalism with students gaining practical experience in the creative process and techniques of making photographs for publication. Work will be assigned for publication in the campus newspaper, Coast Report. C-ID: JOUR 160.

Advanced Newswriting and Reporting
Prerequisite(s): ENGL A100 and JOUR A110.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course offers students insight and background into covering public affairs for print and online news environments. The course guides students through the process of community news reporting and writing, including coverage of student government, local and regional governments, city boards, police, courts and school boards. The course also covers legal and ethical issues in the news media as it pertains to public access, California’s open meetings law, and other news gathering specifics. The course is designed for students pursuing media-related majors and for those seeking employment in the field.
JOUR A215 1 Unit (18 lecture hours)
Coast Report Editorial Board Level 1
Prerequisite(s): Must be editor on Coast Report staff.
Co-requisite(s): JOUR A115, JOUR A125, JOUR A135, or JOUR A145.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course is for the editorial board of the student newspaper. The editors will meet once per week to discuss policy matters, the upcoming issue and the instructor’s critique of the past one. May be taken for grades or on a pass-no pass basis.

JOUR A225 1 Unit (18 lecture hours)
Coast Report Editorial Board Level 2
Prerequisite(s): JOUR A215 and must be editor on Coast Report staff.
Co-requisite(s): JOUR A125 or JOUR A135 or JOUR A145.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course is for the editorial board of the student newspaper. The editors will meet once per week to discuss policy matters, the upcoming issue and the instructor’s critique of the past one. The editors will also design and write headlines for the paper. May be taken for grades or on a pass-no pass basis.

JOUR A235 1 Unit (18 lecture hours)
Coast Report Editorial Board Level 3
Prerequisite(s): JOUR A225 and must be editor on Coast Report staff.
Co-requisite(s): JOUR A135 or JOUR A145.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course is for the editorial board of the student newspaper. The editors will meet once per week to discuss policy matters, the upcoming issue and the instructor’s critique of the past one. The editors will also design and write headlines for the paper. May be taken for grades or on a pass-no pass basis.

JOUR A245 1 Unit (18 lecture hours)
Coast Report Editorial Board Level 4
Prerequisite(s): JOUR A235 and must be editor on Coast Report staff.
Co-requisite(s): JOUR A145.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course is for the editorial board of the student newspaper. The editors will meet once per week to discuss policy matters, the upcoming issue and the instructor’s critique of the past one. The editors will work independently to produce each week’s paper and stay up to date on posting content to CoastReportOnline.com. May be taken for grades or on a pass-no pass basis.

Kinesiology (KIN)

KIN A105 0.5-2.5 Units (5.4-27 lecture hours; 12.6-63 lab hours)
Cardiovascular Fitness
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Cardiovascular exercise program. Stretching, fast-walk, jogging, and running programs will be set up on an individual basis. Pulse monitoring, nutrition, and strength will also be emphasized. Explores the relationship between fitness and health related topics to improve, be part of, and maintain a wellness lifestyle. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

KIN A106 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Weight Training Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
The student will learn the basic principles of weight training and exercises and be able to demonstrate proper biomechanics of weight training exercises. May be taken for grades or on a pass-no pass basis.

KIN A107 0.5-3 Units (5-32 lecture hours; 13-76 lab hours)
Fitness Programs I
Grading Mode: Pass/No Pass
Transfer Credit: CSU, UC.
Allows a student to use the OCC Cardiovascular lab and attend other daytime activity classes with instructor permission. Students must make selections from a series of computer-analyzed fitness and lifestyle evaluations, as well as attend seminars on physical fitness and wellness. Students are required to attend a one-hour orientation. Offered on a pass-no pass basis only.

KIN A108 0.5-3 Units (5-32 lecture hours; 13-76 lab hours)
Strength and Conditioning
Grading Mode: Pass/No Pass
Transfer Credit: CSU, UC.
Individual strength and conditioning programs. Workouts must be done in the Fitness Complex. Students are required to attend a one-hour orientation. Offered on a pass-no pass basis only.

KIN A109 1-3 Units (9-27 lecture hours; 27-81 lab hours)
Cardiovascular Training and Strength Development Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course is designed for the beginning student who is interested in muscular strength/endurance and cardiovascular fitness training to improve general body strength and endurance. Each student will develop an individual fitness and/or strength program with specific performance goals. Safety procedures and protocols through use of cardiovascular and weight training equipment.
KIN A110 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Walking for Fitness Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU

This course is designed to provide an introduction to walking as a cardiovascular fitness activity. Topics to be discussed will include proper walking techniques; fitness program design and evaluation; equipment and safety; persistence and motivation; and nutrition basics. May be taken for grades or on a pass-no pass basis.

KIN A111 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Step Cardio & Core Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC

Contemporary workout designed to improve participant’s strength and cardiovascular fitness level through steady-state stepping movements. The student will be exposed to a graduated continuous system of rhythmic stepping at various platform heights, emphasizing strength, flexibility, and endurance, which are basic components of physical fitness. May be taken for grades or on a pass-no pass basis.

KIN A112 1.5 Units (9-13.5 lecture hours; 27-40.5 lab hours)
Body Sculpting Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC

Body sculpting is a contemporary workout designed to improve each participant’s muscular tone, strength, endurance and flexibility. The student will be introduced to a graduated continuous system of sculpting the body through the use of various resistance techniques. May be taken for grades or on a pass-no pass basis.

KIN A114 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Cardio-Kick Boxing Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC

Designed for students with beginning and intermediate kickboxing ability. Students will learn and improve on a series of combative boxing and kickboxing maneuvers (mainly kicking and punching movements). The objectives of these movements (as well as combinations of them) is to improve cardiovascular and muscular endurance, speed, strength, power, agility and flexibility. In conjunction with improvements in general fitness, this practice of self-defense aims to reduce stress, and improve cognitive processes and focus.

KIN A115 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Cross Training Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC

A multi dimensional approach to total body fitness and wellness. Cross training will encompass aerobics, running and weight training, and provide the student the opportunity to develop and maintain a complete conditioning program which balances cardiovascular conditioning, strength, flexibility, and coordination. May be taken for grades or on a pass-no pass basis.

KIN A116 2.5 Units (36 lecture hours; 18 lab hours)
Triathlon Techniques
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC

A multi-sport fitness program for the novice exerciser to competitor. Students will receive video analysis in swimming, learn safe group cycling practices, proper running technique, discuss injury prevention, the importance of rest and recovery and nutrition. Other topics include equipment technology, selection and maintenance. May be taken for grades or on a pass-no pass basis.

KIN A118 0.5-3 Units (5-32 lecture hours; 10-64 other hours)
Strength and Conditioning Level 2
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

This course is designed to help students develop their physical strength through weight lifting. Students practice advancing methods and techniques of weight lifting and develop an individual program to improve their strength. Offered on a pass-no pass basis only.

KIN A119 0.5-3 Units (4.5-27 lecture hours; 13.5-81 lab hours)
Cardiovascular Training and Strength Development Level 2
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

This combination of lecture/lab course is designed to develop and encourage healthy attitudes and habits with regards to cardiovascular efficiency, body composition, muscular strength and endurance, and flexibility. The course covers the safe use of the equipment, learns the components of a balanced fitness program, basic nutrition, and pre and post-testing for physical fitness. Students use state of the art weight training and cardiovascular equipment to enhance their fitness levels. May be taken for grades or on a pass-no pass basis.

KIN A125 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Self Defense for Women
Grading Mode: Standard Letter

This course is designed for students as an introduction to basic self-defense skills. This includes basic principles of practical personal protection for women with an emphasis on awareness and prevention of situations that may leave a person vulnerable to crime, especially rape. Will explore escape and avoidance strategies, offensive and defensive postures, defensive techniques, and simulated attacks. The course will also examine community services available for both violence prevention and victim abuse services. Finally, fitness principles, such as strength, flexibility, and cardiovascular fitness, will be addressed, particularly in regard to the impact of personal fitness on one's ability to perform the self-defense skills presented in class.
KIN A126  0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)  
Aikido  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  

Aikido is a Japanese art of self-defense which is both non-aggressive and non-competitive. Besides offering students a method of self-defense and all around physical conditioning, Aikido contributes greatly to self-confidence. In addition, it teaches patience, self-discipline, awareness, and respect. May be taken for grades or on a pass-no pass basis.

KIN A127  0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)  
Karate  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  

The study of the elements of Karate, with an emphasis on Karate basics through advanced fundamentals, Kata, and sparring (including Kumite). Karate students progress from beginning fundamentals to intermediate techniques. May be taken for grades or on a pass-no pass basis.

KIN A128  0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)  
Hatha Yoga - Level I  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  

Yoga postures, breathing, concentration/meditation, and relaxation techniques will be presented as a method of personal development encompassing body, mind, and spirit. May be taken for grades or on a pass-no pass basis.

KIN A129  0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)  
T’ai Chi Chih  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  

The study and practice of T’ai Chi Chih, a newly developed system of the Qigong discipline based upon ancient principles. It consists of 20 movement patterns designed to generate, circulate and harmonize internal energy flows for health enhancement. May be taken for grades or on a pass-no pass basis.

KIN A130  0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)  
Aqua Fitness  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  

A course designed to improve physical fitness through an in-water, flotation-assisted workout which is designed to increase flexibility, muscle tone, aerobic conditioning, and physical rehabilitation. May be taken for grades or on a pass-no pass basis.

KIN A131  1-2 Units (9-18 lecture hours; 27-54 lab hours)  
Swimming for Fitness Level 1  
Prerequisite(s): Ability to swim; This skill will be validated the first week of class.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  

Explains the theories and teaches the skills necessary to achieve fitness through swimming. Swimming programs are designed to attain desired levels of cardiovascular efficiency. May be taken for grades or on a pass-no pass basis.

KIN A132  1-2 Units (9-18 lecture hours; 27-54 lab hours)  
Swimming Level 1  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  

Instruction and practice in basics of freestyle, breast stroke, and backstroke, as well as breathing skills, while improving cardiovascular endurance. May be taken for grades or on a pass-no pass basis.

KIN A136  1 Unit (9 lecture hours; 27 lab hours)  
Introduction to Sailing  
Prerequisite(s): Ability to swim 50 yards and tread water for five minutes.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  

Introduces the novice to the fundamentals of sailing through dockside lectures and hands-on experience in Lido 14 dinghies. Points of sail, basic terminology, tacking, jibing, theory, and safety are emphasized. Same as Marine Activities A136. Students completing Kinesiology A136 may not receive credit for Marine Activities A136. May be taken for grades or on a pass-no pass basis.

KIN A137  1 Unit (9 lecture hours; 27 lab hours)  
Introduction to Keel Boats  
Prerequisite(s): KIN A136 or MARA A136 or equivalent experience; and the ability to swim 50 yards and tread water for five minutes; and basic sailing ability; These skills will be validated the first week of class.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  

Introduces the intermediate sailor to the fundamentals of sailing through dockside lectures and hands-on experience in Shields 30 sloops. Points of sail, basic terminology, tacking, jibing, theory, and safety are emphasized. Same as MARA A137. Students completing KIN A137 may not receive credit for MARA A137. May be taken for grades or on a pass-no pass basis.
KIN A138  1 Unit (9 lecture hours; 27 lab hours)
Introduction to Ocean Sailing
Prerequisite(s): Ability to swim 50 yards and tread water for five minutes; knowledge of basic sailing principles; These skills will be validated the first week of class.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Introduces the fundamentals of ocean sailing through dockside lectures and hands-on experience aboard large sailing vessels. Sail handling, winch operation, steering, reefing, line handling are emphasized. Same as MARA A138. Students completing KIN A138 may not receive credit for MARA A138. May be taken for grades or on a pass-no pass basis.

KIN A139  0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)
Kayaking
Prerequisite(s): Students must be able to swim 100 yards and tread water for five minutes; This prerequisite will be validated in class during the first week of the course.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Designed to teach the fundamental kayaking techniques needed to become a safe and effective kayaker. There will be a fee for use of equipment and use of the off-campus facility. Same as MARA A139. Students completing KIN A139 may not receive credit for MARA A139. May be taken for grades or on a pass-no pass basis.

KIN A140  0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)
Outrigger Canoeing
Prerequisite(s): Students must be able to swim 100 yards and tread water for five minutes; this prerequisite will be validated in class during the first week of the course.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Designed to teach the fundamental outrigger canoeing techniques needed to become a safe and effective paddler. There will be a fee for use of equipment and use of the off-campus facility. Same as MARA A140. Students completing KIN A140 may not receive credit for MARA A140. May be taken for grades or on a pass-no pass basis.

KIN A141  2 Units (18 lecture hours; 54 lab hours)
Surfing and Ocean Safety Level 1
Prerequisite(s): Students must be able to swim continuously and unassisted for 15 minutes (any stroke permitted) followed immediately by 5 minutes of treading water; total of 20 minutes in water without holding on to any object; Testing administered first day of class; Students to provide swimsuit and towel; swim goggles optional.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Designed to teach the fundamentals of board surfing and provide beginning surfers the opportunity to safely learn and improve the skills to ride waves. Introduction of paddling, wave selection, equipment, tides, current, and ocean safety are emphasized. May be taken for grades or on a pass-no pass basis.

KIN A145  0.5-1.5 Units (4.5-9 lecture hours; 13.5-27 lab hours)
Badminton Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Develop skills necessary to participate in the game of badminton. Skill development will include instruction on: rules, grip, strokes, etiquette, and basic strategies to compete in singles and doubles. May be taken for grades or on a pass-no pass basis.

KIN A146  1-1.5 Units (9-13.5 lecture hours; 27-40.5 lab hours)
Tennis Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Instruction and practice in the essential stroke skills, rules, etiquette and competition in singles and doubles for the beginning and intermediate levels. May be taken for grades or on a pass-no pass basis.

KIN A147  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Table Tennis Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Introduction and practice in the essential stroke skills, rules, etiquette, and competition in singles and doubles. May be taken for grades or on a pass-no pass basis.

KIN A150  0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)
Basketball
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Instruction and practice in the essential skills, rules, etiquette and competition necessary for beginning/intermediate basketball. This is a coed class designed for recreational players. May be taken for grades or on a pass-no pass basis.

KIN A151  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Futsal/Indoor Soccer Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Designed for men and women with beginning, intermediate, and advanced soccer ability. Students will improve skills through application of rules, theory and study, improve flexibility and endurance training, and participate in drills, Futsal/indoor soccer scrimmages and games. Will explore the relationship between fitness and health related topics to improve, be part of, and maintain a wellness lifestyle. May be taken for grades or on a pass-no pass basis.

KIN A152  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Soccer Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Designed for beginning, intermediate, and advanced soccer players. Students will improve skills through application of rules and theory increase flexibility and endurance, and participate in drills, scrimmages and games. This course will explore the relationship between fitness and health related topics to improve, be part of, and maintain a wellness lifestyle. May be taken for grades or on a pass-no pass basis.
KIN A153 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Golf Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Beginning levels of instruction in putting, chipping, pitching, sand shots and full swing fundamentals with emphasis placed on grip and stance. Students will gain an appreciation and respect for the game, with emphasis on fundamentals necessary for success as a beginning level. May be taken for grades or on a pass-no pass basis.

KIN A154 1-1.5 Units (9-13.5 lecture hours; 27-40.5 lab hours)
Bowling Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

This course is designed to teach the basic fundamentals of bowling and provide beginning bowlers the opportunity to learn and improve their skills. Beginning-level skill development will include instruction on basic bowling techniques with an emphasis on rules and etiquette. May be taken for grade or on a pass-no pass basis.

KIN A155 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Rock Climbing Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Basic climbing techniques and safety fundamentals prepare the student for participation in rock climbing. Securing the climbing harness properly, properly tying to the harness, proper use of climbing commands, safety falling, and arresting falls will be covered. A fee for use of an off-campus facility will be required. May be taken for grades or on a pass-no pass basis.

KIN A156 0.5-2 Units (4.5-18 lecture hours; 13.5-54 lab hours)
Sand Volleyball
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This is an introductory course to the fundamentals of sand volleyball including serving, passing, spiking and digging. Students will learn rules and court strategy for playing the game.

KIN A157 1-2 Units (4.5-9 lecture hours; 40.5-81 lab hours)
Sand Volleyball
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

This is an introductory course to the fundamentals of sand volleyball including serving, passing, spiking and digging. Students will learn rules and court strategy for playing the game.

KIN A158 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Flag Football Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This course is designed for students who have little to no football playing experience. This course will teach the fundamentals of football and provide beginners with a safe environment to learn the game. Students will learn basic football terminology, philosophy, schemes, and learn new skills required to play the game. Students will also learn the important of nutrition and teamwork. The course will be a combination of classroom time and field work. Students will be expected to apply information learned in the classroom onto the field.

KIN A159 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Lacrosse Level 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

The purpose of this course is to provide an introduction to the basic skills, rules, and game tactics of lacrosse. In addition to skill acquisition, the course will focus on specific stages of skill development during modified games through the use of extending, refining, and application tasks and skills of lacrosse. Topics to be discussed and experienced include stick handling, small group game tactics, rule application scenarios, exercise and conditioning, and active participation.

KIN A170 0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)
Adapted Strength Training
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Course is designed for students with physical disabilities requiring an individualized exercise program. Instruction and practice in individualized weight training and resistive exercises will be given for improvement in muscular strength, endurance, and flexibility. May be taken for grades or on a pass-no pass basis.

KIN A171 0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)
Adapted Individual Sports - Bowling
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

This course is designed for students with physical disabilities who can benefit from instruction and practice in the methods, techniques, and rules of bowling. Adapted bowling equipment is available for student use. Class will meet at a local bowling alley. A fee is required to cover use of lanes, shoes, and equipment. May be taken for grades or on a pass-no pass basis.

KIN A172 0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)
Adapted Aquatics
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Designed for students with physical disabilities who can benefit from individualized exercises and swimming in the pool. Instruction and practice in swimming skill development and improvement, exercises in strength and flexibility, and gait training will be offered. May be taken for grades or on a pass-no pass basis. This course may be taken four times.
KIN A173 0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)
Adapted Strength and Balance
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Course is for students with physical disabilities who want to learn methods of increasing stability, decreasing fear, improving posture, recovering loss of balance & getting up from a fall. Students must participate in all challenges & balance assessments.

KIN A174 0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)
Adapted Cardiovascular Fitness
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Course is designed for students with physical disabilities who can benefit from an individualized cardiovascular exercise program. Instruction and practice in cardiovascular activities using a variety of ergometry equipment will be given. May be taken for grades or on a pass-no pass basis.

KIN A175 0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)
Adapted Aerobic Exercise
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Course is designed for students with physical disabilities who can benefit from a sustained cardiorespiratory exercise program. May be taken for grades or on a pass-no pass basis.

KIN A176 0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)
Adapted Stretching
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Course is designed for students with physical disabilities who can benefit from individualized stretching and muscular endurance activities. Activities are conducted both from a sitting position and lying down on mats. Relaxation techniques, pressure points, passive and resistive stretching, and exercises will be demonstrated and performed. May be taken for grades or on a pass-no pass basis.

KIN A202 3 Units (54 lecture hours)
Introduction to Kinesiology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Introduction to the interdisciplinary approach to the study of human movement. An overview of the importance of the sub disciplines in kinesiology will be discussed. Exploration of career opportunities in areas related to sport, movement, exercise and fitness, including teaching, coaching, and fitness professions. C-ID: KIN 100.

KIN A203 2 Units (36 lecture hours)
First Aid and CPR
Grading Mode: Standard Letter, Pass/No Pass

Emphasizes injury prevention, early medical care, first aid for common injuries and life-saving skills. Successful completion qualifies a student for the American Red Cross Standard First Aid Card and CPR Certification. May be taken for grades or on a pass-no pass basis. Formerly known as HLED A112.

KIN A204 3 Units (54 lecture hours)
Techniques and Theory of Coaching Athletes
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course is designed for students to explore career interest in coaching athletes; it is a core course for the coaching certificate program. Introduction of off season and in season training techniques, and game management and strategy, philosophies of coaching, skill and tactical plan development, student athlete motivation, and evidence-based coaching systems are evaluated.

KIN A205 2-4 Units (18 lecture hours; 60-180 other hours)
Coaching Internship
Prerequisite(s): KIN A203 and KIN A204.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Coaching internship is designed to develop breadth and depth of a student’s understanding and experience within coaching. The student will apply the knowledge and skills acquired in the athletic coaching certificate in a practical, supervised, and field-based setting. An emphasis will be placed on athlete/coach interaction, practice planning, game management, player development, and coaching managerial requirements. The practicum experience will focus on using basic coaching theory and principles under the guidance of a head coach. A California mandatory background check (live scan) fee may be required.

KIN A206 1-2 Units (9-18 lecture hours; 27-54 lab hours)
Weight Training Level 2
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

The student will learn the intermediate to advanced principles of weight training and exercises and be able to demonstrate proper biomechanics of weight training exercises appropriate for the student who has experience in weight training. May be taken for grades or on a pass-no pass basis.

KIN A207 0.5-3 Units (4.5-27 lecture hours; 13.5-81 lab hours)
Fitness Programs II
Prerequisite(s): KIN A107.
Grading Mode: Pass/No Pass
Transfer Credit: CSU, UC.

This is an advanced course of KIN A107. Allows a student to use the OCC Cardio Labs and attend other daytime activity classes with instructor permission. Students are required to attend a general fitness evaluation at beginning of the semester. Students are required to attend a one-hour orientation. Offered on a pass no-pass basis only.
KIN A208  0.5-3 Units (4.5-27 lecture hours; 13.5-81 lab hours)
Strength and Conditioning Level 3
Prerequisite(s): KIN A108.
Grading Mode: Pass/No Pass
Transfer Credit: CSU, UC.
Advanced Strength and conditioning programs. Workouts must be done in the Fitness Complex. Students must attend a one-hour orientation. Offered on a pass-no pass basis only.

KIN A210  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Walking for Fitness Level 2
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
This course is designed to provide continued improvement and understanding of the benefits of walking as a cardiovascular fitness activity. Topics to be discussed will include walking and power walking techniques; fitness program design and evaluation; equipment and safety; persistence and motivation; and nutrition basics. May be taken for grades or on a pass-no pass basis.

KIN A211  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Step Cardio and Core Level 2
Advisory: KIN A111.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Advanced step, cardio, and core workout designed to improve participant's strength and cardiovascular fitness. The student will be exposed to a graduated continuous system of rhythmic stepping at various platform heights, emphasizing strength, flexibility, and endurance, which are basic components of physical fitness.

KIN A212  1-1.5 Units (9-13.5 lecture hours; 27-40.5 lab hours)
Body Sculpting Level 2
Advisory: KIN A212 or instructor approval.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Body sculpting is a contemporary workout designed to improve each participant's muscular tone, strength, endurance and flexibility. This course will utilize a variety of intermediate body sculpting resistance techniques, including body pump and resistance bands. May be taken for grades or on a pass-no pass basis.

KIN A214  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Cardio Kickboxing Level 2
Grading Mode: Standard Letter
Transfer Credit: CSU.
Designed for students with intermediate and advanced kickboxing ability. Students will learn and improve on a series of advanced combative boxing and kickboxing maneuvers (mainly kicking and punching movements). The objectives of these movements (as well as combinations of them) is to improve cardiovascular and muscular endurance, speed, strength, power, agility and flexibility. In conjunction with improvements in general fitness, this practice of self-defense aims to reduce stress, and improve cognitive processes and focus.

KIN A215  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Cross Training Level 2
Advisory: KIN A115.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Cross training is a multi-dimensional approach to total body fitness and wellness. This course will encompass an intermediate and advanced level of aerobicics, running and weight training and provide the student the opportunity to develop and maintain a complete conditioning program which balances cardiovascular conditioning, strength, flexibility and coordination. Course may be taken for grade or on a CR/NC basis.

KIN A218  0.5-3 Units (5-32 lecture hours; 13-76 lab hours; 10-64 other hours)
Strength and Conditioning Level 4
Grading Mode: Pass/No Pass
Transfer Credit: CSU, UC.
This course is designed to help students develop with advanced instruction and sport specific practice in the techniques of developing muscle strength. Power lifting, resistance machines, free weights, and additional equipment will be utilized. Advanced training, principles, and theories. Offered on a pass-no pass basis only.

KIN A225  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Self Defense for Women Level 2
Prerequisite(s): KIN A125.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course is designed for students as an advanced set of self-defense skills. This includes review of basic principles of practical personal protection for women with an emphasis on awareness and prevention of situations that may leave a person vulnerable to crime, especially rape. Will explore advance escape and avoidance strategies, offensive and defensive postures, defensive techniques, and simulated attacks. This advanced class covers more prone defense strategies, multiple subject encounters and low and diffused light simulation exercises. The course will also examine community services available for both violence prevention and victim abuse services. Finally, fitness principles, such as strength, flexibility, and cardiovascular fitness, will be addressed, particularly in regard to the impact of personal fitness on one's ability to perform the self-defense skills presented in class. May be taken for grades or on a pass-no pass basis.

KIN A228  0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)
Hatha Yoga Level II
Advisory: KIN A128 or instructor's consent.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Yoga postures, breathing, concentration/meditation, and relaxation techniques will be presented as a method of personal development encompassing body, mind, and spirit. Intermediate yoga poses will be introduced and practiced.
KIN A231  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Swimming for Fitness - Level 2
Advisory: KIN A131.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Explains the theories and teaches the intermediate and advanced skills necessary to achieve cardiovascular fitness through swimming. Introduction to the use of pace clocks, Heart Rate Target - Zone training, hand paddles and pool safety are emphasized. Swimming programs are designed to attain desired levels of cardiovascular efficiency. This is not a swim technique class. Course may be taken for grade or on a CR/NC basis. PREREQUISITES: Ability to swim, comfortable in deep water; This skill will be validated the first week of class.

KIN A232  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Swimming Level 2
Advisory: KIN A132.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Instruction and practice in intermediate to advanced techniques of freestyle, breast stroke, backstroke, and butterfly. Instruction and execution of thorough breathing skills, pulling ability and kicking propulsion while improving cardiovascular endurance. May be taken for grades or on a pass-no pass basis.

KIN A241  2 Units (18 lecture hours; 54 lab hours)
Surfing and Ocean Safety Level 2
Prerequisite(s): Students must be able to swim continuously and unassisted for 15 minutes (any stroke permitted) followed immediately by 5 minutes of treading water; total of 20 minutes in water without holding on to any object; Testing administered first day of class; Students to provide swimsuit and towel; swim goggles optional.
Advisory: KIN A141.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Designed to teach a higher level of fundamentals of board surfing and provide intermediate and advanced surfers the opportunity to safely learn and improve skills to ride more challenging waves. Analysis of paddling, wave selection, equipment, tides, currents, etiquette and water safety are emphasized. May be taken for grades or on a pass-no pass basis.

KIN A245  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Badminton Level 2
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
This course is intended to develop intermediate-advanced level skills necessary to participate in the game of badminton. Skill development will include instruction on intermediate-advanced stroke analysis, specific singles and doubles tactics, offensive and defensive strategies, and competitive class match play. May be taken for grades or on a pass-no pass basis.

KIN A246  1-1.5 Units (9-13.5 lecture hours; 27-40.5 lab hours)
Tennis Level 2
Advisory: KIN A146 or instructor consent.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
Instruction and practice of intermediate and advanced skills and strategies of tennis, including the analysis of self and opponent’s play to become an effective competitor. May be taken for a grade or on a pass-no pass basis.

KIN A247  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Table Tennis - Level 2
Advisory: KIN A147.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Introduces and develops for the Intermediate and advanced players the chop shot, loop and defensive strategies as well as singles and doubles tournaments.

KIN A251  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Futsal/Indoor Soccer Level 2
Advisory: KIN A151.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Designed for intermediate and advanced soccer players. Students will learn advanced technical ball skills and advanced game tactics for competitive team play. This course will explore the relationship between fitness and health-related topics to improve, be part of, and maintain a wellness lifestyle.

KIN A252  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Soccer Level 2
Advisory: KIN A152.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Designed for intermediate and advanced soccer players. Students will learn advanced technical ball skills and advanced game tactics for competitive team play. This course will explore the relationship between fitness and health-related topics to improve, be part of, and maintain a wellness lifestyle.

KIN A253  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Golf Level 2
Advisory: KIN A153.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Intermediate/Advanced instruction, with emphasis on course play and competition. Students should have beginning knowledge of golf, with a golf swing already in place. Refines full swing, chipping techniques, pitching, sand bunker play, rules, scoring, and game management at the intermediate level.
KIN A254  1-1.5 Units (9-13.5 lecture hours; 27-40.5 lab hours)
Volleyball Level 2
Advisory: KIN A154 or instructor consent.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
This course presents advanced volleyball techniques and tactics for team and tournament play. The course covers advanced skills, court positioning, rolls, drives, and team strategy, both offensive and defensive.

KIN A255  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Bowling Level 2
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
This course is designed to teach intermediate-advanced level bowling skills necessary to participate in handicap and scratch bowling leagues and tournaments. Skill development will include instruction on intermediate-advanced bowling techniques, specific strategies and tactics, and competitive class league and tournament play.

KIN A256  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Rock Climbing Level 2
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Climbing techniques and safety fundamentals, equipment overview and advanced skills prepare the student for participation in competitive rock climbing, use of advanced equipment, safety and bouldering skills. Securing the climbing harness properly, properly tying to the harness, proper use of climbing commands, safety falling, and arresting falls will be covered. A fee for use of an off-campus facility will be required. May be taken for grades or on a pass-no pass basis. May be taken for grades or on a pass-no pass basis.

KIN A258  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Flag Football Level 2
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
This course is designed for students who have intermediate to advanced knowledge and of the game. This course will introduce students to advanced football fundamentals, schemes, strategy, and skills of the game. Students will further their knowledge of the game through weekly lectures and competitions. Students will be responsible for organizing practices and create/explain drills to prepare their team for weekly competitions. This course will be a combination of classroom time and field work. Students will be expected to apply information learned in the classroom onto the field.

KIN A259  1-2 Units (9-18 lecture hours; 27-54 lab hours)
Lacrosse Level 2
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
The course is designed for intermediate and advanced lacrosse players. Students will extend, refine, and apply intermediate and advanced skills and tactics during small, large, and whole game scenarios. Topics will include game applications, intermediate and advanced tactical applications while exploring the relationship between fitness and successful continuous large group and full team game play.

KIN A270  3 Units (54 lecture hours)
Fitness and Health
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Theory and benefits of physical activity to fitness-related health. The study of human adaptation to exercise includes cardiovascular conditioning, neuromuscular training, body composition, nutrition for performance, stretching, sports injuries, and aging. Same as Health Education A270. Students completing Kinesiology A270 may not receive credit for Health Education A270. May be taken for grades or on a pass-no pass basis.

KIN A271  3 Units (54 lecture hours)
Drugs & Sports
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
An in-depth look at substance abuse among athletes. The focus will be on drug effects, the impact on the team, nutrition and positive alternatives. Same as Health Education A271. Students completing Kinesiology A271 may not receive credit for Health Education A271. May be taken for grades or on a pass-no pass basis.

KIN A272  3 Units (54 lecture hours)
Movement Analysis
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Introduction to the musculo-skeletal system and its function in human movement. Analysis of movements in sport skills and the muscles and bones involved.

KIN A273  3 Units (54 lecture hours)
Sports Medicine
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Technique and theory of care and prevention of athletic injuries. Includes the use of various therapeutic modalities for therapy and prevention of injury through strength and flexibility exercise.

KIN A274  3 Units (54 lecture hours; 18 lab hours)
Athletic Taping and Modalities
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
The entry-level theory and technique of athletic strapping and physiological effects and use of therapy modalities. Instruction in the use of ultrasound, electric stimulation, heat/cold, and whirlpool.

KIN A275  2-4 Units (18 lecture hours; 54-162 lab hours)
Sports Medicine Practicum Level 1
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
Designed to provide clinical experience for students interested in sports-related injury care and prevention. Experiences will include taping for prevention of injury, use of modalities, and exercise programs in rehabilitation of injuries.
KIN A276  2-4 Units (18 lecture hours; 54-162 lab hours)
Sports Medicine Practicum Level 2
Advisory: KIN A275 or instructor consent.

Grading Mode: Standard Letter
Transfer Credit: CSU, UC.

This course is designed for the beginning/intermediate athletic training student to get an overview of sports medicine topics including medical terminology, therapeutic modalities, basic tape techniques, contagious skin diseases as related to athletes, and a variety of sports-related injuries. Instructor will assess student ability and skill level in the first week of class to insure proper course level placement.

KIN A277  2-4 Units (18 lecture hours; 54-162 lab hours)
Sports Medicine Practicum Level 3
Advisory: KIN A275 and KIN A276.

Grading Mode: Standard Letter
Transfer Credit: CSU, UC.

This course is designed for the intermediate/advanced student to learn therapeutic goals and objectives, therapeutic taping and bandaging, selection of therapeutic exercises, methods of evaluating and recording rehabilitation progress and development of criteria for progression and return to normal function. Instructor will assess student ability and skill level in the first week of class to insure proper course level placement.

KIN A278  2-4 Units (18 lecture hours; 54-162 lab hours)
Sports Medicine Practicum Level 4
Advisory: KIN A275 and KIN A276 and KIN A277.

Grading Mode: Standard Letter
Transfer Credit: CSU, UC.

This course is designed for advanced level athletic training student to further develop their athletic training skills and prepare to transfer to a 4-year school. This includes working with team physicians, physician assistants, emergency medical technicians, coaches, administrators, cooperative learning with lower level students, record keeping and taping. Instructor will assess student ability and skill level in the first week of class to ensure proper course level placement.

KIN A279  3 Units (54 lecture hours)
Sports Management
Grading Mode: Standard Letter
Transfer Credit: CSU.

This introductory course will expose students to the business structures of the recreational, high school, collegiate and professional sports industry. Discussion of sports management career opportunities will be included.

KIN A280  3 Units (54 lecture hours; 18 lab hours)
Strength Conditioning/Theory
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.

Theory and applications of strength development, muscular endurance, flexibility, neuromuscular coordination, nutrition and supplementation. Includes planning, developing and setting up programs designed to achieve the desired goals in the most efficient way. Also, includes introduction to fitness and exercise testing procedures.

KIN A281  3 Units (54 lecture hours)
Fitness and Exercise Testing
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.

Theory and techniques of kinesiology evaluation, exercise testing and exercise prescription.

KIN A282  3 Units (54 lecture hours; 18 lab hours)
Introduction to Exercise Physiology
Advisory: BIOL A221.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

An introduction to the study of human physiological processes during exercise and activity. Includes study of metabolic changes to major body systems during acute exercise, the physiological adaptations due to chronic exercise and the effect of training upon performance. Students will practice fitness testing and apply practical knowledge in a lab setting.

KIN A283  3 Units (54 lecture hours)
Nutrition, Fitness, and Performance
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

An applied nutrition course for individuals interested in health, fitness, and athletics. Principles of nutrition are studied and applied to the athlete and active individuals. Includes pre and post event food and fluid selection, nutrient requirements, supplements, muscle mass and body fat related to performance. Same as Food and Nutrition A136 and Health Education A136. Students completing Kinesiology A283 may not receive credit for Food and Nutrition A136 or Health Education A136. May be taken for grades or on a pass-no pass basis.

KIN A284  3 Units (54 lecture hours)
Theory of Yoga
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A survey of the origins of Yoga, including ancient to modern traditions, and exploration of the principal ancient texts of Yoga. This course includes the evolution of yoga from its earliest development to its current integration into modern culture.
KIN A285 3 Units (36 lecture hours; 54 lab hours)
Yoga Methodology
Prerequisite(s): Prior Yoga Experience as demonstrated in first week of enrollment.

Advisory: KIN A128 and KIN A228.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Designed for students to learn how to teach key poses in each category of Yoga for adults, teens, and children in a variety of settings. This class includes proper alignment, sequencing of postures, positive communication, verbal and physical cueing, precautions, and modifications for yoga clients.

KIN A286 3 Units (54 lecture hours; 18 lab hours)
Yoga Methodology 2
Prerequisite(s): KIN A228 and KIN A285.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Designed for students to increase their knowledge and build on the concepts from Yoga Methodology 1. Students will learn how to teach the principles and techniques of Yoga in each category of the three stages of life (developmental, preventative, and therapeutic) in a variety of settings. This class includes further study of proper alignment, sequencing of postures, positive communication, verbal and physical cueing, precautions, and modifications for yoga clients. May be taken for grade or on a pass-no pass basis.

KIN A287 3 Units (36 lecture hours; 54 lab hours)
Yoga Practicum Level 1
Prerequisite(s): KIN A228 and KIN A285.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Students in this course are given practical experience in yoga teaching, class planning, and auditioning for employment. Students will learn how to prepare to teach diverse populations, enhance the teacher-student experience, and prepare for yoga studio, corporate, and private employment. Additional lab hours will assign students to teach in a supervised Hatha Yoga Level 1 class at OCC.

KIN A288 3 Units (54 lecture hours)
Stress Management Theory and Application
Prerequisite(s): KIN A280 and Current CPR certification to be verified by instructor during first class meeting.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course is designed to give students an understanding of physiological and mental determinants and manifestations of stress. Topics include the nature and physiology of stress, mental stress, stress as it relates to disease, emotions, and personality, behavior modification, communication, time management, with emphasis placed on physical activity and nutrition. Students are also introduced to a variety of stress management techniques including imagery, progressive muscle relaxation, biofeedback, centering, breathing exercises, yoga, and meditation.

KIN A289 3 Units (54 lecture hours)
Mental Performance and Exercise Psychology
Prerequisite(s): KIN A280 and Current CPR certification to be verified by instructor during first class meeting.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course will enable students to understand the effects of psychological factors on motor performance. In addition, the students will gain an understanding of the effects of participating in physical activity on psychological development, health, and well-being.

KIN A296 3 Units (54 lecture hours)
Personal Trainer
Prerequisite(s): KIN A280 and Current CPR certification to be verified by instructor during first class meeting.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course will provide students with the knowledge and confidence to become leaders in the personal training industry to be prepared for careers as fitness professionals. Topics to include an investigation of the personal training industry, fitness assessment, and program design. May be taken for a grade or on a pass/no-pass basis.

KIN A297 2 Units (9 lecture hours; 81 lab hours)
Fitness Specialist Practicum
Prerequisite(s): KIN A280 and Current CPR certification to be verified by instructor during first class meeting.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course will provide a hands-on experience in fitness evaluation and assessment for healthy populations. Students will learn how to accurately perform skinfolds measurement, assess flexibility, strength, and muscular endurance. Maximum and submax cardiovascular endurance assessment will also be covered. Exercise programming based on assessment will be completed. May be taken for grades or on a pass/no-pass basis.

KIN A298 2-3 Units (18 lecture hours; 60-120 other hours)
Fitness Specialist Internship
Grading Mode: Standard Letter
Transfer Credit: CSU.

A supervised internship related to classroom-based learning at a workplace site that supports the learning outcomes of the Fitness Specialist Certificate program.

Leadership (LEAD)

LEAD A180 3 Units (54 lecture hours)
Personal Leadership
Prerequisite(s): LEAD A128
Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to the concepts and personal skills related to leadership on campus, the community, and business. Course progresses from a study of leadership traits and models to assessment and analysis of personal skills and attitudes and ends with the development of individual student plans for leadership development. An introductory course of the leadership studies program.
LEAD A200  
Organizational Leadership  
3 Units (54 lecture hours)  
Grading Mode: Standard Letter  
Transfer Credit: CSU  
Learn to provide leadership to business, community, and governance organizations.

Learning (LRNG)  

LRNG A001  
Basic Skills Remediation  
1-3 Units (54-162 lab hours)  
Prerequisite(s): Completion of the California Community College Learning Disabilities Assessment.  
Grading Mode: Pass/No Pass  
Provides individualized remedial instruction to students with learning disabilities. The program is designed to help a student improve the basic academic skills of reading, spelling, writing, and arithmetic. This is an open entry/open exit course. Offered on a pass-no pass basis only. This course may be taken four times. Not applicable to AA or AS degree.

Library (LIBR)  

LIBR A100  
Library Research and Information Competency  
2 Units (36 lecture hours)  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
Learn how to cope with the ever expanding world of information through the use of the library and information resources. Develop skills in searching, using, evaluating, and citing print, electronic, and web resources. This course may also be offered online.

Machine Technology (MACH)  

MACH A100  
Introduction to Machine Shop  
3 Units (36 lecture hours; 54 lab hours)  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
A basic course in machine shop practices.

MACH A105  
Lathe  
5 Units (54 lecture hours; 90 lab hours)  
Advisory: MACH A100, MACH A120 and MACH A121.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
A basic course in engine lathe operation to include ID and OD threading, knurling, boring, turning, facing, and cutting tapers. This course also includes exposure to the chucker lathe, tracer lathe, and the turret lathe. Safety and measurement are also emphasized.

MACH A110  
Milling Machine  
5 Units (54 lecture hours; 90 lab hours)  
Advisory: MACH A100 and MACH A120.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
A basic course in milling machine operations to include both vertical and horizontal milling usage, theory, and usage of tools and accessories. Safety is also emphasized.

MACH A115  
Production Machining Techniques  
2 Units (18 lecture hours; 54 lab hours)  
Prerequisite(s): MACH A100 and MACH A105 and MACH A110 or permission of instructor.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
This course emphasizes production machining. Set up and running of more than one part on a variety of machines including but not limited to engine lathe, chucker lathe, ID and OD grinder, vertical mill and horizontal mill.

MACH A120  
Measurement and Blueprint Reading  
3 Units (54 lecture hours)  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
A study of blueprint reading and measuring systems used in manufacturing, including an in-depth study of the basic and advanced measuring tools used by machinists. Common blueprint formats and dimension practices will be explored. Geometric dimensioning and tolerancing will be discussed.

MACH A121  
Computations for Machinists  
3 Units (54 lecture hours)  
Prerequisite(s): MACH A100 and MACH A105 and MACH A110 or permission of instructor.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
A course in applied technical computations for students in machine technology and CNC studies. Topics include basic computations, shop formulas and equations, and applied trigonometry as used in the machining industries. This course may be taken two times.

MACH A122  
Machine Shop Inspection  
1.5 Units (18 lecture hours; 27 lab hours)  
Advisory: MACH A120.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  
This course provides a basic understanding of the purpose and procedures for verifying the dimensional properties of manufactured parts. Students will train and practice, using appropriate inspection equipment.
MACH A125 3 Units (36 lecture hours; 54 lab hours)  
CNC Machine Operation 1  
Advisory: MACH A105 and MACH A110.  

Grading Mode: Standard Letter  
Transfer Credit: CSU.  

A basic course in the operation of computerized numerically controlled lathes and mills, including machine functions, tooling setup, reading machine language, part setup, and machine manipulation. Includes production of parts on both lathes and mills.

MACH A126 2 Units (18 lecture hours; 54 lab hours)  
CNC Machine Operation 2  
Advisory: MACH A125 or instructor approval.  

Grading Mode: Standard Letter  
Transfer Credit: CSU.  

Students will learn advanced features of state-of-the-art CNC lathes and mills, make their own fixtures, write the necessary programs, and produce the parts on CNC machines.

MACH A130 3 Units (54 lecture hours)  
Introduction to CNC and Manual Programming  
Advisory: MACH A105 and MACH A110 or approval of instructor.  

Grading Mode: Standard Letter  
Transfer Credit: CSU.  

A basic course in computerized numerical control of machine tools. Types of control systems, capabilities and the different machine languages are examined. Elementary parts programming in two-axis systems, including all steps necessary to complete a part on both CNC lathes and mills.

MACH A133 3 Units (54 lecture hours; 18 lab hours)  
CNC Programming-Mastercam 1  
Advisory: CHT A100 or CIS A100 or MACH A130.  

Grading Mode: Standard Letter  
Transfer Credit: CSU.  

Students will receive hands-on training in the use of Mastercam CNC programming software. The basics of two-dimensional part programming, including geometry development, milling, drilling, tapping, pocketing, and more will be explored.

MACH A134 3 Units (54 lecture hours; 18 lab hours)  
CNC Programming-Mastercam 2  
Prerequisite(s): MACH A133.  

Grading Mode: Standard Letter  
Transfer Credit: CSU.  

Advanced CNC programming using Mastercam to program CNC machines. Instruction emphasis complex cutter movement and surfacing. This course may be taken two times.

MACH A141 1.5 Units (18 lecture hours; 18 lab hours)  
Mastercam Lathe  
Prerequisite(s): MACH A133.  

Grading Mode: Standard Letter  
Transfer Credit: CSU.  

A course designed for students who have completed the basic Mastercam class, MACH A133, and wish to have concentrated instruction on CNC lathe programming on lathe only.

MACH A142 2 Units (36 lecture hours; 18 lab hours)  
Mastercam Solids  
Prerequisite(s): MACH A133.  

Grading Mode: Standard Letter  
Transfer Credit: CSU.  

An intermediate course in CNC programming using the solids feature of Mastercam. This course will introduce students to solid modeling creation using Mastercam. Boolean addition and subtraction, as well as filleting, chamfering, and the machining of solids models.

MACH A146 1.5 Units (18 lecture hours; 27 lab hours)  
Machining with MasterCAM  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.  

An intermediate course in manufacturing with vertical machining centers using MasterCAM to develop programs for the purpose of creating metal parts. Basic 2-D toolpath as well as advanced 3-D toolpath techniques will be discussed and created.

MACH A147 2 Units (18 lecture hours; 54 lab hours)  
Introduction to 5 Axis Machining  
Advisory: MACH A125, MACH A126, and MACH A130.  

Grading Mode: Standard Letter  
Transfer Credit: CSU.  

Students will learn basic features of state-of-the-art CNC 5 axis mills. Write necessary manual programs, and produce the parts on The CNC 5 axis machine, with the aid of 5 axis CNC simulation software.

MACH A152 3 Units (36 lecture hours; 54 lab hours)  
Introduction to SolidWorks  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  

The fundamentals of computer-aided design and drafting using SolidWorks software. Application of SolidWorks in creating manufacturing models will be covered.
MACH A158  
0.5 Units (9 lecture hours; 18 lab hours)  
Additive Manufacturing/3D Printing  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Additive Manufacturing deals with aspects of additive, subtractive, and joining processes to form three-dimensional parts with applications ranging from prototyping to production. Additive manufacturing processes directly from computer-aided-design (CAD) models. In this course, students will learn about a variety of AM and other manufacturing technologies, their advantages and disadvantages for producing both prototypes and functional production quality parts.

MACH A175  
Dimensioning and Tolerancing  
Advisory: MACH A120.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

A course in reading and using Reference (SME Y-14.5-1994) standards for geometric dimensioning and tolerancing.

MACH A190  
2 Units (36 lecture hours)  
Elementary Metallurgy  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

An elementary course describing the relationship between microstructure, composition, heat, and mechanical treatment and physical properties of metal and alloys; their relationship to design and machining.

MACH A195  
3 Units (54 lecture hours)  
Manufacturing Processes  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

A study of engineering materials and manufacturing processes from the viewpoint of the machinist, draftsman, and designer. Course discusses the problems of material selection coupled with economical manufacturing methods.

MACH A199  
1-4 Units (9-72 lecture hours; 0-54 lab hours)  
Current Topics in Machine Technology  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

Current issues in the field of Manufacturing Technology, rotating through a variety of topics, such as inspection, quality control, lean manufacturing, rapid prototype, materials, and other topics related to manufacturing.

MACH A200  
2.5 Units (36 lecture hours; 36 lab hours)  
Tooling  
Advisory: MACH A100, MACH A105, MACH A110, and MACH A120.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

A basic course in the making of jigs, fixtures, and molds.

Management (MGMT)

MGMT A100  
3 Units (54 lecture hours)  
Applied Management for Public and Private Organizations  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

An introduction to the tools, practices, policies, and concepts of management in modern organizations. Emphasis will be on planning, organizing, leading, controlling, communication, and decision-making.

MGMT A115  
3 Units (54 lecture hours)  
Human Relations and Supervision  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

A behavior science approach to human relations in business with special emphasis on developing a student's leadership qualities, understanding, personal characteristics, and attitudes desirable for advancement to greater responsibilities in business management. Designed for on-the-job trainees or mid-management trainees who are seeking further insights in dealing with co-workers and management. This course may also be offered online.

MGMT A239  
3 Units (54 lecture hours)  
Professional Communication  
Grading Mode: Standard Letter, Pass/No Pass  
Study of communication functions, choices, and roles for professionals in business. Practice in using verbal, nonverbal, and writing skills to communicate one-on-one, electronically, and in groups. Same as Business A239. Students completing Management A239 may not receive credit for Business A239. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

Marine Activities (MARA)

MARA A136  
1 Unit (9 lecture hours; 27 lab hours)  
Introduction to Sailing  
Prerequisite(s): Ability to swim 50 yards and tread water for five minutes; This prerequisite will be validated in class during the first week of the course.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU, UC.

Introduces the novice to the fundamentals of sailing through dockside lectures and hands-on experience in Lido 14 dinghies. Points of sail, basic terminology, tacking, jibing, theory, and safety are emphasized. Same as KIN A136. Students completing MARA A136 may not receive credit for KIN A136. may be taken for grades or on a pass-no pass basis.
MARA A137 1 Unit (9 lecture hours; 27 lab hours)
Intermediate Sailing - Intro to Keel Boats
Prerequisite(s): MARA A136 or KIN A136; and Ability to swim 50 yards and tread water for five minutes; and Basic sailing ability; These skills will be validated the first week of class.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Introduces the intermediate sailor to the fundamentals of sailing through dockside lectures and hands-on experience aboard large sailing vessels. Points of sail, basic terminology, tacking, jibing, theory, and safety are emphasized. Same as KIN A137. Students completing MARA A137 may not receive credit for KIN A137.

MARA A138 1 Unit (9 lecture hours; 27 lab hours)
Introduction to Ocean Sailing
Prerequisite(s): Ability to swim 50 yards and tread water for five minutes; Knowledge of basic sailing principles; This prerequisite will be validated in class during the first week of the course.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Introduces the fundamentals of ocean sailing through dockside lectures and hands-on experience aboard large sailing vessels. Sail handling, winch operation, steering, reefing, and line handling are emphasized. Same as KIN A138. Students completing MARA A138 may not receive credit for KIN A138. May be taken for grades or on a pass-no pass basis.

MARA A139 0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)
Kayaking
Prerequisite(s): Students must be able to swim 100 yards and tread water for five minutes; This prerequisite will be validated in class during the first week of the course.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Designed to teach the fundamental kayaking techniques needed to become a safe and effective kayaker. There will be a fee for use of equipment and use of the off-campus facility. Same as KIN A139. Students completing MARA A139 may not receive credit for KIN A139. May be taken for grades or on a pass-no pass basis.

MARA A140 0.5-1.5 Units (4.5-13.5 lecture hours; 13.5-40.5 lab hours)
Outrigger Canoeing
Prerequisite(s): Ability to swim 100 yards and tread water for five minutes; This prerequisite will be validated in class during the first week of the course.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Designed to teach the fundamental outrigger canoeing techniques needed to become a safe and effective paddler. There will be a fee for use of equipment and use of the off-campus facility. Same as KIN A140. Students completing MARA A140 may not receive credit for KIN A140. May be taken for grades or on a pass-no pass basis.

MARA A150 3 Units (54 lecture hours; 18 lab hours)
Coastal Navigation
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Starting with the basics of navigation, students will be able to interpret charts, plot positions and courses, utilize navigational publications, and determine the effects of tides and currents relating to coastal piloting. Passage planning and boating safety legal requirements will be included. May be taken for grades or on a pass-no pass basis.

MARA A151 2 Units (36 lecture hours)
Maritime Industry
Grading Mode: Standard Letter
Transfer Credit: CSU

Students will learn about marine industry careers, maritime terminology, types of vessels and vessel protocol. Job skills and career paths for the marine industry are covered. Personal conduct, customer service skills, resume writing and interviewing skills are included to improve employment opportunities. This is a required course of the Professional Mariner Program. A facility fee will be charged for field trips.

MARA A152 3 Units (36 lecture hours; 54 lab hours)
Boat Handling and Seamanship
Grading Mode: Standard Letter
Transfer Credit: CSU

Students learn safe boating practices and regulations. Practical training while operating small motor boats includes docking procedures, underway maneuvering, anchoring and overboard rescue drills. Time on the water provides experience in crew teamwork, standing watch, maintaining a lookout and general seamanship. This is a required course of the Professional Mariner Program. A facility fee will be charged.

PREREQUISITE: Student must be able to swim 50 yards, tread water for 10 minutes.

MARA A153 4 Units (72 lecture hours; 18 lab hours)
Marine Basic Safety Training
Grading Mode: Standard Letter, Pass/No Pass
Prerequisite(s): MARA A151.

This course is the basic safety training (BST) as specified by the U.S. Coast Guard (USCG). Basic firefighting, personal survival, personal safety, social responsibility, and first aid in marine situations are covered in this hands-on program. Students with satisfactory level of completion will be qualified for First Aid and CPR cards and Certificates of Completion for STCW-95 compliance. This is a required course for the Professional Mariner Program. An optional facility fee will be paid to a Fire Training Facility. A $30 Certificate fee will be paid at Bursar’s Office upon successful completion of all USCG evaluations.

MARA A154 3 Units (54 lecture hours; 18 lab hours)
Basic Communication and Navigation
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: UC.

Students will learn radio communication passing, radio communications with the U.S. Coast Guard (USCG), the U.S. Navy, and other ships. Sailing charts, log-plots, tidal information, and meteorological and nautical publications will be used to plan safe and effective courses and passage plans. This is a required course of the Professional Mariner Program. A facility fee will be charged.
MARA A154 2 Units (36 lecture hours; 27 lab hours)
Yachtkeeping and Engine Maintenance
Grading Mode: Standard Letter
Transfer Credit: CSU

This course offers hands on experience in Yachtkeeping; cleaning interior & exterior surfaces. Students will learn the practical operation and routine maintenance of mechanical systems aboard vessels, diesel inboard engines and gasoline outboard engines. Skills practiced include painting, varnishing and routine engine maintenance. This is a required course of the Professional Mariner Program.

MARA A156 2 Units (36 lecture hours)
Maritime Environment
Grading Mode: Standard Letter
Transfer Credit: CSU

Students will learn about the systems that drive global weather patterns and conditions commonly found along major shipping routes as well as hubs of recreational yachting. Global and regional physical oceanography will be covered as it relates to navigational challenges to the mariner. Understanding oceanography and weather will aid the student in understanding pollution regulations and the responsibilities of the mariner to the environment in which he or she works. This is a required course of the Professional Mariner Program. A facility fee will be charged for field trips.

MARA A157 2 Units (36 lecture hours)
Radar Observer
Prerequisite(s): Professional Mariner Level 1 Certificate of Achievement or equivalent.
Grading Mode: Standard Letter
Transfer Credit: CSU

Students will learn fundamentals of marine Radar, its uses, limitations, and how to interpret data from a radar system. Primary focuses will be on Radar Navigation and Collision avoidance. Students with satisfactory level of completion will be qualified for a Certificate of Completion for U.S. Coast Guard Radar Observer license endorsement, establishing competency in the operation and utilization of marine radar equipment. This endorsement may be added to any U.S. Coast Guard Deck Officer License.

MARA A200 2 Units (120 other hours)
Professional Mariner Internship
Prerequisite(s): MARA A150, MARA A151, MARA A152, MARA A153, or MARA A155.
Co-requisite(s): MARA A201.
Grading Mode: Standard Letter
A supervised internship related to classroom-based learning at a maritime related work site. This course is designed as a supervised internship course for the Professional Mariner student. The student will gain experience in a marine related position that bridges classroom based learning with career goals. This 120-hour unpaid or 150-hour paid work experience course is designed to assist students to acquire career awareness, work habits, attitudes and skills for the professional mariner program. Credit for occupational work experience may be accrued at the rate of one to 8 units per semester for a total of sixteen units. Additionally, this course is for 2 units and students must work 75 paid hours or 60 non-paid hours per unit earned. Transfer credit: CSU.

MARA A201 1 Unit (18 lecture hours)
Professional Mariner Internship Lecture
Co-requisite(s): MARA A200.
Grading Mode: Standard Letter
Transfer Credit: CSU

This course provides instructor-guided preparation related to classroom-based learning at a maritime related work site. This course is designed as a supplement to the supervised internship course for the Professional Mariner student.

Marine Science (MRSC)

MRSC A100 3 Units (54 lecture hours)
Oceanography
Advisory: ENGL A098 or ESL A099.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC

An orientation to the marine sciences, including considerations of physical and chemical properties of the sea, the sea-air interface, the biology of the sea, the geology of the ocean basins, the sea as a physical, chemical, biological, and recreational resource and the obligation of mankind to control further contamination of the environment. This course may also be offered online.

MRSC A100H 3 Units (54 lecture hours)
Oceanography Honors
Advisory: ENGL A099 or ESL A099.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC

An orientation to the marine sciences, including considerations of physical and chemical properties of the sea, the sea-air interface, the biology of the sea, the geology of the ocean basins, the sea as a physical, chemical, biological, and recreational resource and the obligation of mankind to control further contamination of the environment. This course may also be offered online.
MRSC A100L  1 Unit (54 lab hours)
Oceanography Laboratory
Prerequisite(s): MRSC A100 or MRSC A100H or concurrent enrollment.
Advisory: ENGL A098 or ESL A099.
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
An orientation to marine science research process, techniques, and equipment. Investigations of physical and chemical properties of the sea, the air/sea interface, biological taxonomy, and classification, study of longitude, latitude, other navigational elements, ocean basin geography, and geology study. Evaluation of the sea as a physical, chemical, biological, and recreational resource. Includes at least three class field trips.

MRSC A100M  1 Unit (54 lab hours)
Oceanography Laboratory Honors
Prerequisite(s): MRSC A100 or MRSC A100H or concurrent enrollment.
Advisory: ENGL A098 or ESL A199.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
An orientation to marine science research process, techniques, equipment, institutions, and training/education centers. Investigations of physical and chemical properties of the sea, conditions of the air/sea/land interface, review of biological taxonomy and classification, study of longitude, latitude, ocean basin geography, and geology. Evaluation of the sea as a physical, chemical, biological, and recreational resource. Analysis of human efforts to control pollution, manage fisheries, and monitor the ocean world. Includes at least 3 class field trips. If student drops from MRSC A100, the student, on their own initiative, must also drop Marine Science A100M.

MRSC A120  1 Unit (18 lecture hours; 36 lab hours)
Marine Aquarium Science
Advisory: MRSC A100 or MRSC A100H; ENGL A099 or ESL A099.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Introduces students to the science of Aquariumology and provides experience working in a small public aquarium, under the supervision of the instructor and designated student aquarium managers. Students will learn basics of animal husbandry, disease control, aquarium water chemistry, methods of filtration, feeding, and cleaning.

MRSC A121  1 Unit (9 lecture hours; 27 lab hours)
Marine Intertidal Ecology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU
Ecology of the marine intertidal environment of Southern California. This is a field oriented laboratory experience for non-majors. May be taken for grades or on a pass-no pass basis. Same as Ecology A121. Students completing Marine Science A121 may not receive credit for Ecology A121.

MRSC A124  1 Unit (9 lecture hours; 27 lab hours)
Ecology of the Gray Whale
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Ecology and natural history of the California Gray Whale and the Orange County Whale Watch program. Completion qualifies students as docents on whale watching boats. Field trip required. May be taken for grades or on a pass-no pass basis. Same as Ecology A124. Students completing Marine Science A124 may not receive credit for Ecology A124.

MRSC A130  1 Unit (9 lecture hours; 45 lab hours)
Husbandry of Aquatic Organisms
Prerequisite(s): MRSC A120.
Advisory: MRSC A180 and MRSC A180L.
Grading Mode: Standard Letter
Transfer Credit: CSU.
This course focuses on the husbandry of various aquatic organisms in an aquarium setting. Students will learn how to properly care for a diverse assemblage of freshwater and marine fish, invertebrates, algae, and aquatic plants. Course content will focus on common organisms' natural history, nutrition, growth, reproduction, transportation, acclimation, disease diagnosis and treatment, and community planning. Students will be required to demonstrate proper aquatic animal husbandry skills, help care for a living collection of organisms, and perform critical evaluations of procedures in the OCC Public Aquarium. Field trips to local aquariums or to collect organisms may be required to demonstrate particular concepts.

MRSC A140  1 Unit (9 lecture hours; 45 lab hours)
Aquarium Life Support Operation and Maintenance
Prerequisite(s): MRSC A120.
Advisory: MRSC A180 and MRSC A180L.
Grading Mode: Standard Letter
Transfer Credit: CSU.
This course focuses on life support operation and maintenance of aquarium water recirculation systems using a diversity of biological, mechanical, and chemical filtration equipment. Students will learn the principal designs, components, standard operating procedures, and preventative and emergency maintenance for an array of aquarium system types. Course content will emphasize the understanding and proper use of various types of life support and water transportation equipment, and how each component functions to disinfect or manipulate water quality and system characteristics. Students will be required to demonstrate proper equipment operation and maintenance protocols, identify appropriate equipment that can be used to treat hypothetical issues, apply their knowledge to help care for a living collection of organisms, and perform critical evaluations of life support procedures in the OCC Aquarium. Field trips to local aquariums may be required to demonstrate particular concepts.
MRSC A180  
Marine Biology  
Prerequisite(s): MRSC A100 or MRSC A100H; and ENGL A098 or ESL A099.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
The life of the world’s oceans, including principles of cell biology as it relates to the marine situation, energy flow through living systems, the evolution of marine life, the taxonomy and classification of marine plants and animals, an overview of marine habitats, and their organisms, intertidal zonation, plankton biology, marine mammals, pollution and its relations to marine biology, and discussion of currently applicable topics. This course may also be offered online.

MRSC A187  
Marine Mammals  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  
Explores the natural history, ecology, population dynamics, evolutionary history, communications, energetics, migrations, intelligence, and conservation of marine mammals – including: whales, dolphins, seals, sea lions, walrus, sea cows, sea otters, and polar bears. May be taken for grades or on a pass-no pass basis.

MRSC A188  
Marine Mammal Field Studies  
Prerequisite(s): MRSC A187.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
This course offers students the opportunity to survey the ecology, behavior, and life history of various marine mammal groups in a field based setting. In-class meetings will orient students to the specific marine mammal group and the field site that they will explore. The course includes a multi-day field excursion to various locales of ecological interest and may involve camping in primitive wilderness environments. Topics include evolution, human interaction, biology, ecology, life history and conservation of marine mammals. Specific content will vary depending on region and marine mammal life present.

MRSC A195  
Marine Policy and Conservation  
Prerequisite(s): MRSC A100 or A100H.  
Grading Mode: Standard Letter 
Transfer Credit: CSU; UC.  
The world ocean is a complicated system with many current challenges. Addressing these challenges requires an interdisciplinary knowledge of not only marine science but also how ocean policy is made. Combining knowledge from ocean leaders in science and policy, students will learn about how scientists and researchers work within the policy making framework to address ocean related matters. Students will learn current ocean policy issues to substantiate the complexity of ocean-related decision making at the state, national, and international level. This course is designed to give students a basic understanding of how marine resources are managed and what laws, processes, and groups are involved in ocean conservation.
MRSC A220 1 Unit (54 lab hours)
Practical Experience in Aquarium Science and Management 1
Prerequisite(s): MRSC A120.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course introduces students to the complexity involved in working in, and actively managing a functioning public aquarium as a student aquarium manager. Students will gain hands-on experience planning, designing and maintaining exhibits in the OCC Public Aquarium. They will be responsible for helping to educate and mentor students in the marine aquarium science course and giving tours to visitors. Course content will introduce more advanced aquarium equipment and technology and the student will take an active role in identifying potential issues, evaluating possible solutions, and implementing resolutions based on an understanding of aquarium science. All prospective students will be required to perform a facility safety and proficiency demonstration to enroll in this course.

MRSC A221 1 Unit (54 lab hours)
Practical Experience in Aquarium Science and Management 2
Prerequisite(s): MRSC A220.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course will expand and develop student skill sets as a student aquarium manager and mentor. Student managers will apply their experience and knowledge of marine aquarium science and take additional responsibility in aquarium planning, maintenance and coordination of the aquarium. Students will learn about a variety of topics ranging from water chemistry to animal husbandry in greater scientific detail and take greater levels of responsibility in actively managing the aquarium facilities.

MRSC A222 1 Unit (54 lab hours)
Practical Experience in Aquarium Science and Management 3
Prerequisite(s): MRSC A221.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course introduces students to the responsibility and understanding involved in being a senior student aquarium manager. Students will take an active role in researching species interactions and husbandry, and focus on identifying potential issues that they must then proactively address. They will also be responsible for not only mentoring aquarium science students, but also newer aquarium managers to help train them proper procedures and techniques based on the best available scientific knowledge.

MRSC A223 1 Unit (54 lab hours)
Practical Experience in Aquarium Science and Management 4
Prerequisite(s): MRSC A222.
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course is the last class in the aquarium science and management series and focuses on preparing aquarium managers to take on leadership roles in off-campus businesses and organizations involved in aquarium science. Students will broaden their understanding of increasingly-complex aquarium science husbandry techniques and will be responsible for helping the course instructor to plan and implement longer-term facility and educational goals. Constructively mentoring junior aquarium managers and the development of leadership and communication skills will be a central focus of this course.

Marketing (MKTG)

MKTG A100 3 Units (54 lecture hours)
Introduction to Marketing
Grading Mode: Standard Letter
Transfer Credit: CSU.

A survey of the major marketing topics of interest to marketing students and practitioners. Studies include: major institutions involved in the marketing process, major tools used by marketers, and environmental forces affecting the marketing process. Emphasis is placed on effective marketing strategy planning. This course may also be offered online.

MKTG A110 3 Units (54 lecture hours)
Professional Selling
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Theory and practices of the relational selling process. Covers the basic steps in organizing, developing, and preparing a professional sales presentation. Builds self-confidence and competence in selling oneself as well as products, service, and ideas. May be taken for grades or on a pass-no pass basis.

MKTG A130 3 Units (54 lecture hours)
Principles of Advertising
Grading Mode: Standard Letter
Transfer Credit: CSU.

Examines the major components of modern advertising and promotion. Key areas explored include the social and economic role of advertising, controls over advertising, planning of the campaign, and the role of research, media playing, advertising strategy and coordination with other elements of marketing. This course may also be offered online.

MKTG A142 1.5 Units (27 lecture hours)
Direct Marketing
Grading Mode: Standard Letter
Transfer Credit: CSU.

Selling to consumers by mail, catalogs, telemarketing, consumer publications, broadcast media, and business-to-business direct marketing. Includes planning, segmentation, budgeting, creating the message, and the legal environment.
MKTG A150  
International Marketing  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

A survey of major international marketing topics of interest to international business students and practitioners. Studies include: tools used by global marketers; institutions and environmental forces impacting the marketing process worldwide; and effective strategic planning for global markets. This course may also be offered online.

MKTG A150H  
International Marketing Honors  
Grading Mode: Standard Letter  
Transfer Credit: CSU

A survey of major international marketing topics of interest to international business students and practitioners. Studies include: tools used by global marketers; institutions and environmental forces impacting the marketing process worldwide; and effective strategic planning for global markets.

MKTG A200  
Retail E-Commerce Management  
Advisory: MATH A010 or BUS A125.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Study of the operations of an established E-Commerce retail business. Concepts of merchandising include buying, pricing, stock control, credit, credit control, omni-channel strategies, logistics, layout, customer service, marketing, and analytical software. Emphasis is on creation and management of an E-Commerce store.

MKTG A220  
Retail Buying  
Advisory: MATH A010 or BUS A125.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.

Study of the operations of an established E-Commerce retail business. Concepts of merchandising include buying, pricing, stock control, credit, credit control, omni-channel strategies, logistics, layout, customer service, marketing, and analytical software. Emphasis is on creation and management of an E-Commerce store.

Mathematics (MATH)

MATH A005  
Practical Math  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

Practical math involves the fundamental operations of arithmetic on integers, fractions, decimals and percents (without calculators), and consumer applications. The course includes introductions to ratio and proportion, measurement, geometry, and statistics. Applied problems will be emphasized throughout the course. May be taken for grades or on a pass-no pass basis. Not applicable to AA/AS degree.

MATH A008  
Pre-Algebra  
Grading Mode: Standard Letter, Pass/No Pass  
Pre-requisite(s): MATH A005 or appropriate placement.

Combined Elementary and Intermediate Algebra  
Grading Mode: Standard Letter, Pass/No Pass  
Pre-requisite(s): MATH A008 or appropriate placement.

Mathematics (MATH)
MATH A070 5 Units (90 lecture hours)
Intermediate Algebra and Trigonometry
Prerequisite(s): MATH A010 or appropriate placement.

Advisory: MATH A020.

Grading Mode: Standard Letter, Pass/No Pass
Topics covered will be functions, linear and quadratic equations, curve sketching, exponents, rational expressions, rational exponents, logarithms, systems of equations, determinants, Cramer’s Rule, conic sections, trigonometric and inverse trigonometric functions, graphs of trigonometric functions, identities and trigonometric equations, solutions for triangles, and complex numbers. This is an intense and fast-paced course designed for students intending to continue into precalculus. May be taken for grades or on a pass-no pass basis.

MATH A090 2 Units (36 lecture hours)
Support for Liberal Arts Mathematics
Co-requisite(s): MATH A100.

Grading Mode: Pass/No Pass
A concurrent support course for MATH A100, Liberal Arts Mathematics, designed to review prerequisite skills necessary for success. Topics include operations with real numbers; conversion between decimals, percents and fractions; selected algebraic topics essential to Liberal Arts Mathematics; the graph of a line; and problem-solving strategies.

MATH A091 2 Units (36 lecture hours)
Support for College Algebra
Co-requisite(s): MATH A115.

Grading Mode: Pass/No Pass
A concurrent support course for MATH A115, College Algebra, designed to review prerequisite skills necessary for success. Topics include operations with real numbers, an introduction to polynomial, operations with rational and radical expressions, an introduction to polynomials, and solutions to linear equations and inequalities.

MATH A092 2 Units (36 lecture hours)
Support for Trigonometry
Co-requisite(s): MATH A120.

Grading Mode: Pass/No Pass
A concurrent support course designed to review prerequisite topics necessary for success in MATH A120, Trigonometry, covering operations with real numbers, relations and functions, systems of linear equations, factoring, rational expressions, quadratic equations, conic sections, and basic geometry.

MATH A096 2 Units (36 lecture hours)
Support for Introduction to Statistics
Co-requisite(s): MATH A160.

Grading Mode: Pass/No Pass
A concurrent support course for MATH A160, Introduction to Statistics, designed to review prerequisite skills necessary for success. Topics include operations with real numbers; percents, ratios and proportions; selected algebraic topics essential to statistics; the graph of a line; and problem-solving strategies.

MATH A100 3 Units (54 lecture hours)
Liberal Arts Mathematics
Prerequisite(s): MATH A030 or higher or appropriate placement.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Designed for students whose majors do not require calculus, this applications-oriented course emphasizes management science optimization techniques, introductory descriptive and inferential statistics, weighted voting systems analysis, game theory principles, decision-making strategies, growth trends, and pattern analysis. May be taken for grades or on a pass-no pass basis.

MATH A103 3 Units (54 lecture hours; 18 lab hours)
Statistics for Elementary Teachers
Prerequisite(s): MATH A030 or higher or appropriate placement.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Designed for prospective teachers, this course is an activity-based exploration of statistics aligned with the California State Mathematics Standards for K-12. Topics include data representation and analysis, randomization and sampling, measures of central tendency and variability, hypothesizing and statistical inference. May be taken for grades or on a pass-no pass basis.

MATH A104 3 Units (54 lecture hours)
Mathematics for Elementary Teachers
Prerequisite(s): MATH A030 or higher or appropriate placement.

Advisory: MATH A020.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Designed for prospective elementary school teachers, the course emphasizes mathematical structure and problem solving techniques associated with the real number system, elementary number theory, ratio and proportion, set theory, elementary logic, and percent. Instructional delivery design techniques and technological applications will be explored.

MATH A115 4 Units (72 lecture hours)
College Algebra
Prerequisite(s): MATH A030 or higher or appropriate placement.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Topics include linear, quadratic, rational, logarithmic, and exponential functions and their graphs, systems of equations, matrices, sequences, series, and basic combinations. This course prepares students to enter MATH A140 but does not provide sufficient preparation to enter MATH A180. This course may also be offered online. May be taken for grades or on a pass-no pass basis.
MATH A120
3 Units (54 lecture hours)
Trigonometry
Prerequisite(s): MATH A030 or higher or appropriate placement.
Advisory: MATH A020.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Topics covered will be trigonometric (circular) and inverse trigonometric functions, graphs of trigonometric functions, identities and conditional equations, solutions for triangles, vectors, complex numbers and applications. May be taken for grades or on a pass-no pass basis. C-ID: MATH 851.

MATH A140
4 Units (90 lecture hours)
Business Calculus
Prerequisite(s): MATH A115, MATH A155, or MATH A170 or appropriate placement.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Analytic geometry and limits; introduction to differential and integral calculus with applications to include polynomial, rational, exponential and logarithmic differentiation and their graphs. Multivariate calculus to include partial differentiation, multiple integration. Introduction to the calculus of probability with applications. May be taken for grades or on a pass-no pass basis.

MATH A155
4 Units (72 lecture hours)
Finite Mathematics with Applications
Prerequisite(s): MATH A030 or higher or appropriate placement.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Mathematical models, properties of sets, functions, elementary curve fitting, finance, matrix operations, linear programming by the graphic and simplex methods, Markov matrices, elementary probability, and game theory. May be taken for grades or on a pass-no pass basis.

MATH A160
4 Units (72 lecture hours)
Introduction to Statistics
Prerequisite(s): MATH A030 or higher or appropriate placement.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
A general education course covering descriptive statistics, probability, binomial and normal distributions, variation, linear regression, correlation and hypothesis testing. Applications taken from natural sciences, social sciences, business, and everyday life. Students completing MATH A160 may petition for credit for PSYC A160. May be taken for grades or on a pass-no pass basis. This course may also be offered online. Lecture. C-ID: MATH 110.

MATH A170
4 Units (90 lecture hours)
Precalculus
Prerequisite(s): MATH A070 or MATH A120 or appropriate placement.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
The course includes structure and properties of number systems; applications, solution and graphs of polynomials, rational, exponential, logarithmic and trigonometric functions; matrices; sequences and series; analytic geometry. Prepares students for MATH A180. May be taken for grades or on a pass-no pass basis. This course may also be offered online.

MATH A180
4 Units (90 lecture hours)
Calculus 1
Prerequisite(s): MATH A170 or appropriate placement.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
This is the first course in the calculus sequence. It satisfies the sequence for majors in mathematics, science, or engineering. Topics include limits, derivatives of algebraic and transcendental functions, applications of derivatives, indefinite integrals, definite integrals, the Fundamental Theorem of Calculus, and applications of integration. May be taken for grades or on a pass-no pass basis. C-ID: MATH 210.

MATH A180H
4 Units (90 lecture hours)
Calculus 1 Honors
Prerequisite(s): MATH A170 or appropriate placement.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
This is the first course in the calculus sequence. It satisfies the sequence for majors in mathematics, science, or engineering. Topics include limits, derivatives of algebraic and transcendental functions, applications of derivatives, indefinite integrals, definite integrals, the Fundamental Theorem of Calculus, and applications of integration. May be taken for grades or on a pass-no pass basis. C-ID: MATH 210.

MATH A182H
5 Units (90 lecture hours)
Calculus 1 and 2 Honors
Prerequisite(s): MATH A140, MATH A180, MATH A180H or AP Calculus AB score of 3 or higher.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
An in-depth honors level study of elementary differential and integral calculus which includes exponential, logarithmic, and trigonometric functions, techniques of integrations, sequences and series, and applications. Combines content of MATH A180 and MATH A185 with emphasis on theory and challenging problems in a fast-paced course for well-prepared students with previous calculus experience. May be taken for grades or on a pass-no pass basis.
MATH A185  
Calculus 2  
**Prerequisite(s):** MATH A180, MATH A180H or MATH A182H.  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU; UC.  
This is the second course in the calculus sequence. It satisfies the sequence for majors in mathematics, science, or engineering. Topics include techniques and some applications of integration, calculus applied to parametric curves and polar curves, analytic geometry, sequences, series, and an introduction to differential equations. May be taken for grades or on a pass-no pass basis. C-ID: MATH 220.

MATH A185H  
Calculus 2 Honors  
**Prerequisite(s):** MATH A180, MATH A180H or MATH A182H.  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU; UC.  
This is the second course in the calculus sequence. It satisfies the sequence for majors in mathematics, science, or engineering. Topics include techniques and some applications of integration, calculus applied to parametric curves and polar curves, analytic geometry, sequences, series, and an introduction to differential equations. May be taken for grades or on a pass-no pass basis.

MATH A220  
Introduction to Symbolic Logic  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU; UC.  
Students learn to translate simple, quantified, and multiply-quantified English sentences into symbolic form in both sentence logic and predicate logic with quantifiers. Truth tables are used to both classify and compare symbolic sentence’s properties. Proof techniques for determining validity or invalidity of arguments containing simple sentences, compound sentences, and sentences containing quantifiers in sentence and predicate logic systems are learned including truth tables, truth trees, and natural deduction style proofs with inference, replacement and quantifier rules. Same as Math A220. Students completing Philosophy A220 may not receive credit for Math A220. May be taken for grades or on a pass-no pass basis.

MATH A230  
Introduction to Discrete Mathematics  
**Prerequisite(s):** MATH A185, MATH A185H or MATH A182H.  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU; UC.  
Introduction to logic, sets, relations, algorithms, number theory, combinatorics, graphs, trees, and Boolean algebra. May be taken for grades or on a pass-no pass basis.

MATH A235  
Applied Linear Algebra  
**Prerequisite(s):** MATH A185, MATH A185H or MATH A182H.  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU; UC.  
Introduction to linear algebra, classical linear algebra problems, and applications to computer science and related technologies including matrices, determinants, linear spaces, linear transformations, and eigenvalues. May be taken for grades or on a pass-no pass basis.

MATH A280  
Calculus 3  
**Prerequisite(s):** MATH A185, MATH A185H or MATH A182H.  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU; UC.  
Multivariable calculus including vectors, vector-valued functions, functions of several variables, partial derivatives, multiple integrals, calculus of vector fields, Green’s Theorem, Stokes’ Theorem, and the Divergence Theorem. May be taken for grades or on a pass-no pass basis.

MATH A280H  
Calculus 3 Honors  
**Prerequisite(s):** MATH A185, MATH A185H or MATH A182H.  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU; UC.  
MATH A280 in a regular section with an additional one hour per week of honors material. Multivariable calculus including vectors, vector-valued functions, functions of several variables, partial derivatives, multiple integrals, calculus of vector fields, Green’s Theorem, Stokes’ Theorem, and the Divergence Theorem. Selected introductory topics in differential geometry will be discussed in the honors-specific portion of this course. May be taken for grades or on a pass-no pass basis.

MATH A285  
Introduction to Linear Algebra and Differential Equations  
**Prerequisite(s):** MATH A185, MATH A185H or MATH A182H.  
**Grading Mode:** Standard Letter, Pass/No Pass  
**Transfer Credit:** CSU; UC.  
Introduction to linear algebra and differential equations. Topics include matrices, determinants, vector spaces, linear systems of equations, inner product spaces, first and second order differential equations, systems of differential equations, and Laplace transforms. May be taken for grades or on a pass-no pass basis.
MATH A285H  5 Units (108 lecture hours)
Introduction to Linear Algebra and Differential Equations Honors
Prerequisite(s): MATH A185, MATH A185H or MATH A182H.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introduction to linear algebra and differential equations. Topics include matrices, determinants, vector spaces, linear systems of equations, linear product spaces, first and second order differential equations, systems of differential equations, and Laplace transforms. Additional honors topics include Jacobian matrices, properties of R3 and simple abstract topological spaces, and some exterior algebra. May be taken for grades or on a pass-no pass basis.

MATH A290H  5 Units (90 lecture hours)
Introduction to Tensors and Calculus on Manifolds Honors
Prerequisite(s): MATH A280 or MATH A280H; and MATH A285 or MATH A285H.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introductory study of elementary tensor algebra and calculus, differential and integral calculus in higher dimensions, differential forms, and calculus on manifolds. May be taken for grades or on a pass-no pass basis.

Medical Assisting (MA)

MA A150  3 Units (54 lecture hours)
Medical Assisting Core
Prerequisite(s): ALH A111 and BIOL A221; or ALH A111 and BIOL A220 and BIOL A225.

Grading Mode: Standard Letter
Transfer Credit: CSU.


MA A175  3 Units (54 lecture hours)
Administrative Medical Assisting I
Co-requisite(s): MA A150.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to the role of the administrative medical assistant in health care delivery.

MA A181  5 Units (72 lecture hours; 54 lab hours)
Clinical Medical Assisting 1
Co-requisite(s): MA A150.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to the skills required to perform medical office bookkeeping, accounting (accounts receivable and payable), payroll, and banking procedures. Insurance coding and claims preparation used in the medical office setting and facility management skills to facilitate the ability to engage in marketing and community service.

MA A205  5 Units (90 lecture hours)
Administrative Medical Assisting 2
Prerequisite(s): MA A175.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A survey of Western Classical Music. The students will gain an appreciation of music from the Medieval to the Modern period. The class will cover the stylistic features of musical genres from the six major historical periods of Western Music. This course may also be offered online. May be taken for grades or on a pass-no pass basis. C-ID: MUS 100.
MUS A105 3 Units (54 lecture hours)
Music from Bach Up to Rock
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

History and appreciation of Western music from the birth of opera to modern times. Listen to and discuss the development of classical masterworks including Handel's Messiah, Beethoven's symphonies, the operas of Mozart, Verdi, and Wagner, and Tchaikovsky's Nutcracker. Overview of modern music from Stravinsky and Schoenberg to the diverse multicultural origins of jazz and rock. Distinguish between various musical styles and develop aural skills that enhance personal listening enjoyment. This course may also be offered online. May be taken for grades or on a pass-no pass basis. Three hours.

MUS A110 3 Units (36 lecture hours; 54 lab hours)
Computers in Music 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Designed to introduce the layman or computer professional to the rapidly evolving use of computers and related digital technology in music. Emphasis will be given to professional music software, dedicated music systems, MIDI (Musical Instrument Digital Interface) and digital audio. Lecture/Studio/Arranged Studio.

MUS A111 3 Units (36 lecture hours; 54 lab hours)
Computers in Music 2
Prerequisite(s): MUS A110.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Designed to introduce the layman or computer professional to the rapidly evolving use of computers and related digital technology in music. Emphasis will be given to professional music software, dedicated music systems, MIDI (Musical Instrument Digital Interface) and digital audio. Lecture/Studio/Arranged Studio.

MUS A112 3 Units (36 lecture hours; 54 lab hours)
Computers in Music 3
Prerequisite(s): MUS A111.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Designed to introduce the layman or computer professional to the rapidly evolving use of computers and related digital technology in music. Emphasis will be given to professional music software, dedicated music systems, MIDI (Musical Instrument Digital Interface) and digital audio. Lecture/Studio/Arranged Studio.

MUS A113 3 Units (36 lecture hours; 54 lab hours)
Computers in Music 4
Prerequisite(s): MUS A112.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Designed to introduce the layman or computer professional to the rapidly evolving use of computers and related digital technology in music. Emphasis will be given to professional music software, dedicated music systems, MIDI (Musical Instrument Digital Interface) and digital audio. Lecture/Studio/Arranged Studio.

MUS A115 3 Units (54 lecture hours)
Fundamentals of Music
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

For those with no previous music theory background. Fundamentals of music including key signatures, intervals, chords, 7th chords, and functional harmony. This course may also be offered online.

MUS A116 2 Units (27 lecture hours; 27 lab hours)
Basic Guitar
Advisory: Students provide their own acoustic nylon or steel-string guitar.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Fundamentals of guitar, music and musicianship. Music notation, terminology, scales, key signatures and time signatures. Basic guitar chords, rhythms and fingering techniques. Beginning level classical, folk and popular guitar literature. May be taken for grades or on a pass-no pass basis.

MUS A118 1.5 Units (18 lecture hours; 36 lab hours)
Popular Vocal Techniques 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Introduction to the styles and techniques of performing jazz, rock, blues, country, folk, and easy listening music. Also covered are healthy vocal techniques, approach to vocal styles, and song interpretation. May be taken for grades or on a pass-no pass basis.

MUS A119 1.5 Units (18 lecture hours; 36 lab hours)
Popular Vocal Techniques 2
Advisory: MUS A118.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Designed to meet the changing needs and challenges of performing currently popular singing styles including solo, group, and background singing in jazz, rock, blues, country, folk, and easy listening. Also covered are song interpretation, phrasing, microphone technique, PA use, and ‘finding your key.’ May be taken for grades or on a pass-no pass basis.
MUS A120  
College Choir  
Prerequisite(s): training is not necessary.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
Open to all students interested in singing in a college choir. In addition to public performances of standard choral literature, this course includes basic vocal techniques, basic music theory, improvement of sight reading, musicianship skills, music fundamentals, and music history and appreciation as it relates to choral literature. This course may be taken four times. C-ID: MUS 180.

MUS A122  
Chamber Singers  
Prerequisite(s): Successful audition; this prerequisite will be validated in class during the first week of the course.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
A select vocal ensemble which performs suitable music from all historical periods. Extensive participation in concerts on and off campus. Occasional brief section rehearsals. Schedule of performances announced at the beginning of each semester. This course may be taken four times. Studio/Arranged Studio. C-ID: MUS 180.

MUS A127  
Jazz Lab Ensemble  
Prerequisite(s): Eligibility based on successful audition.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
Study and performance of modern big band jazz music. Special emphasis on ensemble skills for rehearsal and concerts. Public performances with guest artists will be schedule during each semester. Guest jazz artists will meet and work with the group periodically. This course may be taken four times. C-ID: MUS 180.

MUS A129  
Guitar Ensemble  
Advisory: Able to sight read standard musical notation on the guitar; Must provide own acoustic guitar.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  
Designed for guitarists who read standard musical notation. Rehearsal and performance of guitar ensemble literature from Renaissance to the present including music of the Baroque, Classical, Romantic and Modern eras. Students in this class will present a public concert with guest artists. May be taken for grades or on a credit-no credit basis. This course may be taken four times. C-ID: MUS 180.

MUS A132  
Wind Ensemble  
Prerequisite(s): Eligibility based on successful audition.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  
Open to advanced performers on brass, woodwind and percussion instruments. Rehearsal and performance of music from standard symphonic and wind ensemble literature. Regularly scheduled concerts. May be taken for grades or on a pass-no pass basis. This course may be taken four times. Studio/Arranged Studio. C-ID: MUS 180.

MUS A133  
Orchestra  
Prerequisite(s): Eligibility based on successful audition.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
Rehearsal and performance of music from the standard symphonic orchestral literature. Open to advanced performers of string, brass, woodwind, and percussion instruments. Regularly scheduled public concerts during the school year. This course may be taken four times. C-ID: MUS 180.

MUS A139  
History of Rock Music  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.  
The study of social and musical influences on rock music and the influence of rock music on society and the music industry, 1950s through modern rock. CDs, videos, computer-generated multimedia presentations. May be taken for grades or on a pass-no pass basis.

MUS A140  
Beginning Instruments  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
Elementary instruction on a selected orchestral instrument.

MUS A141  
Piano 1  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
Group instruction in beginning piano.

MUS A142  
Piano 2  
Advisory: MUS A141 or successful audition.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.  
Continuation of MUS A141 (Piano 1). Rhythms through sixteenth notes, harmonizing of folk tunes, and pieces by contemporary masters will be studied. One-half to one hour daily practice. Practice pianos available on campus.
MUS A143  3 Units (54 lecture hours)
History of Jazz
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

History and development of jazz in the United States, including evolving styles and important musicians, influence of pre 1900 popular music (Ragtime, Blues, and Dixieland), recognition of playing styles merging of other musical forms with the Jazz idiom, Jazz as an art form, and the composer/improviser in jazz today. May be taken for grades or on a pass-no pass basis.

MUS A144  1.5 Units (18 lecture hours; 36 lab hours)
Popular Vocal Techniques
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Designed to meet the changing needs and challenges of performing currently popular singing styles including solo, group and background singing in jazz, rock, blues, country, folk and easy listening. Also covered are microphone technique, self accompaniment and popular music terminology. May be taken for grades or on a credit-no credit basis.

MUS A145  1 Unit (18 lecture hours; 18 lab hours)
Voice 1
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This class teaches beginning singers basic vocal technique, self-confidence, and expression. Students sing songs in English and students' first language. Daily practice is required. An audition is not required.

MUS A146  1 Unit (18 lecture hours; 18 lab hours)
Voice 2
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This course is a continuation of Music A145 for singers with two years of choral experience or one semester of private lessons or voice class. It prepares for solo and group singing by improving breathing, vocal tone, range agility, volume, diction, health, expression and self-confidence at the second semester level. Sing songs from musical theatre, film, folk, popular, and classical repertory in English, Italian and students' first language memorized from printed music. One hour daily practice and attendance at one approved voice recital required.

MUS A148  2 Units (18 lecture hours; 18 lab hours)
Classical Guitar 1
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Group instruction in basic techniques for classical guitar including tuning, correct posture, left and right hand position, and sight reading.

MUS A149  2 Units (18 lecture hours; 18 lab hours)
Classical Guitar 2
Prerequisite(s): MUS A148 or audition.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Continuation of Classical Guitar 1 with emphasis on advanced classical guitar performance techniques and literature.

MUS A150  2 Units (27 lecture hours; 27 lab hours)
Intermediate Band/Orchestra
Prerequisite(s): MUS A140 or audition.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Intermediate instruction on a band or orchestral instrument. This course may be taken two times. C-ID: MUS 180.

MUS A151  1.5 Units (27 lecture hours; 27 lab hours)
Studio Guitar 1
Advisory: Student should be able to read music lead sheet.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Group instruction in studio guitar techniques including styles such as jazz, rock, and other popular genres. Chart reading, finger style guitar, and plectrum guitar are included. May be taken for grades or on a pass-no pass basis. Students must bring their own guitar.

MUS A152  1.5 Units (27 lecture hours; 27 lab hours)
Studio Guitar 2
Advisory: MUS A151 or successful audition.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Continuation of Studio Guitar 1. Group instruction in studio guitar techniques including styles such as jazz, rock, and other popular genres. Emphasis on picking technique, notes reading in positions, scales, chords, music theory, sight reading, solo and ensemble performance. May be taken for grades or on a pass-no pass basis.

MUS A174  2 Units (36 lecture hours)
Sightreading Workshop 1
Advisory: Basic music-reading skills; Students must have a knowledge of key signatures and scales.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A class to develop skill in sightreading basic melodies and rhythms. Students will learn to perform basic melodic and rhythmic musical phrases at sight. This course includes computer-assisted instruction and self-paced learning. Students should have basic music-reading skills, including knowledge of key signatures and scales.
MUS A175 2 Units (36 lecture hours)
Sightreading Workshop 2
Advisory: MUS A174; Basic Music reading skills; Students must have a knowledge of key signatures and scales.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
A class to develop skills in sightreading advanced melodies and rhythms. Students will learn to perform melodic and rhythmic musical phrases at sight. This course includes computer-assisted instruction and self-paced learning. Students should have basic music-reading skills, including knowledge of key signatures and scales. The skill level will be validated during the first week of class by the instructor with a successful audition.

MUS A180 3 Units (54 lecture hours)
Theory 1
Co-requisite(s): MUS A181.
Advisory: MUS A141.
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
Notation, terminology, scales, key signatures, intervals, chords, rhythms and form. Also includes four-part writing with primary triads, seventh chord analysis, harmonization of melodies in major and minor keys. C-ID: MUS 120.

MUS A181 1 Unit (18 lecture hours; 18 lab hours)
Musicianship 1
Advisory: MUS A115.
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory I through ear training, sight singing, analysis, and dictation. C-ID: MUS 125.

MUS A185 3 Units (54 lecture hours)
Theory 2
Prerequisite(s): MUS A180.
Co-requisite(s): MUS A186.
Grading Mode: Standard Letter
Transfer Credit: CSU, UC.
This course incorporates the concepts from Music Theory I. In addition, through guided composition and analysis, the course will include: voice leading involving four-part chorale writing; diatonic harmony; and an introduction to secondary/applied chords and modulation. C-ID: MUS 130.

MUS A186 1 Unit (18 lecture hours; 18 lab hours)
Musicianship 2
Advisory: MUS A142 AND MUS A181.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory II through ear training, sight singing, analysis, and dictation. C-ID: MUS 135.

MUS A187 2 Units (36 lecture hours)
Sightreading Workshop
Advisory: Basic music-reading skills; Students must have a knowledge of key signatures and scales.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
A class to develop skill in sightreading rhythm and melodies. Students will learn to perform melodic and rhythmic musical phrases at sight. This course includes computer-assisted aural learning. Students should have basic music-reading skills, including knowledge of key signatures and scales. May be taken for grades or on a pass/no-pass basis.

MUS A213 1 Unit (18 lecture hours; 18 lab hours)
Voice 3
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
This course is the third semester continuation of Music A146. Songs in English, Italian, German, and French, and students first language. Daily practice and review of a voice recital is required. No audition is required.

MUS A214 1 Unit (18 lecture hours; 18 lab hours)
Voice 4
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
This course is the fourth semester continuation of Music A213. Songs in English, Italian, German, and French, and students first language. In-depth study of characterization and song presentation. Daily practice and review of a voice recital is required. No audition is required.

MUS A215 1 Unit (18 lecture hours; 18 lab hours)
Voice 5
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
This course is the fifth semester continuation of Music A214. Songs in English, Italian, German, and French, and students first language. In-depth study of characterization and song presentation. Daily practice and review of a voice recital is required. No audition is required.
MUS A216  1 Unit (18 lecture hours; 18 lab hours)
Voice 6
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course is the sixth semester continuation of Music A215. Songs in English, Italian, German, and French, and students first language. In-depth study of characterization and song presentation. Daily practice and review of a voice recital is required. No audition is required.

MUS A218  1.5 Units (18 lecture hours; 36 lab hours)
Popular Vocal Techniques 3
Advisory: MUS A119.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Designed to meet the changing needs and challenges of performing currently popular singing styles, including solo, group, and background singing in jazz, rock, blues, country, folk, and easy listening. Also covered are song interpretation, advanced microphone techniques, PA use, finding your key, chart use, and working with an accompanist. PVT 3 students will learn to put together a five-song set of contrasting tunes with patter, emphasizing individual style. Vocal jazz ensemble training will be a strong focus for this class. May be taken for grades or on a pass-no pass basis.

MUS A219  1.5 Units (18 lecture hours; 36 lab hours)
Popular Vocal Techniques 4
Advisory: MUS A218.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An advanced course designed to meet the changing needs and challenges of performing currently popular singing styles, including solo, group, and background singing in jazz, rock, blues, country, folk, and easy listening. Also covered are approaches to vocal styles, song interpretation, phrasing, advanced mic, building stamina, arc of songs and arc of the show. There will a emphasis on working the music business/ marketing oneself, as well as branding. PVT 4 students will learn to put together a ten-song set of contrasting tunes with patter, emphasizing individual style. Vocal jazz ensemble training will be a strong focus for this class. May be taken for grades or on a pass-no pass basis.

MUS A230  1 Unit (18 lecture hours; 36 lab hours)
Jazz Improvisation
Prerequisite(s): Eligibility based on successful audition.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Development of the individual musician's technical tools and performing skills in jazz music improvisation. Includes usage of appropriate idiomatic forms, harmonies, scales, stylistic articulations. May be taken for grades or on a pass-no pass basis. This course may be taken four times.

MUS A233  1 Unit (54 lab hours; 18 other hours)
Symphonic Chamber Orchestra
Prerequisite(s): Eligibility based on successful audition.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Open to advanced performers of string, brass, woodwind and percussion instruments. Rehearsal and performance of music from the standard symphonic and chamber orchestra literature. Regularly scheduled public concerts during the school year. May be taken for grades or on a pass-no pass basis. This course may be taken four times. Studio/Arranged Studio.

MUS A234  1 Unit (54 lab hours)
Studio Jazz Ensemble
Prerequisite(s): Eligibility based on successful audition.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Advanced instrumentalists will discuss, write, rehearse and perform modern big band jazz music. Class includes guest artists and public performances. May be taken for grades or on a pass-no pass basis. C-ID: MUS 180.

MUS A240  0.5 Units (18 lab hours)
Sophomore Recital
Prerequisite(s): Three semesters of MUS A290 or successful audition.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Assists the sophomore music student to organize, arrange and schedule recital performance to meet department and Associate in Arts degree requirements. Studio/Arranged Studio.

MUS A241  2 Units (27 lecture hours; 27 lab hours)
Piano 3
Prerequisite(s): Successful audition; to be verified by instructor during first week of enrollment.
Advisory: MUS A142.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Intermediate/advanced classical piano literature in master class performance. Emphasis on artistic development of student performers.

MUS A242  2 Units (27 lecture hours; 27 lab hours)
Piano 4
Prerequisite(s): Successful audition; to be verified by instructor during first week of enrollment.
Advisory: MUS A241.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Intermediate/advanced classical piano literature in master class performance. Emphasis on artistic development of student performers.
MUS A247 1.5 Units (18 lecture hours; 36 lab hours)
Advanced Pop Vocal Techniques
Advisory: MUS A144.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Designed to meet the changing needs and challenges of performing currently popular singing styles including solo, group and background singing in jazz, rock, blues, country, folk, and easy listening. Also covered are basic appropriate stylistic embellishments for various pop styles as well as the jazz genre. Vocal jazz ensemble training will be a strong focus for this class, as this will prepare students for a degree in vocal jazz at other universities.

MUS A248 2 Units (18 lecture hours; 18 lab hours)
Classical Guitar 3
Prerequisite(s): MUS A149 or audition.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Designed for the serious music student who seeks more extensive awareness in technical facility, musical literature, musicianship and self-discipline.

MUS A249 2 Units (18 lecture hours; 18 lab hours)
Classical Guitar 4
Prerequisite(s): MUS A248 or audition.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Designed for the serious classical guitar student who seeks more extensive awareness in technical facility, musical literature, musicianship and self discipline. Involves ensemble performance with an emphasis on technique and sight reading. A continuation of MUS A248.

MUS A261 3 Units (36 lecture hours; 54 lab hours)
Recording Techniques 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A course in recording studio techniques based upon Pro Tools HD. An introductory workshop for musicians and sound engineers who will record, edit and produce live performances in a studio environment. Included is analysis of studio acoustics, vocal and instrumental recording and mixing board characteristics. May be taken for grades or on a credit-no credit basis.

MUS A262 2 Units (36 lecture hours)
Music as a Business
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

For students planning a career in the music industry. Contracts, agents, managers, producers, contractors, club owners. Guests lecturers from the industry. May be taken for grades or on a pass-no pass basis.

MUS A265 1.5 Units (90 lab hours)
Recording Techniques 2
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An advanced course in recording studio techniques based upon Pro Tools HD. Requires basic knowledge of studio acoustics, vocal and instrumental mic techniques, control board and off-board effects units and general studio activity. Students will develop their own recorded materials including support musicians and production staff. May be taken for grades or on a pass-no pass basis.

MUS A267 2 Units (27 lecture hours; 27 lab hours)
Piano Master Class 1
Advisory: Minimum 2 years prior piano study, to be verified during first week of class.

Grading Mode: Standard Letter
Students perform works in a masterclass setting. Functional skills including technique, memorization, sight-reading, transposition, and ensemble playing. Transfer Status: CSU, UC.

MUS A268 2 Units (27 lecture hours; 27 lab hours)
Piano Master Class 2
Advisory: Minimum 2 years prior piano study, to be verified during first week of class.

Grading Mode: Standard Letter
Transfer Credit: CSU, UC.

Students perform works in a masterclass setting with emphasis on the Romantic and Contemporary Styles. Historical precedents from the Beethoven’s Later Period and examples from the Romantic and Classical Period will be covered. Functional skills including technique, memorization, sight-reading, transposition, and ensemble playing.

MUS A271 1.5 Units (27 lecture hours; 27 lab hours)
Studio Guitar 3
Advisory: MUS A152 or successful audition.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Continuation of Studio Guitar 1 and 2. Emphasis on linear note reading across the guitar fretboard; chord substitutions, altered chords, chordal progressions, turn arounds, music theory, and chordal analysis. May be taken for grades or on a pass-no pass basis.

MUS A272 1.5 Units (27 lecture hours; 27 lab hours)
Studio Guitar 4
Advisory: MUS A271 or successful audition.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Continuation of Studio Guitar 1, 2 and 3. Emphasis on intermediate and advanced picking techniques, analysis of styles, history and appreciation, improvisation, arranging and performance of chordal solos for the guitar. May be taken for grades or on a pass-no pass basis.
MUS A274 2 Units (36 lecture hours)
Sightreading Workshop 3
Advisory: MUS A175 and Basic music-reading skills.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A class to develop skills in sightreading advanced melodies and rhythms, including chromatic alterations and irregular meters. This course includes computer-assisted instruction and self-paced learning. Students should have intermediate music-reading skills. The skill level will be validated during the first week of class by the instructor with a successful audition. Students must have a knowledge of key signatures and scales.

MUS A275 2 Units (36 lecture hours)
Sightreading Workshop 4
Advisory: MUS A274 and Basic music-reading skills.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A class to develop skills in sightreading advanced melodies and rhythms, including chromatic alterations, non-standard intervals, and harmonic progressions, and irregular and mixed meters. This course includes computer-assisted instruction and self-paced learning. Students should have advanced music-reading skills. The skill level will be validated during the first week of class by the instructor with a successful audition. Students must have a knowledge of key signatures and scales.

MUS A277 2 Units (27 lecture hours; 27 lab hours)
Piano Master Class 3
Advisory: Minimum 3 years prior piano study, to be verified during first week of class.

Grading Mode: Standard Letter

Students perform works in a masterclass setting with emphasis on the Sonata-Allegro Form. Historical precedents from the late Baroque Period and examples from the Classical Period will be covered. Functional skills including technique, memorization, sight-reading, transposition, and ensemble playing. Transfer Status: CSU.

MUS A278 2 Units (27 lecture hours; 27 lab hours)
Piano Master Class 4
Advisory: Minimum 3 years prior piano study, to be verified during first week of class.

Grading Mode: Standard Letter

Students perform works in a masterclass setting with emphasis on the Romantic and Contemporary Styles. Historical precedents from the Beethoven's Later Period and examples from the Romantic and Classical Period will be covered. Functional skills including technique, memorization, sight-reading, transposition, and ensemble playing. Transfer Status: CSU.

MUS A280 3 Units (54 lecture hours)
Theory 3
Prerequisite(s): MUS A185.

Co-requisite(s): MUS A281.

Advisory: MUS A241.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This course incorporates the concepts from Music Theory II. In addition, through writing and analysis, the course will include: introduction to chromatic harmony; secondary/applied chords; modulation; borrowed chords; introduction to Neapolitan and augmented-sixth chords. C-ID: MUS 140.

MUS A281 1 Unit (18 lecture hours; 18 lab hours)
Musicianship 3
Advisory: MUS A186 and MUS A240.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory III through ear training, sight singing, analysis, and dictation. C-ID: MUS 145.

MUS A285 3 Units (54 lecture hours)
Theory 4
Prerequisite(s): MUS A280.

Co-requisite(s): MUS A286.

Advisory: MUS A242.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Continuation of Theory and Ear Training 3. Harmonic dictation, harmonization and analysis including chromatic 7th chords, the Neapolitan and Augmented 6th chords. C-ID: MUS 150.

MUS A286 1 Unit (18 lecture hours; 18 lab hours)
Musicianship 4
Advisory: MUS A242 and MUS A281.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory IV through ear training, sight singing, analysis, and dictation. C-ID: MUS 155.
MUS A290 0.5 Units (9 lecture hours)
Applied Music
Prerequisite(s): Audition; concurrent enrollment in an OCC music performing group.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Students will take private lessons in applied music, composition, theory, orchestration, arranging or computer music from an approved teacher. Students will participate in public performances. Students will be required to practice on campus, perform in a music performing group and attend on-campus music performances. All hours for this class are arranged. C-ID: MUS 160.

Natural Science (NS)

NS A112 4 Units (54 lecture hours; 54 lab hours)
Introduction to Physical Science
Prerequisite(s): MATH A010.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to the basic physical principles that govern the universe. This course will present an overview of the general aspects of physics and chemistry including: forces, motion, energy, electricity, magnetism, heat, waves, light, the atom, acids and bases. Satisfies part of the laboratory science requirement for the Elementary Education transfer degree.

Neurodiagnostic Technology (NDT)

NDT A110 4 Units (54 lecture hours; 108 lab hours)
Basic Electroencephalography
Prerequisite(s): ALH A010.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Fundamentals of EEG, including application of electrodes, basic wave forms, artifacts, and introduction to the EEG machine. All enrollees must be accepted into either the Neurodiagnostic or Polysomnography program.

NDT A115 4 Units (54 lecture hours; 54 lab hours)
Advanced Electroencephalography
Prerequisite(s): NDT A110 and ALH A130.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to the abnormal electroencephalogram (EEG), maturational changes, and the basic electronic principles upon which successful electroencephalographic techniques are based.

NDT A116 3.5 Units (18 lecture hours; 256 lab hours)
Clinical Experience 1
Prerequisite(s): NDT A110 and ALH A115.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Beginning clinical practice of electroencephalographic testing on patients at various affiliated neurodiagnostic labs. This will include observation, application of electrodes, performance of EEG testing on clinical patients, medical recordkeeping, and clinical history reporting. Students must purchase a uniform for this course. Offered on a pass-no pass basis only.

NDT A117 3 Units (256 other hours)
Clinical Experience 2
Prerequisite(s): NDT A115 and NDT A116.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Continued clinical experience in Electroencephalography at a selected Neurodiagnostic Lab in an affiliated health care facility, under the direct supervision of a physician and/or EEG technologist. This clinical will build on skills attained in NDT A116, and will include performance of EEG testing on clinical patients, medical record keeping, and clinical history taking. Offered on a pass-no pass basis only.

NDT A119 3 Units (54 lecture hours)
Introduction to Neuro Anatomy and Physiology
Prerequisite(s): BIOL A221; or BIOL A220 and BIOL A225.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to the anatomy of the central and peripheral nervous system with correlation to related symptoms and pathology as needed by a Neurodiagnostic and/or Polysomnographic technologist. Provider approved by the California Board of Registered Nursing, Provider #CEP 12655 for 54 hours. This course may also be offered online.

NDT A119 1 Unit (18 lecture hours)
EEG Record Review-Normal
Co-requisite(s): NDT A115.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Practice in electroencephalograph (EEG) record review of normal adult and pediatric patients. Technical description of normal EEG patterns.

NDT A200 0.5 Units (24 lab hours)
Neurodiagnostic Lab Practice
Prerequisite(s): NDT A110.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Application of basic technical skills to successfully record routine EEG, and EP procedures according to published ACNS guidelines.
NDT A280
Neurologic Disorders
Prerequisite(s): NDT A115 and NDT A190.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Clinical and electoneurodiagnostic correlations to various physical conditions and disease states which are commonly dealt with in neurodiagnostic technology. Relationship of technologists to various medical specialties: neurology, neurosurgery, pathology, radiology, internal medicine, and psychiatry.

NDT A284
Introduction to Transcranial Doppler
Prerequisite(s): NDT A190.
Grading Mode: Standard Letter
Transfer Credit: CSU.
An introduction to Transcranial Doppler (TCD) procedures and recording techniques.

NDT A285
Introduction to Nerve Conduction Velocity
Grading Mode: Standard Letter
Transfer Credit: CSU.
An introduction to nerve conduction velocity (NCV) testing procedures and recording techniques. PREREQUISITE: NDT A190.

NDT A286
Clinical Experience 3
Prerequisite(s): NDT A117.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.
Continued clinical experience in EEG at an affiliated health care facility under the direct supervision of an EEG technologist or physician. This clinical will build on skills attained in NDT A117. There will also be opportunities to observe and possibly perform evoked potential studies. Offered on a pass-no pass basis only.

NDT A287
EEG Record Review-Abnormal
Co-requisite(s): NDT A115 and NDT A191.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Practice in electroencephalograph (EEG) record review of neurological subjects covered in NDT A280. Classification of abnormal EEG patterns with correlation to clinical disorders.

NDT A288
Evoked Potentials
Grading Mode: Standard Letter
Transfer Credit: CSU.
Concepts, terminology, and techniques of Evoked Potential (EP) recording with testing modalities of visual, auditory, and somatosensory systems to be individually discussed. An overview of EP instrumentation and technical concepts. Analyze the clinical correlations of evoked potential testing and will focus on waveform analysis correlating to common neurological diseases. PREREQUISITE: NDT A115 and NDT A190.

NDT A289
Clinical Experience 4
Prerequisite(s): NDT A286 and NDT A288.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.
Clinical practice in neurodiagnostic testing with an emphasis on evoked potential and more specialized neurodiagnostic testing procedures. This clinical also further develops advanced skills in electroencephalographic recording and analysis. Offered on a pass-no pass basis only.

NDT A296
Introduction to Intraoperative Monitoring
Prerequisite(s): NDT A288.
Grading Mode: Standard Letter
Transfer Credit: CSU.
An introduction to Intraoperative neurophysiologic monitoring recording strategies. Analysis of signal changes during an operation will be correlated with anesthetic agents, metabolic effects, and/or the effects of surgical trauma. Intraoperative monitoring scenarios will be demonstrated and practiced in the classroom laboratory.

NDT A297
Microcomputer Applications in Neurodiagnostics
Prerequisite(s): NDT A115.
Advisory: CIS A100.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Specialized computer applications in Neurodiagnostic Technology. Testing modalities of Electroencephalography, evoked potentials, epilepsy monitoring, and automated diagnostic techniques will be presented. Opportunities for hands-on use of digital equipment will be integrated into the classroom and during field trips.
NDT A298
Clinical Internship
Co-requisite(s): NDT A289.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Specialized neurodiagnostic clinical internship at an affiliate hospital site. Specialized areas may include intraoperative neurophysiologic monitoring, neonatal testing, long-term epilepsy monitoring, pediatric testing, transcranial Doppler studies, nerve conduction studies and others. Offered on a pass-no pass basis only.

Nutrition Care (NC)

NC A100
Careers-Dietetics/Fdsci
1 Unit (18 lecture hours; 9 lab hours)
Grading Mode: Standard Letter
Transfer Credit: CSU.

Exploration of the fields of Dietetics and Food Science/Culinology, including trends, future projections and employment opportunities. Guest speakers and field trips to nutrition services in health care and community agencies and food manufacturing plants are included. Same as Food and Nutrition A100. Students completing Nutrition Care A100 may not receive credit for Food and Nutrition A100.

NC A175
Health Care Field Experience
4 Units (27 lecture hours; 150 lab hours)
Prerequisite(s): FSM A150; FN A170; and NC A180 or concurrent enrollment.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Importance and scope of providing food and nutrition services in health care or community facilities to include clinical experience. Team concept approach and public relations will be emphasized. Students will be required to follow dress standards set by the facility in which they are working. TB clearance required. Lecture, Lab.

NC A180
Introduction to Medical Nutrition Therapy
3 Units (36 lecture hours; 36 lab hours)
Prerequisite(s): FN A170 or FN A136 or HLED A136.
Grading Mode: Standard Letter
Transfer Credit: CSU.

The principles of nutrition as they relate to special and abnormal physical conditions and diseases and the dietary modifications necessary. Healthcare diets are studied and planned.

NC A280
Intermediate Nutrition Care
2 Units (18 lecture hours; 54 lab hours)
Prerequisite(s): NC A180.
Co-requisite(s): NC A281.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Nutrition education principles and techniques for individual, family, and small group instruction in normal and preventive nutrition care. Consideration is given to community and cultural influences on nutrition.

NC A281
Supervised Practice 1
3 Units (9 lecture hours; 150 other hours)
Co-requisite(s): NC A280.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Supervised clinical practice in community agencies and schools dealing with nutritional aspects of dietary evaluation, nutrition education and counseling. Students will be required to follow dress standards set by the facility.

NC A285
Advanced Nutrition Care
2 Units (18 lecture hours; 54 lab hours)
Prerequisite(s): NC A281.
Co-requisite(s): NC A286.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Advanced application of knowledge and skills related to food service management and the nutrition care process in preparation for entry-level practice as dietetic technicians in health care facilities.

NC A286
Supervised Practice 2
3 Units (9 lecture hours; 150 other hours)
Co-requisite(s): NC A285.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Supervised practice in food service management and nutrition care in acute medical care facility. Rotation through the various job responsibilities of the dietetic technician. Students will be required to follow dress standards set by the facility.

Philosophy (PHIL)

PHIL A100
Introduction to Philosophy
3 Units (54 lecture hours)
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

A survey of the fundamental problems of philosophy: ethics and aesthetics, logic, philosophy of religion, metaphysics, persons and personal identity, freedom and/or determinism, theory of knowledge, society, and political issues. Basic questions asked about the universe and our place in it. This course may also be offered online. C-ID: PHIL 100.
PHIL A115
Philosophy of Religion
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
An examination of key issues and problems of religion, including the nature and significance of religion and religious experience, arguments for and against the existence of God, the nature of God, the problem of evil, and the relation between science and religion. Same as Religious Studies A115. Students completing Philosophy A115 may not receive credit for Religious Studies A115. May be taken for grades or on a pass-no pass basis.

PHIL A118
Aesthetics/Philosophy of Art
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
A philosophical approach to a critical evaluation of works of art (literary, musical, visual). May be taken for grades or on a pass-no pass basis.

PHIL A120
Ethics
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
An introduction to ethical theories and problems. An analysis of the theories and principles on which moral judgments are based and the way these judgments are used in moral problems such as abortion, euthanasia, capital punishment, sexual equality, discrimination, censorship, and economic justice. Special attention will be given to the kinds of arguments used in ethical discussion. Same as Religious Studies A120. Students completing Philosophy A120 may not receive credit for Religious Studies A120. May be taken for grades or on a pass-no pass basis. C-ID: PHIL 120.

PHIL A125
History of Ancient Philosophy
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
This introductory course surveys ancient philosophy. It explains the philosophical positions of the ancients, their religious attitudes, and the cultural milieu out of which ancient philosophical thought arose. Recommended for philosophy majors, historians, and those interested in the roots of modern civilization. May be taken for grades or on a pass-no pass basis. C-ID: PHIL 130.

PHIL A150
Critical Reasoning & Writing
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
An introduction to the critical analysis and rational evaluation of argument and other forms of expression. Covers the uses of language, distinctions between deductive and inductive reasoning, and practice in detecting formal and informal fallacies. Develop tools for distinguishing between and evaluating beliefs, opinions, claims, explanations, and arguments. A strong emphasis is instruction in writing which models the critical thinking knowledge and skills examined in the course. May be taken for grades or on a pass-no pass basis.

PHIL A155
Introduction to Logic
Advisory: Eligible for ENGL A100.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
An introductory general education course focusing on the use of argumentation in both ordinary and academic discourse, with a particular focus on deductive logic. Emphasis on the role of formal and informal logic in the basic skills of oral communication (speech/listening) and written communication (reading/writing). Various deductive and inductive reasoning techniques will be identified, distinguished and evaluated for logical correctness and logical mistakes. Recommended for all humanities, social science, business and natural science majors, and for those planning to transfer to four-year colleges or universities. Lecture. C-ID: PHIL 110.

PHIL A165
The Theory of Knowledge
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
A critical survey of theories of truth, knowledge and belief, perception, and related problems. An evaluation of the limits and extent of human reasoning. The survey includes the mathematic-deductive method, the problem of induction, and an assessment of the conditions of the possibility of experience. Assess how evidence is assembled, interpreted and evaluated, and addresses what counts as a good reason to believe, i.e. the problems of justifying evidence. May be taken for grades or on a pass-no pass basis.

PHIL A185
Contemporary Philosophy
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Methods and problems of contemporary philosophy. Continental European and Anglo-American philosophy since 1900. Problems of the self, freedom, time, choice and action, language, thought and interpretation, science, evidence, and justification.

PHIL A220
Introduction to Symbolic Logic
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Students learn to translate simple, quantified, and multiply-quantified English sentences into symbolic form in both sentence logic and predicate logic with quantifiers. Truth tables are used to both classify and compare symbolic sentence's properties. Proof techniques for determining validity or invalidity of arguments containing simple sentences, compound sentences, and sentences containing quantifiers in sentence and predicate logic systems are learned including truth tables, truth trees, and natural deduction style proofs with inference, replacement and quantifier rules. Same as MATH A220. Students completing PHIL A220 may not receive credit for MATH A220. May be taken for grades or on a pass-no pass basis. C-ID: PHIL 210.
Photography (PHOT)

PHOT A100  2 Units (36 lecture hours; 18 lab hours)
Basic Digital Photography
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU

Photography designed to help the photo enthusiast increase their visual literacy, increase knowledge of the historic use of photographs in all aspects of society, and to take better pictures. A practical foundation in the use of digital cameras will be introduced, including exposure, composition, lighting, color, as well as, current methodology of image processing. A strong foundation of the historic context of photographs will be provided as a way of students learning to develop their ability to communicate through their images and to place them in context, to analyze, and evaluate photographs.

PHOT A101  3 Units (54 lecture hours)
Photography and Society
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Lecture/discussion class that explores how photographs function in society, and, in turn, how society determines our visual environment. Images will be analyzed in context of the total photographic milieu: news, advertising, snapshots, art, the internet, TV, etc. Fulfills “100” elective course requirement for Photography Certificate of Achievement. May be taken for grades or on a pass-no pass basis.

PHOT A102  1 Unit (18 lecture hours)
Careers in Photography
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Introduction to careers in photography and the Photography program at Orange Coast College. Recommended to anyone interested in pursing photography as a career goal.

PHOT A108  2 Units (36 lecture hours)
Smartphone Food Photography
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Smartphone food photography is a course introducing photography concepts, food styling concepts and camera features unique to smartphone photography. The course focuses on demonstrations, discussions, information resources, lighting and current food photography trends. Students will plan and produce their own food photography projects. Each student will provide their own smartphone. May be taken for grades or on a pass-no pass basis.

PHOT A109  2 Units (36 lecture hours)
Smartphone Fashion Photography
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Smartphone fashion photography is a course introducing photography concepts, fashion concepts and camera features unique to smartphone photography. The course focuses on demonstrations, discussions, critiques, information resources, lighting, fashion trends and smartphone capabilities. Students will plan and produce their own projects. Each student will provide their own smartphone. May be taken for grades or on a pass-no pass basis.

PHOT A110  3 Units (54 lecture hours)
Photography: Theatre and Practice
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This course explores the historical development and aesthetic experience of photography. At the same time, it is a study of photography as art. In addition to learning about key figures from the history of the photography, students will learn camera functions and digital editing techniques in order to develop their ability to create, compose and evaluate photographs.

PHOT A120  3 Units (36 lecture hours; 72 lab hours)
Introduction to Photography
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introduction to analog photography as a creative art with an emphasis on using the camera as a means of communication and personal expression. Topics include, the discussion and demonstration of basic black & white 35mm photography; camera use, film processing and making enlargements; the development of technical and aesthetic skills and elements of design and composition. Emphasis is placed on the historical development of photography and its use as a means of communication and personal expression as well as on the critical evaluation of student work. May be taken for a grade or on a pass-no pass basis.

PHOT A120H  3 Units (36 lecture hours; 72 lab hours)
Introduction to Photography Honors
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introduction to the processes, principles, and tools of photography. Topics include the development of technical and aesthetic skills, elements of design and composition, camera technology, materials and equipment, and contemporary trends in photography. Discussion and demonstration of basic black & white 35mm photography. Instructions in the theory and technique of camera use, processing film, and making enlargements. Emphasis on the historical development of photography and its use as a means of communication, personal expression and on the critical evaluation of student work. May be taken for a grade or on a pass-no pass basis. Lecture/Lab/Arranged Lab.
PHOT A122  3 Units (36 lecture hours; 72 lab hours)
Personal Expression
Prerequisite(s): PHOT A120 or PHOT A120H or PHOT A123 or PHOT A125.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Through making photographs, this class explores the development of ideas, and an individual point of view. Discussion of aesthetics and current trends in photography. Students may work with analog or digital media. Fulfills’ 100’ level elective course requirement for Photography Certificate of Achievement. May be taken for grades or on a pass-no pass basis. Lecture/Lab/Arranged Lab.

PHOT A123  3 Units (36 lecture hours; 72 lab hours)
Introduction to Digital Photography
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

Instruction in photography as a creative art, emphasizing photography as a means of communication and personal expression. Includes examination of the theory of aesthetics, composition, content, and technical elements of photography, as well as, critical evaluation of student work. Introduces DSLR camera operation and digital imaging techniques. This course is required for the Photography Certificates. May be taken for a grade or on a pass-no pass basis.

PHOT A125  3 Units (36 lecture hours; 72 lab hours)
Imaging with Photoshop 1
Prerequisite(s): PHOT A123.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Designed to introduce the student to photographic image processing with computers. Lectures and demonstrations of basic image manipulation, current professional digital workflows, color managed digital printing and archiving of images. Two hours lecture, four hours laboratory. May be taken for a grade or on a pass-no pass basis.

PHOT A127  2 Units (18 lecture hours; 54 lab hours)
Darkroom For Photography Majors
Prerequisite(s): PHOT A110 or PHOT A120 or PHOT A120H or PHOT A123.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to 35mm and medium format techniques. Topics will include; Beginning to intermediate film handling, developing, printing methods and working applications of film-based equipment. This class gives the student an opportunity to explore their creative vision with the use of film-based photography equipment.

PHOT A128  2 Units (18 lecture hours; 54 lab hours)
Medium and Large Format Film Capture
Prerequisite(s): PHOT A120 or PHOT A120H or PHOT A127.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An introduction to intermediate medium format and large format camera techniques. Topics will include; Camera movements, medium format and large format film handling, developing, printing methods, and working applications of medium and large format film based equipment. This class gives the student an opportunity to explore their creative vision with the use of film-based photography equipment.

PHOT A130  3 Units (54 lecture hours)
History and Aesthetics of Still Photography
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Provides an overview of the history of photography from 1800 to the present. The work of major practitioners is discussed, as well as lesser known figures, and the trends, movements, and artist groups that have shaped the course of the medium.

PHOT A141  1-2 Units (54-108 lab hours)
Black & White Photography Lab 1
Prerequisite(s): PHOT A120 or PHOT A120H or PHOT A127.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Instruction and assistance with intermediate black & white laboratory, using 35mm, RC Papers, and camera projects. Students determine their own projects. This is a workshop course intended as, but not limited to, an augmentative laboratory course for those enrolled in certificate studio/production photography classes. Counts towards 100 level elective course requirement for Photography Certificate of Achievement. Lab/Arranged Lab.

PHOT A142  1-2 Units (54-108 lab hours)
Traditional Black & White Photo Lab 2
Prerequisite(s): PHOT A141.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Instruction and assistance with intermediate/advanced black & white laboratory using 120 film, fiber based paper, and camera projects. This is a workshop course intended as, but not limited to, an augmentative laboratory course for those enrolled in certificate studio/production photography classes. Counts towards 100 level elective course requirement for Photography Certificate of Achievement. Lab/Arranged Lab.
PHOT A143
Traditional Black & White Photo Lab 3
Prerequisite(s): PHOT A142.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Instruction and assistance with advanced black & white laboratory, using 4x5 film, fiber based paper, a variety of different film/paper developer combinations, and camera projects. This is a workshop course intended as, but not limited to, an augmentative laboratory course for those enrolled in certificate studio/production photography classes. Students determine their own projects. Instruction is offered at advanced levels. Counts toward "100" level elective course requirement for photography majors. Three to six hours laboratory. Lab/Arranged Lab.

PHOT A152
2 Units (54 lecture hours)
Photo Gallery
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Aids students in the appreciation and critical analysis of contemporary art photography. Presentations and discussions provide background for weekly field-trips to museums and galleries in the Los Angeles area. Course content differs each semester due to the local exhibition calendar. Counts towards "100" level optional course requirement for Photography Certificate of Achievement. May be taken for grades or on a pass-no pass basis.

PHOT A161
1-2 Units (54-108 lab hours)
Digital Photography Laboratory 1
Prerequisite(s): PHOT A125.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Students requiring additional digital laboratory experience. Assistance provided with scanning and printing projects. This is a workshop course intended as an augmentative laboratory course for those enrolled in advanced digital photography classes. Counts toward "100" level elective course requirement for Photography Certificate of Achievement. May be taken for grades or on a pass-no pass basis. Lab/Arranged Lab.

PHOT A180
4 Units (54 lecture hours; 72 lab hours)
Introduction to Professional Photography
Prerequisite(s): PHOT A123.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Instruction in the basic professional techniques and the use of professional cameras and lighting stressing technical excellence in all phases. Three hours lecture, two hours laboratory, two hours arranged.

PHOT A187
3 Units (36 lecture hours; 72 lab hours)
Laboratory Practices
Prerequisite(s): PHOT A120 or PHOT A120H.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Study of professional black and white photographic techniques. Emphasis on the following areas; film, developer and paper selection and testing, exposure, contrast control (zone system), advanced fine printing techniques, alterations of photographic materials through intensification and reduction, basic sensitometry and practical photochemistry. Two hours lecture, two hours laboratory, two hours arranged.

PHOT A188
5 Units (90 lecture hours; 54 lab hours)
Commercial Photography
Prerequisite(s): PHOT A180.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Overview of the profession of photography. Study and application of the techniques of commercial photography with emphasis on tungsten, strobe and available lighting; small and large products, advertising illustration, special effects image techniques, and basic business practices. Five hours lecture, three hours laboratory.

PHOT A196
3 Units (36 lecture hours; 72 lab hours)
Photo Bookworks
Prerequisite(s): PHOT A125.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Major course projects are the production of several unique photographic books. Layout, typography, editing of photos, and makeup of a book are covered. Attention will be paid to viewing and discussing a wide range of photographic bookworks. Instruction is offered at intermediate and advanced levels. Recommended for photography majors. May be taken for grades or on a pass-no pass basis. Two hours lecture, two hours laboratory, two hours arranged.

PHOT A200
3 Units (36 lecture hours; 72 lab hours)
Documentary Photography
Prerequisite(s): PHOT A125.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Concepts, aesthetics and history of documentary photography. Strongly recommended for students interested in journalism, material culture and social/political issues. Students may use B&W, color or digital photography. Instruction is offered at intermediate and advanced levels. Two hours lecture, two hours laboratory, two hours arranged.
PHOT A220 3 Units (36 lecture hours; 72 lab hours)
Fashion Photography
Prerequisite(s): PHOT A180.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to current trends and techniques of professional fashion photography. Lecture/Lab/Arranged Lab.

PHOT A223 3 Units (36 lecture hours; 72 lab hours)
Action Sports Photography
Prerequisite(s): PHOT A180.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A course designed to address topics and skills associated with photographing in the professional Action Sports industry, for the purpose of illustrating a concept or an idea as it relates to publishing, advertising, web and social media.

PHOT A225 3 Units (36 lecture hours; 72 lab hours)
Professional Digital Workflow and Color Management
Prerequisite(s): PHOT A125.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Emphasis on current techniques of advanced digital printing workflow, digital file preparation, color management and advanced digital retouching techniques. Recommended for those with an interest in commercial, editorial, or fine art work. Counts toward '200' level elective for Photography Certificate of Achievement. Two hours lecture, three hours laboratory, one hour arranged.

PHOT A230 3 Units (54 lecture hours)
Photography Since 1945
Prerequisite(s): PHOT A130.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A critical history of photography from 1945 to the present. Works will be considered from social, political, and art historical perspectives. Will survey the work of major photographers, exhibitions, and critical writers, as well as the ever-increasing role of photography in contemporary cultural life. May be taken for grades or on a pass-no pass basis.

PHOT A241 3 Units (54 lecture hours)
Business Practices for Photographers
Prerequisite(s): PHOT A180.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Presentation of basic business practices in commercial photography including pricing, marketing, and calculating expenses. Helps students to identify and achieve professional photographic objectives. May be taken for grades or on a pass-no pass basis.

PHOT A260 1 Unit (54 lab hours)
Art Portfolio Development 1
Prerequisite(s): PHOT A180.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Faculty directed study into the history, criticism, interpretation, literature, theory, or business of art photography, not involving any lab work. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate levels. Recommended for photography majors. Counts toward '200' level elective course requirement. Lab/Arranged Lab.

PHOT A261 1 Unit (54 lab hours)
Art Portfolio Development 2
Prerequisite(s): PHOT A260.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Faculty directed in-depth study of a specific area of art photography. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate/advanced and advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. Lab/Arranged Lab.

PHOT A262 1 Unit (54 lab hours)
Commercial Portfolio Development 1
Grading Mode: Standard Letter
Transfer Credit: CSU.

Faculty directed in-depth study of a specific area of professional commercial portfolio development. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate and intermediate/advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. PREREQUISITE: PHOT A180. Lab/Arranged Lab.

PHOT A263 1 Unit (54 lab hours)
Commercial Portfolio Development 2
Grading Mode: Standard Letter
Transfer Credit: CSU.

Faculty directed in-depth study of the preparation of a professional commercial portfolio and portfolio presentation. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate and intermediate/advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. PREREQUISITE: PHOT A262. Lab/Arranged Lab.

PHOT A264 1 Unit (54 lab hours)
Exhibition Preparation 1
Grading Mode: Standard Letter
Transfer Credit: CSU.

Faculty directed study into the conception, development, planning and installation of photographic exhibitions. Students work closely with faculty in the running of the photography department's three gallery spaces. Instruction is offered at intermediate and intermediate/advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. PREREQUISITE: PHOT A120 or PHOT A120H or PHOT A123. Lab/Arranged Lab.
PHOT A265
Exhibition Preparation 2
1 Unit (54 lab hours)
Grading Mode: Standard Letter
Transfer Credit: CSU.

Faculty directed study into the conception, development, planning, and installation of a personal photographic exhibition. Instruction is offered at intermediate/advanced and advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. PREREQUISITE: PHOT A264. Lab/Arranged Lab.

PHOT A266
Marketing and Self Promotion 1
1 Unit (54 lab hours)
Grading Mode: Standard Letter
Transfer Credit: CSU.

Faculty directed in-depth study of a specific area of photographic marketing and self-promotion. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate and intermediate/advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. PREREQUISITE: PHOT A180. Lab/Arranged Lab.

PHOT A267
Marketing and Self Promotion 2
Prerequisite(s): PHOT A266.
1 Unit (54 lab hours)
Grading Mode: Standard Letter
Transfer Credit: CSU.

Faculty directed, in depth study of the implementation and application of a created marketing and self-promotion plan. Topic(s) and faculty chosen by the student and will include, but not be limited to, branding and identity, logo design, websites, and Internet marketing. Instruction is offered at advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. Lab/Arranged Lab.

PHOT A280
Professional Digital Techniques
3 Units (36 lecture hours; 72 lab hours; 0 other hours)
Prerequisite(s): PHOT A180.
Grading Mode: Standard Letter
Transfer Credit: CSU.

A course on professional digital techniques for emerging digital photographers. A strong technical basis will be introduced, but primary orientation will be toward solving practical problems in professional digital photography. Areas covered will include advanced post-production practices, simulating professional working situations, and professional digital methodologies. Lecture/Lab/Arranged Lab.

PHOT A282
Professional Portraiture
3 Units (36 lecture hours; 72 lab hours)
Grading Mode: Standard Letter
Transfer Credit: CSU.

Prerequisite(s): PHOT A180.

PHOT A283
Art Photography
4 Units (54 lecture hours; 72 lab hours)
Grading Mode: Standard Letter
Transfer Credit: CSU.

A critique based studio class focusing on photography as a contemporary art medium – concepts, aesthetics and history of art photography in relation to contemporary art practice in general. Students may use black and white, color or digital photography. Instruction is offered at intermediate and advanced levels. Required for photography majors. Three hours lecture, two hours laboratory, two hours arranged.

PHOT A285
Wedding and Event Photography
3 Units (36 lecture hours; 72 lab hours)
Grading Mode: Standard Letter
Transfer Credit: CSU.

Advisory: PHOT A188 and PHOT A225.

PHOT A287
Alternative Methods
3 Units (36 lecture hours; 72 lab hours)
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

A course on professional wedding and event photography techniques, methodology and workflow. This course is designed to prepare the student for the professional industry by introducing a high technical level.

PHOT A284
Primary Technical Techniques
3 Units (36 lecture hours; 72 lab hours)
Grading Mode: Standard Letter
Transfer Credit: CSU.

A course on primary technical techniques for emerging digital photographers. A strong technical basis will be introduced, but primary orientation will be toward solving practical problems in professional digital photography. Areas covered will include advanced post-production practices, simulating professional working situations, and professional digital methodologies. Lecture/Lab/Arranged Lab.
PHOT A288 3 Units (36 lecture hours; 72 lab hours)
Editorial and Advertising People Photography
Prerequisite(s): PHOT A188.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Addresses the topics and skills associated with commercial photography of people, usually on location, for the purpose of conveying a message, idea, or concept in advertising, editorial, and annual report applications. Topics include commercial and retail portraiture, concepts communicated through portraiture, location scouting and lighting. Two hours lecture, two hours laboratory, two hours arranged.

PHOT A289 3 Units (36 lecture hours; 72 lab hours)
Architectural Photography
Prerequisite(s): PHOT A180.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A course in professional architectural photography techniques, methodology and workflow. This course is designed to prepare the student for the professional industry by introducing a high technical level. Exterior and interior architectural photography are covered with an emphasis on different light sources, perspective and color correction. Some fieldwork with instructor. Lecture/Lab/Arranged Lab.

PHOT A290 3 Units (36 lecture hours; 72 lab hours)
Advertising Illustration Photography
Prerequisite(s): PHOT A188.

Grading Mode: Standard Letter
Transfer Credit: CSU.

This course is designed for the advanced photography student and professional photographers with specific interest in the commercial photography field of advertising illustration. Counts toward '200' level elective course requirement for Photography Certificate of Achievement. Lecture/Lab/Arranged Lab.

PHYS A111 1 Unit (54 lab hours)
Introductory Physics Laboratory
Prerequisite(s): PHYS A110 or concurrent enrollment.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introductory physics laboratory to complement PHYS A110. Not open to those who hold credit for any other physics laboratory course. May be taken for grades or on a pass-no pass basis.

PHYS A120 4 Units (72 lecture hours; 36 lab hours)
Algebra Based Physics: Mechanics
Prerequisite(s): MATH A120, MATH A170, MATH A180, MATH A180H, or MATH A182H or concurrent enrollment.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

The first semester of a two-semester sequence (with PHYS A125) covering all topics in basic physics. Requires algebra and trigonometry. Satisfies the requirements for biological sciences and technical programs except physics, chemistry, and engineering. May be taken for grades or on a pass-no pass basis. C-ID: PHYS 105.

PHYS A125 4 Units (72 lecture hours; 36 lab hours)
Algebra Based Physics: Electricity/Magnetism
Prerequisite(s): PHYS A120.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

The second semester of a two-semester sequence (with PHYS A120) covering all topics in basic physics. Requires algebra and trigonometry. Satisfies the requirements for biological sciences and technical programs except physics, chemistry, and engineering. May be taken for grades or on a credit no-credit basis. C-ID: PHYS 110.

PHYS A130 4 Units (72 lecture hours; 54 lab hours)
University Physics 1 (non-majors)
Prerequisite(s): MATH A185 or MATH A185H or MATH A182H or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

AA study of general principles of mechanics, waves, and thermodynamics. Emphasis will be on Newton’s three laws of motion, theory of gravity, conservation laws, laws of thermodynamics, generation and propagation of mechanical waves. The first semester of a two-semester sequence (with PHYS A135) requiring calculus.

Physical Education (PE)
See Kinesiology

Physics (PHYS)

PHYS A110 3 Units (54 lecture hours)
Conceptual Physics
Advisory: MATH A010 and MATH A020.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A brief, but complete presentation of the fundamental phenomena and laws in physics, with experimental illustrations, enhancing the development of conceptual scientific thinking. This course may also be offered online. May be taken for grades or on a pass-no pass basis.
PHYS A135 4 Units (72 lecture hours; 54 lab hours)
University Physics 2 (non-majors)
Prerequisite(s): PHYS A130; and Calculus 1 and 2 completed as MATH A182H only or both MATH A180 or MATH A180H, and MATH A185 or MATH A185H.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

A study of general principles of electricity, electromagnetism, optics, theory of relativity, and quantum theory with applications to atoms, nuclei and elementary particles.

PHYS A185 4 Units (72 lecture hours; 54 lab hours)
Calculus Based Physics: Mechanics
Prerequisite(s): MATH A180 or MATH A180H, and MATH A185 or MATH A185H or concurrent enrollment; or MATH A182H or concurrent enrollment.

Advisory: One year of high school physics or a semester of college physics.

Gradung Mode: Standard Letter
Transfer Credit: CSU; UC.

The PHYS A185, PHYS A280, PHYS A285 sequence is required for students planning to major in physics, chemistry or engineering. Newton’s laws of motion, dynamics of particles in a given force field, gravitation, conservation laws of energy, momentum, angular momentum, and the kinematics of rigid body rotation. Propagation of mechanical waves in different elastic medium, waves on the string, water waves, sound waves. C-ID: PHYS 205.

PHYS A185H 4 Units (72 lecture hours; 54 lab hours; 0 other hours)
Calculus-Based Physics: Mechanics Honors
Prerequisite(s): MATH A180 or MATH A180H, and MATH A185 or MATH A185H or concurrent enrollment; or MATH A182H or concurrent enrollment.

Advisory: One year of high school physics or a semester of college physics.

Gradung Mode: Standard Letter
Transfer Credit: CSU; UC.

The PHYS A185, PHYS A280, PHYS A285 sequence is required for students planning to major in physics, chemistry or engineering. Newton’s laws of motion, dynamics, gravitation, energy, momentum, angular momentum, the kinematics of rigid body rotation, fluids, oscillations and waves. Transfer Status: CSU, UC. C-ID: PHYS 205.

PHYS A280 4 Units (72 lecture hours; 54 lab hours)
Calculus Based Physics: Electricity/Magnetism
Prerequisite(s): PHYS A185; and Calculus 1 and 2 completed as MATH A182H only or both MATH A180 or MATH A180H and MATH A185 or MATH A185H.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.


PHYS A285 4 Units (72 lecture hours; 54 lab hours)
Calculus Based Physics: Modern
Prerequisite(s): PHYS A185.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.


Political Science (PSCI)

PSCI A101 3 Units (54 lecture hours)
Survey of Current Issues
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Survey of current issues and events in American and/or world politics. Focus will be on issues and problems of political significance, opposing viewpoints in the political realm, analysis and evaluation of arguments, and ideological and political conflict. May be taken for grades or on a pass-no pass basis.

PSCI A110 3 Units (54 lecture hours)
International Relations
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Introduction to international relations theory with an examination of national, international, transnational, and sub-national actors and their institutions interactions and processes as they relate to global issues. Study of the functions of power, ideology, diplomacy, international law, and organization, as well as military and economic factors. Consideration of United States, Russian, and Chinese foreign policy and prominent cold war and post-cold war problems as they illustrate concepts of international politics. May be taken for grades or on a pass-no pass basis. C-ID: POLS 140.
PSCI A180 3 Units (54 lecture hours)
American Government
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

An introduction to the principles and problems of government with particular emphasis on the American political system at all levels. This course satisfies the state college requirements in the Constitution of the United States, state, and local governments. This course may also be offered online. May be taken for grades or on a pass-no pass basis. C-ID: POLS 110.

PSCI A180H 3 Units (54 lecture hours)
American Government Honors
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

An introduction to the principles and problems of government with particular emphasis on the American political system at all levels. This course satisfies the state college requirements in the Constitution of the United States, state, and local governments. May be taken for grades or on a pass-no pass basis. C-ID: POLS 110.

PSCI A185 3 Units (54 lecture hours)
Comparative Politics
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

An introduction to comparative empirical analysis of selected political systems, including advanced democracies, communist and former communist countries, and less developed countries, with an emphasis on governmental institutions and political processes. Particular attention is placed on the relationship between institutions and behavior. May be taken for grades or on a pass-no pass basis. C-ID: POLS 130.

PSCI A188 3 Units (54 lecture hours)
Introduction to Political Theory
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

An introduction to selected political theorists and concepts from Plato to the present. Focus on the Western tradition and its major texts by reading ancient, modern, and contemporary political thinkers to examine their arguments on the nature of government and politics. C-ID: POLS 120.

PSCI A190 3 Units (54 lecture hours)
Introduction to American Legal System
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

An overview of the American legal system, its structure, and history. Reviews many aspects of the law and judicial process: the adversarial system, powers and jurisdiction of the federal and state courts, judicial review, legal education, the legal profession, and other related topics. May be taken for grades or on a pass-no pass basis.

PSCI A200 3 Units (54 lecture hours)
Introduction to Political Science
Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to the study of politics. Explores the approaches, theories, methods, and models of the discipline and its subfields to prepare students for a systematic examination of the political world and its many faces around the globe. C-ID: POLS 150.

PSCI A201 3 Units (54 lecture hours)
Introduction to Political Science Research Methods
Prerequisite(s): PSCI A180 or PSCI A180H.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to the techniques used for research in the study of politics, including framing and clarifying research questions, systematic thinking about research design, the relationship between data and theory, using and assessing qualitative and quantitative methods, and learning the toolbox of methods of the discipline. C-ID: POLS 160.

Polysomnography (PSG)

PSG A100 1 Unit (18 lecture hours)
Polysomnography Basics
Prerequisite(s): ALH A130 or concurrent enrollment.
Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to the pathological condition of a variety of sleep-related disorders, including basic set-up of the polysomnogram, types of disorders, and treatment modalities for advanced respiratory care and neurodiagnostic technology students.

PSG A150 3 Units (54 lecture hours)
Introduction to Polysomnography
Co-requisite(s): PSG A160.
Grading Mode: Standard Letter
Transfer Credit: CSU.

A fundamental and detailed study of the various sleep disorders, their symptoms, consequences, treatments, and polysomnographic manifestations. Sleep stage scoring, pattern recognition and data computation are covered. Instruction in patient examination and history taking for sleep disorders is included.
PSG A160 2 Units (18 lecture hours; 36 lab hours)
Polysomnography Testing
Prerequisite(s): NDT A110 or concurrent enrollment.
Co-requisite(s): PSG A150.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Hands-on experience and instrumentation theory of various polysomnographic recording equipment utilized for recording sleep studies and includes patient hookup, calibration and simulated testing in the lab. Continuous Positive Airway Pressure (CPAP) and oxygen titration demonstration.

PSG A165 1 Unit (72 other hours)
Polysomnography Clinical 1
Co-requisite(s): ALH A115, PSG A150, PSG A160 and PSG A170.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.
Clinical application of polysomnographic testing at an affiliated sleep disorder center to include patient interaction, application of testing equipment, and monitoring sleep behavior.

PSG A170 0.5 Units (9 lecture hours)
Polysomnographic Practice
Co-requisite(s): PSG A150 and PSG A165.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.
Preparatory course for polysomnography clinical experience. Topics will include medical ethics, clinical emergencies, behavioral and performance objectives, and employability skills.

PSG A175 1 Unit (96 other hours)
Polysomnography Clinical 2
Prerequisite(s): PSG A160 and PSG A165.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.
Clinical application of polysomnographic testing at an affiliated sleep disorder center to include patient interaction, application of testing equipment, and monitoring sleep behavior. Offered on a pass-no pass basis only.

PSG A250 2 Units (36 lecture hours)
Polysomnography Record Review
Prerequisite(s): PSG A150, PSG A160 and PSG A165.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Review of normal and abnormal polysomnographic recordings. Learn to recognize normal and abnormal sleep and breathing patterns and behaviors, artifacts, titration of CPAP, BiPAP, and oxygen. Scoring and calculation of polysomnographic recordings.

PSG A260 2 Units (24 lecture hours; 12 lab hours)
Advanced Polysomnography
Prerequisite(s): PSG A160.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Advanced aspects of polysomnographic technology, testing, instrumentation, ancillary testing, basic management skills, and computerized scoring.

PSG A265 2 Units (12 lecture hours; 144 lab hours)
Polysomnography Clinical 3
Co-requisite(s): PSG A175, PSG A250 and PSG A260.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.
Continued clinical application of Polysomnographic testing at an affiliated sleep disorder center. Includes patient interaction, application of testing equipment, and monitoring sleep behavior. Offered on a pass-no pass basis only.

PSG A270 1 Unit (18 lecture hours)
Physician Lecture Series
Prerequisite(s): NDT A190 or concurrent enrollment.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Physician lectures on current topics in polysomnography and related areas of medicine.

PSG A285 2 Units (144 other hours)
Polysomnography Internship
Co-requisite(s): PSG A265.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.
Final clinical experience in an affiliated Sleep Disorders Center. Students will work with patients and technologists at night in the laboratory to obtain interpretable polygraphs. Offered on a pass-no pass basis only.

Portuguese (PORT)
PORT A180 5 Units (90 lecture hours)
Elementary Portuguese 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.
The focus is on the development of elementary proficiency in listening, speaking, reading, and writing in Portuguese with an introduction to cultures related to the Portuguese language. May be taken for grades or on a pass-no pass basis.
PORT A185  
Elementary Portuguese 2  
Prerequisite(s): PORT A180 or completion of two years of high school Portuguese with a grade of ‘C’ or better.

Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU, UC.

Continuation of PORT A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Portuguese language. This course is equivalent to three years of high school Spanish. May be taken for grades or on a pass-no pass basis.

Psychology (PSYC)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
<th>Grading Mode</th>
<th>Transfer Credit</th>
</tr>
</thead>
</table>
| PSYC A100  
Introduction to Psychology | 3 | This course is a scientific study of mental processes and behavior. The following psychology topics are explored: methodology, physiology, sensation, perception, states of consciousness, learning, memory, intelligence, thought, language, development, motivation, emotion, sexuality, health, stress, personality, abnormal disorders, and therapies. This course may also be offered online. May be taken for grades or on a pass-no pass basis. C-ID: PSY 110. | Standard Letter, Pass/No Pass | CSU; UC. |
| PSYC A100H  
Introduction to Psychology Honors | 3 | This course is a scientific study of mental processes and behavior. The following psychology topics are explored: methodology, physiology, sensation, perception, states of consciousness, learning, memory, intelligence, thought, language, development, motivation, emotion, sexuality, health, stress, personality, abnormal disorders, and therapies. May be taken for grades or on a pass-no pass basis. C-ID: PSY 110. | Standard Letter, Pass/No Pass | CSU; UC. |
| PSYC A105  
Psychology of Women | 3 | Evaluates traditional theories of the psychology of women and how they relate to women today. Will examine what science has taught us about the nature of women and how their psychology is both similar to and different from that of men. Topics include communication styles, social relationships, body image, sexuality, motherhood, work, and physical and mental health. May be taken for grades or on a pass-no pass basis. | Standard Letter, Pass/No Pass | CSU; UC. |
| PSYC A110  
Psychology of Adjustment | 3 | The study of concepts and principles of personal and social adjustment. Theories (e.g., biological, psychodynamic, behavioral, cognitive, humanistic) of healthy adjustment are explored and coupled with personal discipline and responsibility of the individual student. The material is geared to be relevant and applicable to contemporary society. May be taken for grades or on a pass-no pass basis. | Standard Letter, Pass/No Pass | CSU; UC. |
| PSYC A125  
Introduction to Counseling Psychology | 4 | Designed for students who seek to acquire a basic understanding of counseling psychology and helping roles in the mental health profession. Theoretical and practical approaches to treating emotionally, developmentally, and cognitively impaired clients will be explored within the context of the rehabilitation and recovery model and other treatment models. May be taken for grades or on a pass-no pass basis. | Standard Letter, Pass/No Pass | CSU. |
| PSYC A130  
Life Span Developmental Psychology | 3 | Psychological study of human development across the lifespan from prenatal development through childhood, adolescence, adulthood, and dying. Theories and research of physical, cognitive, personality, and social development are examined, as well as attention to developmental problems. Institutions impacting each stage of development also addressed. May be taken for grades or on a pass-no pass basis. C-ID: PSY 180. | Standard Letter, Pass/No Pass | CSU, UC. |
| PSYC A160  
Statistics for the Behavioral Sciences | 4 | This course emphasizes the calculation, interpretation, and application of descriptive and inferential statistics in the behavioral sciences. Topics include research methods, mathematical concepts, distributions, estimation, correlation, regression, sampling and probability, hypothesis testing, z and t Tests, ANOVA, and nonparametric tests. Students completing MATH A160 may petition for alternative credit for PSYC A160. May be taken for grades or on a pass-no pass basis. C-ID: MATH 110. | Standard Letter, Pass/No Pass | CSU. |
| PSYC A165  
Principles of Human Sexuality 1 | 3 | Interdisciplinary approach to psychological, social, and physiological aspects of sexuality. Same as Sociology A165. Students completing Psychology A165 may not receive credit for Sociology A165. May be taken for grades or on a pass-no pass basis. | Standard Letter, Pass/No Pass | CSU; UC. |
PSYC A185
Principles of Psychology
Prerequisite(s): PSYC A100 or PSYC A100H.

Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This course emphasizes contemporary interests, recent discoveries, and classic studies in psychology, with attention to developmental psychology, physiological psychology, abnormal psychology and the other subfields.

PSYC A190
Cross-Cultural Psychology
Grading Mode: Standard Letter
Transfer Credit: CSU, UC

This course is an introduction to essential theories and research in cross-cultural psychology. The course will explore how culture influences human behavior and psychological processes including cognition, lifespan development, emotion, language, personality, mental health, self concept, and social behavior. Topics include identity development, worldview, stereotyping, prejudice, discrimination, enculturation, acculturation, cultural competence, and mental health, with particular emphasis placed on the influence of race, ethnicity, sex, gender, disability, socioeconomic status, nationality, sexual orientation, and religion. Examination of these topics will prepare students to more fully engage in an increasingly diverse society where cross-cultural contact is a routine occurrence.

PSYC A190H
Cross-Cultural Psychology Honors
Grading Mode: Standard Letter
Transfer Credit: CSU, UC

This course is an introduction to essential theories and research in cross-cultural psychology. The course will explore how culture influences human behavior and psychological processes including cognition, lifespan development, emotion, language, personality, mental health, self concept, and social behavior. Topics include identity development, worldview, stereotyping, prejudice, discrimination, enculturation, acculturation, cultural competence, and mental health, with particular emphasis placed on the influence of race, ethnicity, sex, gender, disability, socioeconomic status, nationality, sexual orientation, and religion. Examination of these topics will prepare students to more fully engage in an increasingly diverse society where cross-cultural contact is a routine occurrence.

PSYC A199
Current Topics in Psychology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Study and discussion of topics and issues of current interest in psychology. Units vary according to topic selected, semester offered, and number of meetings scheduled. May be taken for grades or on a pass-no pass basis.

PSYC A200
Positive Psychology
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Focus on presenting practical ways to promote and maintain well-being and happiness by managing emotions, strengthening positive character traits, and fostering better relationships. Topics include compassion, mindfulness, creativity and flow, self-knowledge, self-esteem, love, parenting, friendships, work ethics and achievement, spirituality, tolerance, resilience and humor. May be taken for grades or on a pass-no pass basis.

PSYC A220
Psychology of Personality
Prerequisite(s): PSYC A100 or PSYC A100H.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A survey of classical and contemporary personality theories, research, and applications. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

PSYC A250
Psychobiology
Prerequisite(s): PSYC A100 or PSYC A100H.

Advisory: ENGL A100.

Grading Mode: Standard Letter
Transfer Credit: CSU, UC.

This course is an examination of the relationships between the brain and behavior and their application to self-management. The anatomy and physiology of the following will be explored: neurological disorders and their treatments, sensation, perception, sexuality, drug use, emotion, sleep, learning, memory, and internal bodily states. This course may also be offered online. C-ID: PSY 150.

PSYC A255
Abnormal Psychology
Prerequisite(s): PSYC A100 or PSYC A100H.

Advisory: ENGL A100.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

A survey of abnormal psychology, models of abnormal behavior, assessment and classification of psychological disorders, etiology and treatment, and legal and ethical issues. This course emphasizes a critical thinking approach for understanding content in the context of a culturally diverse society. C-ID: PSY 120.
PSYC A260  
Social Psychology  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.

Topics explored include self-perceptions, attitudes and behavior, group influence and persuasion, attraction and relationships, stereotypes, prejudice, aggression, helping, and the application of social psychology to health, business, and law. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

PSYC A270  
Psychology of Learning  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.

Investigates types of learning, the background and research that led to their discovery, and current models of learning, memory, and problem solving. Critical and analytical thinking applied to instances of everyday learning and memory. May be taken for grades or on a pass-no pass basis.

PSYC A280  
Introduction to Experimental Methods  
Prerequisite(s): PSYC A100 or PSYC A100H; and PSYC A160 or MATH A160.  
Advisory: ENGL A100.  
Grading Mode: Standard Letter  
Transfer Credit: CSU; UC.

This course addresses the principles and techniques which enter into experimental research concerning behavior and emphasizes designing, conducting, analyzing, and reporting research in the behavioral sciences. C-ID: PSY 200.

Public Health (PUBH)

PUBH A100  
Personal Health  
Advisory: Eligibility for ENGL A100.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.

This course focuses on the exploration of major health issues and behaviors in the various dimensions of health. Emphasis is on positive health behaviors and personal responsibility. Topics include mental health, stress, drugs, alcohol, smoking, exercise, nutrition, weight control, chronic and infectious diseases, sexuality, consumer health, violence, aging and environmental health. This course may also be offered online. Same as HLED A100. C-ID: PHS 100.

PUBH A160  
Peer Health Education Level 1  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU.

This course prepares students to serve as a member of the Peer Health Action Team (PHAcT) at OCC. Topics covered include strategies for behavior change, referrals, programming, presentation and group success. Students will be certified as Peer Health Educators through BACCHUS national certification exam. 36 hours in the classroom; 54 hours arranged. Same as HLED A160 - Peer Health Education Level 1.

PUBH A200  
Introduction to Public Health  
Advisory: Eligibility for ENGL A100.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.

The factors that influence health and disease from a population based perspective, with focus on basic concepts and terminologies of public health and the history and accomplishments of public health officials and agencies. An overview of the functions of various public health professions and institutions and an in-depth examination of the core public health disciplines are covered. Topics will include: history; health promotion; determinants of health and burden of disease; legal and ethical issues; epidemiology of communicable and non-communicable disease; environmental health; community organizing and health promotion programming; environmental health and safety; global health; and healthcare policy and management. career opportunities in public health. Same as HLED A220 - Concepts in Public Health. C-ID: PHS 101.

PUBH A202  
Drugs, Health, and Society  
Advisory: Eligibility for ENGL A100.  
Grading Mode: Standard Letter, Pass/No Pass  
Transfer Credit: CSU; UC.

Examination of the use, misuse and abuse of drugs, both licit and illicit, in American society and the pharmacologic, neurologic and physiologic effects of selected substances on the human brain. Includes psychosocial, legal, historical, political, social, economic and health related aspects; drug dependency, treatment, rehabilitation, and prevention education. Focuses on the impact of psychoactive drugs on the individual and society, including the epidemiology and toxicology of substance abuse and its relevance to personal and public health. Epidemiologic data on the prevalence, incidence, and trends of smoking, alcohol, prescription and other drug dependencies in the U.S. will be covered, as well as risk factors associated with the use and abuse of these substances. Current options for recovery and a survey of local resources will be reviewed. Same as HLED A122 - Drugs, Health, and Society. C-ID: PHS 103.
This course provides an introduction to the health inequities in the United States that stem from unequal living conditions. Students will explore how education, socioeconomic status, race/ethnicity, sexual orientation, age, and gender and other social factors shape health epidemics and policy development. The basic skills necessary for advocating for health and social justice will be theoretically demonstrated. C-ID: PHS 102.

This course provides students with an understanding of the U.S. healthcare system and health insurance options to provide for efficient navigation through the healthcare system. Topics include the history of health insurance in the U.S. and the role of government in healthcare; the U.S. healthcare workforce; basic health insurance terminology; types of insurance and the healthcare marketplace; different types of care, including outpatient, ambulatory and long-term care; public assistance programs and disability programs; and, ethical and bioethical issues. Same as INHL A210. Students who complete INHL A210 may not enroll in PUBH A210. May be taken for grades or on a pass-no pass basis.

This course will provide students with the skills and knowledge to be successful health educators in both group and individual setting. Topics will include the principles and practice in the planning, facilitation, and evaluation of public health education and training. This course covers basic theories and participatory training methods, with a focus on meeting the needs of diverse communities and adult learners. Same as INHL A220. Students who complete INHL A220 may not enroll in PUBH A220. May be taken for grades or on a pass-no pass basis.

Students develop skills and knowledge required to locate and critically appraise online health information; review measurements and methods to access public health data located in surveillance systems and vital records, and provide an overview of public health informatics. Same as INHL A230.

Second-semester course for students who have complete HLED A160 and have been certified as peer health educators by BACCHUS. Students will continue their development of skills related to health promotion program planning and implementation. Emphasis will be on leadership and organizational skills, bystander intervention and health topic content, i.e., alcohol, sleep, nutrition, exercise, etc. Students will serve as members of the Peer Health Action Team (PHAcT) at OCC. 36 hours in the classroom; 54 hours arranged. Same as HLED A260 - Peer Health Education.


A study of the effects of radiation in humans and the principles of protection as applied to radiography. Introduction to health-physics instrumentation with a study of radiation control regulations.

Introduction to the radiology environment, emphasizing professionalism, humanistic approach to patients, medical/radiology records responsibilities, and medical/legal principles. Student obligations to clinical education are identified.
RADT A170 3 Units (36 lecture hours; 72 lab hours)
Radiographic Positioning and Critique
Prerequisite(s): Acceptance into the OCC Radiologic Technology Program (Cohort Restriction).
Grading Mode: Standard Letter
Transfer Credit: CSU.
Introduction to radiographic positioning principles, study of contrast media, acquaintance with x-ray apparatus, and laboratory practice and film critique of chest, abdominal studies and upper extremities.

RADT A171 2 Units (128 lab hours)
Clinical Lab 1
Prerequisite(s): Acceptance into the OCC Radiologic Technology Program (Cohort Restriction).
Co-requisite(s): RADT A105 and ALH A115.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Radiographic skills in chest and abdomen procedures will be emphasized.

RADT A172 2 Units (128 lab hours)
Clinical Lab 2
Prerequisite(s): Acceptance into the OCC Radiologic Technology Program (Cohort restriction).
Grading Mode: Standard Letter
Transfer Credit: CSU.
Clinical experience in an affiliated radiology department under the supervision of certificated radiology and health care personnel utilizing a condensed format. Radiographic skills to include assisting with routine contrast media studies of the GI and GU tracts.

RADT A175 3 Units (36 lecture hours; 72 lab hours)
Radiographic Positioning and Critique 2
Prerequisite(s): RADT A170.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Radiographic positioning principles, laboratory practice, and image analysis of the lower extremities, vertebral column, and basic skull. Overview of common pathologies of identified areas.

RADT A176 7 Units (384 lab hours)
Clinical Lab 3
Co-requisite(s): RADT A175.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Radiographic skills to be emphasized will be fluoroscopic procedures, GU tract, upper and lower extremities, and routine spinal column.

RADT A177 4.5 Units (256 other hours)
Clinical Lab 4
Prerequisite(s): Acceptance into the OCC Radiologic Technology Program (Cohort restriction).
Grading Mode: Standard Letter
Transfer Credit: CSU.
Clinical experience in an affiliated radiology department under the supervision of certificated radiology and health care personnel. Radiographic skills to be emphasized will be routine skull radiography, portable radiography, minor special procedures, and introduction to pediatric and trauma radiography.

RADT A180 3 Units (36 lecture hours; 54 lab hours)
Radiographic Imaging
Prerequisite(s): Acceptance into the OCC Radiologic Technology Program (Cohort restriction).
Grading Mode: Standard Letter
Transfer Credit: CSU.
An introductory course to the factors influencing radiographic image formation, principles of film processing, digital imaging, exposure techniques, and essentials of radiographic image quality. Radiographic image critique skills will be developed.

RADT A185 1 Unit (18 lecture hours)
Radiographic Pathology
Grading Mode: Standard Letter
Transfer Credit: CSU.
Advanced study, identification, and critique of common radiographic pathologies in major body systems. Assists the learner in providing quality patient care.

RADT A211 2 Units (128 lab hours)
Advanced Clinical Mammography Lab
Grading Mode: Pass/No Pass
Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Emphasis on independent radiography and decision making in clinical mammography. Professional growth and program exit skills are expected. Sixteen hours of clinical per week.

RADT A212 2 Units (128 lab hours)
Advances Clinical Lab Computed Tomography (CT)
Grading Mode: Pass/No Pass
Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Emphasis on independent radiography and decision making. Professional growth and program exit skills are expected. Sixteen hours of clinical per week.

RADT A216 2 Units (27 lecture hours; 27 lab hours)
Advanced Radiologic Patient Care
Grading Mode: Standard Letter
Transfer Credit: CSU.
Multi-skill preparation for the allied health professional including management communication skills and business management concepts, and contrast media administration limited to the upper extremity. 27 lecture hours, 27 lab hours.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units (Hours)</th>
<th>Course Title</th>
<th>Prerequisite(s)</th>
<th>Grading Mode</th>
<th>Transfer Credit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADT A221</td>
<td>1 Unit (18 lecture hours)</td>
<td>Topics in Mammography</td>
<td>Students will need to be graduates of the OCC Radiologic Technology Program or licensed radiographers by the State of California.</td>
<td>Pass/No Pass</td>
<td></td>
<td>This course will help prepare the student for the American Registry of Radiologic Technologists (ARRT) certification examination in Mammography.</td>
</tr>
<tr>
<td>RADT A222</td>
<td>1 Unit (18 lecture hours)</td>
<td>Topics in Computed Tomography</td>
<td>Students will need to be graduates of the OCC Radiologic Technology Program or licensed radiographers by the State of California.</td>
<td>Pass/No Pass</td>
<td></td>
<td>This course will help prepare the student for the American Registry of Radiologic Technologists (ARRT)certification examination in Computed Tomography.</td>
</tr>
<tr>
<td>RADT A265</td>
<td>2 Units (45 lecture hours)</td>
<td>Principles of Digital Imaging and Computer Applications</td>
<td>Standard Letter</td>
<td>Standard Letter</td>
<td>CSU</td>
<td>Introduction to computer aided medical imagings as used in radiology departments. Applications include computed and digital radiography (CR/DR), CT, MRI, and other modalities. Basic imaging principles are applied, including physics, imaging protocols, and systems electronics. Software and display strategies for varying modalities will be discussed. Course does not include clinical experience. PREREQUISITE: Acceptance into the OCC Radiologic Technology Program (Cohort Restriction).</td>
</tr>
<tr>
<td>RADT A270</td>
<td>2.5 Units (36 lecture hours; 36 lab hours)</td>
<td>Radiographic Positioning and Critique 3</td>
<td>RADT A175.</td>
<td>Standard Letter</td>
<td>CSU</td>
<td>Radiographic positioning, film critique of advanced skull to include sinuses, TMJs, mastoid, mandible, facial bones, bony thorax and pelvic girdle. Introduction to ancillary imaging modalities including sectional anatomy.</td>
</tr>
<tr>
<td>RADT A271</td>
<td>9 Units (612 other hours)</td>
<td>Clinical Lab 5</td>
<td>RADT A177 or concurrent enrollment.</td>
<td>Standard Letter</td>
<td>CSU</td>
<td>Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Emphasis on independent radiography and decision making. Professional growth and program exit skills are expected. Twenty-four hours clinical.</td>
</tr>
<tr>
<td>RADT A275</td>
<td>3 Units (36 lecture hours; 36 lab hours)</td>
<td>Radiographic Positioning and Critique 4</td>
<td>RADT A270.</td>
<td>Standard Letter</td>
<td>CSU</td>
<td>Co-requisite(s): RADT A277. Introduction to advanced imaging principles and procedures to include diagnostic specials, interventional angiography CT and MR sectional anatomy as related to these imaging procedures. Principles of mammographic imaging per California state (RHB) regulations. Introduction to quality assurance principles and techniques. Elements of professional development.</td>
</tr>
<tr>
<td>RADT A276</td>
<td>2 Units (128 other hours)</td>
<td>Clinical Lab 6</td>
<td>RADT A270.</td>
<td>Standard Letter</td>
<td>CSU</td>
<td>Co-requisite(s): RADT A270. Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Radiographic skills emphasized are advanced contrast media procedures, trauma, portable radiography, pediatric and surgical exams.</td>
</tr>
<tr>
<td>RADT A277</td>
<td>7 Units (384 other hours)</td>
<td>Clinical Lab 7</td>
<td>RADT A276 or concurrent enrollment.</td>
<td>Standard Letter</td>
<td>CSU</td>
<td>Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Emphasis on independent radiography and decision making. Professional growth and program exit skills are expected. Twenty-four hours clinical.</td>
</tr>
<tr>
<td>RADT A285</td>
<td>1 Unit (18 lecture hours)</td>
<td>ARRT Board Preparation</td>
<td>Standard Letter</td>
<td>Standard Letter</td>
<td>CSU</td>
<td>Comprehensive categorical review of diagnostic radiologic technology in preparation for State and National Certification boards.</td>
</tr>
<tr>
<td>RADT A290</td>
<td>2.5 Units (45 lecture hours)</td>
<td>Applied Physics &amp; Fluoroscopy</td>
<td>Standard Letter</td>
<td>Standard Letter</td>
<td>CSU</td>
<td>Applied principles of physics for current radiographic equipment including fluoroscopy, image viewing and recording systems, and tomography. Study of knowledge and skills required to qualify student for fluoroscopy component of state licensure exam. Review of imaging concepts (analog and digital), x-ray beam quantity and quality, and radiation protection.</td>
</tr>
</tbody>
</table>
Real Estate (RE)

RE A110 3 Units (54 lecture hours)
Real Estate Principles
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Designed for those preparing for the state real estate license examination and for those interested in the various aspects of real estate ownership and sales. May be taken for grades or on a pass-no pass basis.

RE A120 3 Units (54 lecture hours)
Legal Aspects of Real Estate
Advisory: RE A110.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Escrows, sales contracts, trust deeds, landlord tenant, liens, probate sales, joint tenancy, etc. Emphasizes the more complex aspects of real estate law. This course may also be offered online.

RE A130 3 Units (54 lecture hours)
Real Estate Practice
Advisory: RE A110.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Covers the day to day practice of real estate including sales, working with buyers and sellers, the listing and purchase agreement, finance, taxation, property management and investing for real estate. This course may also be offered online.

RE A140 3 Units (54 lecture hours)
Real Estate Appraisal
Advisory: RE A110.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Designed for brokers or those seeking entry-level appraisal positions. Basic principles, theories and methods of appraising. Analysis of data and factors influencing value conclusions are emphasized.

RE A150 3 Units (54 lecture hours)
Real Estate Finance
Advisory: RE A110.
Grading Mode: Standard Letter
Transfer Credit: CSU.

A study of real estate finance, including money and credit sources for mortgage funds, appraisal for finance purposes, financial terms and concepts, appropriate economic and legal aspects.

RE A190 3 Units (54 lecture hours)
Leasing of Commercial Properties
Advisory: RE A110.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Planning, evaluating and negotiating of leasing techniques, protocol for commercial properties including retail, office, industrial and apartment rentals. May be taken for grades or on a pass-no pass basis.

Religious Studies (RLST)

RLST A100 3 Units (54 lecture hours)
Introduction to Religious Studies
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

An introduction to the study of religion as an academic discipline with particular emphasis on the nature of religion, the methods used to study religious life, ways of expressing religious experience, and the practice of religion. May be taken for grades or on a pass-no pass basis.

RLST A110 3 Units (54 lecture hours)
World Religion
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

An identification of the nature of religious thinking and belief. The variety of patterns developed in both the West and the East are explored with a special emphasis on the relevance to the contemporary intellectual world. May be taken for grades or on a pass-no pass basis.

RLST A115 3 Units (54 lecture hours)
Philosophy of Religion
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC

An examination of key issues and problems of religion, including the nature and significance of religion and religious experience, arguments for and against the existence of God, the nature of God, the problem of evil, and the relation between science and religion. Same as Philosophy A115. Students completing Religious Studies A115 may not receive credit for Philosophy A115. May be taken for grades or on a pass-no pass basis.

RLST A125 3 Units (54 lecture hours)
Introduction to the Bible
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC

This course covers the field of general Biblical introduction, including higher criticism, canonicity, methods of textual transmission, and history of the Bible in English. A survey of how the Bible was written, compiled, copied, and transmitted to the present. May be taken for grades or on a pass-no pass basis.
RLST A128 3 Units (54 lecture hours)
History of Christianity
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A history of Christianity focusing on its central periods, personalities and ideas from its origins to the present. May be taken for grades or on a pass-no pass basis.

RLST A130 3 Units (54 lecture hours)
Life and Times of Jesus
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A study of the historical situation of the world of Jesus’s day and an investigation of the main outlines of his life and teachings. The contributions made by Judaism and the Greek and Roman worlds to the shaping of the Christian religion. May be taken for grades or on a pass-no pass basis.

RLST A135 3 Units (54 lecture hours)
Religion, Spirituality and Society
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Examines religious, spiritual, and secular views of the relation of persons and society with emphasis on contemporary issues of personal and social ethics, societal structure, and political responsibility from diverse academic, religious, and spiritual perspectives.

RLST A140 3 Units (54 lecture hours)
History of Judaism
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

This course surveys the history of Judaism from the earliest possible time to the present time. It describes the time prior to Abraham and discusses the development of the literature, rituals, and ceremonies through the centuries to the present time. It shows the impact of Jewish practices and thought on the changing world. May be taken for grades or on a pass-no pass basis.

RLST A145 3 Units (54 lecture hours)
Mysticism and Meditation
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

An identification of the nature of mysticism. An examination of the varieties of mysticism in the world with special emphasis on their development and practices. Meditation techniques related to mysticism will be examined and explained. May be taken for grades or on a pass-no pass basis.

RLST A150 3 Units (54 lecture hours)
Eastern Thought
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

An introduction to the religions of Asia including Hinduism, Buddhism, Taoism, and Confucianism. In addition to historical background and the current status of the religion, the course will focus on the scripture of each religion. May be taken for grades or on a pass-no pass basis.

RLST A151 3 Units (54 lecture hours)
Early and Western Religions
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Surveys religion in western history from paleolithic beginnings through development of the western monotheisms: Judaism, Christianity and Islam. Major figures and historical periods in the evolution of Western faiths, and impact of these worldviews globally today. Transfer Status: CSU; UC.

RLST A160 3 Units (54 lecture hours)
Contemporary Religious Topics: Islam
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Islam, the youngest of the world’s major religions, has evolved to play a significant role in world politics. The course will introduce students to the beliefs and practices of Islam, its history and development, its contribution to the arts and sciences, and its significant role in the 21st century. May be taken for grades or on a pass-no pass basis.

RLST A180 3 Units (54 lecture hours)
The Bible as Literature
Advisory: ENGL A100.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Read, analyze, and write on important Biblical works from both the Old and New Testament canon. Explore the historical, cultural, philosophical, and aesthetic implications of representative works, their origins and adoption. Formulate and produce written analysis of assigned works. Same as ENGL A141. Students completing RLST A180 may not receive credit for ENGL A141. May be taken for grades or on a pass-no pass basis.

Respiratory Care (RSPC)
RSPC A185 3 Units (54 lecture hours)
Respiratory Anatomy and Physiology
Grading Mode: Standard Letter
Transfer Credit: CSU.

Anatomy and physiology of the cardiopulmonary system with emphasis on function & clinical assessment by respiratory therapists. Includes pulmonary and cardiac anatomy, pulmonary ventilatory mechanics, pulmonary blood flow, oxygenation transport, hypoxemia and hypoxia, carbon dioxide transport, acid-base balance and regulation of respiration.

RSPC A190 3 Units (36 lecture hours; 54 lab hours)
Basic Respiratory Care Equipment
Co-requisite(s): RSPC A185 and RSPC A195.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Theories of equipment operation, procedures, and use for treatment of cardiopulmonary disease, including the use of humidity and aerosol, oxygen, infection control, hyperinflation techniques, basic ventilatory measurement, respirators, chest physiotherapy, and equipment related to compressed gases. Emphasis is placed on clinical application of equipment & techniques.
RSPC A191  
Clinical Lab 1  
1.5 Units (144 lab hours)  
Prerequisite(s): RSPC A190.  
Grading Mode: Pass/No Pass  
Transfer Credit: CSU.  
Beginning clinical practice of procedures presented in RSPC A190. Includes hospital and respiratory therapy department orientation, recordkeeping, patient chart evaluation, use of compressed gases, medical gas therapy, humidity and aerosol therapy, drug administration, sterilization and culturing of equipment, incentive spirometry, IPPB and chest physiotherapy, and patient assessment. Offered on a pass-no pass basis only.

RSPC A192  
Clinical Lab 2  
3 Units (192 lab hours)  
Prerequisite(s): RSPC A190 and RSPC A191.  
Grading Mode: Pass/No Pass  
Transfer Credit: CSU.  
Continued applications of procedures and concepts of basic clinical therapy presented in the first year of the respiratory care program. Application and skills evaluations in advanced administration of aerosol therapy, IPPB, pharmacological agents, chest physiotherapy, medical gases, and patient assessment. Offered on a pass-no pass basis only.

RSPC A195  
Respiratory Pharmacology  
1 Unit (18 lecture hours)  
Co-requisite(s): RSPC A185 and RSPC A190.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
A study of the drugs used to treat respiratory pathologies and their administration. Includes bronchodilators, steroids, mucokinetics, antibiotics, and respiratory stimulants and depressants.

RSPC A196  
Introduction to Mechanical Ventilation  
0.5 Units (9 lecture hours)  
Co-requisite(s): RSPC A192.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Introduction to the foundational elements of mechanical ventilation. Includes initiation, modalities, physiologic assessment and patient weaning in addition to the basic clinical preparation and legal documentation necessary in the care of patients requiring ventilatory support.

RSPC A255  
Home Care and Rehabilitation  
1 Unit (18 lecture hours)  
Prerequisite(s): RSPC A190.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Techniques and operation of respiratory home care and pulmonary rehabilitation. Includes special equipment set-up, patient and family education, patient evaluation, and care of the ventilator dependent patient at home. Also includes regulations of home care and third party reimbursement.

RSPC A260  
Arterial Blood Gases, Theory and Practice  
2 Units (36 lecture hours; 18 lab hours)  
Prerequisite(s): RSPC A185.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Interpretation of arterial blood gases, arterial puncture technique, blood gas analysis. Interpretation of fluid and electrolyte imbalances, renal physiology on acid base control. Phlebotomy theory.

RSPC A265  
Pulmonary Pathology  
3 Units (54 lecture hours)  
Prerequisite(s): RSPC A185.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
The study of cardiopulmonary disease processes with emphasis on pathophysiology, manifestations, and treatment. Relates each disease state to evaluation, testing, and treatment.

RSPC A270  
Ventilators and Respiratory Management  
3 Units (36 lecture hours; 54 lab hours)  
Co-requisite(s): RSPC A276.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Principles and techniques in the management of patients requiring ventilatory support. Includes mechanical descriptions of ventilators in common use (including laboratory demonstrations and hands on practice), as well as patient assessment for need for ventilatory support along with assessment for changes in ventilatory support techniques.

RSPC A275  
Respiratory Care Procedures  
3 Units (54 lecture hours; 18 lab hours)  
Prerequisite(s): RSPC A185.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Respiratory care procedures, including physical assessment of the chest, chest x-ray assessment, airway management, bronchoscopy, chest tube drainage, electrocardiogram performance and interpretation, and ALS procedures.
RSPC A276  
Clinical Lab 3  
Prerequisite(s): RSPC A192.  
Co-requisite(s): RSPC A270 and RSPC A265.  
Grading Mode: Pass/No Pass  
Transfer Credit: CSU.  
Clinical application of procedures & concepts from RSPC A260, RSPC A270 and RSPC A275, continuing experience in the skills from RSPC A191 and RSPC A192. Includes ABG puncture & analysis, airway management, artificial airways, bronchial hygiene, bronchoscopy, ventilatory management, patient assessment, monitoring, & other therapeutic measures related to patient treatment. Offered on a pass-no pass basis only.

RSPC A278  
Pulmonary Case Assessment  
Prerequisite(s): RSPC A276.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Assessment of critical pulmonary patients with emphasis on assessment techniques, critical care procedures, and management techniques as applied to case studies. Includes use of both actual and simulated patient scenarios using information gathering and decision making by the Respiratory Care Practitioner.

RSPC A279  
Physician Series 1  
Co-requisite(s): RSPC A276.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Physician presentations on current topics in pulmonary medicine emphasizing patient assessment and treatment. Discussion with physicians about individual clinical problems.

RSPC A280  
Advanced Monitoring, Procedures and Therapies in Critical Care  
Prerequisite(s): RSPC A270.  
Co-requisite(s): RSPC A286.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Theory, use, and application of medical techniques used to monitor cardiopulmonary status. Advanced procedures and therapies used in the diagnosis and treatment of the critically ill cardiopulmonary patient. Includes capnography, transcutaneous assessment and hemodynamic monitoring.

RSPC A285  
Pulmonary Function Testing  
Prerequisite(s): RSPC A260 and RSPC A265.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Theory and application of pulmonary function testing by mechanical and electronic devices.

RSPC A286  
Clinical Lab 4  
Prerequisite(s): RSPC A276.  
Co-requisite(s): RSPC A280 and RSPC A290.  
Grading Mode: Pass/No Pass  
Transfer Credit: CSU.  
Clinical application of respiratory therapy primarily in critical care areas. Includes airway management, patient assessment, ventilator mechanics and management, and monitoring of the critically ill patient. Offered on a pass-no pass basis only.

RSPC A287  
Clinical Internship  
Co-requisite(s): RSPC A286.  
Grading Mode: Pass/No Pass  
Transfer Credit: CSU.  
Advanced clinical utilization of knowledge and skills in critical care or specialty areas. Cumulative application of assessment, diagnostic, therapeutic, and judgmental skills acquired within the Respiratory Care Program. Offered on a pass-no pass basis only.

RSPC A290  
Neonatal Intensive Care  
Prerequisite(s): RSPC A260, RSPC A270, and RSPC A275.  
Co-requisite(s): RSPC A286.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Theory and practice of neonatal intensive respiratory care with emphasis on the role of the R.C.P. Includes fetal anatomy and physiology, delivery and assessment, resuscitation, neonatal pathologies, respiratory care diagnostic and therapeutic procedures, and techniques for mechanical ventilation. Provider approved C.B.R.N, CEP #12655 for 56 hours.

RSPC A296  
Respirtory Care Board Review  
Co-requisite(s): RSPC A278.  
Grading Mode: Standard Letter  
Transfer Credit: CSU.  
Comprehensive categorical review of diagnostic and therapeutic modalities in Respiratory Care to prepare for national certification, national registry, and state licensing board examinations.
**Sociology (SOC)**

**SOC A100**
*3 Units (54 lecture hours)*
**Introduction to Sociology**
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
An introductory study of the basic concepts, theoretical approaches, and methods of sociology. Topics typically include the analysis and explanation of social structure, group dynamics, socialization and the self, social stratification, culture and diversity, social change, and global dynamics. Course objectives include the ability to apply sociological ideas to everyday life. C-ID: SOCI 110.

**SOC A100H**
*3 Units (54 lecture hours)*
**Introduction to Sociology Honors**
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
The study of social interrelationships and human group organization. Attention is given to the foundations of society, culture, group organization, social differentiation, and the methods of sociological study. Emphasis is on American social institutions. C-ID: SOCI 110.

**SOC A110**
*3 Units (54 lecture hours)*
**Introduction to Dating, Relationships, and Marriage**
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
The sociological analysis of the structures and functions of dating, relationships, marriage and family. Emphasis on sociological theory and research on kinship systems, components of mate selection, intimate relationships, marriage patterns and child-rearing practices. The family is examined from historical, cultural, and global perspectives and in relation to social change. Transfer Credit: CSU; UC. C-ID: SOCI 130.

**SOC A150**
*3 Units (54 lecture hours)*
**Introduction to Race and Ethnicity**
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Multicultural approaches to cultural diversity including immigration policy, affirmative action, and bilingual debates. Intercultural comparisons including Native American, African American, Hispanic American, Asian American, and European American cultural traditions. Social science theories and methodologies for development of positive intercultural relationships. Same as ANTH A150. Students completing SOC A150 may not receive credit for ANTH A150. May be taken for grades or on a pass-no pass basis. C-ID: SOCI 150.

**SOC A185**
*3 Units (54 lecture hours)*
**Analysis of Social Problems**
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
An analysis of contemporary social problems. Topics include global ecology, political economy, sexual behavior, drug use, racism, sexism, ageism, education, environment, health issues, crime, and violence. C-ID: SOCI 115.

**SOC A185H**
*3 Units (54 lecture hours)*
**Analysis of Social Problems Honors**
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
An analysis of contemporary social problems. Topics include global ecology, political economy, sexual behavior, drug use, racism, sexism, ageism, education, environment, health issues, crime, and violence. C-ID: SOCI 115.

**SOC A200**
*3 Units (54 lecture hours)*
**Introduction to Research Methods**
Prerequisite(s): SOC A100 or SOC A100H.
Advisory: MATH A160 or PSYC A160.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Introduces basic steps in the research process and/or basic steps in critically evaluating discussions on social issues using a variety of research methodologies. Emphasizes the scientific investigation of social subject matter. C-ID: SOCI 120.

**Spanish (SPAN)**

**SPAN A160**
*5 Units (90 lecture hours)*
**Spanish for Spanish Speakers 1**
Grading Mode: Standard Letter, Pass/No Pass, Conversion
Transfer Credit: CSU; UC.
A beginning course for Spanish speaking students to improve their command of all aspects of the Spanish language and broaden their appreciation of Hispanic culture. The course will be taught in Spanish. May be taken for grades or on a pass-no pass basis.

**SPAN A165**
*5 Units (90 lecture hours)*
**Spanish for Spanish Speakers 2**
Prerequisite(s): SPAN A160 or 2 years of High School Spanish with a minimum grade of ‘C’ or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
A second level beginning course for Spanish speaking students to improve their command of all aspects of the Spanish language and to broaden their appreciation of the Hispanic culture. The course will be taught in Spanish. C-ID: SPAN 230.

**SPAN A180**
*5 Units (90 lecture hours)*
**Elementary Spanish 1**
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Spanish, with an introduction to cultures related to the Spanish language. This course is equivalent to two years of high school Spanish. May be taken for grades or on a pass-no pass basis.
SPAN A180H  5 Units (90 lecture hours)
Elementary Spanish 1 Honors
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Spanish, with an introduction to cultures related to the Spanish language. This course is equivalent to two years of high school Spanish. May be taken for grades or on a pass-no pass basis.

SPAN A185  5 Units (90 lecture hours)
Elementary Spanish 2
Prerequisite(s): SPAN A180 or SPAN A180H or completion of two years of high school Spanish with a grade of ‘C’ or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Continuation of SPAN A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Spanish language. This course is equivalent to three years of high school Spanish. May be taken for grades or on a pass-no pass basis. C-ID: SPAN 110.

SPAN A185H  5 Units (90 lecture hours)
Elementary Spanish 2 Honors
Prerequisite(s): SPAN A180 or SPAN A180H or completion of two years of high school Spanish with a grade of ‘C’ or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Continuation of SPAN A180H, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Spanish language. This course is equivalent to three years of high school Spanish. May be taken for grades or on a pass-no pass basis. C-ID: SPAN 110.

SPAN A199  2-5 Units (36-90 lecture hours)
Current Topics in Spanish
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Development of listening, speaking, reading, and writing proficiency in Spanish. Extensive exposure to cultures related to the Spanish language through authentic materials and group discussions on a variety of topics ranging from current events to global issues. Emphasis on cross-cultural understanding. This course may also be offered online. May be taken for grades or on a pass-no pass basis.

SPAN A280  5 Units (90 lecture hours)
Intermediate Spanish 1
Prerequisite(s): SPAN A185 or SPAN A185H or completion of three years of high school Spanish with a grade of ‘C’ or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Continuation of SPAN A185, with further development of language skills at the intermediate level and exploration of cultures related to the Spanish language. Additional emphasis on reading and writing, with an introduction to selected literary works. May be taken for grades or on a pass-no pass basis. C-ID: SPAN 200.

SPAN A280H  5 Units (90 lecture hours)
Intermediate Spanish 1 Honors
Prerequisite(s): SPAN A185 or SPAN A185H or completion of three years of high school Spanish with a grade of ‘C’ or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Continuation of SPAN A185, with further development of language skills at the intermediate level and exploration of cultures related to the Spanish language. Additional emphasis on reading and writing, with an introduction to selected literary works. May be taken for grades or on a pass-no pass basis. C-ID: SPAN 200.

SPAN A285  5 Units (90 lecture hours)
Intermediate Spanish 2
Prerequisite(s): SPAN A280 or SPAN A280H or completion of four years of high school Spanish with a grade of ‘C’ or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Continuation of SPAN A280, with further refinement of language skills at the intermediate level and investigation of cultures related to the Spanish language in preparation for higher level specialized work. May be taken for grades or on a pass-no pass basis. C-ID: SPAN 210.

Speech/Language Path Assist (SLPA)

SLPA A100  2 Units (36 lecture hours)
Introduction to Speech-Language Pathology Assistant
Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to the Speech Language Pathology Assistant career. Professional standards and responsibilities, legal and ethical issues, interdisciplinary and supervisory relations, and management of individuals with speech-language and hearing disorders are emphasized. Consideration is given to cultural, ethnic, and linguistic diversity.
SLPA A115 3 Units (54 lecture hours; 8 lab hours)
Speech, Language, and Hearing Development
Grading Mode: Standard Letter
Transfer Credit: CSU.

Developmental functions of speech, language, hearing and swallowing mechanisms, including acquisition of morphology, semantics, syntax, pragmatics, and phonology from birth to adolescence. Language development models and language differences discussed. Anatomy and physiologic function pertaining to speech, swallowing, and hearing mechanisms.

SLPA A120 2 Units (36 lecture hours; 18 lab hours)
Speech-Language Administrative Procedures
Grading Mode: Standard Letter
Transfer Credit: CSU.

Organizational and functional skills required in the speech pathology workplace. Emphasis on office management, client interaction requirements, communication techniques, educational techniques, writing skills related to speech-language pathology, scheduling, and computer applications.

SLPA A140 3 Units (54 lecture hours)
Introduction to Communication Disorders
Grading Mode: Standard Letter
Transfer Credit: CSU.

Study of communicative disorders in both children and adults to include classification and prevalence, types of disorders, diagnostic techniques, remediation of speech and language, and treatment protocols. The role of the speech-language pathologist and audiologist is covered.

SLPA A150 3 Units (54 lecture hours; 36 lab hours)
Introduction to Phonetics
Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to phonetics including the analysis, description, and transcription of speech. The course encompasses speech production, acoustics, International Phonetic Alphabet, fine phonetic transcription, phonetic measurements, dialects, and the analysis of both normal and abnormal speech sounds. Protocol techniques for therapy are covered.

SLPA A180 3 Units (36 lecture hours; 54 lab hours)
Screening and Therapeutic Processes
Grading Mode: Standard Letter
Transfer Credit: CSU.

Screening procedures and equipment used in evaluation of client status and development of treatment protocols. Therapeutic techniques, use of protocol forms, checklists and anecdotal records for speech, hearing, and language disorders. This course includes therapeutic procedures used in client protocol applications and in patient safety issues.

SLPA A190 3 Units (16 lecture hours; 206 lab hours)
SLPA Clinical Experience 1
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Application of clinical practice procedures and techniques as required of a speech-language pathology assistant under the supervision of a speech language pathologist. Offered on a pass-no pass basis only.

SLPA A200 2 Units (36 lecture hours)
Adult and Geriatric Disorders
Grading Mode: Standard Letter
Transfer Credit: CSU.

Therapeutic techniques and assessment directed at adult and geriatric conditions. Special emphasis on acquired conditions and specialized application/adaptation of screening, protocols, and therapy.

SLPA A250 5 Units (32 lecture hours; 256 lab hours; 32 other hours)
SLPA Clinical Experience 2
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Advanced application of clinical practice procedures and therapeutic techniques performed under the guidance of a speech pathologist. Client observation, treatment protocols, record keeping procedures, and discussion of case study management issues are also covered.

Technology (TECH)

TECH A040 3 Units (72 lecture hours)
Technical Math
Grading Mode: Standard Letter, Pass/No Pass

An applied math course designed for the student with minimal background in mathematics to develop ‘need to know’ skills necessary to be successful in technical, science, and vocational courses which require specific mathematical skills. Considerable review of essential math is emphasized. May be taken for grades or on a pass-no pass basis.

Theater Arts (THEA)

THEA A100 3 Units (54 lecture hours)
Introduction to Theatre
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

An introductory lecture course which explores the process of creating theatre today, including the contributions of the playwright, actor, director and designer. Plays of varying genres will be viewed and discussed. Students will attend and review two OCC-produced plays. C-ID: THTR 111.
THEA A101
Introduction to History and Literature of the Theatre
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC

The study of the history of theatre from the Origins of Theatre to today. The history and development of theatre and drama are studied in relationship to cultural, political and social conditions of the time. Important plays from each era will be viewed and discussed. Students will attend and review one OCC theatre production. May be taken for grades or on a pass-no pass basis.

THEA A103
Theatre Improvisation- Short Form
Grading Mode: Standard Letter, Pass/No Pass

The student will rehearse and perform individual and group improvisational scenes and exercises. The goals of the course are to help performers work with ease in front of an audience or camera, and learn Improv Olympics and theatre sports techniques and rules.

THEA A104
Improvisation - Long Form
Advisory: THEA A103.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

The student will rehearse and perform individual and group improvisational scenes and exercises. The goal of the course is to help performers work with ease in front of an audience or camera. May be taken for grades or on a pass-no pass basis.

THEA A105
Drama And Acting
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

An introduction to acting and dramatic literature. Includes analysis of plays and dramatic structure, rehearsal techniques and performance of scenes and monologues.

THEA A106
Acting Fundamentals
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

This course prepares a student to apply basic acting theory to performance and develops the skills of interpretation of drama through acting. Special attention is paid to skills for performance: memorization, stage movement, vocal production, and interpretation of text. Required for theatre arts majors. May be taken for grades or on a pass-no pass basis. C-ID: THTR 151.

THEA A107
Acting 2
Prerequisite(s): THEA A106 or intermediate acting experience/skills; This skill level will be validated by the instructor during the first week of the course.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This course follows Acting Fundamentals and continues the exploration of theories and techniques used in preparation for the interpretation of drama through acting. The emphasis will be placed on deepening the understanding of the acting process through character analysis, monologues, and scenes. C-ID: THTR 152.

THEA A110
Theatre Laboratory Level 1
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

An introduction to technical theatre and the creation of scenic elements. Includes basic concepts of design, painting techniques, set construction, set movement, prop construction, backstage organization, and career possibilities. Students will work on OCC stage productions under faculty supervision. Lab/Arranged Lab.

THEA A111
Theatre Laboratory Level 2
Advisory: THEA A110.
Grading Mode: Standard Letter
Transfer Credit: CSU.

A laboratory course for the creation of scenic elements. Includes concepts of design, painting techniques, set construction, set movement, prop construction, backstage organization. Level 2 students will work on OCC stage productions on intermediate skill-level technical tasks including scenery building and painting, and prop building and backstage crew assignments. Lab/Arranged Lab.

THEA A112
Theatre Laboratory Level 3
Advisory: THEA A111.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Level 3 students will work at an advanced skill-level in the scene shop or backstage on OCC stage productions supervising crews and projects and/or building, rigging or painting scenic and prop elements. Includes advanced level concepts of set and prop design and construction, painting techniques, set rigging and movement, backstage organization, and career possibilities. Lab/Arranged Lab.
THEA A113 2 Units (108 lab hours)
Theatre Laboratory Level 4
Advisory: THEA A112.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Students will work on OCC stage productions under faculty supervision. Technical tasks in the fourth semester include working as head carpenter, lead scenic painter or prop master on a production. Lab/Arranged Lab.

THEA A115 3 Units (36 lecture hours; 72 lab hours)
Acting for Camera and Stage
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Explores the translation of stage acting techniques into film and television acting. May be taken for grades or on a pass-no pass basis. Lecture/Lab/Arranged Lab.

THEA A120 3 Units (18 lecture hours; 108 lab hours)
Drama Rehearsal and Performance - Beginning
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This course provides instruction and supervised participation in theatre rehearsal and performance of a dramatic play. Students will gain practical acting experience at an introductory level. Actors must pass auditions. Cast assignments will be given upon enrollment. C-ID: THTR 191.

THEA A121 3 Units (18 lecture hours; 108 lab hours)
Drama Rehearsal and Performance - Intermediate
Advisory: THEA A120.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course provides instruction and supervised participation in theatre rehearsal and performance of a dramatic play. Second semester students at an intermediate level will gain practical acting experience in comic ensemble or supporting roles. Assignments will be given upon enrollment. Actors must pass auditions.

THEA A122 3 Units (18 lecture hours; 108 lab hours)
Drama Rehearsal and Performance - Advanced
Advisory: THEA A121.
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

This course provides instruction and supervised participation in theatre rehearsal and performance of a dramatic play. Second semester students will gain intermediate skill level experience acting in ensemble or supporting dramatic roles. Assignments will be given upon enrollment. Actors must pass auditions.

THEA A123 3 Units (18 lecture hours; 108 lab hours)
Comedy Rehearsal and Performance - Beginning
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU, UC.

This course provides instruction and supervised participation in theatre rehearsal and performance of a comedic play. Students will gain practical acting experience at a beginning level. Actors must pass auditions. Cast assignments will be given upon enrollment. C-ID: THTR 191.

THEA A124 3 Units (18 lecture hours; 108 lab hours)
Comedy Rehearsal and Performance - Intermediate
Advisory: THEA A123.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course provides instruction and supervised participation in theatre rehearsal and performance of a comedic play. Second semester students at an intermediate level will gain practical acting experience in comic ensemble or supporting roles. Assignments will be given upon enrollment. Actors must pass auditions.

THEA A125 3 Units (18 lecture hours; 108 lab hours)
Comedy Rehearsal and Performance - Advanced
Advisory: THEA A124.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course provides instruction and supervised participation in theatre rehearsal and performance of a comedic play. The third semester focuses at an advanced level on comic acting techniques and performance. Students in their third semester will gain practical experience in the performance of an ensemble, supporting or leading comic role.

THEA A126 3 Units (18 lecture hours; 108 lab hours)
Musical Theatre Rehearsal and Performance - Beginning
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC

This course provides instruction and supervised participation in theatre rehearsal and performance of a stage musical. Students will gain practical acting and singing experience at a beginning level. Actors must pass auditions. Cast assignments will be given upon enrollment.

THEA A127 3 Units (18 lecture hours; 108 lab hours)
Musical Theatre Rehearsal and Performance - Intermediate
Advisory: THEA A126.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course provides instruction and supervised participation in theatre rehearsal and performance of a stage musical. Students in their second semester will gain practical experience in musical theatre performance. Students will rehearse and perform at an intermediate level in an ensemble or supporting role. Roles will be assigned after enrollment. Actors must pass auditions.
THEA A128 3 Units (18 lecture hours; 108 lab hours)
Musical Theatre Rehearsal and Performance - Advanced
Advisory: THEA A127.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course provides instruction and supervised participation in theatre rehearsal and performance of a stage musical. Students in their third semester will work at an advanced level of skill on characterization, vocal and acting technique in an ensemble, supporting or leading role. Assignments will be given upon enrollment. Actors must pass auditions.

THEA A129 3 Units (18 lecture hours; 108 lab hours)
Technical Theatre Practicum
Grading Mode: Standard Letter
Transfer Credit: CSU.

Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction of scenery, properties or costume, lighting, sound, and running crews of a faculty-directed play. Lecture/Lab/Arranged Lab. C-ID: THTR 192.

THEA A131 3 Units (18 lecture hours; 144 lab hours)
OCC Theatre Repertory 1
Grading Mode: Standard Letter
Transfer Credit: CSU.

This is 'The Rep,' a student-run theatre company. Students will collaborate under faculty supervision to plan and produce several plays. First semester students will choose two or more areas of play production in which to take part. Play production aspects include backstage duties such as technical production, crew, or stage management, acting in student-directed plays, or management duties such as planning, publicity and ushering. This course gives students hands-on experience which extends and enriches experience beyond previous beginning acting and technical courses. Lecture/Lab/Arranged Lab.

THEA A132 3 Units (18 lecture hours; 144 lab hours)
OCC Theatre Repertory 2
Advisory: THEA A131.

Grading Mode: Standard Letter
Transfer Credit: CSU.

This is 'The Rep.' Second-semester students will work at a higher skill level on more complex tasks in at least two aspects of play production while staging a series of stage plays. Play production aspects including acting, design, publicity, technical production, stage management and house management will be practiced. This course extends and enriches experience beyond previous courses. Lecture/Lab/Arranged Lab.

THEA A133 3 Units (18 lecture hours; 144 lab hours)
OCC Theatre Repertory 3
Advisory: THEA A132.

Grading Mode: Standard Letter
Transfer Credit: CSU.

This is 'The Rep.' Experienced students in their third semester will collaborate with others to plan and produce several plays at an advanced skill-level in one or more aspects of play production. Aspects of play production include acting, design, playwriting, publicity, technical production, stage management, production management and house management. This course extends and enriches the student's specific skills and experience at an advanced level. Lecture/Lab/Arranged Lab.

THEA A134 3 Units (18 lecture hours; 144 lab hours)
OCC Theatre Repertory 4
Advisory: THEA A133.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Students in their fourth semester with 'The Rep' will take part in planning and producing several plays in a position requiring experience, advanced skills and responsibility, such as director, designer, production manager, artistic director, leading actor, etc. Lecture/Lab/Arranged Lab.

THEA A144 4 Units (36 lecture hours; 144 lab hours)
Summer Theatre Festival
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

Students participate in the pre-production, planning, audition, rehearsal, and performance of a theatrical production or productions in repertory. May be taken for grades or on a pass-no pass basis.

THEA A145 3 Units (18 lecture hours; 126 lab hours)
Touring Production 1
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.

Students will participate in elements of presenting a show at various locations. These elements will include: acting, set design, set construction, lighting, sound design, costuming, make up, and interaction with audiences through question and answer sessions. This course may require occasional overnight stays. Roles are assigned through audition.

THEA A146 3 Units (18 lecture hours; 126 lab hours)
Touring Production 2
Advisory: THEA A145.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU

Students will participate at an intermediate skill level in one or more production aspects presenting a touring show at various locations. These aspects include: acting, technical design and production, and stage management. Students will also learn to interact with audiences during question and answer sessions. Acting roles are assigned through audition.
THEA A165 1 Unit (54 lab hours)
Stagecraft Lab
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Introduction to stage craft activities including scenery construction, set painting, light rigging, stage props and theatre operations. One hour lecture, two hours non-lecture.

THEA A170 1 Unit (54 lab hours)
Stage Crew Activity
Grading Mode: Standard Letter
Transfer Credit: CSU.
The student will help produce an OCC stage production. One or more elements of technical theatre will be explored including scenic and prop construction, scene painting, or stage lighting. Strongly recommended for theatre majors. May be taken for grades or on a pass-no pass basis. Lab/ Arranged Lab.

THEA A172 3 Units (18 lecture hours; 108 lab hours)
Elizabethan Play Workshop and Production
Grading Mode: Standard Letter
Transfer Credit: CSU.
This course provides instruction and supervised participation in theatre and rehearsal and performance of a play from or influenced by the Elizabethan era. Auditions will be held the first week of the class, and students will be assigned roles based on these auditions.

THEA A175 3 Units (54 lecture hours; 18 lab hours)
Stage Scenery
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
An in-depth study of all the diverse theatre crafts such as scenery construction, scene painting, and properties, and a survey study of theatre design. The historical development and major trends of stagecraft will be studied. Students will prepare a practical project consisting of a scene design or scale model. Required for students planning to transfer to CSU Long Beach and Fullerton. May be taken for grades or on a pass-no pass basis. Lecture/Lab/Arranged Lab. C-ID: THTR 171.

THEA A176 3 Units (54 lecture hours; 18 lab hours)
Stage Lighting
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
This course involves the study and execution of stage lighting with emphasis on equipment, control, color and their relationship to design. Students will participate in the lighting of college productions. Lecture/Lab/Arranged Lab. C-ID: THTR 173.

THEA A177 3 Units (54 lecture hours; 18 lab hours)
Make-Up
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
A practical introduction to basic makeup techniques for theatre and film. C-ID: THTR 175.

THEA A178 3 Units (54 lecture hours; 18 lab hours)
Stage Costuming
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
An introduction to costuming techniques for the theatre and entertainment industry. Topics include basic costume construction and alteration techniques, costume craft tools and materials, mask making and an introduction to costume design methods. Lecture/Lab/Arranged Lab. C-ID: THTR 174.

THEA A181 1-2 Units (60-144 other hours)
Arts Internship
Grading Mode: Standard Letter
Transfer Credit: CSU.
A supervised internship related to classroom-based learning at a work site related to the student's certificate program.

THEA A182 3 Units (54 lecture hours; 18 lab hours)
Advanced Make-Up
Advisory: THEA A177.
Grading Mode: Standard Letter
Transfer Credit: CSU.
An advanced course in film and stage make-up techniques. Class will cover advanced make-up application which will include design, sculpting, molding, casting and finishing techniques of a prosthetic make-up.

THEA A188 3 Units (54 lecture hours; 18 lab hours)
Body Movement for the Actor
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Instruction in using the body as an expressive instrument in performance. Strength, flexibility, relaxation, control, and body relationship will be studied. May be taken for grades or on a pass-no pass basis. Lecture/ Lab/Arranged Lab.

THEA A189 2.5 Units (36 lecture hours; 36 lab hours)
Stage Combat
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Fundamentals of stage combat emphasizing such weapons as quarterstaff, foil, epee, sabre, broadsword, rapier, and dagger. Such stunt techniques as fist fighting and falls are included. Strongly recommended for acting majors and theatre arts teachers.

THEA A200 3 Units (54 lecture hours)
Voice and Articulation
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
This course explores vocal techniques for actors including warm-up techniques, phonetics, projection, articulation and the use of regional accents. May be taken for grades or on a pass-no pass basis.
THEA A206  3 Units (54 lecture hours; 18 lab hours)
Acting 3
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Advanced techniques based on the study, analysis, rehearsal, and performance of dramatic scenes. Areas of concentration include projection and articulation, goal discovery and setting, and the use of imagery and connection. Three hours lecture, one hour studio.

THEA A207  3 Units (54 lecture hours; 18 lab hours)
Acting 4
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Advanced acting techniques with particular emphasis on stage diction. Units of study include phonetics, voice projection, vocal quality, dialects, and the application of vocal techniques to dramatic literature. Required of theatre arts majors.

THEA A215  2 Units (18 lecture hours; 54 lab hours)
Rehearsal and Performance 1
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
Participation in the rehearsal and public performance of a theatrical production. Area of involvement (acting, technical, house management) will be determined by instructor with student to satisfy individual expectations.

THEA A216  2 Units (18 lecture hours; 54 lab hours)
Rehearsal and Performance 2
Prerequisite(s): THEA A215.
Grading Mode: Standard Letter
Transfer Credit: CSU.
Students will work collaboratively at an advanced skill level to produce and perform a play. Each student's area of involvement will be in one or more of the following areas: acting, technical, stage management, or house management. Student's area of involvement will be determined by the instructor with the student to satisfy individual expectations. Actors must audition for roles. 18 Lecture Hours, 40 scheduled Lab Hours, 14 arranged Lab Hours.

THEA A275  3 Units (18 lecture hours; 108 lab hours)
Directing
Grading Mode: Standard Letter
Transfer Credit: CSU; UC.
This course introduces and explores the basic principles of stage direction.

THEA A285  3 Units (18 lecture hours; 108 lab hours)
Advanced Directing
Advisory: THEA A275.
Grading Mode: Standard Letter
Transfer Credit: CSU.
An advanced practicum in stage direction. Students in their second semester will work independently under faculty supervision to direct or stage manage a play or project in the OCC Theatre Department.

Tutoring (TUTR)

TUTR A060  9-108 Hours (9-108 other hours)
Supervised Study
Grading Mode: P/NP/SP Non-Credit
Supervised learning for student academic assistance to help students in historically difficult classes master content while they develop and integrate learning and study strategies. Enrollment is open all semester. This course may be taken four times. Not applicable to an AA/AS degree.

TUTR A150  1 Unit (18 lecture hours; 36 lab hours)
Tutoring Skills/Student Success Center
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.
Designed for students who meet the criteria to be tutors in one of the Student Success Center. Tutoring skills development in the areas of interpersonal and communication skills, learning styles, study skills techniques, diversity/cultural awareness, and Socratic method. Open entry/open exit. May be taken for grades or on a pass-no pass basis. This course may be taken four times.

Vietnamese (VIET)

VIET A180  5 Units (90 lecture hours)
Elementary Vietnamese 1
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Vietnamese, with an introduction to cultures related to the Vietnamese language. This course is equivalent to two years of high school Vietnamese. May be taken for grades or on a pass-no pass basis.

VIET A185  5 Units (90 lecture hours)
Elementary Vietnamese 2
Prerequisite(s): VIET A180 or completion of two years of high school Vietnamese with a grade of 'C' or better.
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.
Continuation of Vietnamese A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Vietnamese language. This course is equivalent to three years of high school Vietnamese. May be taken for grades or on a pass-no pass basis.
Welding Technology (WELD)

WELD A100 3 Units (36 lecture hours; 72 lab hours)
Arc & Oxy-acetylene Welding
Grading Mode: Standard Letter
Transfer Credit: CSU.

Beginning course in arc and oxy-acetylene welding that covers safety practices, use of equipment, brazing and cutting operations, and applications to various types of steels.

WELD A101 4 Units (36 lecture hours; 108 lab hours)
Arc & Oxy-acetylene Welding
Grading Mode: Standard Letter
Transfer Credit: CSU.

Beginning course in arc and oxy-acetylene welding that covers safety practices, use of equipment, welding in all positions, brazing and cutting operations, and applications to various types of steels.

WELD A102 0.5 Units (27 lab hours)
Weld Testing GMAW 1
Prerequisite(s): WELD A100 or WELD A101 or concurrent enrollment or industry experience.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Weld testing for mastery of levels I, II, III and/or IV in the Gas Metal Arc Welding process. A Welder Qualification Certification will be issued. When completed, may lead to a Certificate of Specialization. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass-no pass basis only. Lab.

WELD A103 0.5 Units (27 lab hours)
Weld Test GMAW 2
Prerequisite(s): WELD A100 or WELD A101 or concurrent enrollment or industry experience.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Weld testing for mastery of Gas Metal Arc Welding process to the industry standard set by the Inter-Industry Conference on Auto Collision Repair (I-CAR) required tests. A Welder Qualification Certification will be issued. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass-no pass basis only. Lab.

WELD A104 0.5 Units (27 lab hours)
Weld Test GTAW
Prerequisite(s): WELD A100 or WELD A101 or concurrent enrollment or industry experience.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Weld testing for mastery of level I in Gas Tungsten Arc Welding process. A Welder Qualification Certification will be issued. When completed, may lead to Certificate of Specialization. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass-no pass basis only. Lab.

WELD A105 0.5 Units (27 lab hours)
Weld Testing Basic
Prerequisite(s): WELD A100 or WELD A101 or concurrent enrollment or industry experience.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Weld testing for mastery of levels I, II, III or IV in Shielded Metal Arc Welding process. A Welder Qualification Certification will be issued. When completed, may lead to Certificate of Specialization. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass-no pass basis only. Lab.

WELD A106 0.5 Units (27 lab hours)
Weld Testing Intermediate
Prerequisite(s): WELD A100 or WELD A101 or concurrent enrollment or industry experience.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Weld testing for mastery of levels V and/or VI in the Shielded Metal Arc Welding process. A Welder Qualification Certification will be issued. When completed, may lead to a Certificate of Specialization. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass-no pass basis only. Lab.

WELD A107 0.5 Units (27 lab hours)
Weld Testing Advanced 1
Prerequisite(s): WELD A100 or WELD A101 or concurrent enrollment or industry experience.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Weld testing for mastery of levels VII, VIII, and/or IX in Shielded Metal Arc Welding. Enroll only when ready to test. A Welder Qualification Certification will be issued. Fee charged for qualification test. Offered on a pass-no pass basis only. Lab.

WELD A108 0.5 Units (27 lab hours)
Weld Testing Advanced 2
Prerequisite(s): WELD A100 or WELD A101 or concurrent enrollment or industry experience.
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Weld testing for mastery of levels I, II, III, and/or IV in Flux Cored Arc Welding. A Welder Qualification Certification will be issued. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass-no pass basis only. Lab.
WELD A109 0.5 Units (27 lab hours)
Weld Testing FCAW 1
Prerequisite(s): WELD A100 or WELD A101 or concurrent enrollment or industry experience.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Weld testing for mastery of levels V, VI, VII, VIII in Flux Cored Arc Welding. A Welder Qualification Certification will be issued. When completed, may lead to Certificate of Specialization. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass-no pass basis only. Lab.

WELD A110 0.5 Units (27 lab hours)
Weld Testing FCAW 2
Prerequisite(s): WELD A100 or WELD A101 or concurrent enrollment or industry experience.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Weld testing for mastery of levels IX in Flux Cored Arc Welding. A Welder Qualification Certification will be issued. When completed, may lead to Certificate of Specialization. Enroll only when ready to test. Fee charged for qualification test. Lab.

WELD A111 0.5 Units (27 lab hours)
Weld Testing Pipe
Prerequisite(s): WELD A100 or WELD A101 or concurrent enrollment or industry experience.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Weld testing for mastery of levels I and/or II in the Pipe Welding process or Gas Tungsten Arc and Shielded Metal Arc Welding processes. A Welder Qualification Certification will be issued. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass-no pass basis only. Lab.

WELD A115 1-2 Units (54-108 lab hours)
Arc and Oxy-acetylene Welding Practice Level 1
Prerequisite(s): WELD A100 or WELD A101 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A laboratory class to develop skills in arc and oxy-acetylene welding.

WELD A116 1-2 Units (54-108 lab hours)
Arc and Oxyacetylene Welding Practice Level 2
Prerequisite(s): WELD A100 or WELD A101 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A second-level laboratory class to develop skills in SMAW and oxy-acetylene welding.

WELD A117 1-2 Units (54-108 lab hours)
Arc and Oxyacetylene Welding Practice Level 3
Prerequisite(s): WELD A100 or WELD A101 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A second-level laboratory class to develop skills in SMAW and oxy-acetylene welding.

WELD A118 1-2 Units (54-108 lab hours)
Arc and Oxyacetylene Welding Practice Level 4
Grading Mode: Standard Letter
Transfer Credit: CSU.

A level four laboratory class to develop skills in arc, oxy-acetylene, and GMAW welding. PREREQUISITE: WELD A100 or WELD A101 or concurrent enrollment.

WELD A120 4 Units (54 lecture hours; 54 lab hours)
Mathematics & Fabrication Layout for Welders
Advisory: TECH A040.

Grading Mode: Standard Letter
Transfer Credit: CSU.

The study of mathematics to prepare welders for job skills requiring fabrication layout.

WELD A130 3 Units (36 lecture hours; 72 lab hours)
Gas Tungsten Arc Welding Level 1
Prerequisite(s): WELD A100, WELD A101 or WELD A140.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

GTAW (gas tungsten arc welding) theory and practice covering aluminum and stainless steels and qualification requirements. May be taken for grades or on a pass-no pass basis.

WELD A131 3 Units (36 lecture hours; 72 lab hours)
Gas Tungsten Arc Welding Level 2
Prerequisite(s): WELD A100 or WELD A101 or WELD A140.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

GTAW (gas tungsten arc welding) Level 2 theory and practice covering aluminum and stainless steels and qualification requirements.

WELD A140 1.5 Units (18 lecture hours; 36 lab hours)
Occupational Welding Level 1
Grading Mode: Standard Letter
Transfer Credit: CSU.

A first-level beginning course in arc and oxy-acetylene welding covering safety practices, use of welding, brazing, thermal and mechanical cutting equipment operations on various types of metal.
WELD A141
Occupational Welding Level 2
Advisory: WELD A140.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A second-level beginning course in arc and oxy-acetylene welding covering safety practices, use of welding, brazing, thermal and mechanical cutting equipment operations on various types of metal.

WELD A142
Occupational Welding Level 3
Advisory: WELD A141.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A third-level beginning course in arc and oxy-acetylene welding covering safety practices, use of welding, brazing, thermal and mechanical cutting equipment operations on various types of metal.

WELD A143
Occupational Welding Level 4
Advisory: WELD A142.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A fourth-level beginning course in arc and oxy-acetylene welding covering safety practices, use of welding, brazing, thermal and mechanical cutting equipment operations on various types of metal.

WELD A180
Blueprint Reading
Grading Mode: Standard Letter
Transfer Credit: CSU.

A basic course in the reading of blueprints associated with the welding fabrication industry.

WELD A200
Advanced Welding
Prerequisite(s): WELD A100, WELD A101, or WELD A120.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Advanced welding theory and practice covering thermal cutting, oxy-acetylene and gas shielded arc welding processes, welding of ferrous and non-ferrous metals, qualification and certification requirements to Los Angeles City and American National Standards Institute, use of welding symbols. May also enroll in WELD A215 for additional laboratory units. Each 54 hours of laboratory time earns one unit. Will be given credit for the laboratory course appropriate for the number of hours worked.

WELD A201
Advanced Welding
Prerequisite(s): WELD A100 or WELD A101.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Advanced welding theory and practice, covering thermal cutting, oxy-acetylene welding and welding of ferrous and non-ferrous metals, qualification and certification requirements to Los Angeles City and the American National Standards Institute. May also enroll in WELD A215 for additional laboratory units. Each 54 hours of laboratory time earns one unit. Will be given credit for the laboratory course appropriate for the number of hours worked. Same as WELD A200 but with added lab hours.

WELD A210
Welding Inspection and Testing
Grading Mode: Standard Letter
Transfer Credit: CSU.

This course covers physical tests, metallographic analysis, visual inspection, non-destructive examination of welds and chemical analysis of metals and alloys.

WELD A211
Gas Metal Arc Welding Training Level 1
Prerequisite(s): WELD A100, WELD A101 or WELD A140.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This course teaches Gas Metal Arc Welding Theory and practice on ferrous and non-ferrous metals covering welding standards set by the American Welding Society, American National Standards Institute and I-CAR in preparation for qualification and certification requirements. Students may also enroll in WELD A115 or WELD A215 for additional laboratory units. Each 54 hours of laboratory time earns one unit. Students will be given credit for laboratory course appropriate for the number of hours worked.

WELD A212
Gas Metal Arc Welding Training Level 2
Prerequisite(s): WELD A100, or WELD A101, or WELD A140.

Advisory: WELD A211.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

This second level course teaches Gas Metal Arc Welding Theory and practice on ferrous and non-ferrous metals covering welding standards set by the American Welding Society, American National Standards Institute and I-CAR in preparation for qualification and certification requirements.
WELD A215 1-2 Units (54-108 lab hours)
Advanced Arc and Oxy-Acetylene Level 1
Prerequisite(s): WELD A200 or WELD A201 or WELD A223 or concurrent enrollment.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A laboratory course to develop skills in arc, oxyacetylene, GTAW and GMAW welding.

WELD A216 1-2 Units (54-108 lab hours)
Arc and Oxyacetylene Lab Level 2
Prerequisite(s): WELD A200 or WELD A201 or WELD A223.

Advisory: WELD A215.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A second-level advanced laboratory course to develop skills in oxyacetylene, SMAW, GTAW and GMAW welding.

WELD A217 1-2 Units (54-108 lab hours)
Arc and Oxyacetylene Lab Level 3
Prerequisite(s): WELD A200 or WELD A201 or WELD A223.

Advisory: WELD A216.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A third-level advanced laboratory course to develop skills in oxyacetylene, SMAW, GTAW, GMAW and FCAW welding.

WELD A218 1-2 Units (54-108 lab hours)
Arc and Oxyacetylene Welding Lab level 4
Prerequisite(s): WELD A200 or WELD A201 or WELD A223.

Advisory: WELD A217.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A fourth level advanced laboratory course to develop skills in oxyacetylene, SMAW, GTAW, GMAW and FCAW welding.

WELD A220 2 Units (36 lecture hours)
Welding Specifications and Codes
Grading Mode: Standard Letter
Transfer Credit: CSU.

Codes and specifications used by governmental agencies and industry in control of products and production.

WELD A223 1.5 Units (18 lecture hours; 36 lab hours)
Advanced Welding Level 1
Prerequisite(s): WELD A100 or WELD A101 or WELD A140.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An advanced welding course teaching the theory and practice of joining ferrous and non-ferrous metals. Includes certification requirements joint design and use of welding symbols. Lectures include preparation for Los Angeles City testing.

WELD A224 1.5 Units (18 lecture hours; 36 lab hours)
Advanced Welding Level 2
Prerequisite(s): WELD A100 or WELD A101 or WELD A140.

Advisory: WELD A223.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A second-level advanced welding course teaching the theory and practice of joining ferrous and non-ferrous metals. Includes certification requirements joint design and use of welding symbols. Lectures include preparation for Los Angeles City testing.

WELD A225 1.5 Units (18 lecture hours; 36 lab hours)
Advanced Welding Level 3
Prerequisite(s): WELD A100 or WELD A101 or WELD A140.

Advisory: WELD A224.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A third-level advanced welding course teaching the theory and practice of joining ferrous and non-ferrous metals. Includes certification requirements joint design and use of welding symbols. Lectures include preparation for Los Angeles City testing.

WELD A226 1.5 Units (18 lecture hours; 36 lab hours)
Advanced Welding Level 4
Prerequisite(s): WELD A100 or WELD A101 or WELD A140.

Advisory: WELD A225.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A fourth-level advanced welding course teaching the theory and practice of joining ferrous and non-ferrous metals. Includes certification requirements joint design and use of welding symbols. Lectures include preparation for Los Angeles City testing.

WELD A230 3 Units (54 lecture hours; 18 lab hours)
Welding Metallurgy
Grading Mode: Standard Letter
Transfer Credit: CSU.

Basic metallurgy as applied to welding, metal structures, strength of material. Weld ability of metals, heat treatment, welding procedures, welding stresses and control.
WELD A250 3 Units (36 lecture hours; 72 lab hours)
Pipe Welding Level 1
Prerequisite(s): WELD A200, WELD A201, or WELD A226.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Oxygen-Acetylene, Shielded Metal Arc, Gas metal Arc and Gas Tungsten Arc Welding of pipe for welder qualification to achieve American National Standards (ANSI) certification.

WELD A251 3 Units (36 lecture hours; 72 lab hours)
Pipe Welding Level 2
Prerequisite(s): WELD A200 or WELD A201 or WELD A226.

Advisory: WELD A250.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Second-level course for Oxygen-Acetylene, Shielded Metal Arc, Gas Metal Arc and Gas Tungsten Arc Welding for pipe welder qualification to achieve American National Standards (ANSI) certification.

WELD A252 3 Units (36 lecture hours; 72 lab hours)
Pipe Welding Level 3
Prerequisite(s): WELD A200 or WELD A201 or WELD A226.

Advisory: WELD A251.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Third-level course for Shielded Metal Arc, Gas Metal Arc Welding for pipe welder qualification to achieve American National Standards (ANSI) certification.

WELD A253 3 Units (36 lecture hours; 72 lab hours)
Pipe Welding Level 4
Prerequisite(s): WELD A200 or WELD A201 or WELD A226.

Advisory: WELD A252.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Fourth-level course for Shielded Metal Arc, Gas Tungsten Arc Welding for pipe welder qualification to achieve American National Standards (ANSI) certification.

WELD A255 3 Units (36 lecture hours; 72 lab hours)
Orbital Welding Level 1
Prerequisite(s): WELD A100 or WELD A101 or WELD A140.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Advanced welding theory and practice covering the process of gas tungsten arc welding using an automatic orbital welding system. Instruction includes safety, equipment use, and certification requirements.

WELD A256 3 Units (36 lecture hours; 72 lab hours)
Orbital Welding Level 2
Prerequisite(s): WELD A100 or WELD A101 or WELD A140.

Advisory: WELD A255.
Grading Mode: Standard Letter
Transfer Credit: CSU.

Second-level advanced welding theory and practice covering the process of orbital gas tungsten arc welding, cleanroom procedures, piping blueprints and certification. Instruction includes safety, equipment use, and certification requirements.

Noncredit Courses

All courses designated with an “N” are noncredit courses.

Noncredit course descriptions are listed in the Noncredit Course Descriptions section at the back of this catalog.

A
• Accounting (ACCT) (p. 624)
• Allied Health (ALH) (p. 624)
• Architecture (ARCH) (p. 625)

B
• Business (BUS) (p. 625)

C
• Chemistry (CHEM) (p. 626)
• Computer & High Technology (CHT) (p. 626)
• Consumer Studies (COS) (p. 627)

E
• English (ENGL) (p. 627)
• English as a Second Language (ESL) (p. 627)
• English Language Learning (ELL) (p. 628)

K
• Kinesiology (KIN) (p. 630)

M
• Mathematics (MATH) (p. 630)

T
• Tutoring (TUTR) (p. 631)
Accounting (ACCT)

ACCT A007N  54 Hours (54 lecture hours)
Not for Profit Recordkeeping and Compliance Noncredit
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This is a noncredit course utilizing the theory and fundamentals of generally accepted accounting principles and industry-specific guidance in conjunction with legal and regulatory issues needed for managing the recordkeeping and compliance documentation for Not-for-Profit entities. Creation of recordkeeping systems and various financial statements/reports that will help to evaluate accountability, transparency, and persuasiveness of a Not-for-Profit entity. Topics will include day to day transaction and special project accounting, tax and audit issues, endowments and grants, reporting obligations and other legal considerations. Not applicable to AA or AS degree.

Allied Health (ALH)

ALH A001N  36 Hours (18 lecture hours; 18 lab hours)
Personal Care Aide I: Foundational Knowledge, Attitudes and Skills Non-Credit
Advisory: Identification required on first day of class; No felony convictions.
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This noncredit course will provide students with the education needed to meet the skills required to provide personal care services to elders and to consumers with disabilities in a home setting. Topics include Qualities of a Direct Care Worker; Work Settings; Teamwork and Professionalism; Working with Elders; Respecting Differences; Communication Skills; Working with a Consumer Who Is Depressed; Infection Control; Body Systems and Common Diseases and Body Mechanics.

ALH A002N  27 Hours (12 lecture hours; 15 lab hours)
Personal Care Aide II: Person Centered Care Noncredit
Prerequisite(s): ALH A001N or concurrent enrollment.
Advisory: Identification required on first day of class; No felony convictions.
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This noncredit course will provide students with the education needed to meet the skills required to provide personal care services to elders and to consumers with disabilities in a home setting. Topics include Qualities of a Direct Care Worker; Work Settings; Teamwork and Professionalism; Working with Elders; Respecting Differences; Communication Skills; Working with a Consumer Who Is Depressed; Infection Control; Body Systems and Common Diseases and Body Mechanics.

ALH A003N  9 Hours (3 lecture hours; 6 lab hours)
First Aid and CPR/AED for Personal Care Aide Nondredit
Prerequisite(s): ALH A002N or concurrent enrollment.
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This is a noncredit course. Techniques and theory of cardiopulmonary resuscitation will be covered and demonstrated. Completion qualifies the student for the American Heart Association Professional Rescuer CPR/AED certification.

ALH A004N  4.5-9 Hours (4.5-9 lecture hours)
Professional Writing for Health and Consumer Science - Noncredit
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This noncredit class will support the development of writing skills for the science professional. Students will learn standard formats and expressions appropriate for their profession. Students will also work on writing related to the presentation of capstone projects. Not applicable to AA or AS degree.

ALH A005N  4.5-9 Hours (4.5-9 lecture hours)
Computational Skills for Consumer and Health Sciences I Noncredit
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This noncredit course reviews the Order of Operations as it applies to various uses with the allied health professions, an example would be using Order of Operations to determine quality assurance for fluoroscopy units within a radiology suite. The equation uses a baseline value against an acquired value; nmA/bmAXnP 2/bkVp2. Within the allied health professions there are a multitude of formulas that need to be solved; for example, in respiratory care, the alveolar gas equation; medical assisting and respiratory care (to name two examples) require calculations involving multiple elements, students need to understand basic computational concepts to successfully calculate dosage (medical assisting) or volumes (respiratory care).

ALH A006N  4.5-9 Hours (4.5-9 lecture hours)
Computational Skills for Consumer and Health Sciences II Noncredit
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This noncredit course covers measurement fundamentals and scientific notation in the allied health sciences to allow for performance of specific job functions. Scientific notation is a method of recording extremely large and small values. As such, the allied health professional will need to be able to perform addition, subtraction, multiplication, and division of values using scientific notation. Converting between measurement systems. Centigrade and Fahrenheit; C = (F-32)/1.8, centimeter to inches; cm = inch/2.54, pounds to kilograms; kb = lb/2.205 to name a few.

ALH A007N  4.5-9 Hours (4.5-9 lecture hours)
Computational Skills for Consumer and Health Sciences III Noncredit
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This noncredit course covers ratios and proportions required for dosage calculations, dimensional analysis, and other job-specific applications related to the allied health professions. Allied health professionals need to be able to use, like proportions, to solve problems in a variety of allied health applications. Dental Assisting and Radiologic Technology use, like proportions, to adjust exposure factors for changes in distance. Drug dosage calculations typically use ratios and proportions to solve for differences in concentrations and weight. Sonography signal intensity is calculated by determining the difference between transmitted/received signal and allowing for distance traveled.
Architecture (ARCH)

ARCH A004N  18 Hours (14 lecture hours; 4 lab hours)
Introduction to FrameCAD Steel Framing Noncredit
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
Introduction to FrameCAD Steel Framing is an overview of integrated steel panelization design and fabrication. Instruction includes entry level use of FrameCAD Structure and FrameCAD Detailer software as well as file export to FrameCAD Factory and machine. The class will produce and assemble a small sample project using the OCC FrameCAD F325iT.

ARCH A021N  48 Hours (36 lecture hours; 12 lab hours)
FrameCAD Studio 1 Noncredit
Advisory: ARCH A004N.
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
FrameCAD Studio 1 is a project-based course that develops design skills to produce a steel panel project using FrameCAD software. Basic steel frame design concepts will be covered as well as use of FrameCAD Structure and FrameCAD Detailer. Students will also receive basic machine safety and steel panel assembly experience.

ARCH A022N  48 Hours (36 lecture hours; 12 lab hours)
FrameCAD Studio 2 Noncredit
Advisory: ARCH A021N.
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
FrameCAD Studio 2 is a project-based intermediate course that develops design skills to produce a steel panel project using FrameCAD software. Students will be encouraged to design a project of choice and will work collaboratively to design and prepare each project for production. This is a continuation of FrameCAD Studio 1 and FrameCAD Structure and FrameCAD Detailer software will be used to design the projects and export to FrameCAD Factory software for production.

ARCH A041N  48 Hours (36 lecture hours; 12 lab hours)
FrameCAD Workshop 1 Noncredit
Advisory: ARCH A004N.
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
FrameCAD Workshop 1 is a project-based course that develops beginning level production skills needed to produce a steel panel framing system using FrameCAD software and a FrameCAD F325iT machine. Students will be introduced to FrameCAD machine operation and safety and will be able to visit a steel frame project or production facility. Students will assist in running production jobs and gain experience in panel assembly and workflow.

ARCH A042N  48 Hours (36 lecture hours; 12 lab hours)
FrameCAD Workshop 2 Noncredit
Advisory: ARCH A004N and ARCH A041N.
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
FrameCAD Workshop 2 is a project-based continuation of Workshop 1 that develops intermediate level production skills needed to produce steel panel framing systems using FrameCAD software and a FrameCAD F325iT machine. Students will review FrameCAD machine operation and safety and be involved in running production jobs and learning about panel assembly and fabrication workflow on the machine.

ARCH A043N  48 Hours (36 lecture hours; 12 lab hours)
FrameCAD Workshop 3 Noncredit
Advisory: ARCH A004N, ARCH A041N and ARCH A042N.
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
FrameCAD Workshop 3 is a project-based continuation of FrameCAD Workshop 2 that develops advanced level production skills needed to produce steel panel framing systems using FrameCAD software and a FrameCAD F325iT machine. Students will review FrameCAD machine operation and safety and be involved in coordinating production jobs, panel assembly, and fabrication workflow on the machine.

ARCH A085N  144 Hours (36 lecture hours; 108 lab hours)
Environmental Design Systems Noncredit
Advisory: ARCH A180 or comparable course completion or work experience.
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
This intermediate design course focuses on the environmental, cultural, and physical forces that affect architecture. Students will research and utilize design approaches and building components/systems that respond to human needs and the natural and built environments. Study topics will include site design and cultural context, environmental/climate responsive approaches to design, maintaining structural design integrity, incorporating life safety and access, and ecologically minded approaches to design.

Business (BUS)

BUS A086N  54 Hours (54 lecture hours)
Not-for-Profit Management Noncredit
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
This noncredit course utilizes the many dimensions of business in conjunction with regulatory issues required for the challenges and opportunities of Not-for-Profit entities with a focus on communication and critical thinking skill development for leaders. Explores areas of strategic planning, financial management, capacity building, program evaluation, data management and analysis, legal and ethical issues of compliance, fundraising, governance practices, and volunteer and board development in their relation to the accountability, transparency, and persuasiveness of a Not-for-Profit entity. Topics will also include community outreach, endowments and grants, reporting obligations and other legal considerations. Not applicable to AA or AS degree.

BUS A087N  54 Hours (54 lecture hours)
Not-for-Profit Marketing Noncredit
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
A noncredit course that surveys of the major marketing and branding topics especially for Not-for-Profit entities and new to mid-level professionals. Explores external communications, message development, and conveying the message and mission of the Not-for-Profit. Topics will include communication across a variety of platforms, social and digital media, public events, and one-on-one networking, and fundraising. Not applicable to AA or AS degree.
Chemistry (CHEM)

CHEM A010N 18 Hours (18 lecture hours)
Chemistry Skills for Introductory Chemistry Noncredit
Co-requisite(s): CHEM A110.

Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
Not Transferable.

This is a non-credit course designed to provide additional practice of the
concepts learned in CHEM A110 - Introductory Chemistry. Students will
develop skills necessary to successfully demonstrate competency in
CHEM A110. This course is expected to increase retention and student
success and is a part of the Chemistry Skills Certificate of Competency.

CHEM A030N 18 Hours (18 lecture hours)
Chemistry Skills for Preparation for General Chemistry Noncredit
Co-requisite(s): CHEM A130.

Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
Not Transferable.

This is a non-credit course designed to provide additional practice of
the concepts learned in CHEM A130 - Preparation for General Chemistry.
Students will develop skills necessary to successfully demonstrate
competency in CHEM A130. This course is part if the Chemistry Skills
Certificate of Competency.

CHEM A080N 18 Hours (18 lecture hours)
Chemistry Study Skills for General Chemistry A
Co-requisite(s): CHEM A180.

Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
Not Transferable.

This is a non-credit course designed to provide additional practice of the
concepts learned in CHEM A180 - General Chemistry A. Students will
develop skills necessary to successfully demonstrate competency in
CHEM A180. This course is expected to increase retention and student
success in CHEM A180 and is part of the Chemistry Skills Certificate of
Competency.

CHEM A081N 18 Hours (18 lecture hours)
Lab Skills for General Chemistry A
Co-requisite(s): CHEM A180 or CHEM A185.

Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
Not Transferable.

This is a non-credit course designed to provide additional instruction
and practice of the lab skills taught in CHEM A185- General Chemistry.
Students will develop skills necessary to successfully demonstrate
competency in CHEM A185 laboratory. This non-credit course will be a
part of the new Chemistry Skills Certificate and is expected to increase
student retention and success in CHEM A185.

CHEM A085N 18 Hours (18 lecture hours)
Chemistry Study Skills for General Chemistry B
Co-requisite(s): CHEM A185.

Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
Not Transferable.

This is a non-credit course designed to provide additional practice of the
concepts learned in CHEM A185 - General Chemistry B. Students will
develop skills necessary to successfully demonstrate competency in
CHEM A185. This course is expected to increase retention and student
success in CHEM A185 and is a part of the Chemistry Skills Certificate of
Competency.

CHEM A086N 18 Hours (18 lecture hours)
Lab Skills for General Chemistry B
Co-requisite(s): CHEM A185.

Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
Not Transferable.

This is a non-credit course designed to provide additional instruction
and practice of the lab skills taught in CHEM A185- General Chemistry.
Students will develop skills necessary to successfully demonstrate
competency in CHEM A185 laboratory. This non-credit course will be a
part of the new Chemistry Skills Certificate and is expected to increase
student retention and success in CHEM A185.

Computer & High Technology (CHT)

CHT A001N 27 Hours (27 lecture hours; 0 lab hours; 0 other hours)
Computer Basics - An Introduction
Grading Mode: P/NP/SP Non-Credit

This noncredit course introduces basic computer fundamentals,
keyboarding and basic Microsoft Word features in a Windows
environment. Topics include: basic Windows features, taskbar settings,
computer operations, terminology, keyboarding and mouse features.
Create and format a business letter, and save files in folders and in
multiple locations. Offered as Pass/No Pass/Satisfactory Progress only.

CHT A002N 27 Hours (27 lecture hours)
Computer Basics - Navigating the Internet
Grading Mode: P/NP/SP Non-Credit

This noncredit course is an introduction to navigating the Internet. Topics
include terminology, how to access the Internet using different browsers,
apply settings, conduct a search using various search engines, using
multiple tabs, and bookmarks. Identify Internet security dangers and
precautions as well as social media and online communication platforms.
Basic introduction of cloud computing and email etiquette. Offered as
Pass/No Pass/Satisfactory Progress only.
Consumer Studies (COS)

COS A001N 12 Hours (12 lecture hours)
Introduction to the Customer Service
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This noncredit course provides an introduction to customer service including effective communication skills, building relationships, types of customer service, dealing with difficult customers, and soft skills. Students will learn and practice the necessary skills for success as a customer service provider. This course is appropriate for individuals seeking employment in the customer service field in any industry.

COS A002N 12 Hours (12 lecture hours)
Customer Service and Retail Employment Opportunities
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This course includes researching and exploring local job opportunities in the customer service and retail industry. Students will become familiar with the online job search process, Orange Coast College Job Center, and local community resources. Students will complete a written application and prepare for a first interview.

English (ENGL)

ENGL A001N 18 Hours (18 lecture hours)
Grammar Within Reach - Noncredit
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
This noncredit course takes community members and college students through a review of grammar fundamentals and provides an opportunity to practice precise grammar and varied sentence styles that are immediately applicable to writing for the workplace and everyday life and for writing in college classes. This noncredit course can be paired with another English noncredit course for a certificate of competency. Not applicable to AA or AS degree

ENGL A002N 18 Hours (18 lecture hours)
Reading for Success - Noncredit
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
This noncredit course supports students and community members in practicing fundamental reading and study strategies necessary for college success and success in the workplace and community at larger by practicing strategies including annotating and summarizing texts, finding the main idea and identifying supporting details, identifying the larger organizational strategy and stylistic devices used to support the claims and main points in a text. This noncredit course can be paired with another English noncredit course for a certificate of competency. Not applicable to AA or AS degree

ENGL A003N 18 Hours (18 lecture hours)
Perfecting Paragraphs - Noncredit
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
This noncredit course takes students through the process of creating cohesive, organized, college-level paragraphs and essay sections in building essays for a variety of purposes and to be used for writing across many disciplines. This noncredit course can be paired with another English noncredit course for a certificate of competency. Not applicable to AA or AS degree

ENGL A004N 18 Hours (18 lecture hours)
Building A College Essay - Noncredit
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
This noncredit course will take students through the process of building a single, focused college essay—from the planning and outlining stage, to creating a thesis or claim, to gathering support and evidence and integrating source material, then formatting per MLA guidelines. This noncredit course can be paired with another English noncredit course for a certificate of competency. Not applicable to AA or AS degree

ENGL A006N 1-6 Hours (1-6 lecture hours)
Support Skills for English Composition
Grading Mode: P/NP/SP Non-Credit, Letter Non-Credit
Not Transferable.
This noncredit course will help students build various skills required in their English composition courses. These skills include sentence grammar, sentence fluency, paragraph and essay structure, reading comprehension, source integration, and research writing.

ENGL A011N 10-36 Hours (10-36 lecture hours)
Experiencing Literature for Lifelong Learning
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This regular noncredit course is for lifelong learners who want to enjoy the benefits of engaging in an exploration of different types of literature. Participants will become more avid, savvy readers of fiction by practicing close reading to understand texts. Through classroom readings, lecture, and discussion, students will understand the dynamics of fiction and how it applies to their lives. Fiction reveals relationships between people and people’s relationships to the world. Fiction often gives a clearer view of its times than contemporary news reports of history. Students learn what to look for in reading. Students gain pleasure and confidence in literary judgment with every page read.

English as a Second Language (ESL)

ESL A045N 36 Hours (36 lecture hours)
ESL Support for Freshman Composition: Reading and Vocabulary Noncredit
Advisory: Concurrent enrollment in ENGL A100; This supplemental class is geared for second language students who are enrolled in ENGL A100 and other college-level courses and need supplemental help in reading and vocabulary.
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This course focuses on improving reading skills and reading comprehension by demonstrating reading strategies and building vocabulary for non-native speakers of English enrolled in ENGL A100. Offered on a pass-no pass basis only.

ESL A046N 36 Hours (36 lecture hours)
ESL Support for Freshman Composition: Sentence Structure Noncredit
Advisory: Concurrent enrollment in ENGL A100; This supplemental class is geared for second language students who are enrolled in ENGL A100 and other college level courses and need supplemental help in sentence structure.
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
Advanced sentence structures for English 100 non-native students, esp. clauses, compound and complex sentences. Offered on a pass-no pass basis only.
This course will help students to learn basic spelling patterns of English by focusing on short and long vowels, consonants, consonant blends, prefixes, suffixes, homonyms, and homophones. Students will practice and memorize some of the more common words in English in addition to discussing and identifying some common mistakes that English language learners make in spelling. By learning the sounds of English, students will also improve pronunciation. Offered on a pass/no pass basis only. ADVISORY: Concurrent enrollment in ENGL A100; This supplemental class is geared for second language students who are enrolled in ENGL A100 and other college level courses and need supplemental help in spelling.

**Grading Mode:** P/NP/SP Non-Credit

**ELL A048N**

**ELL Support for Freshman Composition: Advanced Pronunciation Noncredit**

**Advisory:** Concurrent enrollment in ENGL A100; This supplemental class is geared for second language students who are enrolled in ENGL A100 and other college level courses and need supplemental help in advanced pronunciation.

**Grading Mode:** P/NP/SP Non-Credit, Pass/No Pass

This course is for ESL students at an advanced level of oral expression and pronunciation. It provides instruction in refining pronunciation skills in order to communicate as per the conventions of academic English in order to be able to succeed in Freshman Composition and other college-level courses. Offered on a pass-no pass basis only.

**Grading Mode:** P/NP/SP Non-Credit, Pass/No Pass

This noncredit course is one in a series of two courses designed to help non-native speakers of English prepare for U.S. citizenship. In this course, students review and practice basic writing conventions and basic reading skills. They also learn about and discuss the naturalization process and civic rights and responsibilities of U.S. citizens.

**Grading Mode:** P/NP/SP Non-Credit, Pass/No Pass

This noncredit course is one in a series of two courses designed to help non-native speakers of English prepare for U.S. citizenship. In this course, students receive direct instruction of English speaking and listening skills. Students also learn about and discuss the fundamentals of U.S. history, government, and geography.

**Grading Mode:** P/NP/SP Non-Credit, Pass/No Pass

This noncredit course is one in a series of two courses designed to help non-native speakers of English prepare for U.S. citizenship. In this course, students receive direct instruction of English speaking and listening skills. Students also learn about and discuss the fundamentals of U.S. history, government, and geography.

**Grading Mode:** P/NP/SP Non-Credit

This course is the second in a sequence of five designed for adult English language learners wanting to improve their ability to communicate in English. In this high beginning course, students will continue to practice listening, speaking, reading, and writing in the context of everyday situations and U.S. culture while laying the foundation for higher order thinking skills.

**Grading Mode:** P/NP/SP Non-Credit

This course will help students to learn basic spelling patterns of English by focusing on short and long vowels, consonants, consonant blends, prefixes, suffixes, homonyms, and homophones. Students will practice and memorize some of the more common words in English in addition to discussing and identifying some common mistakes that English language learners make in spelling. By learning the sounds of English, students will also improve pronunciation. Offered on a pass-no pass basis only. ADVISORY: Concurrent enrollment in ENGL A100; This supplemental class is geared for second language students who are enrolled in ENGL A100 and other college level courses and need supplemental help in spelling.

**Grading Mode:** P/NP/SP Non-Credit, Pass/No Pass

This course is the first in a sequence of four grammar review courses designed to provide non-native English speaking students additional opportunities to master various essential grammatical structures. In this beginning course, students will review rules governing the use and meaning of basic English verb tenses and basic sentence structures. Students will practice identifying and producing these target structures in spontaneous oral and written communication.

**Grading Mode:** P/NP/SP Non-Credit

This noncredit course is designed for English learners responsible for children in the U.S. elementary school system. Students will practice listening, speaking, reading and writing skills and develop the cultural awareness and knowledge of the American primary school system in order to be more effective advocates for their children's education. Special attention will be given to the cultural and academic expectations of elementary school students in the U.S. This course is recommended for students with at least low-intermediate English skills.
ELL A036N 90 Hours (90 lecture hours)
English Language Learning: Intermediate A
Advisory: ELL A026N or CASAS testing.

Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
Not Transferable.

This noncredit course is the third in a sequence of five designed for adult English language learners wanting to improve their ability to communicate in English. In this low-intermediate course, students will continue to practice listening, speaking, reading, and writing in the context of everyday situations and U.S. culture. They will also begin preparation for a potential transfer to a work-related or academic path.

ELL A037N 54 Hours (54 lecture hours)
Intermediate Grammar Review
Grading Mode: P/NP/SP Non-Credit
This noncredit course is the second in a sequence of four grammar review courses designed to provide non-native English speaking students additional opportunities to master various essential grammatical structures. In this intermediate course, students will expand their understanding of the English verb system and sentence structures, with a review of the present perfect, basic modals, phrasal verbs, and compound sentence structures. Students will practice identifying and producing these target structures in spontaneous oral and written communication.

ELL A043N 36 Hours (36 lecture hours)
Intermediate English Skills for Career Preparation
Advisory: ELL A046N or ELL A047N.

Grading Mode: P/NP/SP Non-Credit
This noncredit course is the first of two courses in a high-intermediate course series for adult English language learners seeking to improve their employability in the United States. The primary goal of this course is to help students develop the English skills necessary to obtain a job in the U.S., explore potential career paths, and familiarize them with the cultural expectations, rules, and regulations of the American workplace.

ELL A044N 36 Hours (36 lecture hours)
Intermediate English Skills for Career Advancement
Grading Mode: P/NP/SP Non-Credit
This noncredit course is the second of two courses in a high-intermediate course series for adult English language learners seeking to improve their employability in the United States. The primary goal of this course is to help students develop the English interpersonal skills and cross-cultural competence necessary to perform and/or advance in the American workplace.

ELL A046N 90 Hours (90 lecture hours)
English Language Learning: Intermediate B
Advisory: ELL A036N or CASAS testing.

Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
Not Transferable.

This noncredit course is the fourth in a sequence of five designed for adult English language learners wanting to improve their ability to communicate in English. In this high-intermediate course, students will continue to practice listening, speaking, reading, and writing in the context of everyday situations and U.S. culture while preparing for a potential transfer to a work-related or academic path.

ELL A047N 54 Hours (54 lecture hours)
Advanced Grammar Review 1
Grading Mode: P/NP/SP Non-Credit
This noncredit course is the third in a sequence of four grammar review courses designed to provide non-native English speaking students additional opportunities to master various essential grammatical structures. In this intermediate-advanced course, students continue to expand their understanding of the English verb system and sentence structures, with a review of the passive voice, verbals, and complex sentence structures. Students will practice identifying and producing these target structures in spontaneous oral and written communication.

ELL A048N 36 Hours (36 lecture hours)
Speaking about Non-Fiction—Intermediate
Grading Mode: P/NP/SP Non-Credit

This noncredit course is designed for intermediate English learners wanting to practice their speaking skills by engaging in extended discussions about substantive topics. Students will also practice reading skills with a focus on increasing their vocabulary and awareness of cultural topics of general interest such as current events, significant speeches, politics, technology, world events, sports, travel, business, and lifestyle.

ELL A049N 36 Hours (36 lecture hours)
Speaking about Fiction—Intermediate
Grading Mode: P/NP/SP Non-Credit

This noncredit course is designed for intermediate English learners wanting to practice their speaking skills by engaging in extended discussions about substantive topics. Students will also work on improving their reading skills by summarizing and responding to various works of fiction.

ELL A056N 90 Hours (90 lecture hours)
English Language Learning: Advanced
Advisory: ELL A046N or CASAS testing.

Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
Not Transferable.

This noncredit course is the fifth in a sequence of five designed for adult English language learners wanting to improve their ability to communicate in English. In this low-advanced course, students will continue to practice listening, speaking, reading, and writing in the context of everyday situations and U.S. culture while developing skills and strategies for a successful transfer to a career development or academic preparation path.
Kinesiology (KIN)

KIN A001N 22 Hours (18 lecture hours; 4 lab hours)  Lifeguard Training, Professional Rescue Noncredit
Grading Mode: P/NP/SP Non-Credit
This is a non-credit course designed to introduce and develop the basic lifesaving skills necessary to successfully serve as a lifeguard. Topics will include discussion and practice of lifeguard skills, including assessment of emergency situation, rescue techniques, first aid, and use of emergency equipment. Upon completion of the class, a student who successfully passes written and practical exams will be qualified to be certificated for an American Red Cross Emergency Water Safety, Basic Lifeguarding, or Lifeguard Training Certificate.

KIN A002N 13 Hours (9 lecture hours; 4 lab hours)  Aquatic First Aid/CPR/AED for Lifeguard Rescue Noncredit
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This is a non-credit course. Emphasizes injury prevention, early medical care, first aid for common injuries and life-saving skills. Successful completion qualifies a student for the American Red Cross Standard First Aid Card and CPR Certification.

KIN A003N 26 Hours (18 lecture hours; 8 lab hours)  First Aid, CPR/AED First Responder Noncredit
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This course is a requirement of employment as a lifeguard and aquatics safety personnel. It is highly demanded by local fire, policy, emergency medical technicians, and the general community served by the college.

KIN A010N 9-36 Hours (9-36 lecture hours)  Chair Cardio Fitness
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This 'everyone-can-do' body/mind class helps encourage and improve mobility, flexibility, strength, balance, posture, breathing and relaxation. Exercising from a seated position makes it ideal for, but not limited to, those challenged with Parkinson's, multiple sclerosis, arthritis or for adults new to exercise. Special consideration for participant needs makes this class useful and unique to each individual. Develop attitudes and learn techniques that work for you. Make this fun, light-hearted approach to exercise a weekly highlight.

KIN A011N 10-36 Hours (10-36 lecture hours)  Stretch and Flex for Wellness
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
Emphasizes proper techniques of movement, joint flexibility, breathing, and body alignment for postural integration. Flexibility as it relates to physical fitness, health, and stress reduction will be explored to improve and maintain a wellness lifestyle.

KIN A084N 54 Hours (54 lecture hours)  Theory of Yoga Noncredit
Grading Mode: P/NP/SP Non-Credit
This is a non-credit course that provides a survey of the origins of Yoga, including ancient to modern traditions, and exploration of the principal ancient texts of Yoga. This course includes the evolution of yoga from its earliest development to its current integration into modern culture.

KIN A085N 90 Hours (36 lecture hours; 54 lab hours)  Yoga Methodology Noncredit
Prerequisite(s): Prior Yoga Experience as demonstrated in first week of enrollment.
Advisory: KIN A128 and KIN A228.
Grading Mode: P/NP/SP Non-Credit
This is a non-credit course designed for students to learn how to teach key poses in each category of Yoga for adults, teens, and children in a variety of settings. This class includes proper alignment, sequencing of postures, positive communication, verbal and physical cueing, precautions, and modifications for yoga clients.

Mathematics (MATH)

MATH A001N 27 Hours (27 lecture hours)  Preparation for Elementary Algebra Bootcamp Noncredit
Grading Mode: P/NP/SP Non-Credit
This is a noncredit course intended to prepare students for elementary algebra before enrollment in Math A010 · Elementary Algebra. The course will review pre-algebra materials. Topics to include simplifying expressions, solving equations and application of pre-algebra concepts.
MATH A002N 27 Hours (27 lecture hours)
Preparation for Intermediate Algebra Bootcamp Noncredit
Grading Mode: P/NP/SP Non-Credit
This is a noncredit course intended to prepare students for intermediate algebra before enrollment in Math A030 - Intermediate Algebra. The course will review elementary algebra materials. Topics to include simplifying expressions, solving equations and application of concepts.

MATH A004N 45 Hours (45 lecture hours)
Math Jam Basic Math Computational Skills Noncredit
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This is a noncredit course focusing on mastering key arithmetic topics. These topics include operations with whole numbers, operations with decimals, introduction to percents, introduction to integers, introduction to fractions, introduction to ratios and proportions, introduction to statistics and an introduction to measurement and basic geometry.

MATH A009N 18 Hours (18 lecture hours)
Study Session for Pre-Algebra Noncredit
Co-requisite(s): MATH A008.
Grading Mode: Not Graded
This is a noncredit course. This course provides additional practice of the mathematical concepts covered in Math A008 - Pre-Algebra. Students will develop the skills necessary to successfully demonstrate competencies related to Math A008.

MATH A011N 18 Hours (18 lecture hours)
Study Session for Elementary Algebra Noncredit
Co-requisite(s): MATH A010.
Grading Mode: Not Graded
This is a non-credit course. This course provides additional practice of the mathematical concepts covered in Math A010 - Elementary Algebra. Students will develop the skills necessary to successfully demonstrate competencies related to Math A010.

MATH A028N 9 Hours (9 lecture hours)
Problem Solving Seminar in Mathematics
Grading Mode: P/NP/SP Non-Credit
This regular noncredit course is for students interested in Math competitions or general problem solving, designed to review prerequisite skills necessary for success. Topics include Geometry; Counting and Probability; Functions and Polynomials, Logic, and general problem-solving strategies.

MATH A082N 36 Hours (36 lecture hours)
Math Jam for STEM Pathway Noncredit
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This is a noncredit preparation course designed to review prerequisite topics necessary for success in MATH A115 or MATH A120 covering operations with real numbers, relations and functions, systems of linear equations, factoring, rational expressions, radical equations, quadratic equations, exponential and logarithmic equations, conic sections, and basic geometry.

MATH A086N 36 Hours (36 lecture hours)
Math Jam for SLAM Pathway Noncredit
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This is a noncredit preparation course for MATH A100 and MATH A160, designed to review prerequisite skills necessary for success. Topics include operations with real numbers; conversion between decimals, percents, and fractions; selected algebraic topics; the graph of a line; and problem-solving strategies.

TUTR A050N 54 Hours (54 lab hours)
Supervised Tutoring Noncredit
Grading Mode: P/NP/SP Non-Credit
This noncredit course provides supervised peer tutoring in academic courses for students who want assistance with course content and/or study skills. This is an open entry/open exit course. NOT APPLICABLE TO AA DEGREE.

TUTR A090N 14 Hours (9 lecture hours; 5 lab hours)
Tutoring Skills 1 Noncredit
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This noncredit course is designed for students who want to work as tutors in a Tutorial or Academic Success Center including the Student Success Center at OCC. Tutoring skills development in the areas of interpersonal and communication skills, learning styles, study skills techniques, diversity/cultural awareness, and Socratic method. One of a sequence of courses leading to a Certificate of Completion in Tutoring Skills and Strategies.

TUTR A091N 14 Hours (9 lecture hours; 5 lab hours)
Tutoring Skills 2 Noncredit
Grading Mode: P/NP/SP Non-Credit, Pass/No Pass
This noncredit course is designed for students who want to work as tutors in an Academic Assistance or Tutorial Center including the Student Success Center at OCC. Tutoring skills development in the areas of communication skills and Socratic method, diversity and cultural awareness, learning disabilities, at-risk students, motivation/grit, and group tutoring. One of a sequence of courses that lead to a Certificate of Completion in Tutoring Skills and Strategies.

Administration and Faculty

Faculty
Abemathy, Dean (2008)
Professor, Architectural Technology
B.A., California Polytechnic State University, San Luis Obispo
M. A., University of California, Los Angeles
Ph.D., University of California, Los Angeles

Alabi, Jessica (2007)
Professor, Sociology
A.A., Santa Ana College
B.A., Chapman University
M.A., Ph.D., University of California, Irvine

Anderson, Courtney (2006)
Professor, Speech
B.A., George Mason University, Virginia
M.A., California State University, Long Beach
Appel, Matthew (2005)
Assistant Professor, Chemistry
B.S., California Polytechnic State University, San Luis Obispo
M.S., University of California, Irvine
Ph.D., University of California, Irvine

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Professor, Mathematics
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M.S., West Coast University
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B.S., University of California, Los Angeles
A.S., El Camino Community College

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Professor, Mathematics
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Professor, Counseling Services
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B.S., California State University, Fullerton
M.S., San Diego State University

Baker, Cherryl (2001)
Professor, Biology
B.A., California State University, Fullerton
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Professor, Marine Science
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M.S., San Diego State University

Barber, William B. (1990)
Professor, Culinary Arts
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Professor, English
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Barnes, Carol (1985)
Professor, Counseling Services
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B.B.A., University of Wisconsin
M.A., Ph.D., Michigan State University

Barton, Laurie (1999)
Professor, English as a Second Language
B.A., Mills College
M.S., California State University, Fullerton
M.F.A., Antioch University

Barvarz, Parnian (1999)
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Beau, Leslie (2006)
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M.B.A., Pepperdine University

Becker, Lauren (2015)
Professor, Fashion
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B.A., California State University, Fullerton

Behr, Laura (2005)
Professor, Kinesiology and Athletics
Head Coach, Women's Crew
B.A., Purdue University
M.S., University of Wisconsin

Beichner, Brian (2016)
Instructor, Emergency Medical Services
B.S., Concordia University
B.S., University of California, Riverside
M.S., Purdue University

Bender, Edward Erik (1995)
Professor, Geology
B.S., Rider University, New Jersey
M.S., Vanderbilt, Tennessee
Ph.D., University of Southern California

Berg, Chistopher (2018)
Instructor, Geology
B.S., University of Cincinnati
M.S., University of Kentucky
Ph.D., The University of Texas at Austin

Bialecki, Michael (2006)
Professor, Biology
B.S., University of Michigan
Ph.D., University of Utah

Blair, Jamie (1987)
Professor, Mathematics
B.A., M.A, California State University, Long Beach

Blake, Elizabeth (2009)
Associate Professor, Nutrition and Dietetic Technology
B.S., M.A., California State University, Long Beach

Blystone, Allissa (2018)
Instructor, Anatomy
B.S., M.A., Baylor University
Ph.D., University of Dayton

Boogar, Tyler (2017)
Instructor, Mathematics, Basic Skills
Chavez Jimenez, Irving (2019)  
Counselor, Disabled Student Services and Programs  
M.S., B.A., California State University, Los Angeles

Clark, Gregory (1998)  
Professor, Leadership Studies/Management  
B.A., University of California, Davis  
M.A., Chapman University  
Ed.D., University of Southern California

Coaty, Patrick (1999)  
Professor, Political Science/History  
B.S., University of Wisconsin-Madison  
M.A., Ph.D., Claremont Graduate School

Coco, Felicia (2001)  
Professor, Speech  
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Ed.D, B.A., California State University, Long Beach  
M.A., School for International Training, Vermont

Congleton, John (2002)  
Assistant Professor, Chemistry  
B.A., M.S., University of California, San Diego

Connor, Sean (2016)  
Instructor, Communication Studies  
B.A., M.A., California State University, Fullerton

Costas, Jose (1999)  
Professor, Dance  
B.S., M.Ed., Catholic University of Puerto Rico  
M.F.A., Tisch School of the Arts, New York University

Cottrell, Lynne (2010)  
Professor, Medical Assisting  
Certificate in Medical Clinical Assisting, Bryman School, Long Beach  
A.A., Golden West College  
B.S., M.S., California State University, Dominguez Hills

Cox, Steven (2001)  
Professor, Art  
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Craner, Michelle (2017)  
Instructor, Fashion Merchandising  
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Cuellar, Eric (1999)
Associate Professor, Counseling Services
B.A., M.Ed., University of San Diego

Cutenese, Charles (1999)
Professor, Kinesiology and Athletics
Head Coach, Women's Volleyball
A.A., Orange Coast College
B.A., California State University, Fullerton
M.Ed., Azusa Pacific University

Dale, John (2006)
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B.A., University of California, Irvine
M.L.S., San Jose State University

Davari, Shauhin (2015)
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J.D., University of California, Davis

Della Marna, Jodi (1997)
Professor, Librarian
B.A., California State University, Fullerton
M.L.S., University of California, Los Angeles
M.A., California State University, Dominguez Hills

Denney, Matthew D. (2017)
Instructor, Heating, Ventilation, Air Conditioning, and Refrigeration
A.A., Universal Technical Institute, Arizona
B.S., DeVry University, Illinois

De Surra, Christopher (1999)
Professor, Speech
B.A., M.A., San Diego State University

Professor, Political Science/American Government
B.A., San Diego State University
M.P.A., National University
Ed.D., Pepperdine University

Drum, Stephen (2002)
Professor, Physics
B.S., M.S., University of California, Irvine

Dubrovskij, Stanislav (2017)
Instructor, Mathematics
M.S., State University of New York at Stony Brook
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Elliott, Kelli (2005)
Professor, Biology
B.S., San Diego State University
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Ellis, Jeanette (2012)
Instructor, Early Childhood
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Ellis, Robert (2013)
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Emsberger, Gabriela (2008)
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Instructor, Engineering
M.S., B.S., University of Naples Federico II
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Evans, Christopher (1997)
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Fang, Jerome (2015)
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Forssell, Erik (2015)
Assistant Professor, Film and Video
A.A., Orange Coast College
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Foster, Rodney (1991)
Professor, Aviation Maintenance Technology
B.S., M.B.A., Amberton University, Texas

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Professor, Architectural Technology
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Gaytan, Donovan (1991)
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Goerrissen, Jan (2012)
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Gonzalez, Jarren (2008)
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Gonzalez, Shirley L. (1993)
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Gordon, Lee (1989)
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Gotschall, Noriko (2016)
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Gratz, Erin (2019)
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MLIS, University of Illinois, Urbana-Champaign
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Grooms, Mark (2016)
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Guerra, Arnold, III (2002)
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Hamamura, Mark (2018)
Instructor, Physics
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Hanlon, Anna (2003)
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Harlow, Richard (2005)
Assistant Professor, Horticulture
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Harriman, Stanley (2015)
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Hellman, Amy (2016)
Instructor, Chemistry
B.S., University of California, Santa Barbara
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Henderson, Karl (2015)
Assistant Professor, Manufacturing Technology
A.S., ITT Technical Institute of Technology

Hitchings, Jamie (2017)
Instructor, Film & Television
A.A., Munson Williams Proctor Institute College of Art
B.F.A., Kansas City Art Institute
M.A., New York University

Hoffman, Glynis (1997)
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Hogue, Steven (2000)
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Holt, Kelly (2012)
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Hussain, Syed (2008)
Professor, Mathematics; Engineering
Iacopetti, Anthony (2007)
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Head Coach, Women's Water Polo; Swimming and Diving
B.A., University of New Mexico
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Ibranossian, Agatha (2006)
Professor, Photography
B.F.A., Art Center College of Design

Icaro-Boiser, Rubirosa (2012)
Instructor, Counseling Services: International/General
A.A., Cerritos College
B.S., California State University, Fullerton
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Johnson, Douglas (2012)
Instructor, Accounting
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M.S., California State University, Dominguez Hills
M.S.D., Arizona State University

Judd, Frederick (2017)
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J.D., Brigham Young University Law School

Kagawa, Akemi (1999)
Professor, Japanese
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Kamphuis, Jacqueline (1999)
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Kang, Hannah (2016)
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Keith, Arlete Beatriz (2005)
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Kennedy, Marilyn (1999)
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Kerins, John Christopher (2017)
Instructor, Commercial Art
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M.F.A., University of California, Los Angeles

Ketcham, Christopher (2017)
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M.S., Azusa Pacific University

Kings, Rose Anne (2000)
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Kirs, Rose Anne (2000)
Professor, Architectural Technology

Kirch, Stacy (2001)
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Koines, Andrew (2001)
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Komenda, Virginia (2012)
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M.A., University of Southern California

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M.F.A., University of Michigan

Kubiak, Renee (2000)
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Kulik, Christopher (2016)
Instructor, Counseling Services, CAFYES/EOPS
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Kuo, Daniel (2006)
Professor, Economics
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M.A., University of California, Santa Barbara

La Mer, Emma Grace “Joey” (1992)
Assistant Professor, Speech
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Lan, Andrea (2017)
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Lannom, Michael (2014)
Instructor, Welding Technology
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Lau, John M. (2000)
Professor, Chemistry
B.S., Pacific Lutheran University, Washington
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Legaspi, Jodi (2016)
Instructor, Kinesiology and Athletics, Softball Coach
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Lerma, Maria (1993)
Professor, English as a Second Language
B.A., University of Southern California
Liang, Tabitha Wei Mei (2016)
Instructor, Neurodiagnostic and Polysomnographic Technology
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Livingston, Tab (1997)
Professor, Mathematics
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Lloyd, Douglas (2015)
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Lohman, Benjamin (2001)
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B.S., Bradley University, Illinois
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Loren, Davi (2001)
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Lovegreen, Alan (2016)
Instructor, English
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Luckring, Eve (1999)
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Maekawa, Naoko (2008)
Professor, Mathematics
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Maher, Deborah (1999)
Professor, Psychology
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Ph.D., University of California, Riverside

Marcina, Vesna (2002)
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Marron, Elias (1995)
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Maughan, Helen (2000)
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Instructor, Counseling Services
A.A., Moorpark Community College
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M.S., California State University, Long Beach

McCall, Leslie (2001)
Professor, Photography
A.A., Cypress College
B.F.A., Art Center College of Design
M.F.A., Art Institute of Boston at Lesley University

McComb, Helen (1984)
Professor, History/Humanities
B.A., M.A., University of California, Santa Barbara

Means, Leland (2012)
Associate Professor, Sculpture
B.A., California State University, Sonoma
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Miranda, Pedro Luis (2017)
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Mochizuki, Jon Atsushi (2017)
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Montagne, Meredith (2015)
Assistant Professor, Physical Anthropology
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Moore, Art (1984)
Professor, Mathematics
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Morgan, Arabian (2006)
Professor, Accounting
B.S., M.B.T., University of Southern California

Morgan, Carleton (1991)
Professor, Librarian
B.A., California State University, San Bernardino
M.L.S., San Jose State University

Morgan, Dennis (1999)
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A.A., El Camino College
B.S., California State University, Dominguez Hills
M.B.A., California State University, Long Beach

Mucciaro, Thomas (1999)
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Ph.D., Stanford University

Mucino, Patricia (2016)
Instructor, Counseling Services
B.S., California State Polytechnic University, Pomona
M.S., California State University, Long Beach

Muelas, Mari-aala (2005)
Assistant Professor, Spanish
B.A., M.A., University of California, Los Angeles

Muir, Robert (1999)
Professor, Mathematics
Myers, Kevin (1999)
Associate Professor; Fine Arts/Ceramics
B.F.A., M.F.A., Otis College of Art and Design

Naesse, Irene (2001)
Professor, Geography
B.A., M.A., San Diego State University

Navidad, Apolinario (2005)
Professor, Music
B.A., M.A., California State University, Long Beach

Neil, Jeanne (2009)
Professor, Accounting
A.S., Mt. San Jacinto College
B.A., M.B.A., California State University, San Bernardino

Nelson, Jessica (2016)
Instructor, Counseling Services: Student Success and Support Programs/Retention
M.S., California State University, Long Beach
B.A., University of California, Los Angeles

Newman, Matthew (2019)
Instructor, Film Production & Immersive Media
B.A., Chapman University

Ngo, Michelle (2009)
Instructor, Counseling Services
B.A., California State University, Fullerton
M.A., California State University, Dominguez Hills

Nguyen, Christina (2019)
Professor, Counseling Services
B.A., California State University, Long Beach
M.A., National University

Nguyen, Jessica (2000)
Professor, Counseling Services
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Nguyen, Yvette (2019)
Counselor
M.Ed., University of Southern California
B.A., University of California, Los Angeles
A.A., East Los Angeles College

Norfolk, Kristy (2017)
Instructor, Cardiovascular Technology & Diagnostic Medical Sonography
A.A., Orange Coast College
M.S., Weber State University

Norling, Marcella (1982)
Professor, Religious Studies
B.A., University of California, Santa Barbara
M.A., National University

Obstfeld, Loretta (2005)
Assistant Professor, English
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M.F.A., Chapman University

Ochoa, Marco (2002)
Assistant Professor, Kinesiology and Athletics
Head Coach, Cross Country
B.A., M.A., Adams State College, Colorado

O'Hara, Kevin (2016)
Instructor, Film & Television
A.A., Palomar Community College
B.A., California State University, San Marcos

Ogaz, Rebecca (2015)
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B.A., California State University
M.A., Loyola Marymount University
Ph.D., Chicago School of Professional Psychology

Ortiz Oscar (2008)
Professor, Construction Technology
A.A., El Camino College
A.A., Los Angeles Trade Technical College

Ottoson, Kathryn (2018)
Counselor, Career Education Programs
B.S., M.S., California State University, Pomona

Otwell, Charles (2014)
Professor, Philosophy
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Parker, Kenneth (2005)
Assistant Professor, English
B.A., M.F.A., Saint Mary's College of California

Parsell, Jill (2014)
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B.S., M.S., California State University, Pomona

Paulding, Michael (2015)
Instructor, Computer Science
B.S., Bucknell University, Pennsylvania
M.S., Ph.D., University of Hawai'i at Manoa

Pena, Maximino (2017)
Instructor, Construction Technology
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B.S., California State University, Long Beach

Perkins, Marc (2002)
Professor, Biological Sciences
B.S., Harvey Mudd College
M.S., Arizona State University

Peters, Timothy (1999)
Associate Professor, Construction Technology
Vocational Equivalency

Pettus, Candice (2001)
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A.A., Orange Coast College
B.A., M.A., California State University, Fullerton

Pham, Lien (2006)
Professor, Psychology
Phillips, Clyde (1993)
Assistant Professor, Counseling Services

Plum, Caryn (2012)
Associate Professor, Counseling Services: Allied Health/General
B.A., California State University, Chico
M.S., University of California, Long Beach

Polk, Sherana (2008)
Professor, Speech
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M.A., California State University, Northridge

Prioleau, Karen (2012)
Instructor, Professional Mariners
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Pullman, Lori (2014)
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M.A., California State Polytechnic University

Quinn, Christopher (2012)
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Raileanu, Lia (1999)
Professor, French
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Rangno, Erik (2007)
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M.A., Ph.D., University of California, Irvine

Raskin, Debra (2016)
Instructor, Mathematics
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M.A., University of California, Fullerton

Reber-Bonhall, Cynthia (2005)
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B.S., Weber State University, Utah
M.A., California State University, San Bernardino

Reed, Charlene (2007)
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M.A., Pepperdine University

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M.A., University of Southern California

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B.S., University of Utah

Rodriguez, David (1999)
Professor, Construction Technology
A.A., El Camino College
B.S., California State University, Long Beach

Rojas, Alexandria (2016)
Instructor, Counseling Services
B.A., M.A., Chapman University

Rossiter, Jamie (2019)
Instructor, Geography
M.A., San Diego State University
B.A., Southern Connecticut State University

Rubenstein, Eliza (2009)
Associate Professor, Music
B.A., Oberlin College, Ohio
M.F.A., University of California, Irvine

Rudmann, Brent (2014)
Assistant Professor, History
B.A., California State University, San Marcos
M.A., University of San Diego

Russell, Gregory (2008)
Associate Professor, Biological Sciences
B.S., University of Wyoming
Ph.D., University of California, Riverside

Ruzi, Flavia (2017)
Instructor, English
B.A., University of California, Los Angeles
Ph.D., M.A., University of California, Riverside

Professor, Radiologic Technology
B.A., M.A., California State University, Dominguez Hills

Sam, Thinh (2006)
Assistant Professor, Math
B.S., M.S., University of Colorado

Sarafian, Joseph (2017)
Instructor, Architectural Technology
B.A., University of Southern California
M.A., University of California, Los Angeles

Savage, Jennifer (2008)
Professor, Economics
B.A., University of Colorado, Colorado Springs
M.A., University of California, Irvine

Scane, Danielle (2006)
Professor, Business
B.A., Arizona State University
M.S., Amberton University

Schneideman, Robert (1997)
Professor, Counseling Services
Assistant Professor, Kinesiology and Athletics
B.S., California State University, Fullerton
M.H.A., University of Phoenix

Sevi, Kayleigh (2015)
Assistant Professor, English
B.A., M.A., California State University, Long Beach

Sherman Falcioni, Jocelyn (2009)
Professor, World Languages
B.A., Azusa Pacific University
M.A., University California, Los Angeles

Simpkin, Phillip (2018)
Instructor, Philosophy and Religious Studies
A.A., Golden West College
B.A., M.A., California State University, Long Beach

Simpson, Melissa (2001)
Professor, Culinary Arts
B.S., University of Missouri

Smith, C. Doug (2002)
Assistant Professor, Kinesiology and Athletics
Assistant Coach, Football
B.S., Bowling Green State University
M.S., California State University, Fullerton

Smith, Kevin (2004)
Assistant Professor, Kinesiology and Athletics
Head Coach, Soccer
B.A., University of California, Irvine
M.S., National University

Smith, Ward (2016)
Instructor, Librarian
B.A., Birmingham-Southern College
M.A., University of California, Los Angeles

Smolin, James M. (2005)
Professor, Psychology
B.A., M.A., California State University, Long Beach
Ph.D., Purdue University, Indiana

Sogo, L. Farah (1999)
Professor, Biology
B.A., University of California, Riverside
Ph.D., University of California, San Diego

Spencer, Steven (2001)
Assistant Professor, Kinesiology and Athletics
Head Coach, Men's Basketball
A.A., College of Marin
B.A., Sonoma State University
M.S., California Lutheran University

Stanton, Jordan (2017)
Instructor, History
B.A., University of Illinois at Champaign-Urbana
M.A., University of Chicago

Ph.D., University of California, Irvine

Stuart, Andrew (2016)
Professor, English
B.A., M.A., California State University, Long Beach

Stuart, John (2007)
Associate Professor, Heating, Ventilation, Air Conditioning and Refrigeration
B.A., California State University, Fullerton
M.A., California State University, Long Beach

Sugden, James (2008)
Assistant Professor, Accounting
B.A., California State University, Northridge
M.B.A., University of Southern California

Ternes, Linda (2018)
Associate Professor, Mathematics
B.A., Vanguard University
M.S., California State University, Long Beach

Tom, Eileen (2008)
Professor, Counseling Services
B.A., California State University, Long Beach
M.A., University of California, Los Angeles

Topping, Holly (2008)
Associate Professor, Art
B.F.A., Otis College of Art and Design
M.F.A., University of California, Irvine

Traver, Maria (2007)
Assistant Professor, Counseling Services
A.A., Irvine Valley College
B.S., California State University, Fullerton
M.A., California State University, Long Beach

Vidal, Jared (2019)
Counselor, Transfer Center
M.S., California State University, Los Angeles
B.A., California State University, Fullerton

Vieau, Arlene (1997)
Assistant Professor, Chemistry
B.A., University of Hawaii
M.S., California State University, Fullerton

Voicu, Mariana (2001)
Professor, Mathematics
B.A., California State University, San Bernardino
M.S., University of California, Irvine

Volkoff, Cora (2016)
Instructor, Digital Media Arts and Design
B.A., University of California, Davis
M.A., National University

Wagner, Laura (2018)
Instructor, English
B.A., Williams College
Ph.D., University of California, Berkeley

Wang, Yilin (2017)
Instructor, Chemistry
A.A., Santa Fe College  
B.S., University of Florida  
M.S., University of Tennessee, Knoxville  
Ph.D., University of California, Irvine  

Watson, Maryann (2001)  
Professor, Computer Information Systems  
A.A., Long Beach City College  
B.A., California State University, Long Beach  
M.Ed., Azusa Pacific University  

Weatherford, Leigh Ann (2001)  
Assistant Professor, English  
B.A., University of Virginia  
M.A., San Diego State University  

Wells, Julie (2016)  
Instructor, Biology  
B.A., University of California, Santa Barbara  
Ph.D., University of California, Irvine  

Wheaton, Dana (1991)  
Professor, Music  
B.A., California State University, Humboldt  
M.A., California State University, Long Beach  

Whitridge, Roger (1999)  
Professor, Art  
M.A., California State University, Long Beach  
M.F.A., Claremont Graduate School  

Wickremesinghe, Manoj (2005)  
Professor, Counseling Services: Articulation Officer  
B.A., University of California, Los Angeles  
M.A., California State University, Fullerton  
M.A., California State University, Dominguez Hills  
Ed.D., University of Southern California  

Williams, Jennifer (2017)  
Instructor, Kinesiology, Head Track and Field Coach  
A.A., Rancho Santiago College  
B.S., San Diego State University  
M.S., Azusa Pacific University  

Zitter, Jeremy (2001)  
Professor, English  
B.A., M.A., California State University, Long Beach  

Zuidervaart, Genevieve (2012)  
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A.A., Cypress College  
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B.A., Interpersonal and Organizational Communication, University of Central Florida  

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B.S., Physical Education, Biola University  
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B.A., Biblical Literature, Oral Roberts University  
M.S., Library Science, University of Arizona  
Ph.D., Philosophy and Religion, California Institute of Integral Studies

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B.S., State University of New York, Utica/Rome

Vacant  
Dean, Consumer and Health Sciences

Vacant  
Executive Director, Marine Programs

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B.S., Management, and Operations Management, California State University, Long Beach  
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D.B.A., Argosy University

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M.A., Business Administration, University of Redlands

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M.A., Fuller Theological College  
M.S., California State University, Los Angeles  
Ed.D., University of California, Irvine

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B.A., Child Development and Family Studies, California State University, Long Beach  
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B.A., Interdisciplinary Studies, University of California, Berkeley  
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J.D., Loyola Law School, Los Angeles  
B.A., English, University of California, Irvine

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A.A., General Studies, El Camino College  
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M.S., College Student Services Administration, Oregon State University

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B.S., Public Administration, University of Southern California

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B.A., Latin American Studies, California University, Fullerton  
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B.A., Psychology and Social Behavior; B.A., History, University of California, Irvine  
M.A., Public Administration, California State University, Long Beach

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A.A., English, Orange Coast College  
B.A., English, California State University, Fullerton  
M.S., Counseling, National University

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B.A., Political Science, University of Hawai‘i at Manoa

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Director, Mental Health Services  
B.A., Sociology, College of William and Mary  
M.A., Clinical Psychology, Pepperdine University

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Dean of Students  
B.A., Social Work, Azusa Pacific University  
M.A., Social Sciences, Higher Education Administration, Azusa Pacific University  
Ed.D., Education and Organizational Leadership, University of La Verne

**Administrative Services**  
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B.A., Psychology, California State University, San Diego  
M.B.A., Technology Management, University of Phoenix  
Ed.D., Education Leadership, California State University, Long Beach

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A.A., Liberal Arts, Santiago Canyon College

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Grounds Supervisor

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B.A., Criminal Justice and Sociology, California State University of Fullerton  
M.A., Behavioral Sciences, California State University of Dominguez Hills

**Vacant**  
Director IT, Academic and End User Support

**Vacant**  
Director, College and Community Support

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**John Weispfenning, Ph.D.**  
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**Andrew Dunn, Ed.D**  
Vice Chancellor, Administrative Services and Finance

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**Marco Baeza, Ed.D**  
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**Student Trustee**
Medical and Dental Advisors for the School of Allied Health Professions

Alavneyjad, Bahram, M.D.
Respiratory Care

De Silva, Bertrand R., M.D.
Polysomnographic Technology

Goodwin, Scott C., M.D.
Radiologic Technology

Jennings, Sally, RNP
Medical Assisting

Kiciman, Nafiz M., M.D.
Cardiovascular Technology

Lim, Lester, D.D.S.
Registered Dental Assisting

Nuwer, Marc, M.D., Ph.D.
Neurodiagnostic Technology

Stratton, Sam, M.D.
Emergency Medical Services

Yu, Maurice, M.D.
Diagnostic Medical Sonography

Major Clinical Affiliates for the School of Allied Health Professions

American Heart Association

Anaheim Memorial Medical Center, Anaheim
Cardiology Specialist of Orange County, Santa Ana
Care Ambulance Services, Inc., Orange
Cedars-Sinai Medical Center, Los Angeles
Children’s Hospital of Orange County (CHOC), Orange
Children’s Hospital of Los Angeles, Los Angeles
Children’s Learning Connections, Inc., Santa Ana
Children’s Speech Center, Torrance
Desert Regional Medical Center, Palm Springs
Doctor’s Ambulance Service, Laguna Hills
Fountain Valley Regional Hospital and Medical Center, Fountain Valley
Healthbridge Children’s Rehabilitation Hospital, Orange Coast College
Hoag Memorial Hospital Presbyterian, Newport Beach
Hoag Memorial Sleep Diorders Center
Huntington Beach Hospital, Huntington Beach
Inland Valley Regional Medical Center, Murrieta
Kaiser Foundation Hospitals, Southern California Region
Lakewood Regional Medical Center, Lakewood
Loma Linda University Medical Center, Loma Linda
Long Beach Memorial Medical Center, Long Beach
Los Alamitos Medical Center, Los Alamitos
Los Angeles County/USC Medical Center, Los Angeles
Los Angeles Harbor/UCLA Medical Center, Torrance
Mission Hospital Regional Medical Center, Mission Viejo
Mission Sleep Disorders Institute, Mission Viejo
Newport Language and Speech Center, Mission Viejo
Norris Cancer Center, Los Angeles
Obsterix, Inc., Long Beach
Ocean Sleep Medicine, Aliso Viejo
Orange Coast Memorial Medical Center, Fountain Valley
Orange County Department of Education
Orange County Department of Health and Human Services, WIC Program, Santa Ana
Pacific Cardiovascular Associates, Costa Mesa
Palmar Pomerado Health, San Diego
Pomona Valley Hospital Medical Center, Pomona
Pomona Valley Sleep Disorders Center, Pomona
Presbyterian Intercommunitiy Hospital, Whittier
Providence Health System - John Wayne Cancer Institute, Santa Monica
Providence Health System - Little Company of Mary, Torrance
Providence Health System - St. Elizabeth Care Center, North Hollywood
Providence Health System - St. John’s Health Center, Santa Monica
Providence Health System - St. Joseph Medical Center, Burbank
Providence Health System - Tarzana Medical Center, Tarzana
Providence Health System - 17 Other Facilities, Various Locations
Rancho Los Amigos Hospital, Downey
Riverside Community Hospital, Riverside
Saddleback Memorial Medical Center, Laguna Hills and San Clemente
St. Joseph Hospital, Orange
St. Jude Hospital and Rehabilitation Center, Fullerton
St. Mary Medical Center, Long Beach
San Bernardino County Medical Center, San Bernardino
San Clemente Hospital Medical Center
Shoreline Speech and Language Center, Hermosa Beach
Sleep Center of Orange County, Irvine
South Coast Medical Center, Laguna Beach
Speech, Language and Learning Center, San Juan Capistrano
Stanford University Medical Center, Stanford
Torrance Memorial Medical Center, Torrance
Tri-City Medical Center, Oceanside
UC Davis Health Systems, Sacramento
UCI Medical Center, Orange
UCLA Neuropsychiatric Institute, Los Angeles
UCLA School of Dentistry, Los Angeles
UCLA Sleep Disorders Center, Los Angeles
USC Universiity Hospital, Los Angeles
Veterans Administration Medical Center, Long Beach
West Anaheim Medical Center, Anaheim
Western Medical Center, Santa Ana
Western Medical Center – Anaheim
Numerous Ambulances Services, Clinics, Convalescent Hospitals, Dental Offices, Physician Offices, School Districts, and Skilled Nursing Facilities

Emeritus

Members of the full-time faculty and academic administrators are granted emeritus status upon their retirement in recognition of their service to the college.

Adan, Amina
Professor, History, Geography
1992-2018

Adelmann, Daniel
Professor, Allied Health/Respiratory Care
1980-2012

Akers, Thomas M.
1975-2011

Anthony, Patricia
Professor, Airline Travel Careers
1978-2003

Arfsten, Patricia E.
Professor, Counseling Services
1974-2010

Arnold, Herrick F.
Professor, Political Science/History
1969-2016

Ashbaugh, Stanley
Professor, Chemistry
1974-98

Attore, Lois Shafquat
Professor, Psychology
1979-06

Baker, Edward R.
Dean, Fine Arts
1968-98

Bandaruk, Theodore W.
Professor, Biology
1971-2010

Banoczi, Walter R.
Professor, Neurodiagnostic Technology
1996-2016

Beard, Daniel R.
Professor, Food Service Management/Business
1975-2016

Belcher, Mary J.
Professor, Early Childhood Education
1985-2012

Bellah, Geoffrey
Professor, English
1991-2014

Bennett, Jane
Professor, Business Law
1974-2004

Bennett, Lawrence T.
Professor, French/English
1961-1984

Berger, Irina V.
Associate Professor, Russian/History
1963-1984

Bingo, George
Professor, Aviation Technology
1968-1988

Bise, Robert G.
Professor, Economics
1965-2009

Blanc, George
Administrative Dean, Economic Development and Community Education
1974-2003

Bloomfield, Lisa
Professor, Digital Media Arts and Design
1999-2016

Bosse, Dean A.
Professor, Learning Specialist
1975-2004

Bouhey, Ann
Professor, Emergency Medical Technology
1976-2003

Bowen, Shirley A.
Professor, Coordinator of Tutorial Center
1986-1998

Brady, John P. Jr.
Professor, Electronics
1977-1998

Brand, Joanna
Professor, Librarian
1992-2004

Brand, Jon S.
Professor, Geography
1965-1998

Breece, William H.
Professor, Anthropology
1991-2016

Brown, John Tormay
Associate Professor, Civil Technology
1975-1988

Brown, Susan
Administrative Dean, Admissions and Records
1964-1995

Bruce, Silas
Professor, Wastewater Technology
1970-1988

Buckley, John M.
Division Dean; Professor, Political Science and American Studies
1969-2001

Bullard, Barbara Burgess
Professor, Speech
1966-2004

Burchett, Dean
Professor, Psychology/Counselor
1956-1984

Burke, Carol A.
Professor, English
1976-2004

Butler, Dennis
Professor, Business Education
1981-2004

Cabral, Marta
Professor, Counseling Services
2001-2018

Catnett, James
Director of Community Relations
1971-2008

Carlson, Lawrence A.
Professor, English
1966-2000

Carlson, N. Ravin
Associate Professor, Construction Technology
1999-2016

Jim Carnet
Director, Community Relations
1971-2008

Carroll, Kathleen "Kat"
Professor, Speech
1985-2018

Carter, Minette
Professor, French
1966-2004

Cary, Bruce
Professor, Counseling Services; Articulation Officer
1972-2003

Casados, Victor G.
Professor, Art
1967-2007

Cesareo, Miljenko
Professor, Physics
1964-1989

Chard, Richard
Administrative Dean, Vocational Education
1980-1992

Chardonnay, Carole
Professor, Music
1974-2008

Childs, Thomas H.
Assistant Professor, Political Science; Student Placement Director
1964-1985

Clark, Linda S.
Professor, Early Childhood Education
1986-2006

Clarke, James E.
Professor, Construction Technology
1971-1998

Clasby, Joan M.
Professor, Diagnostic Medical Sonography
1982-2004

Clifton, Robert B.
Professor, Aviation Technology
1969-1999

Coates, Mona A.
Professor, Sociology
1967-2004

Cole, Norman H.
Professor, Biology
1973-2004

Coleman, Susan
Professor, Interior Design;
Coordinator of Career Education  
1975-2004

Collins, Donald L.  
Professor, Biology  
1969-2004

Conner, Gregory (1990)  
Professor, English as a Second Language  
1990-2018

Cool, Phyllis  
Professor, Counseling Services  
1980-2003

Cooper, Barbara  
Professor, Food Service Management  
1986-2018

Cortez, Jose O.  
Professor, Machine Technology  
1999-2010

Cowperthwait, Sarah M.  
Professor, English as a Second Language  
1976-1993

Cron, James R.  
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1971-1993

Crutcher, Robert  
Professor, Art  
1977-2000

Curtis, Adrienne R.  
Associate Professor, Chemistry  
1976-1999

Daniels, Sharon Callaway  
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1973-2011

Danziger, Lesley  
Professor, English  
1990-2006

Decker, Karen G. A.  
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1970-2004

Dees, Robert  
President  
1976-2009

Denton, Bob C.  
Professor, Mathematics  
1986-2006

Dimsdale, Jeffery M.  
Dean, Student Services  
1968-2000

Donoff, Sharon K.  
Vice President, Student Services  
1971-2000

Doss, Richard  
Professor, Philosophy  
1971-1995

Dowling, Thomas  
Professor, Art  
2000-2017

Duddridge, Dorothy  
Professor, Dance  
1961-1984

Duong, Nghia  
Professor, Counseling Services  
1989-2019

Earick, Dianne  
Associate Professor, English as a Second Language  
1992-2014

Eastman, Judith B.  
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1974-2000

Eldon, Freda S.  
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1962-1995

Ellis, Gerald  
Dean, Evening College; Professor, Engineering/Math  
1954-1982

Everhart, Howard  
Professor, Air Transportation  
1970-1985

Ezell, Michael  
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1978-2004

Farrell, Dan  
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1980-2012

Farrell, Gene  
President  
2002-2005

Ferazzi, Patricia A.  
Professor, Physical Education and Athletics  
1974-2004

Fereira, Virginia "Ginny"  
Professor, Physical Education and Athletics  
1975-2003

Fitzel, Gordon L.  
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1978-2000

Feisthammel, Audrey M.  
Professor, Home Economics  
1968-1986
Finnegan, Michael  
Professor, English  
1965-1998

Flowers, Carol L.  
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Foley, William H.  
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1974-1995

Fratantaro, Edward G.  
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1965-1988

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1989-2010

Golden Jill  
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1999-2012

Goldmann, Tamar  
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1985-2018

Goldner, Pamela  
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1981-1994

Golson, D. Alexander  
Professor, Theatre Arts  
1986-2013

Gosbert, David F.  
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1977-2007

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Professor, English  
1980-2002

Grams, Carol Ann  
Professor, Psychology  
1968-2003

Grant, David A.  
President; Dean of Students  
1962-1995

Gratton, Margeret  
President  
1996-2002

Grazaitis, Mariana  
Professor/Library  
1965-1988

Green, Charles B.  
Professor, Psychology  
1971-2004

Griggs, Patricia A.  
Associate Professor, Counseling Services  
1984-1995

Guillen, Alex  
Professor, Counseling Services  
1989-2016

Hall, William  
Professor, Film/Video  
1991-2017

Hanchett, Florence L.  
Associate Professor, Sociology  
1969-2003

Hancock, Robert J.  
Professor, Mathematics/Engineering  
1969-2003

Harmer, Ann Tonn  
Professor, Biological Sciences  
1978-2008

Hayes, Laird  
Professor, Physical Education and Athletics  
1976-2011
Hayward, Valerie J.
Professor, Mathematics
1989-2010

Hearlson, Kenneth W.
Professor, Political Science
1980-2011

Heavern, Irene J.
Professor, English
1991-2010

Hendrickson, Novelle
Instructor, Interiors/Clothing and Textiles
1974-1987

Henry, Lorraine A.
Professor, Radiologic Technology
1985-2012

Hoepner, Robert L.
Professor, Counseling Services
1964-1995

Hoffman, Gary S.
Professor, English
1971-2011

Hoffman, Theodore
Professor, Electronics
1965-1991

Hokanson, Fred A.
Dean, Physical Education and Athletics; Professor Physical Education
1969-2003

Holben, Carol Ann
Associate Professor, Mathematics
1970-1998

Howe, Richard L.
Professor, Business Education
1964-1996

Huang, Eleanor B.
Professor, Dietetic Technology
1976-2009

Hutchinson, Richard
Professor, Welding Technology
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Ichino, Paul T.
Associate Professor, Radiologic Technology
1976-1988

Iseman, Toni E.
Professor, Counseling Services
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Jackson, Ann
Counselor, Professor of English
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Jackson, Nicolette A.
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James, Gary
Dean, Math and Sciences, Professor
1967-1993

Jarman, David L.
Professor, Construction Technology
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Jennings, Donald
Professor, Fine Arts/Ceramics
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Johnson, Stanley N.
Dean, Mathematics and Science
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Johnston, David W.
Associate Professor, Philosophy
1960-1998

Jones, Sharon S.
Professor, Health and Physical Education
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Jorgensen, James C.
Professor, Physical Education and Athletics
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Jupiter, Cheryl
Professor, Counseling Services; Director, Transfer Center
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Karasuda, Shin
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Karr-Powell, Arlene
Professor, Music
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Professor, Counseling Services
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Professor, Counseling Services
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Kelly, Marilyn
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Professor, Biological Sciences
1973-2009
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<td>1975-2007</td>
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<td>Klammer</td>
<td>Karen</td>
<td>Associate Professor, Business Education</td>
<td>1976-2004</td>
</tr>
<tr>
<td>Knox</td>
<td>John</td>
<td>Associate Professor, Kinesiology and Athletics; Head Coach, Track and Field</td>
<td>2001-2017</td>
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<td>Sheila S.</td>
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<td>Connie Mack</td>
<td>Associate Professor, Dental Technology</td>
<td>1972-1991</td>
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<td>Joan</td>
<td>Counselor, Professor of English</td>
<td>1976-2003</td>
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<td>James A.</td>
<td>Counselor, Professor of Psychology</td>
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<td>Kunzler-Yett</td>
<td>Betil</td>
<td>Professor, Anthropology</td>
<td>1989-2010</td>
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<td>Margaret</td>
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<td>Cheri L.</td>
<td>Professor, Fashion</td>
<td>2001-2016</td>
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<td>Robert</td>
<td>Professor, Film/Video</td>
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<td>Lawrence P.</td>
<td>Professor, Art</td>
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<td>Professor, Horticulture</td>
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<td>Herb F.</td>
<td>Professor, English/Physical Education and Athletics</td>
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<td>Louie</td>
<td>Dennis H.</td>
<td>Professor, Office Information Systems</td>
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<td>Martha</td>
<td>Professor, Computer Science</td>
<td>1998-2018</td>
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<td>Janice C.</td>
<td>Professor, Kinesiology and Athletics</td>
<td>1976-2013</td>
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<td>Dean, Social and Behavioral Sciences</td>
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<td>Lauri R.</td>
<td>Professor, Photography</td>
<td>1968-1996</td>
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<td>Mary Martha</td>
<td>Professor, Physical Education and Athletics</td>
<td>1990-2003</td>
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<td>Douglas</td>
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<td>1974-2010</td>
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<td>George R.</td>
<td>Professor, Physical Education and Athletics, Assistant Football Coach</td>
<td>1963-1993</td>
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<td>Ernest W.</td>
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Professor, Physical Education and Athletics; Baseball Coach
1976-2004

McChesney, Mary
Professor, Spanish
1950-1983

McDonough, Catherine
Director, Student Health Service/Associate Professor
1971-1995

McGill, John R.
Executive Dean, Instruction, Dean, Admissions, Records and Information Services
1966-1988

McIlwain, James L.
Vice President, Administrative Services
1965-2003

Melrose, Charlene Tichy
Professor, Psychology
1972-2016

Mitchel, Robert
Dean, Business Division; Associate Professor, Business Education
1960-1988

Moeller, Linda A.
Associate Professor, Physical Education and Athletics; Head Coach, Women's Crew
1981-2005

Morgan, Patricia J.
Associate Professor, Home Economics
1959-1995

Morin, Sylvette
Professor, English as a Second Language
1989-1999

Netoliczka, Elisabeth
Associate Professor, Spanish
1991-2004

Nauta, Dale
Professor, Mathematics
1990-2019

Nudelman, Jack
Assistant Professor, Electronics Technology/Avionics
1980-2010

O'Conner, Robin
Professor, Kinesiology and Athletics
2003-2019

O'Keeffe, Thomas
Assistant Professor, English
1979-2000

Oberhaus, Mary Ann
Professor, Marketing/Management
1977-2003

1967-1998

Olds, Michael V.
Professor, Economics
1983-2007

Olson, Judith O.
Professor, Airline and Travel Careers
1974-2004

Osborne, Tom
Professor, Business Education
1954-1983

Oritz, Kenneth K.
Administrative Dean, Special Services
1976-2004

Oviatt, Vinta (1997)
Professor, Librarian
1997-2018

Padden, William E.
Associate Professor, Aviation and Space
1991-2000

Paladino, Alan M.
Professor, Electronics Technology
1976-2003

Parker, John R.
Professor, Ornamental Horticulture
1974-2004

Phan, Dat Huy
Professor, Counseling Services
1985-2009

Ponder, Johnny
Instructor, Computer Information Systems
1971-1992

Price, David G.
Professor, Electro/Mechanical Drafting
1974-1998

Priddy, Barbara J.
Professor, Business Education
1973-1998

Ragenovich, Christine
Professor, Political Science
1989-08

Rees, Henry M.
Professor, Construction Technology
1975-1998

Reese, James I.
Professor, Geology
1972-1988

Remington, Alan
Associate Professor, Music
1977-2003
Richards, Jerrel T.
Dean, Counseling, Psychology and Special Services
1958-1984

Riddick, Glenda
Associate Professor, Human Development
1971-1994

Ring, David C.
Professor, Philosophy
1999-2015

Robinson, Stephen J.
Professor, Fine Arts/Sculpture
1974-2011

Rogers, Marcia A.
Professor, English
1997-2016

Romans, Van A.
Professor, Fine Arts
1973-2003

Rose, Judy
Professor, Dental Assisting
1976-2007

Roundy, Willard H.
Professor, Chemistry
1965-2002

Rubinstein, Nanacy Lee
Professor, Business Education
1965-1988

Ruetter, Donald B.
Professor, Computer Information Systems
1971-2004

Salessi, Susana N.
Professor, Spanish/Italian
1974-2004

Salibi, Nuha
Professor, English as a Second Language
1992-2013

Salinger, Joan A.
Professor, Art/Photography
1987-2016

Sanford, John R.
Associate Professor, Photography
1969-1998

Scarfone, Patricia M.
Professor, Spanish/Italian
1986-2004

Schmitz, Joseph
Associate Professor, Art
1972-1984

Scripsma, Kenneth E.
Associate Professor, Hotel Management
1971-1992

Shanley, Karen L.
Professor, Dance
1976-2000

Sharkey, Donna L.
Professor, Art
1962-1986

Shaw, Kenneth H.
Assistant Professor, Electronics Technology
1982-2003

Shrock, Cheryl R.
Professor, Computer Aided Design/Drafting
1990-2009

Simon, Richard
Professor, Communications/Business
1984-2000

Simonds, Robert
Professor, Construction Technology
1963-1981

Sjule, Gerald
Professor, Counseling Services
1962-2019

Skeie, Leon
Professor, Kinesiology and Athletics
1973-2016

Slaughter, Robert L.
Professor, Business Education
1968-1991

Slosberg, Kenneth
Professor, Photography
1974-2006

Smith, Douglas C.
Professor, English
1966-1998

Smith, Edith G.
Professor, Music
1971-1998

Smith, Robert B.
Professor, Psychology 1971-04
1985-2014

Snow, Roslyn
Professor, English
1962-1998

Sohl-Ellison, Linda
Professor, Dance
1980-2016

Steadry, Frederick A.
Associate Professor, Photography
1971-2012
Steinfeld, Thomas E.
Professor, Architecture
1999-2010

Stephens, Roy L.
Professor, Aviation and Space
1976-1994

Stoneking, Joyce
Professor, Business Education
1978-2004

Storm, Sara
Professor, English as a Second Language
1992-2018

Suzuki, Lori L.
Professor, History
1989-2009

Tarlós, Theresa
Associate Professor, Geography
1999-2009

Taussig, H. Arthur
Professor, Photography
1972-2003

Taylor, Michael
Professor, English; Kinesiology and Athletics
Assistant Coach, Football
1991-2018

Tennant, Wayne W.
Professor, Fine Arts
1972-2011

Timmins, Terry
Professor, Sociology/Anthropology
1971-2013

Thompson, Jean
Associate Dean, Community Services
1957-1981

Tolson, Janet M.
Professor, Counseling Services
1988-2003

Tomchak, Joseph
Professor, Anthropology
1958-1986

Toy, Sandra E.
Professor, Business Education
1975-2003

Upton, John
Professor, Photography
1965-1998

Vail, Doreen W.
Professor, Sociology
1965-2003

Varga, John L.
Professor, Accounting
1976-2008

Visco, Frank J.
Professor, Biology
1968-2004

Visintainer, Linda L.
Associate Professor, Radiologic Technology
1991-2003

Wallace, Barry C.
Professor, Physical Education and Athletics; Head Coach, Men's and Women's Golf
1968-2003

Wasserman, Larry
Professor, Art
1975-1998

Webb, Debbie K.
Associate Professor, Librarian
1984-2012

Wendell, Robert
Associate Professor, Art
1973-2009

Westerman, Donna
Professor, Art
1976-2007

Wetzel, Robert C.
Professor, Physical Education and Athletics
1964-1995

Whitmore, Lynn A.
Professor, English
1992-2004

Willis, Margie Canfield
Professor, Allied Health/Medical Assisting
1975-2010

Wilson, Robert L.
Dean, Business Education; Professor, Business Education
1969-1995

Win, U Kyaw
Professor, Counseling Services
1968-1998

Winter, Nicolas
Associate Professor, English as a Second Language
1980-2013

Wolfe, Judith A.
Associate Professor, Spanish/French
1975-2003

Workman, William
Professor, Physical Education and Athletics; Head Football Coach
1986-2000

Wylie, James
Professor, Chemistry
1953-1985

Wynne, Ann M.
Professor, History
1985-2011

Yanaga, Randall K.
Associate Professor, Mechanical Drafting/Machine Technology
1986-2010

Yates, Ronald L.
Instructor, Computer Information Systems
1985-2007

Yett, Jay R.
Professor, Geology/Natural Science
1984-2010

Yost, Betty
Professor, Biology
1976-1990

Zellerbach, Charles
Associate Professor, Business
2005-2016

Zhe, Robert R.
Associate Professor Counselor, Disabled Students
1989-2014
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