

# 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 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) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-arts-general-education-option-1/>), 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) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-degree-general-education-option-2/>), or Option 3 (IGETC (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-degree-general-education-option-3/>)) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

| Course                  | Title                                | Units |
|-------------------------|--------------------------------------|-------|
| <b>Required Courses</b> |                                      |       |
| APT A130                | Private Pilot Aviation Ground School | 5     |
| APT A132                | Aviation Navigation                  | 3     |
| APT A133                | Aviation-Meteorology                 | 3     |
| APT A146                | Advanced Aircraft & Engines          | 3     |
| APT A180                | Basic Air Transportation             | 3     |
| Subtotal                |                                      | 17    |

## Tracks

### Track 1

| Course   | Title                                   | Units |
|----------|---|-------|
| APT A134 | Instrument Pilot Aviation Ground School | 3     |
| APT A138 | Aerodynamics                            | 3     |
| APT A139 | Commercial Pilot Aviation Ground School | 3     |
| Subtotal |   | 9     |

### Track 2

| Course   | Title                              | Units |
|----------|------------------------------------|-------|
| APT A110 | Introduction to Airport Operations | 3     |
| APT A115 | Introduction to Flight Operations  | 3     |
| APT A145 | Airline Transport Pilot Ground     | 3     |
| Subtotal |                                    | 9     |

## Electives

| Course  | Title                                | Units |
|---|--------------------------------------|-------|
| Select six units of the following (courses above may not fulfill elective units): |                                      |       |
| APT A110  | Introduction to Airport Operations   |       |
| APT A115  | Introduction to Flight Operations    |       |
| APT A120  | Private Pilot Flight Lab             |       |
| APT A121  | Instrument Pilot Flight Lab          |       |
| APT A122  | Commercial Pilot Flight Lab          |       |
| APT A123  | Private Pilot Advanced Flight Lab    |       |
| APT A124  | Advanced Commercial Pilot Flight Lab |       |
| APT A126  | Multi-Engine Aircraft Operations Lab |       |

| Course    | Title                                      | Units |
|-----------|--|-------|
| APT A140  | Flight Instructor Ground School            |       |
| APT A145  | Airline Transport Pilot Ground             |       |
| APT A146  | Advanced Aircraft & Engines                |       |
| APT A192  | Human Factors and Crew Resource Management |       |
| ACCT A101 | Financial Accounting                       |       |
| ACCT A102 | Managerial Accounting                      |       |
| ECON A170 | Microeconomics                             |       |
| ECON A175 | Macroeconomics                             |       |
| Subtotal  |  | 6     |

**Total Units: 32**

| Requirement  | Units  |
|--|--------|
| Program Major Units                                | 32     |
| AS General Education Option 1, 2, or 3             | Varies |
| Transferable electives to satisfy unit requirement | Varies |
| Total Degree Units                                 | 60     |