

ELECTRONICS, CERTIFICATE OF ACHIEVEMENT

Financial Aid Eligible
Banner Code: 3_CN_ELEC
Control Number: 19336

This sequence of classes is designed to give the student a solid foundation in Electronics using applied theory to solve practical applications utilizing the materials and forces of nature for the benefit of society. Students who successfully complete this sequence of classes will be able to pursue a bachelor's degree in Engineering or Engineering Technology or be employed as a skilled productive member of an Engineering team in Industry. Areas of interest in this program include theory and application of electric and electronic systems and components, including circuits, electro-magnetic fields, energy sources, communications devices, computers, and other components and devices powered by electricity. Design, assembly, installation, operation, maintenance, and repair of electronic equipment used in industry and manufacturing including the fabrication and assembly of related components. Design, development, testing, and maintenance of electro-mechanical and servo-mechanical devices and systems.

Program Level Student Learning Outcomes

Upon completion of this program, students will be able to:

1. Design and build several of the most common circuits used in electronics technology.
2. Analyze operating and defective electronic circuits by interpreting data from a variety of test and measurement equipment.
3. Research and interpret basic electronic components using manufacturer's data manuals, library resources, and the Internet.

Certificate Graduation Requirements

A Certificate is awarded upon completion of the required coursework with a grade of C or higher in each course. A grade of P (Pass) is acceptable, however, the student must meet an overall GPA requirement of 2.0 to receive the certificate. To receive the certificate, a student must file a petition for graduation during their final semester prior to the application deadline as noted on the Coastline Graduation webpage (<https://www.coastline.edu/student-life/graduation.php>).

Certificate of Achievement

Certificate programs are designed to prepare individuals to enter a particular field of employment or to provide in-service training to those already employed. Certificates of Achievements are majors that include 16 units or more and will be posted on the transcript. They may be used as elective units towards the A.A. or A.S. Degree.

- Student must be in attendance at the time requirements are completed.
- Students must also earn a minimum of 12 units of coursework at Coastline, excluding experiential credit.
- A student with prior experience may be excused from certain certificate courses.

- 50 percent of the certificate program's units must be completed at Coastline no matter how the total number of units required for the certificate can be met.

Course	Title	Units
Required Core		
Students will complete all of the following:		
ELEC C101	Introduction to Electronics with Computer Application	3
ELEC C102	DC Circuit Analysis	4
ELEC C103	AC Circuit Analysis	4
ELEC C104	Digital Computer Electronics	3
Program Electives		
Select a minimum of 10 units of the following:		10
ELEC C204	Semiconductor Devices and Circuits	
ELEC C210	Analog Electric Circuit Analysis	
ELEC C230	Advanced Digital Electronics	
ELEC C240	Microcomputer Systems and Assembly Programming	
ELEC C272	Electronic Manufacturing	
ELEC C280	Basic Electrical Machines	
ELEC C281	Work Based Learning	
or ELEC C282	Work Based Learning	
or ELEC C283	Work Based Learning	
or ELEC C284	Work Based Learning	
Total Units		24

Courses for a degree in Electronics at Coastline are offered through our Military/Contract Education Program with distance learning (online) delivery designed to meet the needs of our global military community. The class schedule and degree roadmap for this program can be found at <http://military.coastline.edu>. Students who wish to pursue a degree or certificate in Electronics who live in the local Orange County or nearby areas and are not eligible for enrollment in our Military/Contract Education Programs are encouraged to visit our sister college, Orange Coast College, the home college for Electronics. Information about their Electronics Program may be found at www.orangecoastcollege.edu (<http://www.orangecoastcollege.edu>).