DEGREES & CERTIFICATES

ELECTRICAL ENGINEERING ASSOCIATE OF SCIENCE (AS)

About the Program
The Associates of Science in Electrical Engineering is offered to prepare students to transfer to a California State University or other university (with the exception of University of California) as an Electrical Engineering major. This program will enable students to develop a strong foundational understanding in engineering, physics and mathematics that will be essential as they continue on the engineering pathway. In addition, students will benefit from hands-on laboratory experiences in their engineering and science courses allowing them to learn by doing.The LPC Electrical Engineering degree is intended for transfer to a CSU or other non-UC university. Students are encouraged to meet with a counselor early on and refer to the catalog of the prospective transfer institution to determine specific major requirements required for transfer since they can vary from university to university. Finally, because this program is a high-unit major, counselors can also assist in determining appropriate general education courses to complete the degree requirements.If interested in transferring to a UC as an Electrical Engineering major, please see the Associates of Science in Electrical Engineering UC Pathway.

Program Goals and Objectives
The goal of this program is to earn a local Associates of Science degree in Electrical Engineering, with the secondary goal of transferring to a California State University or other university (with the exception of University of California) as an Electrical Engineering major. This program provides a guided path of courses to take for students who aspire to be electrical engineers and are planning on transferring to a university other than one in the UC system. Students will be able to develop a strong foundation in engineering, physics and mathematics, as well as gain critical hands-on laboratory skills that will help them to succeed in their future educational and career endeavors.

Career Opportunities
This program provides a solid foundation for those who want to continue their education and earn a bachelors degree in electrical or electronic engineering which is generally required for entry level electrical/electronic engineering jobs. This program also prepares students for entry level jobs installing, repairing and maintaining electrical and electronic equipment in numerous different industry sectors. These industry sectors may include the auto industry, aerospace industry, airline industry, commercial contracting, construction and others.

Program Outcomes

- Upon completion of the AS in Electrical Engineering, the students are able to apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
- Upon completion of the AS in Electrical Engineering, the students are able to set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
- Upon completion of the AS in Electrical Engineering, the students are able to use a variety of technological tools to solve electrical engineering problems.

Required Core: (42.5 Units)

CHEM 1A General College Chemistry I 5
ENGR 1 Introduction to Engineering 2
ENGR 26 Computational Methods for Engineers and Scientists 3
ENGR 44 Introduction to Circuit Analysis 4
MATH 1 Calculus I 5
MATH 2 Calculus II 5
MATH 3 Multivariable Calculus 5
MATH 5 Ordinary Differential Equations 3.5
PHYS 1A General Physics I 5
PHYS 1C General Physics III 5

Total Units for the Major 42.5

Program-Based GE: Select One (3 Units)

CMST 1 Fundamentals of Public Speaking 3
CMST 10 Interpersonal Communication 3

Additional General Education and Electives 14.5