

## DEGREES & CERTIFICATES

### ELECTRICAL ENGINEERING UC PATHWAY CERTIFICATE OF ACHIEVEMENT (CA)

#### About the Program

The Certificate of Achievement in Electrical Engineering is offered to prepare students to transfer a school in the University of California system 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 the University of California system. 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. If interested in transferring to a CSU or other university not in the UC system as an Electrical Engineering major, please see the Associates of Science or Certificate of Achievement in Electrical Engineering.

#### Program Goals and Objectives

The goal of the Electrical Engineering UC Pathway Certificate of Achievement is to prepare students to transfer to the University of California system in Electrical Engineering. 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 UC. The Electrical Engineering UC Pathway Associate of Science degree provides a strong foundation in engineering, physics and mathematics. Students also 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 Certificate of Achievement in Electrical Engineering UC Pathway, students are able to apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
- Upon completion of the Certificate of Achievement in Electrical Engineering UC Pathway, students are able to set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
- Upon completion of the Certificate of Achievement in Electrical Engineering UC Pathway, students are able to use a variety of technological tools to solve electrical engineering problems.

#### Required Core: (53 Units)

CHEM 1A General College Chemistry I.....	5
CS 1 Computing Fundamentals I.....	4
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
MATH 7 Elementary Linear Algebra.....	3.5
PHYS 1A General Physics I.....	5
PHYS 1B General Physics II.....	5
PHYS 1C General Physics III.....	5
PHYS 1D General Physics IV.....	3