

ENGINEERING: ELECTRICAL ENGINEERING EMPHASIS - ASSOCIATE IN SCIENCE DEGREE

Top Code: 0901.00

The Associate in Science in Engineering: Electrical Engineering Emphasis provides a strong preparation for students planning to transfer to a 4-year university and major in Electrical Engineering. The curriculum includes fundamental engineering and science core courses as well as required lower-division courses in Electrical Engineering.

Please Note: *The courses that universities and colleges require for transfer vary. When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes

1. Develop technical solutions to electrical engineering problems using principles of mathematics, science, and engineering.
2. Analyze and interpret empirical data to provide a basis for solutions to electrical engineering problems.
3. Communicate orally and in writing the results of experiments, projects, and data analysis.

Requirements for the Associate in Science Degree

Code	Title	Units
ENGR 010	INTRODUCTION TO ENGINEERING	2
MATH 005A	SINGLE VARIABLE CALCULUS I	5
MATH 005B	SINGLE VARIABLE CALCULUS II	5
MATH 005C	MULTIVARIABLE CALCULUS	5
MATH 055	DIFFERENTIAL EQUATIONS	4
PHYS 001A	PHYSICS FOR SCIENTISTS AND ENGINEERS I: MECHANICS	5
PHYS 001C	GENERAL PHYSICS	5
CHEM 001A	GENERAL CHEMISTRY AND CHEMICAL ANALYSIS I	5
ENGR 016	ENGINEERING CIRCUITS	3
ENGR 018	INTRODUCTION TO NUMERICAL ANALYSIS	3
Total Units		42

Visit the Program Mapper (<https://pasadena-city.programmapper.ws/academics/interest-clusters/35afad1b-8598-4ecf-a320-0ed4834a7df8/programs/b1eb0e33-04b9-ab2f-b348-d4a66ad3ae88/>) for a suggested sequence of courses.

General Education Requirements for the Associate in Science Degree

- General Information (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/>)

- PCC Local Gen Ed (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#pcclocaltext>)
- CSU Breadth (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#csubreadthtext>)
- IGETC (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#igetctext>)