

ENGINEERING: ELECTRICAL ENGINEERING EMPHASIS – ASSOCIATE IN SCIENCE DEGREE

Top Code:

0901.00

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

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

Requirements for the Major

Code	Title	Units
CHEM 001A	GENERAL CHEMISTRY AND CHEMICAL ANALYSIS I	5
ENGR 010	INTRODUCTION TO ENGINEERING	2
ENGR 016	ENGINEERING CIRCUITS	3
ENGR 018	INTRODUCTION TO NUMERICAL ANALYSIS	3
MATH 005A	SINGLE VARIABLE CALCULUS I	5
	or MATH 005AH HONORS SINGLE VARIABLE CALCULUS I	
MATH 005B	SINGLE VARIABLE CALCULUS II	5
	or MATH 005BH HONORS SINGLE VARIABLE CALCULUS II	
MATH 005C	MULTIVARIABLE CALCULUS	5
	or MATH 005CH HONORS MULTIVARIABLE CALCULUS	
MATH 055	DIFFERENTIAL EQUATIONS	4
	or MATH 055H HONORS DIFFERENTIAL EQUATIONS	
PHYS 008A	PHYSICS FOR SCIENTISTS AND ENGINEERS I: MECHANICS	5
	or PHYS 001A PHYSICS FOR SCIENTISTS AND ENGINEERS I: MECHANICS	
PHYS 008C	PHYSICS FOR SCIENTISTS AND ENGINEERS III: THERMODYNAMICS, OPTICS, AND MODERN PHYSICS	5
	or PHYS 001C GENERAL PHYSICS	
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>)