

## PRE-ENGINEERING

- NAS763**  
 **(CSUGE) NAS764**  
 **(IGETC) NAS765**

This program is designed to prepare students for a possible major in an Engineering related field. Possible university engineering majors include: Civil Engineering, Computer Engineering and Mechanical Engineering.

### Program Learning Outcomes

Upon successful completion of this program, students should be able to:

- Demonstrate the standard methods of mathematical analysis including trigonometry and analytic geometry, differential and integral calculus, and the solutions to differential equations.
- Demonstrate a working knowledge of the theories and principles of physics.
- Conduct experiments and analyze and interpret data collected.

### REQUIRED COURSES (24-26 UNITS)

#### UNITS

<input type="checkbox"/>	MAT 1A	CALCULUS I	4
<input type="checkbox"/>	MAT 1B	CALCULUS II	4
<input type="checkbox"/>	PHY 4A	MECHANICS OF PHYSICS	4

Choose one of the following:

<input type="checkbox"/>	PHY 4B OR	ELECTRICITY AND MAGNETISM	4
<input type="checkbox"/>	PHY 4C	HEAT, LIGHT AND WAVES	4

*\*ELECTIVES: CHOOSE FROM THE LIST BELOW*

8-10

### ELECTIVE COURSES (8-10 UNITS)

#### UNITS

<input type="checkbox"/>	CHE 1A	GENERAL CHEMISTRY, I	5
<input type="checkbox"/>	CHE 1B	GENERAL CHEMISTRY, II	5
<input type="checkbox"/>	MAT 1C	CALCULUS III	4
<input type="checkbox"/>	PHY 4B	ELECTRICITY AND MAGNETISM (if not used above)	4
<input type="checkbox"/>	PHY 4C	HEAT, LIGHT AND WAVES (if not used above)	4

### Associate of Science Degree

The Associate of Science Degree in Pre-Engineering will be awarded upon completion of the degree requirements including Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) or RCCD General Education requirements, as well as other graduation requirements as described in the college catalog.