

# ENGINEERING FUNDAMENTALS

## PROGRAMS

- **Certificate of Achievement**



**HARTNELL  
COLLEGE**

### DESCRIPTION

A student completing the Engineering Fundamentals Certificate of Achievement will gain a solid grounding in the basic principles that underlie all engineering disciplines. This certificate provides both academic preparation for and a pathway to internships. When combined with further study, it will lead to the Engineering Associate in Science Degree and/or transfer. This certificate is intended to be completed at the beginning of a student's course of study, while they are at the freshman level. As such, it prepares a student to enter most sophomore-level engineering and STEM support courses. This certificate is specifically designed to encourage and guide students to select their courses in a sequence which enables them to transfer as fast as possible. Recommendations based on majors are as follows:

- Civil or Mechanical engineering majors: Engineering 5 AND Chemistry 1A
- Computer or Software engineering majors: Computer Science 1 AND Computer Science 2A
- Electrical engineering majors: Computer Science 1 AND (Computer Science 2A OR Chemistry 1A)

Students should discuss which options make sense for them with their counselor.

### LEADS TO CAREER OPPORTUNITIES SUCH AS:

- Aerospace Engineer
- Biomedical Engineer
- Chemical Engineer
- Civil Engineer
- Computer Engineer
- Electrical Engineer
- Industrial Engineer
- Mechanical Engineer

### TRANSFER PREPARATION

Courses that fulfill major requirements for an associate degree may differ from those needed to prepare for transfer. Students who plan to transfer to a four-year college or university should schedule an appointment with a Hartnell College counselor to develop a student education plan before beginning their program.

### TRANSFER RESOURCES

www.ASSIST.org – CSU and UC Articulation Agreements and Major Search Engine

CSU System Information - <http://www2.calstate.edu>

### FINANCIAL AID

Paying for the cost of a college education requires a partnership among parents, students and the college. As the cost of higher education continues to rise we want you to know that Hartnell College offers a full array of financial aid programs, federal loan programs, and fee waivers.

<https://www.hartnell.edu/students/fa/net-price-calculator.html>