



College to Career Connection Engineering

What is Engineering?

Engineering is the application of scientific knowledge to solving problems in the real world. Their work is the link between scientific discoveries and the commercial applications that meet societal and consumer needs. Engineering enables understanding of concepts to come to life through problem solving, designing and building things. These skills rely heavily on rational thinking and logical decision making. You might want to consider a major in engineering if you like math, science, problem solving, and are creative and detail oriented. Most careers in engineering require a baccalaureate or graduate degree. The Engineering program at COC provides curriculum concerned with the fundamentals of mechanics, electrical theory, and materials that can be applied to all disciplines within engineering. The degree at COC includes courses in Solids Modeling for Mechanical Drafting, Materials of Engineering, Circuits, Statics, Dynamics, Calculus and Physics. Students can earn an associate degree in Pre- Engineering.

[COE - Engineering Associate in Science](#) - will not transfer to a 4 year university

Potential Industries/Employers

- Professional, Scientific, Technical Services
- Machinery Manufacturers
- Research and development
- Semiconductor and other electronic component manufacturing
- Federal and State Government
- Transportation equipment manufacturing
- Computer and electronic product manufacturing
- Aerospace product and parts manufacturing

Possible Job Titles

- Automotive Engineers
- Mechanical engineer
- Manufacturing engineer
- Computer engineer
- Aerospace engineer
- Electrical engineer
- Manufacturing engineer

- Mathematicians and Statisticians
- Petroleum Engineers
- Sales Engineers
- Nuclear Engineer
- Biomedical engineer
- Environmental engineering

How this Major Helps You Move Forward:

Skills Advancement

While College of the Canyons does not endorse all of these opportunities, we aim to provide access:

- [Internships](#)
- [COC Career Center](#)
- [College of the Canyons Mathematics Engineering Science Achievement \(MESA\)](#)
- [Try Engineering Competitions, Internships, Projects and Scholarships](#)

CSU/UC Major Preparation (BA/BS):

- [CSUN: Electrical Engineering B.S.](#)
- [CSUN: Manufacturing Systems Engineering B.S.](#)
- [CSULA: Mechanical Engineering - B.S.](#)
- [CPSLO: Biomedical Engineering B.S.](#)
- [UCLA: Electrical Engineering B.S.](#)
- ... and more!

Additional information can be found at:

- [What Can I do With this Major](#)
- [COC Engineering Department](#)
- [Assist: Student Transfer Information System](#)
- [Occupational Outlook Handbook](#)
- [O*NET OnLine: Job and Career Exploration](#)
- [Linkedin Alumni Tool](#)

Associations

Association is a group of people who come together for a common purpose. You can find helpful information about jobs and careers.

- [Geeky Girl Reality](#)
- [Explore Engineering](#)
- [National Society of Professional Engineers Student Resources](#)
- [National Action Council for Minorities in Engineering](#)
- [Society of Women Engineers \(SWE\)](#)
- [Accreditation Board for Engineering & Technology](#)

This is a general information. It is not an exhaustive, comprehensive list. For specific information on majors and careers please connect with your professors and visit the counseling center at <https://www.canyons.edu/studentservices/counseling> | 3/26/21