

Engineering (EGG)



PIKES PEAK
COMMUNITY
COLLEGE

Why Study Engineering?

Engineering is a high-demand, rewarding profession. An engineering degree offers opportunities to envision, design, and build the future. At PPCC, we help students obtain a solid foundation of academic rigor, excellence, and performance to put you on the path to success!

Is Engineering for Me?

Students studying engineering at PPCC will develop problem solving skills that are applicable to a wide range of engineering careers. Students learn to:

- Apply engineering techniques and math skills to real world problems, come up with potential solutions and make conclusions based on their results.
- Select appropriate methods or theoretical frameworks to solve problems.
- Apply appropriate engineering techniques, skills and models to analyze real-world issues and draw conclusions.
- Gain a broad understanding of technology, physics and engineering fields.
- Analyze the professional and ethical impacts of engineering solutions.

Engineering provides solid skills that apply to multiple disciplines. Completing this degree enables transfer to Colorado 4-year universities, and gives students a strong foundation to further their engineering studies.

Future Career Prospects

Employment in engineering occupations is projected to grow 6 percent from 2020 to 2030. About 146,000 new jobs are projected to be added. Engineers will be in demand in various areas such as rebuilding of infrastructure, renewable energy, oil and gas extraction, and robotics. Some typical career fields for engineers with a bachelor's degree include:

- Aerospace Engineers
- Biomedical Engineers
- Chemical Engineers
- Civil Engineers
- Computer Hardware Engineers
- Electrical and Electronics Engineers
- Environmental Engineers
- Mechanical Engineers
- Petroleum Engineers

Learn more about engineering careers at [onetonline.org](https://www.onetonline.org/):
<https://www.onetonline.org/link/summary/17-2141.00>

Faculty Profile

Our Engineering faculty has a range of professional experience, to include:

- Teaching Engineering and Mathematics
- Local Industry and Engineering
- Nationally Recognized Scholarly Research

Transfer Options

After earning your Associate of Engineering Science degree from Pikes Peak Community College, you may complete your Bachelors in Engineering in two years at one of several 4-year universities.

Top Transfer Institutions:

- University of Colorado – Colorado Springs
- University of Colorado – Boulder
- Colorado State University -- Pueblo
- Colorado School of Mines

Associate of Engineering Science (AES) in General Engineering

Sample Academic Plan for Full Time Student who is “calculus and chemistry ready.”

*Your personalized schedule will be best determined by meeting with an Academic Advisor.

Semester 1 (Course & Credit Hours)	Semester 2 (Course & Credit Hours)
MAT 2410 Calculus I (5)	MAT 2420 Calculus II (5)
ENG 1031 or ENG 1022 Technical Writing or English Composition II (3)	PHI 2018 Environmental Ethics (3)
EGT 1110 Intro Design/Engineering Applications (3)	CSC 1060 Computer Science I (4)
CHE 1111 General College Chemistry I with Lab (5)	PHY 2111 Physics I, Calculus Based, with Lab (5)
Total 16 Credit Hours	Total 17 Credit Hours

Semester 3 (Course & Credit Hours)	Semester 4 (Course & Credit Hours)
MAT 2430 Calculus III (4)	MAT 2562 Differential Equations with Linear Algebra (4)
PHY 2112 Physics II, Calculus Based with Lab (5)	EGG 2012 Engineering Mechanics II (Dynamics) (3)
EGG 2011 Engineering Mechanics I (Statics) (3)	Arts and Humanities/Social Science Course HIST 2015/LIT 2002/SOC 2007/POS 2025 (3)
ECO 2001 Principles of Macroeconomics (3)	AES Elective— Speak to an advisor (3)
Total 15 Credit Hours	Total 13 Credit Hours

Interested? Now what?

Never Applied?... apply for free at ppcc.edu/admissions

Applied, but not yet enrolled?... visit ppcc.edu/advising

Currently enrolled student?... visit ppcc.edu/advising