Engineering (EGG)



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/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 Mechanical 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	MAT 2420
Calculus I (5)	Calculus II (5)
ENG 1021	PHI 2018
English Composition I (3)	Environmental Ethics (3)
EGT 1110 or EGG 1020	ECO 2001
Engineering Projects (3)	Principles of Macroeconomics (3)
CHE 1111	PHY 2111
General College Chemistry I with Lab (5)	Physics I, Calculus Based, with Lab (5)
Total 16 Credit Hours	Total 16 Credit Hours

Semester 3 (Course & Credit Hours)	Semester 4 (Course & Credit Hours)
MAT 2430	MAT 2562
Calculus III (4)	Differential Equations with Linear Algebra (4)
PHY 2112	EGG 2030
Physics II, Calculus Based with Lab (5)	Mechanics of Solids (3)
EGG 2011	EGG 2012
Engineering Mechanics I (Statics) (3)	Engineering Mechanics II (Dynamics) (3)
CSC 1060	EGG 2020
Computer Science I (4)	Thermodynamics (3)
	CAD 2455
	SolidWorks/Mechanical (3)
Total 16 Credit Hours	Total 16 Credit Hours

Interested? Now what?

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

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

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