Environmental engineering

Did You Know?
Student teams from the EVEN capstone design course won the 2009 and 2012 WEFTEC national design competitions, and advanced as the winning regional team in 2013 to the national finals.

Degrees Offered
BS BS/MS

Rankings (USNWR)
Environmental Engineering ■ 13th among public graduate programs nationwide

College ■ 17th among public undergraduate engineering programs nationwide ■ 20th among public graduate engineering programs nationwide

Environmental engineers play a vital role in maintaining the quality of both human environmental systems and the natural environment. The field of environmental engineering encompasses the scientific assessment, modeling and design of engineering solutions to environmental problems impacting the biosphere, land, water, and air quality. The University of Colorado Boulder’s undergraduate environmental engineering program emphasizes sustainable, multidisciplinary approaches to managing the unique challenges and balancing the competing social, political, and economic goals of environmental problems and solutions. The degree provides mastery of principles and practices, inspires global public service, and prepares students for graduate school, professional licensure and broad, dynamic careers.

“With environmental engineering I am able to develop technical solutions to protect and play in the outdoors I love. At CU I have the resources of a large university and the camaraderie and personal attention of a small college.” — Hallie Bevan

Hands-on Learning
At CU-Boulder, students learn by doing. Environmental engineering students enjoy extensive hands-on learning opportunities through laboratory courses, field work, and undergraduate research positions. Through service learning activities such as Engineers without Borders, students apply their knowledge to real-world projects that improve the quality of life for people in developing countries.

What can I do with a degree in environmental engineering?
■ Become an environmental consultant
■ Work in industry as a licensed Professional Engineer
■ Work for a governmental agency, such as the EPA, US Geological Survey, or US Forest Service
■ Pursue a graduate degree in civil or environmental engineering, or a law or medical degree

Environmental engineering is a top job growth industry, with employment projected to increase 22% through 2020. (USBLS)
Environmental Engineering Curriculum Options

- Air Quality
- Applied Ecology
- Chemical Processing
- Energy
- Environmental Remediation
- Water Resources and Treatment
- Individualized Special Option, such as Engineering for Developing Communities
- BS/MS Program (5 years)
- Active Learning Opportunities, such as Discovery Learning Apprenticeships

Course Highlights

**Air/Earth Science Lab or Field Course**
Environmental engineering students in all curriculum options must take a three (or more) credit-hour course with a significant laboratory or field component related to air quality or earth science, enabling students to take their knowledge into the “real world” and gain firsthand engineering experience. Course choices include EVEN 4100 (Environmental Sampling and Analysis), GEOL 1010/1030 (Introduction to Geology Lab), ATOC 1050/1070 (Weather and the Atmosphere Lab), CVEN 3708 (Geotechnical Engineering 1), and more.

**Engineering Economics**
Since understanding the economic structures, constraints, and processes of engineering is key to success in the field, environmental engineering students also complete a course in engineering economics. Choices include CVEN 4147 (Civil Engineering Systems), which examines both the theory and application of engineering economics, as well as optimization techniques for evaluating problems in civil and environmental engineering; or EMEN 4100 (Business Methods and Economics for Engineers), which examines cost concepts, financial statements, project comparisons, risk management, and more.

For more information visit [www.colorado.edu/engineering/enveng](http://www.colorado.edu/engineering/enveng)