Bachelor of Science
ENVIRONMENTAL ENGINEERING
CEE.MINES.EDU

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING
The Department of Civil and Environmental Engineering produces graduates who can design and maintain sustainable built and natural environments in society. Mines offers two closely-related undergraduate programs: the BS in environmental engineering and the BS in civil engineering. Environmental engineers are responsible for the protection of our natural environment and its inhabitants, including ensuring the distribution of clean and safe drinking water to communities and cities.

COMBINED DEGREE PROGRAM
Students can earn a MS in civil and environmental engineering or a MS in environmental engineering and science with as little as one additional year of study after their undergraduate degree. These students further specialize in water resources, water treatment, mitigation of pollution or other subfields of environmental engineering. They will command a higher starting salary with their enhanced qualifications.

PROGRAM SCOPE

DEGREES OFFERED
- Environmental Engineering Bachelor’s
- Environmental Engineering Science Master’s and PhD
- Civil and Environmental Engineering Master’s and PhD

SAMPLE COURSEWORK
- Hydrology and Water Resources Engineering
- Water & Wastewater Treatment Processes
- Environmental Engineering Laboratory
- Site Remediation Engineering
- Sustainable Engineering Design
- Environmental Engineering Field Session
- Chemical Fate & Transport in the Environment
- Pollution Prevention: Fundamentals & Practice
- Fundamentals of Ecology

75% of environmental engineering majors at Mines are women**
98% of 2019-20 bachelor’s graduates were either employed or in graduate school*
$64,330 Average starting salary for 2019-20 bachelor’s graduates*

*Information is from the 2019-20 Mines Career Center Outcomes Survey; **IRSA Report (Spring 2020)
Research opportunities for undergraduate students in environmental engineering are plentiful. These opportunities can be packaged in many different ways, including fellowships, scholarships, hourly jobs or course credit. Undergraduate research may be sponsored at the faculty level or in various research centers, such as the six that are highlighted below.

**RESEARCH CENTERS**

**AQWATEC**
The **Advanced Water Technology Center (AQWATEC)** advances the research and development of novel water treatment processes and hybrid systems. The center works to enable sustainable and energy efficient utilization of polluted water sources to provide potable and non-potable water supplies.

**CERA**
The **Center for Environmental Risk Assessment (CERA)** promotes and enhances environmental risk assessment research and educational activities at Mines. CERA focuses on scientific-based approaches for estimating human and ecological risks associated with exposures to artificial and natural chemicals in the environment.

**CESEP**
The **Center for Experimental Study of Subsurface Environmental Processes (CESEP)** utilizes knowledge from diverse disciplines to provide a broad and thorough understanding of environmental and hydrologic processes. CESEP creates solutions to problems related to underground environmental issues like global climate change, groundwater pollution, landmine detection and remediation of hazardous waste in the environment.

**IGWMC**
The **Integrated Ground Water Modeling Center (IGWMC)** supports and advances the appropriate use of digital engineering models in groundwater resources protection and management. IGWMC organizes short courses, workshops and conferences. It also conducts research in groundwater hydrology and water resources.

**RENUWIT**
**Reinventing the Nation’s Urban Water Infrastructure (ReNUWIt)** is an interdisciplinary, multi-institutional research center whose goal is to reimagine the ways in which we manage the distribution of clean drinking water. ReNUWIt uses technology to design novel solutions for society’s need for sustainable water infrastructure.

**WE²ST**
The **ConocoPhillips Center for a Sustainable WE²ST** at Colorado School of Mines aims to be the nation’s premiere institution for research, education and outreach associated with the joint sustainability of water resources and energy production in arid lands. Research areas include regional water resources and management, contamination and risk mitigation, water treatment and reuse, and corporate social responsibility.