DEPARTMENT OF GEOLGY & GEOLOGICAL ENGINEERING

GEOLOGY.MINES.EDU

BE PART OF THE SOLUTION!
The Department of Geology and Geological Engineering (GGE) at Mines is one of the premier departments of its kind in the United States, ranking among the elite worldwide. Geology students and faculty focus on the complex interactions of humans and the earth, addressing some of the greatest resource and environmental challenges that are shaping the future.

- 96% of GGE undergrads reported positive outcomes after graduation*
- 1200 Organizations recruiting on campus in 2020*
- $63,000 Median salary for GGE undergraduates*
- 4% Projected job growth for Geological Engineers (2019-29)†

AREAS OF STUDY
The Department offers a bachelor’s degree in Geological Engineering with career tracks that include Geological/Geotechnical Engineering, Geological Sciences, Petroleum Exploration and Development, Minerals Exploration and Development and Hydrology. In addition, students spend six weeks doing field research and mapping between their junior and senior years. It is a time to collaborate and learn in the amazing natural laboratories of southwestern Colorado and Utah.

COMBINED DEGREE PROGRAM
Students can earn a MS in Geology and Geological Engineering with as little as one additional year of study after their undergraduate degree. These students further specialize in areas of water resource quality and management, data sciences/analytics and machine learning, and energy/mineral exploration and development.

- $110,500 Median salary for GGE M.S. graduates*
- 100% GGE master’s graduates reported positive outcomes*
Research opportunities for undergraduates are abundant in the GGE Department. These range from opportunities with individual professors to efforts as a part of a larger Research Center. Grants are provided in the department on a competitive basis for funding UG Research, or funding comes through funded research projects from a variety of sources; National Science Foundation, Corporate summer funding, Federal Agencies, to name a few. Below are examples of ongoing UG Researchers and their projects, and the Research Centers in the Department highlighted below.

**JOSHUA EBNER**
BS, Geological Engineering, ’21

Josh spent the summer of 2020 utilizing hyperspectral instrumentation to characterize the distribution of germanium in core samples from western Alaska.

**NINA GUIZZETTI**
BS, Geology and Geological Engineering, ’21

Nina is digitalizing legacy geology maps from Nevada using GIS as part of a research project within our Center for Advanced Subsurface Earth Resource Models, which is supported by the National Science Foundation.

**JACK HENRY**
BS, Geology and Geological Engineering, ’21

Jack presented his undergraduate research examining fluvial architecture in extraterrestrial systems during the Conoco-Phillips poster competition.

**SADIE JONSON**
BS, Geological Engineering, ’22

Sadie (left) in the forests of Georgia working on groundwater-surface water exchange at the Manitou Experimental Forest as part of a grant funded by the National Science Foundation.