Geological Engineering (B.S.)

Worldwide travel, advanced laboratories, hands-on equipment and small class sizes: Not exactly a rocky road.

Geological engineering is a hybrid field that involves application of geology to engineering problems and application of engineering to geological problems. The field is broad and diverse, and geological engineers work with engineers and scientists of many sorts. But, overall, all geological engineers are focused on the safe use of natural resources and protecting people and property from harm caused by geological forces.

Program type: Major
Format: On Campus or Online
Est. time to complete: 4 years
Credit hours: 128

Why study geological engineering at UND?

Application Deadlines

Fall: Aug. 17
Spring: Dec. 15
Summer: May 1

UND geological engineering students receive top-notch instruction in small classes. There are many opportunities to work with faculty on research projects and many of our students gain internships that provide them a leg up when they enter the job market.

In the past, students have studied landslides, worked on enhanced oil recovery, and helped investigate and clean up polluted waters and land. Students may travel; some have worked in Peru, India, England, Canada, Antarctica and many locations in the United States.

Besides a comprehensive and high-quality program, we offer two special opportunities for geological engineering students:

◆ A petroleum option includes coursework designed to prepare students for employment in the petroleum industry while they complete their B.S. in Geological Engineering.
◆ A combined program allows students to earn a master's degree in addition to a B.S.

Geological Engineering at UND

◆ Earn your geological engineering degree from a university accredited by the Engineering Accreditation Commission of ABET.
◆ Gain access to the Wilson M. Laird Core and Sample Library, a vast resource containing 40,000 cores from nearly every oil well drilled in North Dakota.
◆ The F.D. Holland Jr. Geology Library is one of the largest geoscience libraries in the upper Midwest.
◆ Generous scholarship support available and excellent instructors with a wide range of backgrounds.
◆ Smallest class sizes of any engineering discipline at UND.
◆ Opportunities to get involved in real and meaningful research and excellent instructors with a wide range of backgrounds.

Jobs in Geological Engineering
**93K**  Median income for mining and geological engineers, 2016*
- U.S. Bureau of Labor Statistics

**7K**  Number of geological engineering jobs in the U.S., 2016*
- U.S. Bureau of Labor Statistics

Graduates of UND’s geological engineering program play critical roles in many industries, including mining, energy exploration, education and more. Geological engineers are in demand in careers such as:

- Environmental engineering
- Geological engineering
- Petroleum geologist
- Hydrogeology
- Remote sensing/GIS
- Mining
- Mapping and surveying
- Teaching

When You Major in Geological Engineering

A Geological Engineering degree gives you the strategic skills you need, including:

- Geology
- Geographic Information Systems
- Geotechnical Engineering
- Soil Science
- Geologic Mapping
- ArcGIS (GIS Software)

UND Geological Engineering Major Alumni

Geological Engineering alumni have gone on to a variety of successful careers with:

- American Engineering Test, Inc.
- Barr Engineering Co.
- Center for Energy and Environment
- Alaska Department of Fish and Game
- Archaeological Research, Inc.
- BJ Services Company

Top 3 Online Engineering College

UND’s geological engineering program consistently ranks among the best for educational quality, affordability and career outcomes. This flexible online degree allows students to focus on pursuing their areas of interest and building on their capabilities while they work or keep up with personal obligations.

Explore More Options

Connect with the department or discover additional education opportunities.

- Harold Hamm School of Geology & Geological Engineering
- Explore Similar Degrees