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 Snapshot

Program type: Major
Format: On-campus or online
Est. time to complete: 4 years
Credit hours: 128

Why Study Geological Engineering at UND?

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.

Top Online Engineering College in the Nation

Every engineering program offers education, but not every program prepares students to make a real impact the way UND does. UND is increasingly regarded as one of the top academic and research institutions in the nation for engineering. We consistently rank among the best for educational quality, affordability and career outcomes.

#3 - Best Online Colleges Offering Bachelor's in Engineering Degrees in 2019

#5 - 15 BEST ONLINE ENGINEERING DEGREE BACHELOR'S PROGRAMS FOR 2020

Accredited Geological Engineering Degree

Earn your geological engineering degree from a university accredited by the Engineering Accreditation Commission of ABET.

Leaders that Do

Develop research skills at UND to make an impact on the next generation of leaders.
Application Deadlines

FALL:
FRESHMEN: FEB. 1* | AUG. 1
TRANSFERS: APRIL 15* | AUG. 1
*ACADEMIC SCHOLARSHIP PRIORITY DEADLINE
SPRING: DEC. 15
SUMMER: MAY 1

Geological Engineering at UND

- Smallest class sizes of any engineering discipline at UND.
- 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.
- Excellent instructors with a wide range of backgrounds.
- Opportunities to get involved in real and meaningful research.

Jobs in Geological Engineering

93K
Median income for mining and geological engineers, 2016*

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