

# Geology

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## Department Information

- **Department Location:**  
Stevens Hall
- **Department Phone:**  
701-231-8455
- **Department Web Site:**  
[www.ndsu.edu/geosci/](http://www.ndsu.edu/geosci/) (<http://www.ndsu.edu/geosci/>)
- **Credential Offered:**  
B.S.; B.A.
- **Official Program Curriculum:**  
[catalog.ndsu.edu/undergraduate/program-curriculum/geology/](http://catalog.ndsu.edu/undergraduate/program-curriculum/geology/) (<http://catalog.ndsu.edu/undergraduate/program-curriculum/geology/>)

Today is the ideal time for students to choose a career as a geoscientist. Students with a solid high school background in the sciences and mathematics, liking the outdoors and field studies, and those that are challenged by a rigorous program of classroom, laboratory and field courses, should consider North Dakota State University's program in geosciences. Geoscientists are presently in demand for energy and mineral exploration, and for solving environmental problems.

## Career Opportunities

Geologists who studied at NDSU are currently employed in such diverse fields as environmental science, groundwater resources, education, community planning, cartography, engineering geology, petroleum and gas exploration, precious-metals mining, and land reclamation.

## The Department

The geosciences faculty and instructional staff are dedicated to providing the best possible undergraduate education. Faculty members have earned consistently high ratings for their teaching. They also are active in research and bring the benefits of their research activities to students. Many geoscience undergraduates find part-time employment in faculty research or as laboratory teaching assistants. Courses are taught by a variety of techniques including lectures, labs, active learning, report writing and applied field studies. Field studies have included Black Hills, Death Valley, Washington, Hawaii, Iceland and southern Italy. The department's excellent instructional facilities include computers, X-ray diffraction, petrographic microscopes, GPS and surveying equipment, and a continuously-upgraded collection of rocks, minerals, air photos and maps. Training in geographic information systems is provided through the Warren D. Kress Advanced Geography Laboratory. The Optical Dating and Dosimetry Laboratory is used to determine the depositional age of sediments. The Quaternary Entomology Laboratory and the Cosmogenic Nuclide Preparation Laboratory are used for studies of climate change. The Environmental Geomechanics Laboratory is used for studies of water quality.

A core of geology courses, along with training in mathematics, physics, chemistry, soils, geography, computer science and technical writing will prepare students to handle the diverse challenges encountered in this professional career.

## High School Preparation

A solid background in English, mathematics (through trigonometry), biology, chemistry and physics is strongly recommended.

## The Faculty and Staff

S.S. Day, Ph.D., University of Minnesota, 2012, Fluvial Geomorphology, Slope Stability, Geospatial Sciences

B.J.C. Laabs, Ph.D., University of Madison, Wisconsin, 2004, Quaternary Geology, Paleoclimate, Geochronology

K. Lepper, Ph.D., Oklahoma State University, 2001, Glacial Geology, Hydrogeology, Geophysics

P. Oduor, Ph.D., University of Missouri, Rolla, 2004, Geochemistry, Geographic Information Systems

J.L. Rock, M.S., North Dakota State University, 2009

B. Saini-Eidukat, Ph.D., University of Minnesota, 1991, Mineralogy, Petrology, Geochemistry

L.S. Tackett, Ph.D., University of Southern California, 2014, Paleontology, Stratigraphy

S.A. Wood, Ph.D., Princeton University, 1985, Aqueous Geochemistry, Mineral Deposits

A.C. Ashworth, Ph.D., University of Birmingham, England, 1969, Earth History, Paleontology, Paleoecology (Emeritus)

D.P. Schwert, Ph.D., University of Waterloo, Canada, 1978, Quaternary Geology, Land Use (Emeritus)

### **Special Note**

Students in the geosciences program are encouraged to use their elective credits in courses that will enhance their professional skills (i.e., foreign languages, geography, archaeology, soils, etc.). In addition, the Department of Geosciences offers elective courses in environmental geology, glacial geology, geochemistry, hydrogeology, geophysics and remote sensing.