



GEOLOGY

What YOU will learn:

A major in geology will move you to a broad range of study, encompassing a blend of the physical and biological sciences but adding the fourth dimension of geologic time. You will engage in a field- and laboratory-oriented program of study that exposes you to the full spectrum of geological experiences. Research projects will carry you around the world to remote localities in Antarctica, Australia, South America, Canada, Europe, and all of the world's oceans.

Introductory courses are Physical Geology, focused on Earth's structure, composition, and the physical processes that shape the Earth; and Historical Geology, which treats the evolution of Earth and life from their origins to the present. Higher-level courses emphasize mineralogy, geochemistry, rock origins, Earth structure, and geophysics. All of these courses prepare the student for a six-week summer field course.

Career opportunities YOU will have:

The employment outlook in geology is excellent, especially in the fields of petroleum geology and environmental geology. Several topical issues present challenges-and employment opportunities-for geologists, including decreasing energy, mineral, and water resources; increasing concerns about protecting the environment; climate change and its effect on sea level, coastal erosion, and flooding; and predicting and mitigating natural hazards such as earthquakes, tsunamis, volcanic eruptions, and landslides. Employment of recent Nebraska graduates includes:

- Engineer Officer, US Army
- Environmental Specialist, University of Nebraska
- Exploration Geologist, Euro Exploration Services
- Mudlogger, Horizon Well Logging LLC
- Physical Scientist, US Geological Survey
- Staff Geologist, Cameco Resources
- Staff Geologist, Power Resources Inc

Why NEBRASKA for Geology?

You will have access to hundreds of activities and groups related to specific academic, social, cultural, or political interests. Geoscientists enjoy the outdoors as their natural laboratory and many classes take field trips to geologically significant sites around the United States. The Geology Club and student chapter of the American Association of Petroleum Geologists offer opportunities for co-curricular social and field interaction with fellow geology students and faculty. Involvement in any of these activities and organizations builds leadership, communication, and organizational skills and helps you to make new friends with those who have similar interests.

Picture yourself engaging in research similar to these current student projects: *Analog Modeling of Re-activated Faults and Synchronous Deposition*, *Effects of Ice Age Climate on the Evolution of Utah's Canyons*, or *Regional Differences in Perceptions of Volcanoes and Earthquakes*.

Connect with the Department and your peers by joining the Geology Club, where future geologists join together to go on field trips, listen to speakers from the field, and host 'bad geology' movie nights. You may also choose to join the American Association of Petroleum Geologists, or Sigma Xi, a scholarly organization that offers student travel grants to national meetings and for field work.





COLLEGE OF ARTS AND SCIENCES

GEOLOGY

	COURSE NAME	HOURS
FIRST Semester	MATH 106: Calculus I	5
	CHEM 109: General Chemistry I	4
	ACE 1: Written texts/research & knowledge skills	3
	Language Requirement - 201 Level (CDR E)	3
Total Hours		15

	COURSE NAME	HOURS
SECOND Semester	GEOL 101: Physical Geology (ACE 4)	4
	MATH 107: Calculus II	4
	CDR A: Written communication	3
	Language Requirement - 202 Level (CDR E)	3
Total Hours		14

THIRD Semester	GEOL 103: Historical Geology (CDR B, BL)	4
	PHYS 211: (or 141) General Physics I	4
	PHYS 221: General Physics Laboratory I	1
	ACE 2: Communication skills	3
	Elective/Minor/Secondary Major/Pre-Professional Course	3
Total Hours		15

FOURTH Semester	GEOL 210: Minerals, Rocks & Ores	4
	GEOL 211: Sedimentology & Stratigraphy	3
	PHYS 212 (or 142) General Physics II	4
	PHYS 222: General Physics Lab II	1
	ACE 5: Humanities	3
Total Hours		15

FIFTH Semester	GEOL 340: Structural Geology	3
	Geology Course	3
	Ancillary Course	4
	ACE 6: Social Sciences	3
	Elective/Minor/Secondary Major/Pre-Professional Course	1
Total Hours		14

SIXTH Semester	GEOL 310: Dispositional Environments	3
	Geology Course	3
	Ancillary Course	3
	CDR C: Humanities	3
	ACE 8: Ethics/civics/stewardship	3
Total Hours		15

SUMMER Session

GEOL 460: Summer Field Course	6
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SEVENTH Semester	GEOL 410: Geochemistry	3
	Geology Course	3
	CDR D: Social Sciences	3
	ACE 9: Global awareness & human diversity	3
	Elective/Minor/Secondary Major/Pre-Professional Course	2
Total Hours		14

EIGHTH Semester	Geology Course	3
	Geology Course	3
	ACE 7: Fine Arts	3
	Elective/Minor/Secondary Major/Pre-Professional Course	3
Total Hours		12

DISCLAIMER: This document represents a sample 4-year plan for degree completion with a major of interest in the College of Arts and Sciences. Actual course selection and sequence may vary and should be discussed individually with an Academic Advisor at the college and department level.