Geology is a discipline that involves understanding Earth processes, interpreting the history of Earth, discovering and using natural resources to promote the quality of human life, and occupying the planet through awareness of events that contribute to shape its surface. The mission of the OSU Boone Pickens School of Geology, at the undergraduate level, is to provide a broad perspective of the Earth, and develop skills and knowledge to successfully advance a career in geology.

Geology majors develop the following skills:

- Carry out field work in various environments
- Make precise observations
- Collect field samples
- Use instruments and technology in the laboratory
- Perform microscopic and chemical analyses
- Extract information about rock and water samples
- Make interpretations of quantitative data
- Predict the behavior of Earth systems
- Review findings and summarize results
- Test hypotheses to evaluate results
- Refine interpersonal skills
- Work independently and as a member of a team
- Develop methods of creative thinking
- Enhance problem solving skills
- Put ideas into action

Job and Internship Websites

- American Geosciences Institute
  http://www.agiweb.org/workforce/careers.html
- Association for Women Geoscientists
  http://www.awg.org/eas/jobweb.htm#studentops
- Earth Works
  http://earthworks-jobs.com/
- Geology Jobs
  http://geology.com/jobs.htm
- GIS Jobs Clearing House
  http://www.gjc.org/
- Geo and GIS Jobs
  http://www.geojobs.org/
- The Geological Society of America
  http://geosociety.org/
- National Science Foundation
  http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5517&from=fund
- Oklahoma Energy Resource Board
  http://www.oerb.com/
- Oklahoma Geological Survey
  http://www.ogs.ou.edu/
- US Army Corps of Engineers
- U.S. Department of Energy
  http://energy.gov/jobs/jobs
- Geological Survey
  http://www.usgs.gov/ohr/
- USA Jobs
  https://www.usajobs.gov/
- Carl Albert Public Internship Program
  http://ok.gov/opm/State_Jobs/Carl_Albert_Public_Internship_Program.html
- Net Impact
  https://netimpact.org/careers/find-opportunities/job-board

College of Arts & Sciences Career Services
213 Life Science East
Tel: 405 744 5658

For appointments and resources:
http://cascareers.okstate.edu
Geology Career Paths...

**Economic geologists** explore for and develop metallic and nonmetallic resources; they study mineral deposits and find environmentally safe ways to dispose of waste materials from mining activities.

**Engineering geologists** apply geological data, techniques, and principles to the study of rock, soil surficial materials and groundwater; they investigate geologic factors that affect structures such as bridges, buildings, airports, or dams.

**Environmental geologists** study the interaction between the geosphere, hydrosphere, atmosphere, biosphere, and human activities. They work to solve problems associated with pollution, waste management, urbanization, and natural hazards.

**Geochemists** use physical and inorganic chemistry to investigate the nature and distribution of major and trace elements in groundwater and Earth materials; they use organic chemistry to study the composition of fossil fuel deposits.

**Geologists** study materials, processes, products, physical nature, and the history of Earth.

**Geomorphologists** study Earth’s landforms and landscapes in relation to the geologic and climatic processes and human activities.

**Geophysicists** apply the principles of physics to studies of the Earth’s surface and interior.

**Hydrogeologists** study the occurrence, movement, abundance, distribution, and quality of subsurface water and its interactions with surrounding geology.

**Hydrologists** study surface water, including its relationships with geologic landforms.

**Mineralogists** study mineral formation, composition, and properties.

**Paleoecologists** study the function and distribution of ancient organisms and their relationships to their environment.

**Paleontologists** study fossils to understand past life forms and their changes through time as well as to reconstruct past environments.

**Petroleum geologists** are involved in exploration for, and production of, oil and natural gas resources.

**Petrologists** determine the origin and natural history of rocks by analyzing mineral composition, rock textures and other grain relationships.

**Sedimentologists** study the nature, origin, distribution, and alteration of sediments and sedimentary rocks. Fossil fuels, groundwater, and many mineral deposits occur in sedimentary rocks.

**Seismologists** study earthquakes and analyze the behavior of earthquake waves to interpret the structure of the Earth.

**Stratigraphers** investigate the time and space relationships of rocks, on a local, regional, and global scale throughout geologic time -- especially the fossil and mineral content of layered rocks.

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**Job Titles**

- Atmospheric Scientist
- Earth Science Teacher
- Ecologist
- Environment Consultant
- Environmental Engineer
- Field Geologist
- Geological Technician
- Geochronologist
- Naturalist
- Natural Resource Manager
- Marine Geologist
- Oceanographer
- Planetary Geologist
- Soil Scientist
- Structural Geologist
- Science Librarian
- Technical Writer
- Volcanologist
- Testing and Inspection Professional

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**Types of Employers**

- Natural History Museums
- Testing Labs
- Minerals Industry
- Energy Industry (Oil, Gas, Coal)
- Mining Companies
- Engineering Consulting Firms
- Environmental Consulting Firms
- Environmental Advocacy Groups
- Waste Management Companies
- U.S. Bureau of Reclamation
- U.S. Bureau of Land Management
- U.S. Forest Service
- USDA Soil Conservation Services
- OK Dept. of Environmental Protection
- US Environmental Protection Agency
- Peace Corps
- OK Dept. of Transportation
- US Geological Survey
- OK Geological Survey
- National Oceanographic & Atmospheric Administration (NOAA)
- City planning offices
- Secondary schools/Universities
- State and Federal Highway Depts.