

Geology

Geology is the study of the earth and its history. Geology looks at how the earth has changed and how it fits together. With this research geologists find water and minerals and determine where humans can build structures safely. They also help us understand natural disasters, such as volcanoes and earthquakes. Geology is a very diverse science.



The [Geology](#) program at Colorado Mesa University is designed for students who desire a professional or technical geo-science career, or plan to pursue graduate studies in Geology. Instruction takes place in a state-of-the-art science complex, which houses several instructional laboratories, a projects room, a computer-application lab, a petrology-mineralogy lab, a rock-storage facility, and a sample preparation room. Students learn from five tenure-track professors and during their studies students will use equipment such as petrographic microscopes, binocular microscopes, a computer-assisted x-ray diffractometer, scanning-electron microscopes, short-period and long-period seismometers, and a magnetometer. The Environmental Geology option places a stronger emphasis on geologic hazards, ground-water and surface-water hydrology, low-temperature geochemistry, biological systems, and environmental science. CMU also has many [clubs and organizations](#) that can help prepare students for advanced study in their field or build campus and community connections.

A person in this career field may:

- Define research problems.
- Develop research models.
- Gather and analyze data.
- Develop and/or write research proposals.
- Identify materials/specimens.
- Analyze dinosaur bones.
- Study volcanoes.
- Determine climatic conditions of the earth in both present and the past.
- Find resources such as oil and gas.

Major Skills & Characteristics

- Good verbal skills
- Good writing skills
- Be organized
- Be methodical
- Strong math skills
- Work well as part of a team
- Learn new information quickly
- Problem solving skills
- Enjoy being outdoors
- Strong interpersonal skills
- Inquisitiveness
- Logical thinking
- Analytical thinking
- Computer skills
- Attention to detail

Organizations That Commonly Employ Geology Majors

- Universities
- U.S. Foreign Service
- U.S. Air Force
- NASA
- National Park Service
- Peace Corps
- Environmental consulting companies
- Federal or State geological surveys
- Highway departments
- Oceanographic institutes
- Petroleum or mining companies
- Secondary schools
- Mining companies
- Railroads
- Research labs
- Construction companies
- Engineering firms
- Consulting firms

Related Careers

- Agricultural engineer
- Cartographer
- Climatologist
- Consultant
- Cooperative extension agent
- Economic geologist
- Environmental geologist
- Environmental lawyer
- Forest ranger
- General manager-petroleum/mining
- Geochemist
- Geodynamicist
- Geophysical exploration
- Geologist
- Sales engineer
- Scientific photographer
- Sedimentology
- Seismologist
- Volcanologist
- Waste management specialist
- Hydro geologist
- Instrumentation technician
- Laboratory technician
- Landscape manager
- Marine advisor
- Materials analyst
- Meteorologist
- Mineralogist
- Mining engineer
- Stratigraphy
- Structural geography
- Water quality control
- Water remote sensing interpreter
- National park service professional
- Natural resource manager
- Oceanographer
- Park naturalist
- Park ranger
- Peace Corps ranger
- Petroleum engineer
- Petroleum geologist
- Pollution control specialist
- Project manager
- Prospector
- Surveyor
- Technical writer
- Urban/regional planner
- U.S. Foreign Service worker
- Waste disposal specialist
- Well logging specialist

Note: Some of the occupations listed above may require additional education, experience, or training beyond a Bachelor's Degree. To research these occupations use the Career Research Resources links below.

Career Research Resources:

Use these sites to research information about specific occupations such as nature of the work, training or qualifications, employment or job outlook, projections, earnings and wages.

Occupational Outlook Handbook: <http://www.bls.gov/ooh/>

The Bureau of Labor Statistics

- View OOH information on Geoscientists at <http://www.bls.gov/ooh/life-physical-and-social-science/geoscientists.htm> and other Life and Physical Science Professions at <http://www.bls.gov/ooh/life-physical-and-social-science/home.htm>
- Use the A-Z index to select the occupation you are researching.

O*NET-Online: <http://www.onetonline.org>

The U.S. Department of Labor

- In the occupational search box type in key words, job titles, or occupational codes to research various careers.

My Future.com: <http://www.myfuture.com>

The Department of Defense

- This site compiles information from departments of [Commerce](#), [Education](#) and [Labor](#).

Organizations and Associations Links

- American Association of Petroleum Geologists: www.aapg.org
- American Geosciences Institute (AGI): www.agiweb.org
- Association of Women Geoscientists (AWG): www.awg.org
- Colorado Geological Society: www.waterinfo.org
- Colorado Division of Reclamation, Mining and Safety: <http://mining.state.co.us>
- Geological Society of America, The: www.geosociety.org
- Rocky Mountain Association of Geologists, The: www.rmag.org

Job Listings/Job Search Sites:

- Federal Government jobs: www.usajobs.gov
- Geologist Jobs: www.geologistjobs.com
- Glassdoor: www.glassdoor.com
- Green Job Search: <http://greenjobs.greenjobsearch.org>
- I hire Environmental: www.ihireenvironmental.com
- Indeed: www.indeed.com
- Oil and gas jobs—geology: www.earthworks-jobs.com