Potential Careers

NMU’s Earth Science Program prepares students for employment in the public, private, and non-profit sectors in fields such as planning, management, research, assessment, technology innovation, and education. Careers include, but are not limited to:

Occupations
- Atmospheric Scientist
- Educator
- Environmental Consultant
- Geographer
- Geologist
- Geomorphologist
- Geoscientist
- Hydrologist
- Natural Hazards Scientist
- Natural Resources Specialist
- Researcher
- Resource Explorer
- Soil Scientist
- Surveyor

Additional Resources and Info

For Career Planning and Opportunities:
Academic & Career Advisement Center
3302 C.B. Hedgcock
906-227-2971
www.nmu.edu/acac

Earth, Environmental, & Geographical Sciences Dept.
3001 New Science Facility
906-227-2500
eegs@nmu.edu
www.nmu.edu/eegs

For Job Search, Resume and Career Information:
Career Services
3502 C.B. Hedgcock
906-227-2800
www.nmu.edu/careers

For Information about NMU Student Organizations Associated with this Major Contact:
Center for Student Enrichment
1206 University Center
906-227-2439
www.nmu.edu/cse

Rock & Mineral Club
nmurocks@nmu.edu

Internet Resource Links:
www.careers.org
www.careerresource.net

For Career Information with National Organizations:
www.amergeog.org American Geographical Society
www.nrcs.usda.gov National Resources Conservation Service
www.sca-inc.org Student Conservation Association
www.earthscienceworld.org/careers
www.agiweb.org American Geological Institute
www.geosociety.org The Geological Society of America
www.aag.org Association of American Geographers

Current as of Fall 2015
Provided by:

The Academic & Career Advisement Center
Earth Science

Have you ever wondered why the earth appears as it does? Do you enjoy the outdoors? Are you concerned about the environment? Do you like to analyze things? If you answered “yes” to most of these questions, then Earth Science could be the major made for you.

Earth Scientists gather and interpret data about the earth to improve our quality of life. They provide basic information to society for problem solving, environmental protection, establishing policies, and public health, safety, and welfare. By applying logic and reasoning, along with knowledge of the forces that shape the earth, geoscientists can reconstruct the past and anticipate the future.

The Earth Science major at NMU provides students with a thorough knowledge of Earth’s physical environment including its geology, weather and climate, astronomical relationships, and hydrology. The Earth, Environmental, and Geographical Sciences department at Northern provides students with ample opportunity to gain excellent field experience, locally and abroad.

With a degree in Earth Science, students are able to work as explorers for new resources, consultants on engineering or environmental problems, researchers, teachers, and more. One of the attractive benefits of working in the earth sciences is that the work is often a mix of indoor and outdoor activities, and is only limited by the skills and competencies you develop.

Skills and Competencies

As in most other fields, strong interpersonal communications and organizational skills are a must for any professional. Some other valuable skills and competencies specific to a profession in the Earth Science area are leadership capabilities, critical thinking, mapping, and remote sensing and data analysis.

Course Work

This degree includes the following courses as part of the program requirements, and specific major requirements along with liberal studies and graduation requirements.

Core
- GC 100 Physical Geography (4 cr.)
- GC 205 Introduction to Geographic Research (4 cr.)
- GC 210 Earth Hazards (4 cr.)
- GC 225 Introduction to Maps (2 cr.)
- GC 235 Quantitative Methods (4 cr.)
- GC 255 Physical Geology (4 cr.)
- GC 385 Weather and Climate (4 cr.)
- GC 390 Oceanography (2 cr.)
- GC 465 Hydrology (4 cr.)
- GC 489 Human Impact Upon the Environment (4 cr.)

Choose one course from the following:
- GC 202 Soils (4 cr.)
- GC 376 Field Methods (4 cr.)
- GC 365 Historical Geology (4 cr.)
- GC 370 Geomorphology (4 cr.)

Choose 4 credits from the following:
- GC 335 Geographic Information Systems (4 cr.)
- GC 425 Remote Sensing (4 cr.)
- GC 445 Advanced Aerial Photograph Interpretation & Photogrammetry (2 cr.)
- GC 455 Digital Image Processing (2 cr.)
- GC 492 Research in Water Science (2 cr.)

Other Required Courses
- AS 103 Observational and Solar System Astronomy (4 cr.)
- CH 111 General Chemistry I (5 cr.)
- CH 112 General Chemistry II (5 cr.)
- MA 161 Calculus I (4 cr.)
- PH 201 College Physics I (5 cr.)

Detailed course descriptions can be found at www.nmu.edu/bulletin.

Career Development

You should begin the resume-building process as soon as you can. The Academic and Career Advisement Center can assist you with career planning, while Career Services will help you fine tune your resume and look for jobs related to your field. In the meantime, the more hands-on experience you have, the better the chances are that you will find a job. Becoming involved in a earth-science related internship is a way to develop your professional skills and gain experience. Your academic course work is important as well, so be sure to maintain a high grade point average.

Additional Considerations

Additional education, work experience, and specific training may be necessary for some occupations.

Take advantage of internship opportunities as experience will be quite beneficial.

Job Outlook

Starting salaries are contingent upon occupation, geographic location and the individual applicant’s work experience and initiative. Employment of earth scientists is expected to grow at an average or faster-than-average rate of 10-16%, depending on the field of work. Visit www.bls.gov/ooh for more information.