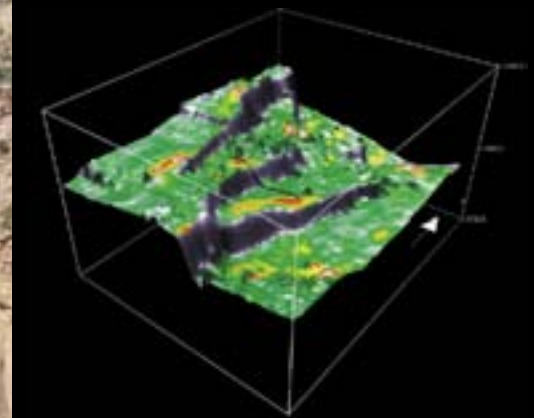




Field Studies

Our curriculum focuses intensely on field studies. Hands-on training and experience are critical to your success. We teach two required field courses in the summer but also provide plenty of opportunities for students to see classic and novel field sites here on the Keweenaw Peninsula and beyond.

Recent field trips included Alaska, Utah, Nicaragua, Mexico, Newfoundland, Florida, Guatemala, Canada, and Montana.



CREATE THE FUTURE

MichiganTech

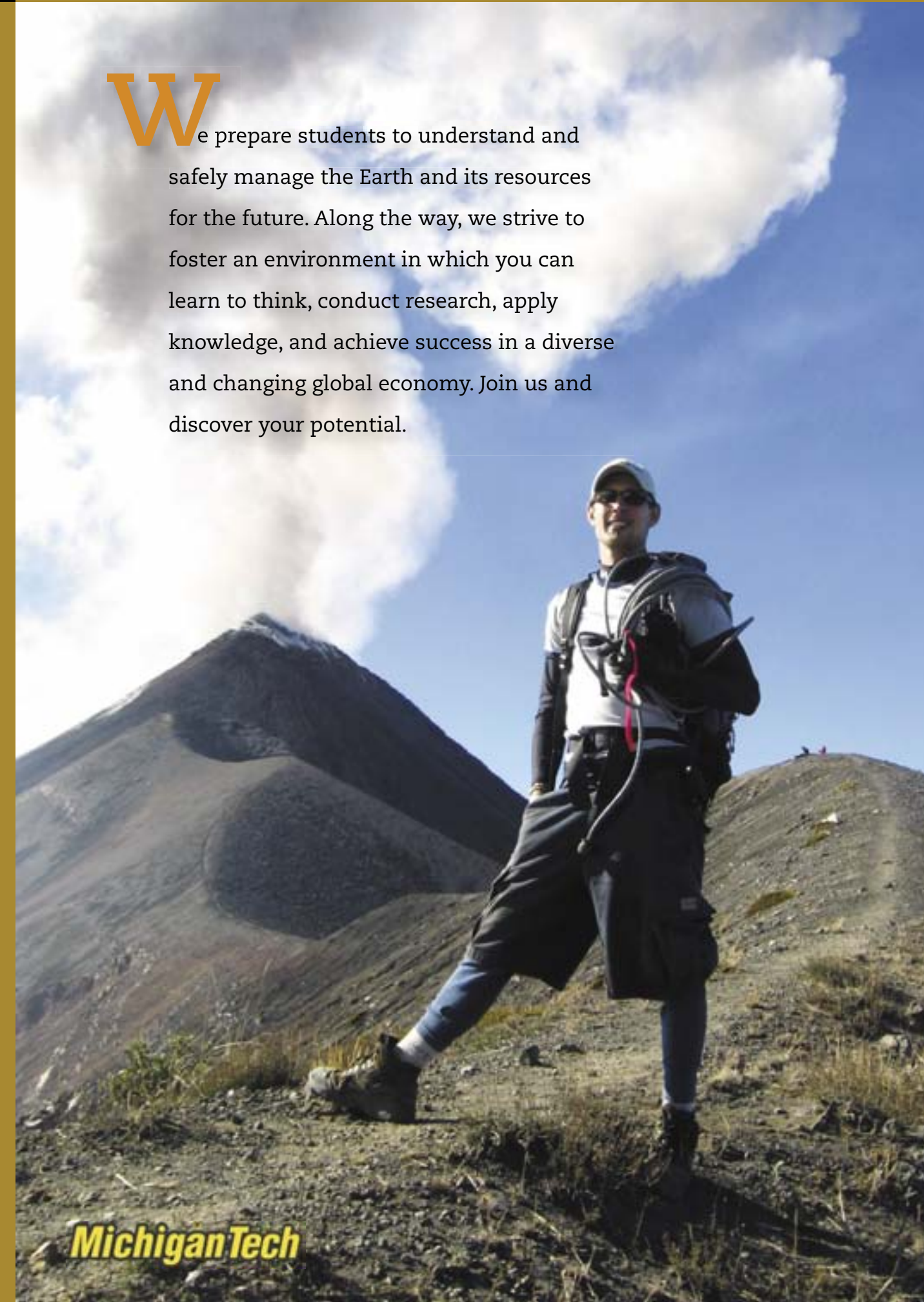
GEOLOGICAL & MINING ENGINEERING AND SCIENCES

Michigan Technological University
 Geological & Mining Engineering and Sciences
 630 Dow Environmental Sciences and Engineering Building
 1400 Townsend Drive
 Houghton MI, 49931-1295
 T: 906-487-2531
 F: 906-487-3371
 E: geo@mtu.edu

www.geo.mtu.edu

Michigan Technological University is an equal opportunity educational institution/ equal opportunity employer.

Since 1885, we have offered educational excellence in beautiful Upper Michigan. Our students create the future in arts, humanities, and social sciences; business and economics; computing, engineering, forestry and environmental science; natural and physical sciences; and technology.



We prepare students to understand and safely manage the Earth and its resources for the future. Along the way, we strive to foster an environment in which you can learn to think, conduct research, apply knowledge, and achieve success in a diverse and changing global economy. Join us and discover your potential.

MichiganTech

Beautiful Outdoor Facilities

We are located in Michigan's Keweenaw Peninsula, on the south shore of Lake Superior. Hundreds of miles of rocky coastline surround the peninsula and nearby Isle Royale National Park, offering a unique geology and rugged topography unusual to the Midwest. An international focal point for mineral collectors, this area is ideal for a wide variety of geologic studies.

The peninsula was also the center of a billion-dollar native copper ore district. The development of that mining district eventually led to the creation of the Michigan Mining School more than 100 years ago. Our department is the direct descendent of that original school.

Excellent Indoor Facilities

Our department features world-class computer and analytical laboratory equipment.

Labs and research areas:

- Remote Sensing and Volcanology
- Subsurface Remediation and Visualization
- Seismic Petrophysics
- Environmental Magnetism
- Rock Mechanics
- Environmental Geochemistry
- X-Ray Diffraction
- Subsurface Visualization Lab
- Remote Sensing Institute
- Michigan Tech Research Vessel—R/V Agassiz
- Michigan Tech Volcano Observatory

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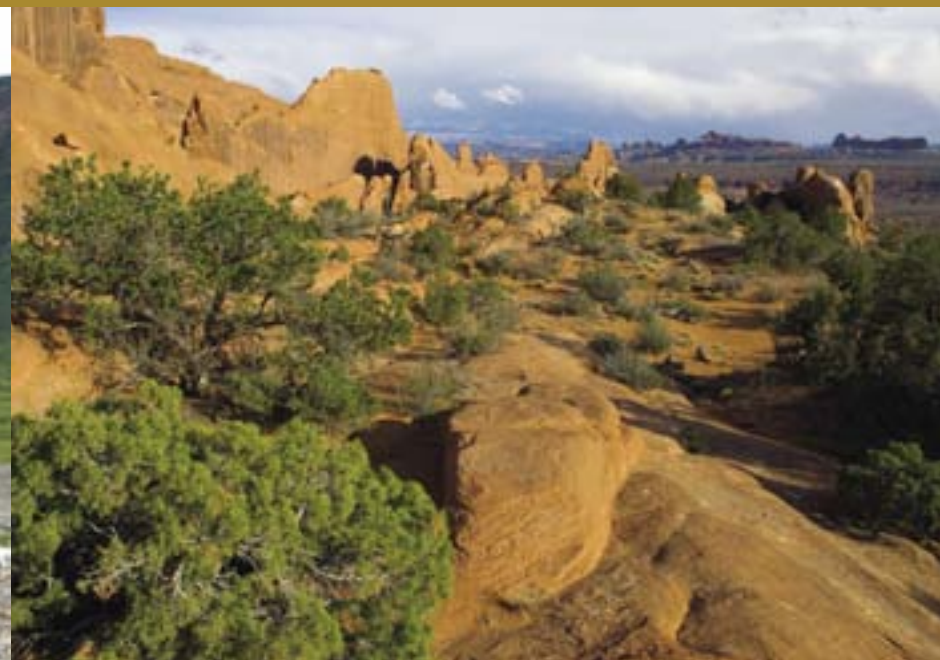


With few exceptions, you will spend part of your working time outdoors enjoying nature—and, if desired, traveling the world.

Upon graduation, you could work for oil companies such as Shell Exploration and Development, BP, Marathon, or Jordan Exploration; gas companies such as Nicor Gas, SEMCO, or DTE Energy; petroleum service companies such as Schlumberger, BakerHughes, or Halliburton; mining companies such as Newmont, Freeport-McMoRan, or Rio Tinto; environmental and engineering consulting firms such as Arcadis, URS, Ciorba Group, Golder Associates—or any number of smaller firms.

Graduates also work for government agencies, including the US Geological Survey and state and local municipalities. Many enter graduate school for greater specialization.

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Make The World Your Career

Do you like the outdoors and working with state-of-the-art technology? If so, check out these options.

GEOLOGICAL ENGINEERING

Geological engineers apply engineering to human problems that relate to the earth's atmosphere, surface, and interior. The field offers many specialty areas, including exploration for energy and mineral resources, hydrogeology and groundwater engineering, and hazard investigation and planning.

As a geological engineer, you could locate new sites and design facilities for nuclear waste disposal; develop and restore groundwater resources; stabilize rock and soil slopes for dams, highways, and property development; and minimize the danger from landslides, volcanoes and earthquakes.

GEOLOGY

Geology is the study of the earth, earth materials, and earth systems. It is a physical and natural science. Geologists are involved in the development of natural resources, protection of the environment, remote sensing and land use planning, and natural and human-induced hazard investigation.

As a geologist, you could explore and extract minerals, search for energy resources, dispose of nuclear and chemical waste, choose the best sites for structures, and study volcanoes and earthquakes.

APPLIED GEOPHYSICS

Geophysics is the study of Earth through the use of physics. Applied geophysics is the application of such studies to the betterment of mankind and the environment. It includes understanding of past climates and continental positions, the identification of oil and gas reserves or water supplies, and the evaluation and mitigation of natural hazards.

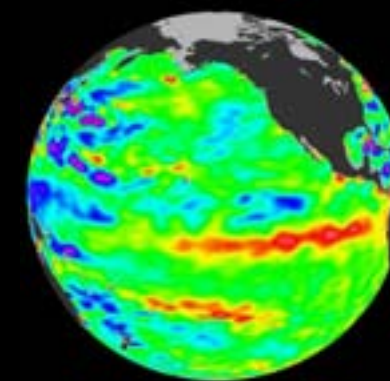
As a geophysicist, you will perform many of the same duties as a geologist but be more involved in gathering subsurface data for laboratory interpretation.

EARTH SCIENCE EDUCATION

The earth science education degree gives you the flexibility to pursue a teaching career, continue your studies in graduate school, or seek employment as a professional geologist.

MINORS INCLUDE

- Applied Geophysics
- Geological Engineering
- Earth Sciences
- Mining
- Remote Sensing
- Enterprise



Join an Enterprise team and get the extra edge on your education. Solve real-world engineering, design, and communication problems. Develop marketing, business, and leadership skills. Teams are made up of students from every major, and operate like companies in the private sector. You can join an Enterprise team starting in your second year at Michigan Tech. Our department houses the Aqua Terra Tech Enterprise team, but you can choose from more than twenty-eight across campus.

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