EARN A GRADUATE DEGREE IN GEOLOGY, GEOPHYSICS, GEOLOGICAL ENGINEERING, OR MINING ENGINEERING

GEOLGY (MS, PHD), GEOPHYSICS (MS, PHD), GEOLOGICAL ENGINEERING (MS, PHD), MINING ENGINEERING (MS, PHD)

INTERNATIONAL AND INTERDISCIPLINARY

Our Geological and Mining Engineering and Sciences graduate programs prepare students for careers in Earth sciences and geological engineering. The department’s graduate programs—which provide students the education needed to understand and safely manage Earth and its resources for the future—are challenging yet flexible; they are designed to accommodate individual needs, backgrounds, and interests. Interdisciplinary study is also encouraged. The majority of graduate students are involved in international field-oriented research; increasingly, they incorporate a sociocultural facet in hazards-related work. Unique international graduate programs are available in developing countries through our partnership with the US Peace Corps, and in Italy and France through INVOGE, our international dual-degree program.

A SOLID RESEARCH PORTFOLIO

Research activities include development of complex computational models of earth systems; laboratory experiments analyzing Earth material phenomena; analysis of remote-sensing data of the Earth’s surface and atmosphere; properties of the Earth’s deep interior and its ancient past; field measurements of volcanologic, hydrologic, and atmospheric systems; and seismic imaging of underground oil and gas reservoirs and their properties. Most of the hazards research is international. Research funding averages nearly $3 million per year.

WATERFRONT FACILITIES AND INDOOR LAB: THE WORLD IS OUR OUTDOOR LAB

Our department, housed in the Dow Environmental Sciences and Engineering Building, features world-class computer and analytical laboratory facilities. Specialized laboratories include the Laboratory for Atmospheric Remote Sensing, Subsurface Visualization Laboratory, Seismic Petrophysics Laboratory, Hydrogeology and Subsurface Remediation, and the Environmental Magnetism Laboratory. Field research is conducted domestically in Alaska and Yellowstone, as well as the beautiful Keweenaw Peninsula and Lake Superior watershed. Our international efforts span North and South America as well as Australia and much of Southeast Asia.

ALUMNA SPOTLIGHT

“...The combination of my educational and research experiences at Michigan Tech provided me with a unique perspective, allowing me to blend together the Earth sciences with engineering, sustainability, and carbon-cycle science. These experiences made me a broadly-developed researcher and enabled me to work effectively with others outside of my field. These skills are necessary in the climate sciences, an inherently multi-disciplinary field.”

Deborah Huntzinger
PhD, 2007
Assistant Professor, Climate Science
Northern Arizona University
ADMISSION REQUIREMENTS

Application deadline: Apply by February 1 for the fall semester. Applications are reviewed on an individual basis using a holistic approach.

All Students
- Graduate School application
- Statement of purpose
- Official transcripts
- GRE required
- Three letters of recommendation
- Admitted applicants typically have an undergraduate GPA of 3.0/4.0 or better

International Students
- TOEFL: Recommended score of 79 iBT

FINANCE YOUR FUTURE

Earning your graduate degree is an investment in your career and future. Here are a few financial aid opportunities you can explore as you look for ways to pay for your degree.

- The department offers student support through graduate research assistantships (GRAs), graduate teaching assistanships (GTAs), and fellowships. The department makes every effort to see that graduate students receive funding throughout their tenure as long as they are making satisfactory progress toward their degree.
- Many graduate students are eligible for a new set of federal loans, up to $20,500 per academic year, as an independent student.
- Contact Michigan Tech’s Financial Aid Office at 906-487-2622 or finaid@mtu.edu for more information on financial aid opportunities.

ABOUT MICHIGAN TECH

Michigan Technological University, founded in 1885, has gained worldwide recognition for innovative education and scholarship. Michigan Tech is a leading public research university, exploring the boundaries of knowledge, developing new technologies, and preparing students to create the future for a prosperous and sustainable world. Michigan Tech offers more than seventy graduate degree programs in engineering, forestry and environmental sciences, computing, business and economics, natural and physical sciences, technology, humanities, and social sciences.

ABOUT Houghton

Houghton lies in the heart of Upper Michigan’s scenic Keweenaw Peninsula. The campus overlooks the Keweenaw Waterway and is just a few miles from Lake Superior. The area’s waters and forests, including our 600-acre recreational forest adjoining campus, offer students unparalleled opportunity for outdoor recreation and relaxation. The University’s 7,000 students come from all fifty states and more than sixty nations, making the area a vibrant, multicultural community.

APPLYING IS EASY—AND FREE!

www.mtu.edu/gradschool/admissions/apply

Geological and Mining Engineering and Sciences
Dow Environmental Sciences and Engineering Building, Room 630
Michigan Technological University
1400 Townsend Drive • Houghton, MI 49931-1295
Phone 906-487-2531 • Fax 906-487-3371 • Email geo@mtu.edu
www.mtu.edu/geo/graduate/geo-eng

Graduate School
Email gradadms@mtu.edu or call 906-487-2327
www.mtu.edu/gradschool

Michigan Technological University is an equal opportunity educational institution/equal opportunity employer, which includes providing equal opportunity for protected veterans and individuals with disabilities. 34022/0714