Stature

Research in volcanology and remote sensing is nationally and internationally recognized and supported by NASA, the NSF, and others. Michigan Tech volcanologists created the volcano website <www.geo.mtu.edu/volcanoes/>, which has been recognized by *National Geographic*.

Petroleum geology and geophysics research activities are widely recognized and supported by major grants from DOE.

Hydrogeology research is well established and has attracted support from the NSF, EDA, and DOE.

The department's mining engineering program is nationally recognized. Research activities are supported by DOE and NSF. Michigan Tech's five-person mining team won second place at the twenty-fourth annual International Collegiate Mining Contest in Kalgoorlie, Australia.

Michigan Tech is the home of the nationally recognized A. E. Seaman Mineral Museum, the official Mineralogical Museum of Michigan, which possesses more than 60,000 specimens.





About Michigan Tech and Houghton

Michigan Tech was founded in 1885 and has gained world-wide recognition for innovative education, scholarship, and research.

Our faculty strive to be mentors, and our graduate students receive intensive, advanced instruction and the opportunity to pursue research in a wide range of academic programs. The department takes a personalized approach to each student's graduate program.

Houghton lies in the heart of Upper Michigan's scenic Keweenaw Peninsula. The campus overlooks Portage Lake and is just a few miles from Lake Superior.

Houghton has a population of 7,400 residents. The University's more than 6,600 students from many states and foreign countries make the area a vibrant multicultural community.

Houghton is the safest college town in Michigan and the eighth-safest in the nation. It also has been called one of the nation's top ten summer sports meccas, and one of the top ten best places in the country to live.

For more information, contact

Michigan Technological University Geological and Mining Engineering and Sciences Dow Environmental Sciences and Engineering Building 1400 Townsend Drive

Houghton, Michigan 49931-1295 USA Telephone 906-487-2531 Fax 906-487-3371 Email geo@mtu.edu Website www.geo.mtu.edu/

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



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EACH

Geological and Mining Engineering and Sciences

The program

The graduate faculty of the department are involved in a wide range of research topics that cross disciplinary boundaries. A major effort is made to create a unique program for each graduate student and encourage interactions with other departments.

Degrees

MS and PhD in Geology MS and PhD in Geological Engineering MS in Geophysics MS and PhD in Mining Engineering

The Department of Geological & Mining Engineering & Sciences at Michigan Technological University (MTU) invites applications from highquality, motivated students seeking MS and PhD degrees in Geological or Mining Engineering, Geology, and Geophysics. The department's graduate programs are challenging yet flexible; they are designed to accommodate individual needs, background, and interests. Interdisciplinary study is also encouraged.



You will work together with world leaders teaching and developing solutions to world problems.

Recent and current research projects in Geological and Mining Engineering and Sciences

The Department of Geological and Mining Engineering and Sciences programs have a wide variety of research strengths. These include:

- Volcanology
- Petroleum Geology and Geophysics
- Subsurface Remediation and Contaminant Transport
- Seismic Petrophysics
- Subsurface Visualization
- Stratigraphy and Basin Analysis
- Geochemistry and Ore Deposits
- Near Surface Geophysics
- Environmental/Aqueous Geochemistry
- Basin/Regional Scale Hydrogeology/Hydrology
- Atmospheric Remote Sensing
- Paleomagnetism/Environmental Magnetism
- Structural Geology
- Mineralogy and Petrology
- Satellite Limnology

"Michigan Tech's Department of Geological and Mining Engineering and Sciences allowed me to customize my doctoral program in geology to suit my needs as an off-campus student working in the petroleum industry. Later, the department willingly and creatively provided financial support and resources when it became clear that I would need to come on campus to complete my dissertation research. In May, 2002, I graduated with my PhD in Geology culminating in a great learning experience."

> Albert "Buddy" Wylie, PhD Graduate 2002



- Rock Mechanics
- Environmental Impacts of Mining
- Geostatistics
- Mine Health and Safety

Laboratories

The department is housed in the Dow Environmental Sciences and Engineering and M&M buildings featuring world-class computer and analytical laboratory equipment; for example

- Laboratory for Remote Sensing and Volcanology
- Subsurface Remediation Lab
- Subsurface Visualization Lab
- Seismic Petrophysics Lab
- Environmental Magnetism Lab
- Rock Mechanics Lab
- Environmental Geochemistry Lab
- X-Ray Diffraction Lab