

ABOUT THE DEPARTMENT

The *Department of Geosciences* at Western Michigan University resides in Rood Hall. Additional lab and teaching space is in Haenicke Hall, Wood Hall, and Michigan Geological Repository for Research and Education (MGRRE). The Department comprises 14 board appointed faculty (including 3 joint appointments). Undergraduate majors typically total in excess of 100 students in 5 majors areas; Earth Science (including Science Education dual majors), Geochemistry, Geology, Geophysics, and Hydrogeology. *Graduate enrollments typically numbering 30 students* are enrolled in a range of specialization in either Earth Science or Geology Masters Degree programs. The *Ph.D. program typically has 10-15 students* in a range of disciplines including hydrogeology, environmental geology, geochemistry/isotope geochemistry, basin analysis, and remote sensing.

The Department of Geosciences has historically emphasized employment opportunities for its graduates and the training of geosciences professionals. We boast an alumni cadre placed in a wide range of geosciences professions including: Science Educators; resource exploitation scientists; environmental scientists, both private sector consulting, and public sector regulatory and research positions; and a wide range of natural scientists, including park rangers and naturalists. Ph.D. graduates have been very successful in the job market with most currently employed in either higher education or private sector consulting.

MISSION STATEMENT

1. To reflect in our teaching, research, and service the breadth and importance of the geosciences to society and the interrelationship of our discipline to other fields of science.
2. To provide graduates of our programs with the technical expertise and skills needed to gather and interpret geologic data in a rigorous scientific manner.
3. To provide our graduates with the tools to effectively communicate the results of geologic investigations to other professionals and the public.
4. To facilitate professional development of our graduates with a sound foundation in the Geosciences and a passion for intellectual curiosity and lifelong learning.

UNDERGRADUATE PROGRAMS

Geology Major—38 credit hours in Geology plus approximately 33 hours in supporting science courses.

Geophysics Major—The Geosciences and Physics Departments offer a program of study leading to a major in geophysics. Students choosing this program of study are also required to take mathematics courses which correspond to a minor in mathematics. Students contemplating a geophysics major should contact the Geosciences Department as early as possible for advising.

Geochemistry Major—The Geosciences and Chemistry Departments offer a program of study leading to a major in geochemistry. Students choosing this major will not be required to complete an additional minor. The geochemistry major is designed to meet the needs of students preparing for a professional career in geochemistry or environmental chemistry.

Hydrogeology major—Prepares students for graduate study or employment in hydrogeology. It focuses on those aspects of geology and related sciences that pertain to the occurrence, movement and quality of water with particular attention to water-related environmental problems.

Earth Science Teaching—The Earth Science Education major and minor is designed to provide a basic understanding of those subjects normally included in a secondary earth science course: geology, meteorology, astronomy, and oceanography. Earth Science is now a common course of study as well as other courses including geology, astronomy, and oceanography in many high schools. More than 350 schools in Michigan now offer or plan to offer earth science.

Earth Science Non-Teaching—The earth science major and minor program is a broad and flexible course of instruction for students anticipating careers in conservation, related professions, state and federal parks and planning agencies.

GRADUATE PROGRAMS

Master of Arts in Earth Science

A non-thesis program that permits students to design programs of study in consultation with the program advisor that are compatible with the individual's goals. The program is intentionally flexible; coursework may be drawn from geosciences, biological sciences, chemistry, anthropology, economics, political science, communication, and physics, among others.

Master of Science in Geosciences

A research degree designated to prepare the student for professional work in geology and for further graduate study. Departmental areas of specialization include: Hydrogeology; Geochemistry and Petrology; Geophysics and Tectonics; Stratigraphy and Sedimentary Geology.

Doctor of Philosophy in Geosciences

A research degree designed for persons intending to take leadership roles in teaching and research in one of four core areas of the Geosciences. These four core areas are: Hydrogeology; Geochemistry and Petrology; Geophysics and Tectonics; Stratigraphy and Sedimentary Geology.

CONTACT

Mohamed Sultan, Chair
Department of Geosciences
1187 Rood Hall
Western Michigan University
Kalamazoo, MI 49008-5241
Phone: (269) 387-5487
Fax: (269) 387-5513
Email: mohamed.sultan@wmich.edu
www.geology.wmich.edu/