The research-focused Master of Geological Sciences is tailored to your interests, Our department has active research programs in:

- Basin analysis
- Ecohydrology
- Economic geology
- Fluvial Geomorphology
- Glacial geology
- Hydrology
- Isotope geochemistry
- Geophysics
- Limnology
- Paleoclimatology
- Petrology
- Planetary geology
- Sedimentology
- Structural geology
- Tectonics

Why UMD

Duluth's natural environment provides a unique opportunity to study the region's geology. You'll have the opportunity to collaborate in your research with the Large Lakes Observatory, the Natural Resources Research Institute, and the Precambrian Research Center. We also ensure our graduates are well prepared for professional geological work in industry, education, government or further schooling.

Acquired Skills

- Demonstrate proficiency in coursework (at the graduate level) in core geological topics
- Demonstrate acquisition of new research skills in field methodologies, data collection, and/or data processing.
- Demonstrate graduate-level proficiency in the design of research, using appropriate methodology to address a geological problem.
- Prepare and defend a suitable thesis research proposal to their thesis committee.
- Complete an original research project approved by their thesis committee.
- Demonstrate proficiency in written and oral professional communications to scientific audiences, including research proposals and reporting of research outcomes.
- Demonstrate ability to articulate scientific questions and outcomes to a general audience at a public final thesis defense.
- Demonstrate readiness for the professional workforce, through scholarly independence, collaboration with peers, transfer of scientific knowledge to the general public, and/or interaction with experts in their field outside of UMD.
- Address the relevance of their academic and research endeavors to the global earth system, by citing published research of non-US researchers in their theses and any scholarly work that results from it.
- Participate with peers and experts in their field at professional international workshops and meetings.

Career Possibilities

To find out what our recent graduates are doing, see the Career and Internship Services Report: Follow-up of Majors
Requirements

In addition to the general application instructions provided by the Graduate School, visit the Geological Sciences program page for specific application instructions and deadlines related to the program. Also visit the catalog requirements page linked above for additional information.