

Geoscience, MS

The MS in geoscience is regarded by most hiring agencies as the working degree. The master's program in geoscience prepares students for employment in industry or for doctoral study.

Learning Outcomes

Graduates will demonstrate the ability to:

- develop subject matter expertise and broad knowledge in the field of geoscience;
- conduct research under the direction of a faculty member and interact successfully with other members of a research team;
- effectively communicate research findings in both written and oral formats;
- conduct all aspects of research and teaching with the highest ethical standards; and
- be prepared for career options in academia, industry, government, or other relevant fields.

Requirements

The Master of Science program in geoscience requires a minimum of 30 s.h. of graduate credit. Students may count up to 8 s.h. of research credit toward the 30 s.h. required for the degree. They must earn at least 24 s.h. toward the degree in University of Iowa courses taken after they enroll in the program. Throughout their graduate study, students must maintain a grade-point average (GPA) of at least 3.00 in all coursework required for their degree and in all graduate-level geoscience coursework. Students whose GPA drops below 3.00 are placed on academic probation.

All entering students are required to enroll in EES:7270 Geologic Orientation, Scholarly Integrity, and Responsible Conduct of Research during the fall semester of their first year in the graduate program. Students also must complete EES:5010 Geoscience Seminar Series each semester until they defend their thesis.

During the second semester of study, each student should propose an advisory committee of at least three faculty members to the department chair for approval. Thesis students are responsible for obtaining their advisory committee's approval of a suitable program of coursework and for satisfactory development of research plans as outlined in a thesis proposal, which should be completed and approved by the department chair before the end of the second semester of full-time study. The thesis typically has depth and breadth similar to those of a published research paper. Thesis students must deliver a half-hour public presentation of their thesis, followed by an oral defense.

Students are encouraged to present their research at local, regional, national, or international meetings. The department provides partial funding for travel to such meetings.

Detailed information about graduate degree requirements and timelines for making satisfactory progress toward a degree is available; see Graduate Student Guidelines on the Department of Earth and Environmental Sciences Graduate Program website.

Admission

All geoscience graduate students must meet the admission and degree requirements of the Graduate College; see the Manual of Rules and Regulations on the Graduate College website (particularly sections IX, X, and XII). They also should acquaint themselves with the university calendar.

Career Advancement

Career opportunities are readily available for geoscience graduates. Professional geologists work in resource companies, environmental corporations, educational institutions, conservation agencies, urban planning, state and federal geological surveys, and government resource and research organizations. Companies such as ExxonMobil routinely recruit Iowa graduates on campus.

The Pomerantz Career Center offers multiple resources to help students find internships and jobs.

Academic Plans

Sample Plan of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

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Course	Title	Hours
Academic Career		
Any Semester		
30 s.h. must be graduate level coursework; graduate transfer credits allowed upon approval. More information is included in the General Catalog and on department website. ^a		
		Hours
		0
First Year		
Fall		
EES:7270	Geologic Orientation, Scholarly Integrity, and Responsible Conduct of Research ^b	1
EES:5010	Geoscience Seminar Series ^c	1
EES Elective course ^d		4
EES Elective course ^d		3
		Hours
		9
Spring		
EES:5010	Geoscience Seminar Series ^c	1
EES Elective course ^d		3
EES Elective course ^d		3
EES Elective course ^d		2
		Hours
		9
Second Year		
Fall		
EES:5010	Geoscience Seminar Series ^c	1
EES:7990	Research: Geoscience ^e	4
EES Elective course ^d		1
		Hours
		6
Spring		
EES:5010	Geoscience Seminar Series ^c	1

EES:7990	Research: Geoscience ^e	4
EES Elective course ^d		1
Final Exam ^f		
Hours		6
Total Hours		30

- a Students must complete specific requirements in the University of Iowa Graduate College after program admission. Refer to the Graduate College website and the Manual of Rules and Regulations for more information.
- b Complete during first year fall semester.
- c Complete each semester until degree completion.
- d Courses selected should reflect the individual needs, interests and talents of the student; work with faculty advisor to determine appropriate graduate elective coursework and sequence.
- e Maximum total of 8 s.h. for thesis research credit allowed.
- f Consists of a half-hour public presentation of thesis followed by an oral defense.