Applied Environmental Geoscience, MS

Department: Geology Department
College: College of Science

Overview

About This Degree

The MS in applied environmental geoscience is a broadly-utilized degree program that emphasizes interdisciplinary coursework and thought. This terminal degree program requires a combination of advanced courses selected from geology offerings, as well as additional courses from other units on campus, enabling students to complement traditional geology courses with courses in soils, watershed, and engineering in order to acquire a competitive background to obtain employment in the environmental fields. This degree is for students interested in studying the geosciences, having a multidisciplinary degree, and going on to careers in environmental fields.

The program offers two distinct focuses.

- **Energy Track:** This track prepares participants for careers in the energy extractive industries, such as petroleum/natural gas, and coal.
- **Environmental Track:** The environmental track is tailored for land managers, and those in the environmental assessment and remediation fields.

The Geology Department is one of the oldest departments at Utah State. It fosters a friendly environment where students are able to interact with faculty and receive specialized attention in their research.

Because USU's applied environmental geoscience program is designated as a Western Regional Graduate Program, students from participating western states qualify for in-state tuition. For more information, visit http://wrgp.wiche.ed http://wrgp.wiche.edu.

Career Options

Graduates in applied environmental geoscience can pursue careers in the following industries:

- Energy (oil, gas, coal, geothermal)
- Government agencies
- Regulation
- Environmental consulting
- Natural hazards assessment (earthquakes, landslide, etc.)

What it takes

Admissions Requirements

Students must have a bachelor's degree in geology, earth science, or any related science discipline. Occasionally, students may need to take one or two prerequisite courses to make up for deficiencies in their undergraduate transcripts. These courses, if needed, will be decided upon by the advisor and graduate committee of the student.

Application Requirements:

- Complete the online application
- Pay the $55 application fee
- Score at or above the 40th percentile on in the GRE
- Have a 3.0 or higher GPA on your last 60 semester or 90 quarter credits
- Provide transcripts of all college/university credits
- Provide three contacts for letters of recommendation

International students have additional admissions requirements.

Admissions Deadlines

Applications for the MS are due by:

- Fall semester - February 15
- The department continues to review applications after this date, but students must meet this deadline to be considered for assistantships.

Master's Degree Plan Options

Students receive the MS by pursuing the following plan option:

- The **Plan B** option, which requires the production of a paper or creative work of art and is expected to reflect equivalent scholarship standards as a thesis.

Financial Assistance

The department typically funds all of its graduate students with research assistantships and occasionally other types of assistantships.

A limited number of scholarships are available through the Geology Department. These change from year to year depending on available funding, so contact the department to see what is currently available.

A variety of additional funding opportunities are available, including fellowships, scholarships, tuition awards, and travel support. Additionally, students may be eligible for subsidized health insurance through qualifying assistantships.

Program Requirements

Click here to see course requirements for the **Master of Science**.

The applied environmental geoscience degree requires additional coursework from several units on campus, including the Department of Geology, the Department of Civil and Environmental Engineering, the Department of Plant, Soils, and Climate, the Department of Watershed Sciences, the Department of Biology, and the Department of Mathematics and Statistics.

Contact

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Get Involved

Professional Organizations, Honor Societies, and Clubs

American Geophysical Union: This is dedicated to the furtherance of the geophysical sciences through the individual efforts of its members and in cooperation with other national and international scientific organizations.

The Geological Society of America: This society was established in 1888 and provides access to elements that are essential to the professional growth of earth scientists at all levels of expertise and from all sectors: academic, government, business, and industry.

Labs, Centers, Research

Institute for Natural Systems Engineering: The INSE is a recognized leader in the development, testing, and application of multi-disciplinary assessment methods for aquatic ecosystems and instream flow assessment methodologies.

Optically Stimulated Luminescence Laboratory: OSL specializes in the analysis of the luminescence signals from quartz grains in geomorphological applications. It currently has two RISO TL/OSL Readers and one with a single-grain attachment.

Rock Preparation Laboratory: This lab has a rock crusher, corers, trim saws, and thin-section equipment.

Utah Center for Water Resources Research: The UCWRR facilitates water research, outreach, design, and testing elements within a university environment that supports student education and citizen training.

Utah Water Research Laboratory: The UWRL works on nearly 250 water-related projects a year and has projects in all of Utah's 29 counties and more than 40 countries. The lab is one of the go-to places that addresses the technical and societal aspects of water-related issues, including quality, quantity, and distribution of water.

Water Initiative: Utah State University supports a broad community of students and faculty engaged in water education, research, and outreach. The USU Water Initiative provides an overarching umbrella for the activities of this community aimed at fostering interdisciplinary collaboration and collegial sharing of ideas related to water across the departments and colleges of USU.