ABOUT THE MAJOR

As a student in the Geoscience program at the U, you will focus on the composition, structure, and history of the Earth and the processes that govern them. You will learn to apply the principles of chemistry, physics, mathematics, and biology and gain a fundamental understanding of how the Earth works and has evolved through time. The geoscience coursework includes theoretical, fieldwork, and laboratory components that will prepare you to address societal needs and problems such as locating and characterizing mineral, energy, and groundwater resources, assessing seismic and other geologic hazards, and evaluating and remediating environmental contamination. You can tailor your major to suit your interests, passions, and future goals by selecting from three emphasis areas: Geology, Geophysics, or Environmental Geosciences. The Geology emphasis uses Utah's unique structures to focus on geologic materials, Earth systems, and fossils. The Geophysics emphasis focuses on using physical methods to image and understand the Earth. The Environmental Geoscience emphasis focuses on layers of the atmosphere and their interactions. Regardless of emphasis area, the Geoscience major at the U provides both pre-professional training for future scientists and prepares you to make informed choices about pressing societal issues.

LEARNING OUTCOMES

- Understand the nature and origin of the materials that make up the Earth
- Understand geologic time and how it is measured
- Apply basic principles of math, chemistry, biology and physics to geologic issues
- Recognize the professional and ethical responsibilities expected of scientists
- Demonstrate skills in reading comprehension of scientific literature, and in oral and written communication of scientific results
- Demonstrate proficiency in geologic field skills and in solving integrative, field-based problems in Earth science

PLAN & PREPARE

At the U, we plan for our students to have an Exceptional Educational Experience identified by four broad categories we call the Learning Framework: Community, Knowledge & Skills, Transformation, and Impact. This major map will help you envision, explore, design, and plan your personalized Exceptional Educational Experience with the Learning Framework at the core. In addition to assisting you in planning your coursework and navigating the requirements of your major, this map will help you incorporate other kinds of experiences to expand your knowledge, support your development, and prepare you for the future you want.

GET STARTED TODAY

Schedule an appointment with an advisor advising.utah.edu

Visit ugs.utah.edu

Learn more about the Learning Framework ugs.utah.edu/learning-framework

College of MINES + EARTH SCIENCES THE UNIVERSITY OF UTAH

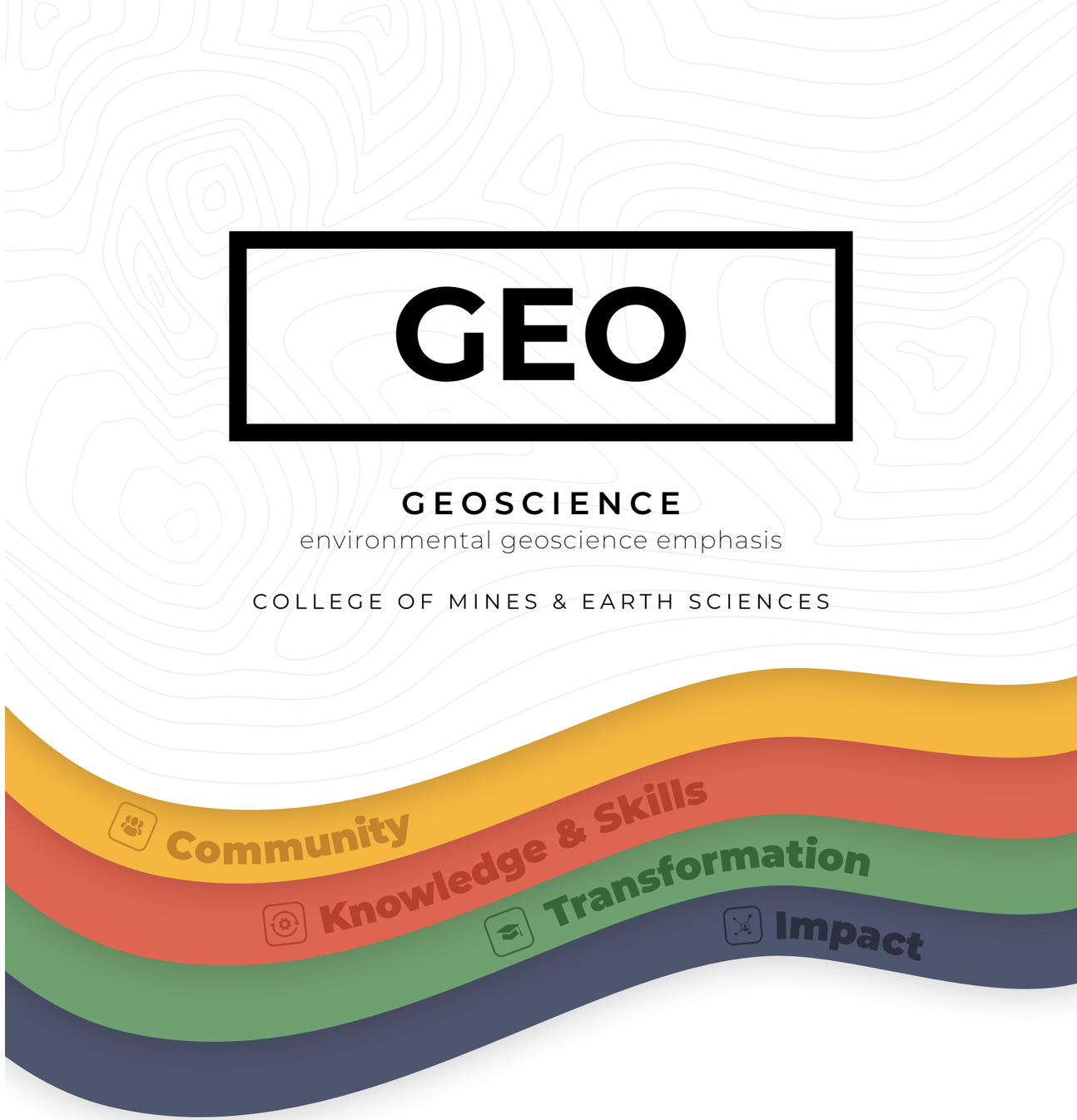
115 S 1460 E, Room 383
Salt Lake City, UT 84112
earth.utah.edu

GEO

GEOSCIENCE

environmental geoscience emphasis

COLLEGE OF MINES & EARTH SCIENCES



"Environmental Geoscience is an exciting and hands-on major, where students apply classroom ideas in the field. People always say, "fake it 'till you make it," but the Department of Geology and Geophysics gives you the tools and confidence to "rock" it."

>> Baylee Olds
USGS Geologist, NAGT Student Intern

THE UNIVERSITY OF UTAH EXCEPTIONAL EDUCATIONAL EXPERIENCE THE OFFICE OF UNDERGRADUATE STUDIES

GEOSCIENCE environmental geoscience emphasis

Use this map to explore, envision, design, and plan your Exceptional Educational Experience.

	GETTING STARTED	MAKING PROGRESS		FINISHING UP
COURSES	- Meet with your academic advisor to create a first year course plan - Take GEO 1100 and GEO 2500 in the fall - Check with your advisor to take an appropriate math course	- Take GEO 3100 Dynamic Earth - Talk to your advisor about your allied science sequence - Study in the Student Epicenter (FASB 104)	- Find professors on earth.utah.edu and set up an appointment to talk about research - Take a general education class that feels interesting (GEO 3030 is a great IR class!) - Begin taking upper division electives to explore the earth sciences	- Meet with your academic advisor to review your degree audit - Prepare to take Field Methods and Field Geology as your capstone experience - Apply for graduation during your final fall semester
COMMUNITY	- Visit student involvement tables in the fall (find more information in the Student Epicenter - FASB 104) - Check social media links and calendar of events	- Ask your advisor about becoming a student ambassador - Volunteer at the Student Epicenter to help with outreach workshops and building tours	- Find a student club or organization at getinvolved.utah.edu - Experience an alternative fall or spring break through the Bennion Center	- Join GeoClub and get involved with the annual Open House, the weekly Distinguished Lectures Series, or sit on the department outreach committee
KNOWLEDGE AND SKILLS	- Meet with a Career Coach at the CPDC[1] - Take a tour of the Global Change and Sustainability Center (FASB 234)	- Attend the STEM Job Fair in the fall to find internships - Join a research team. Connect with your current professors or find research interests on the	- Find a learning abroad experience - Research professional licensure requirements for geological engineering - Consider taking GEOG 3100 Intro to GIS[2] & Cartography	- Share your research with the Office of Undergraduate Research - Present your research at the annual department Open House
TRANSFORMATION	- Use the Catalog to explore a minor or certificate - Visit with a Student Success Advocate - Explore the Natural History Museum of Utah	- Begin research for a senior thesis and work with a professor studying hydrology - Volunteer at the Natural History Museum of Utah	- Explore the geology of Utah by visiting Utah Geological Survey - Visit one of Utah's national parks - Dig for trilobites at u-digfossils.com	- Participate in graduation events across campus - Interview a Distinguished Lecture Series presenter
IMPACT	- Join Inclusive Earth (student club information in the Student Epicenter FASB 104) - Attend a MUSE Casual Friday	- Participate in or create your own community service project at the Bennion Center - Volunteer at the Gardens on campus	- Find volunteer opportunities at geology.utah.gov - Attend the Wasatch Gem Society annual Gem, Mineral and Fossil show	- Teach the community about your interests at the annual Open House - Share your research in the department newsletter
CAREER	- Start building your resume with your career coach - Activate and customize your Handshake account to find jobs, internships, and career events	- Create a LinkedIn Account - Research internships through the Hinckley Institute - Start research with a faculty member	- Apply for research funding through UROP[3] - Ask your advisor or professors about Learning Abroad experiences for earth scientists - Attend Career Expos in fall and spring semesters	- Apply for jobs or graduate schools at least 6 months before graduation - Meet with a Career Coach to practice interview conversations

WHERE CAN I GO AFTER GRADUATION?

- Geochemist
- Oceanographer
- Environmental Geologist
- Environmental Technician
- Environmental Field Scientist
- Field Geologist
- Environmental Health Scientist
- Environmental Scientist
- Soils Inspector
- Water Inspector
- Wellsite Geologist
- Mudlogger
- Hydrogeologist
- Hydrologist

[1] *Career & Professional Development Center* [2] *Geographic Information Systems* [3] *Undergraduate Research Opportunities Program*