ABOUT THE MAJOR

If you want to expand your understanding of our planet and learn how to effectively share your knowledge with others, the University of Utah's Earth Science Teaching Composite (ESTC) major is a great fit for you! Earth Science is a group of scientific areas involving the study of earth and other planets through geology, meteorology, oceanography, and astronomy. Earth Scientists apply the principles of chemistry, physics, mathematics, and biology to understand the composition, structure, and history of the Earth and the processes that govern them.

In addition to taking foundational courses in math, chemistry, physics, and biology, the ESTC major allows you to engage in earth challenges in areas such as climate, natural disasters, preservation, and sustainability. You are also encouraged to take advantage of Utah's unique features for an immersive educational experience. Utah is one of the very few states that can boast of having rocks of every geologic period exposed, extending our state's history back beyond two billion years into the past. Every major rock type, fossil group, precious metal, economic metal, fossil fuel, and type of geologic structure and landform can be found in our state. Our five national parks and seven national monuments attract more than three million visitors per year to enjoy and appreciate the world-class geology in our state.

The Earth Science Composite Teaching major meets state requirements for Earth Science, Integrated Science, and Physical Science teaching endorsements. It provides students with the knowledge and skills to teach Earth Science, Physical Science and Integrated Science. It provides students with the knowledge and skills to build upon the curricula described by the Utah State Office of Education for the above programs. It provides students with the knowledge of math, chemistry, physics, and biology required to understand the earth sciences.

LEARNING OUTCOMES

- Ability to pass the Level I Praxis Exam
- Understand the nature and origin of the materials that make up the Earth and the dynamic processes that operate within it from its deep interior to the surface.
- Understand the geologic evolution of the Earth and the development and evolution of life on Earth.
- Demonstrate skills for student learning and classroom management.
- Understand teaching professionalism and ethical responsibility.
- Engage in lifelong learning and embrace the need to do so.

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

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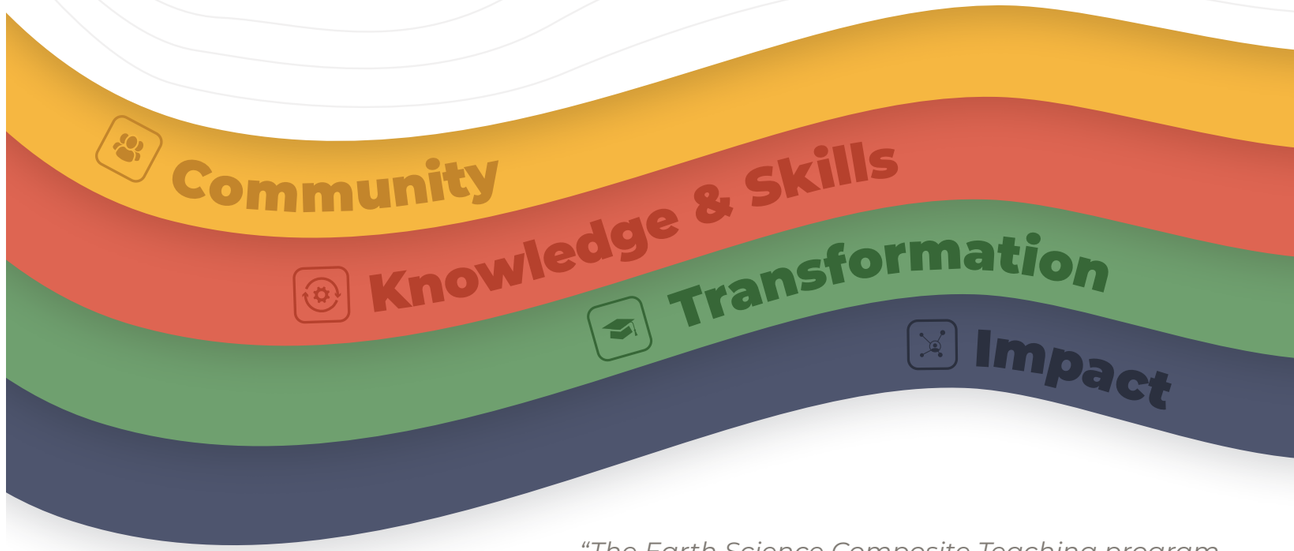
Salt Lake City, UT 84112
earth.utah.edu

GEO

EARTH SCIENCE COMPOSITE TEACHING

COLLEGE OF MINES AND EARTH SCIENCES



"The Earth Science Composite Teaching program satisfied my longing to better understand some of the dynamics of geology and to fully embrace a love and respect for the Earth and it's many intricacies. This program has prepared me to cultivate a deep and meaningful understanding of our planet to the young people of our community, so that they might become better stewards of our planet."

>> Mitchell Poen
Earth Science High School Teacher
Granite School District

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

EARTH SCIENCE COMPOSITE TEACHING

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 - Meet with an Education advisor to prepare for EDU 1010 - Take GEO 1100, GEO 2500, and EDU 1010 in the fall semester - Take an appropriate math course - Apply for the Teach for Utah scholarship program	- Take GEO 3100 – Dynamic Earth - Continue with your allied science sequence (check with your advisor) - Study in the Student Epicenter (FASB 104)	- Volunteer with after-school programs, the Center, or the Natural History Museum of Utah - Apply to be a Learning Assistant in the College of Science	- Meet with your GEO and EDU academic advisor to review your degree audit - Apply to teacher licensure programs - Prepare to take Field Methods - Apply for graduation during your final fall semester
COMMUNITY	- Visit student involvement tables in the fall semester (find more information in the Student Epicenter – FASB 104) - Checkearthutahedu for social media links and calendar of events	- Apply to be a student ambassador (ask your advisor for details) - Volunteer to help with outreach workshops and building tours (visit the Student Epicenter for details)	- Find a student club or organization at getinvolvedutahedu - Experience an alternative fall or spring break through the Bennion Center	- Join GeoClub and get involved with the annual Open House, the weekly Distinguished Lecture Series, or sit on the department outreach committee (email: gg-info@listsutahedu)
KNOWLEDGE AND SKILLS	- Apply for the Teach for Utah scholarship program - Meet with a Career Coach - Interview or job shadow with someone in your field of interest (connect with a Geology professor at earthutahedu)	- Attend the Education and STEM Job Fairs in the fall to find internships, check the CPDC[1] calendar for more details - Find a learning abroad experience	- Research professional licensure requirements for earth science secondary teaching - Volunteer with an after-school program (check your local school district for opportunities)	- Apply to the teacher licensure program - Finish science major courses and apply to the MEd program
TRANSFORMATION	- Visit with a Student Success Advocate - Volunteer at local elementary schools to talk about earth sciences - Take a safety class (CPR, First Aid, CERT training, Wilderness training) - Explore the Natural History Museum of Utah – free for students!	- Explore the geology of Utah by visiting the Utah Geological Survey at geologyutahgov	- Visit one of Utah's national parks (explore at Utahcom/national-parks) - Dig for trilobites at u-digfossilscom	- Participate in graduation events across campus (look out for advisor emails with details) - Interview a Distinguished Lecture Series presenter
IMPACT	- Join Inclusive Earth (student club information in the Student Epicenter FASB 104) - Attend a MUSE Casual Friday (visit the MUSE website for events calendar)	- Volunteer in a K-12 classroom (look on your local district's website for more information) - Participate in or create your own community service project at the Bennion Center	- Volunteer at the Gardens on campus - Find volunteer opportunities at geologyutahgov - Discover outreach opportunities through your academic advisor	- Teach community members about your interests at the annual Open House (watch for emails from your advisor) - Share your research or experiences 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[2] - Attend the Career Expos in fall and spring semesters	- Apply for jobs or graduate schools at least six months before graduation (see your advisor for details) - Meet with a Career Coach to practice interview conversations

WHERE CAN I GO AFTER GRADUATION?

- Secondary Earth Science Teacher

[1] *Career & Professional Development Center* [2] *Undergraduate Research Opportunities Program*