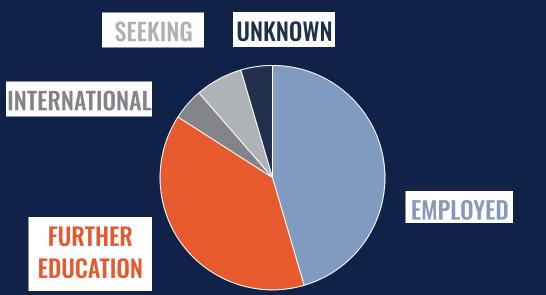
## 2023-24 **BS, Geological Engineering**

## **Experiential Major Menu**

## WHERE GEOLOGICAL ENGINEERING **STUDENTS GO**



**Student pursuits one-year post-graduation:** 



#### Industries of employment for students one year out:

- Civil/Construction & Building Trades
- Environmental Resources/Water
- Manufacturing
- Mining
- Consulting
- Energy Oil & Gas

#### Job titles of our graduates one-year out:

- Field Engineer
- Geotechnical Engineer
- Staff Engineer
- Geologist
- Account Manager

This menu is a tool for you to use to explore opportunities at Mines outside of the classroom. These are not requirements, but rather recommendations to help you leverage what Mines has to offer. Just like at a restaurant, choose what looks best to you and start from there! This menu can help you create your own pathway and customize your experience during your time at Mines.

The activities are placed in specific years based off staff and faculty recommendations, but you can participate in most of them at any time. There is never a wrong time to get involved if you're looking, and no pressure to do any of these things!

## **Get to know Geological Engineering**

Our faculty, staff and students work in a number of fundamental and applied areas important to earth, energy and environment that include mineral and energy resources, underground construction and tunneling, geological hazards, and geochemistry, as well as surface and ground water resources. We take education seriously, and have excellent teaching facilities, world class laboratory facilities, and access to some of the best field sites in the world.

We have close partnerships with the U.S. Geological Survey and Colorado Geological Survey and are proud to house one of the best geology museums in the country. Geology is important to many areas important to humanity, from hazards to water resources to changing climate and we are training outstanding students to be stewards of our earth's natural resources.

#### **Get Involved**

**Attend Celebration of Mines in August to get to know** campus organizations and academic departments, sample food, and play games. Below are some departments that offer many great opportunities to enhance your experience here at Mines.

- Student Activities, Involvement & Leadership
- University Honors and Scholars Program
- Every Oredigger

## **Contact us:**

1516 Illinois St., Golden, CO 80401

https://geology.mines.edu



### **Academic options in Geological Engineering** Explore the options below to see how to expand upon a **Geological Engineering degree and what to expect** from the course load.

- Minors
  - <u>Underground Construction & Tunneling</u>
  - Geophysics
  - Space and Planetary Science and Engineering
  - Chemistry
  - Water Sustainability
  - McBride Honors Program
  - <u>Teaching</u>
- 4+1 Programs
  - Geology, Geophysics, Geological Engineering, Hydrologic Science and Engineering, Geochemistry, GIS & Geoinformatics, Space Resources, Underground Construction and **Tunneling and Data Science**
- Academic Flow Chart
- Academic Catalog

# 2023-24 EXPERIENTIAL MAJOR MENU BS, Geological Engineering

	1st year	2nd year	3rd year
Leadership & Innovation	<ul> <li>Join the Mines Rockhounding Club</li> <li>Explore opportunities to get involved with the <u>Undergraduate</u> <u>Student Government</u></li> <li>Explore options to get involved with <u>RHA</u> and Community Councils</li> <li>Apply for the Environmental Leadership Lab trip and Scholars Program. Check the Daily Blast for more information in April.</li> </ul>	<ul> <li>Join AAPG, AEG an/or SEG student groups at Mines</li> <li>Attend the Leadership Summit and develop your leadership skills right on campus</li> <li>Participate in the Leadership Workshop Series with SAIL</li> <li>Attend the Hennebach Program lectures</li> <li>Sign up to engage in innovative thinking and real-world problem solving with Innov8x Challenge</li> </ul>	<ul> <li>Become an officer in your society</li> <li>Apply to be an Undergraduate Writing Fellow, a peer tutor in t Writing Center. Check the Daily Blast for information in early October.</li> </ul>
Professional Development	<ul> <li>Join the <u>Geology and Geological Engineering page</u> on LinkedIn</li> <li>Update or create a college resume and <u>get it reviewed</u> with feedback</li> <li>Attend <u>Career Day</u></li> <li>Use <u>DiggerNet</u> for employment opportunities</li> <li>Enroll in <u>CSM 250</u> to plan your career path</li> <li>Work on a professional profile using the <u>Mines Strategy</u> guide</li> </ul>	<ul> <li>Attend Career Day for summer internship positions</li> <li>Join the <u>Association of Environmental and Engineering</u> <u>Geologists</u> or the <u>Society of Economic Geologists</u> for free as a student</li> <li>Join the <u>American Association of Petroleum Geologists</u> for \$10 or apply for a scholarship</li> <li>Explore <u>ethics opportunities</u> across campus</li> <li>Attend <u>VIP events</u> each semester</li> <li>Attend the <u>Chevron Lecture Series</u> luncheon</li> </ul>	<ul> <li>Attend Career Day to network</li> <li>Consider opportunities for graduate schools</li> <li>Take Introduction to Research Ethics (SYGN 502)or Profession: Oral Communication (LICM 501), both are graduate classes but accessible to Undergraduates.</li> <li>Write an article for SWE's annual <u>newsletter</u></li> <li>Be a tutor or lead core review with CASA</li> </ul>
Research, Creative & Scholarly Achievement	<ul> <li>Explore the option of a summer with <u>SURF</u></li> <li>Pick up copies of <u>The Oredigger</u> to see what is going on at Mines and maybe contribute a written piece.</li> <li>Explore how to get involved with research through <u>different</u>. <u>opportunities</u> on campus</li> </ul>	<ul> <li>Attend the <u>Emerging Scholars Seminar Series</u> to learn about various research topics</li> <li>Find a faculty member you are interested in working with and apply for <u>MURF</u></li> <li>Explore classes offered through <u>HASS</u></li> </ul>	<ul> <li>Show your research outcomes in <u>Reuleaux</u></li> <li>Explore options to join a <u>musical group</u> on campus or <u>Mines Li Theater</u></li> <li>Take Research, Values, and Communication (<u>HASS 360</u>)</li> <li>Co-author a paper with a fellow student or faculty member</li> <li>Manage departmental or student organization's web and/or s media presence</li> </ul>
Inclusive & Impactful Civic Engagement	<ul> <li>Apply to <u>work</u> at College View Middle School in Denver as a tutor</li> <li>Join Society of Women Engineers as a <u>mentee</u></li> <li>Attend the Study Abroad Fair this Fall to start exploring your options. Additional scholarships may be available.</li> <li>Attend the annual <u>Celebration of DI&amp;A at Mines</u></li> </ul>	<ul> <li>Participate in outreach at local elementary schools</li> <li>Participate in <u>Girls Lead The Way</u></li> <li>Examine different viewpoints with the <u>movie and book</u> recommendations from MEP</li> <li>See how you can contribute to <u>Mines Without Borders</u> projects</li> <li>Join the Mines DI&amp;A <u>general council meetings</u> or a <u>learning</u> <u>community</u></li> </ul>	<ul> <li>Assist with Trick-or-Treat so Golden Can Eat, more information Daily Blast</li> <li>Tutoring at local high schools</li> <li>Explore DI&amp;A <u>workshops</u> along with trainings from <u>SHAPE</u></li> <li>Join the departmental DI&amp;A Council</li> <li>Serve as a panelist at <u>Making The Connection</u> or other recruiting events</li> <li>Coordinate an <u>S2S community service</u> event</li> </ul>
Health & Wellness	<ul> <li>Participate in <u>Oredigger Camp</u> to build your Mines community before classes start</li> <li>Balance studying for finals with daily wellness activities during <u>Stress Less Week</u></li> <li>Become familiar with the Counseling Center's <u>services</u></li> <li>Attend a QPR suicide prevention <u>training</u></li> <li>Attend a Bystander Intervention <u>workshop</u></li> <li>Attend <u>Fresh Check Day</u></li> <li>Take a group fitness class</li> </ul>	<ul> <li>Sign up to be a part of <u>intramural sports</u></li> <li>Get financially savvy with <u>Money Matters</u></li> <li>Participate in a Peer Educator led <u>workshop</u></li> <li>Utilize <u>YOU@Mines</u> to find personalized wellness resources to succeed, thrive &amp; matter at Mines</li> <li><u>Apply</u> to be a Betsy's Friends Peer Educator</li> <li>Check on your own health at the <u>Sexual and Reproductive</u> <u>Wellness Fair</u></li> </ul>	<ul> <li>Adventure with the <u>Outdoor Recreation Center</u> through an organized trip (domestic or international!) or rent gear to have of your own</li> <li>Get <u>CPR/First Aid</u> certified</li> <li>Prioritize your sleep by grabbing a Bedside Box</li> <li>Organize a <u>suicide prevention training</u> or a <u>Peer Education</u> workshop for your student organization</li> <li>Destress with some therapy dogs at <u>Pause for Paws</u></li> <li>Do a <u>personal training</u> session with Rec Sports</li> </ul>
Academic Success	<ul> <li>Sign your family up for the <u>CASA First-Year Family Newsletter</u> so they can support your academic success</li> <li>Attend the <u>Major Fair</u> and <u>declare</u> a major in late April at Declaration Day with CASA. Keep an eye out for an announcement in the Daily Blast</li> </ul>	<ul> <li>Check out CASA for academic <u>advising</u> to go over your schedule and academic opportunities</li> <li>Explore <u>Bounce Back</u> if you are needing to retake a course, on academic probation or returning from academic suspension.</li> </ul>	<ul> <li>Meet with <u>CASA</u> to go over your schedule and talk about possi graduate opportunities including <u>4+1 programs</u></li> <li>Start to request letters of recommendation from faculty or supervisors for graduate school or jobs</li> <li>Participate in Summer Field Session this upcoming summer</li> </ul>



_	4th or final year
n the y	<ul> <li>Expand your leadership in your society or organization</li> <li>Take <u>CSM 350:</u> Special Studies in Leadership &amp; Small Group Dynamics</li> </ul>
onal but	<ul> <li>Look for full time employment at Career Day and on DiggerNet.</li> <li>Take advantage of the Career Center's <u>Offer Letter Review</u></li> <li>Participate in free Mines sponsored <u>review sessions</u> for the FE and then <u>register</u> to take the exam</li> </ul>
<u>: Little</u>	<ul> <li>Submit a piece of visual art, fiction, poetry or music to <u>High Grade</u></li> <li>Present at a conference</li> <li>Present at Mines <u>Undergraduate Research Symposium</u></li> </ul>
r social	
ion in itment	<ul> <li>Tutor at a local high school</li> <li>Volunteer as a mentor for K-14 student with <u>Rocky Mountain MESA</u></li> <li>Take <u>Art &amp; Environmentalism</u> in Italy</li> <li>Apply for a Mines DI&amp;A <u>community grant</u> to help promote an inclusive campus</li> <li>Facilitate a workshop at Celebration of DI&amp;A at Mines. Keep an eye on the Daily Blast for calls for proposals.</li> </ul>
ave one	<ul> <li>Show your loved ones everything you love about Mines at <u>Family &amp;</u> <u>Friends weekend</u></li> <li>Participate in the <u>Imposter Syndrome</u> Peer Education workshop before heading out into the workforce or graduate school</li> <li>Help manage your stress with Stress Less Box</li> <li>Take a Self-Check at <u>YOU@Mines</u></li> <li>Do a QPR <u>refresh</u></li> </ul>
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ssible	<ul> <li>Mandatory senior design research experience</li> <li>Apply to graduate school and/or jobs</li> </ul>