2023-24 **BS, Mining Engineering**

Experiential Major Menu

WHERE MINING ENGINEERING **STUDENTS GO Student pursuits one-year post-graduation:** UNKNOWN **FURTHER**



Industries of employment for students one year out:

- Mining
- Civil/Construction & Building Trades
- High Tech/Information Technology
- Chemicals

Job titles of our graduates one-year out:

- Mining Engineer
- Geologic Technician
- Field Engineer
- Explosives Engineer
- Management Development Program
- Open Pit Engineer
- Tunneling Engineer

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 Mining Engineering

The Mining Engineering department was established in 1874 to provide scientific & engineering support to Colorado's booming mining industry. Today we are a multi-disciplinary program with a strong emphasis on applied engineering education & research. We operate the Edgar Experimental Mine and Earth Mechanics Institute, which are full-sized teaching labs that are unique in the world, and provide an outstanding hands-on student experience in a small department setting, which develops career-ready graduates for industry.

Our department is consistently ranked #1 in Minerals & Mining Engineering program globally. Our focuses range from space mining to deep underground mining and from mineral processing to industrial recycling and our curriculum reflects this with detailed technical training as well as broad societal and environmental outlooks.

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:

1600 Illinois St., Golden, CO 80401

mining@mines.edu



Academic options in Mining Engineering

Explore the options below to see how to expand upon a Mining Engineering degree and what to expect from the course load.

Minors

- Underground Construction & Tunneling
- Economics
- Space Mining
- Explosives Engineering
- McBride Honors Program
- <u>Teaching</u>

4+1 Programs

- Geology, Geophysics, Geological Engineering Mining Engineering, Engineering and Technology Management
- Academic Flow Chart
- Academic Catalog

2023-24 EXPERIENTIAL MAJOR MENU BS, Mining Engineering

	1st year	2nd year	3rd year
Leadership & Innovation	 Join a student club focused on mining Explore opportunities to get involved with the <u>Undergraduate</u> <u>Student Government</u> Explore options to get involved with <u>RHA</u> and Community Councils Apply for the Environmental Leadership Lab trip and Scholars Program. Check the Daily Blast for more information in April. 	 Join the <u>Society for Mining, Metallurgy & Exploration (SME)</u> Student Chapter or the <u>International Society of Explosive</u> <u>Engineers</u> Attend the <u>Leadership Summit</u> and develop your leadership skills right on campus Participate in the <u>Leadership Workshop Series</u> Attend the <u>Hennebach Program</u> lectures Sign up to engage in innovative thinking and real-world problem solving with <u>Innov8x Challenge</u> 	 Become an officer in your student organization Apply to be an Undergraduate Writing Fellow, a peer tutor in the Writing Center. Check the Daily Blast for information in early October.
Professional Development	 Update or create a college resume and <u>get it reviewed</u> with feedback Attend <u>Career Day</u> Use <u>DiggerNet</u> for employment opportunities 	 Attend the SME <u>Annual Conference</u> Participate in Career Day to network Create a <u>LinkedIn</u> Profile Enroll in <u>CSM 250</u> to plan your career path Explore <u>ethics opportunities</u> across campus Attend <u>VIP events</u> each semester Attend the <u>Chevron Lecture Series</u> luncheon 	 Explore certification through the EMCIS Safety Program Attend department and industry social events Attend Career Day for summer internship positions Consider opportunities for graduate schools Take Introduction to Research Ethics (SYGN 502) or Professional C Communication (LICM 501), both are graduate classes but access to Undergraduates. Write an article for SWE's annual <u>newsletter</u>
Research, Creative & Scholarly Achievement	 Explore the option of a summer with <u>SURF</u> Pick up copies of <u>The Oredigger</u> to see what is going on at Mines and maybe contribute a written piece. Explore how to get involved with research through <u>different</u> <u>opportunities</u> on campus 	 Explore employment opportunities at the Earth Mechanics Institute (EMI), the Edgar Experimental Mine, and Department Office and Labs Attend the Emerging Scholars Seminar Series to learn about various research topics Find a faculty member you are interested in working with and apply for MURF Explore classes offered through HASS 	 Show your research outcomes in <u>Reuleaux</u> Explore options to join a <u>musical group</u> on campus or <u>Mines Little</u> <u>Theater</u> Take Research, Values, and Communication (<u>HASS 360</u>) Co-author a paper with a fellow student or faculty member Manage departmental or student organization's web and/or soci media presence
Inclusive & Impactful Civic Engagement	 Participate in SME public service and education events Apply to work at College View Middle School in Denver as a tutor Join Society of Women Engineers as a mentee Attend the Study Abroad Fair this Fall to start exploring your options. Additional scholarships may be available. Attend the annual <u>Celebration of DI&A at Mines</u> 	 Participate in outreach at local elementary schools Participate in <u>Girls Lead The Way</u> Examine different viewpoints with the <u>movie and book</u> recommendations from MEP See how you can contribute to <u>Mines Without Borders</u> projects Join the Mines DI&A <u>general council meetings</u> or a <u>learning</u> <u>community</u> 	 Assist with Trick-or-Treat so Golden Can Eat, more information in Daily Blast Tutoring at local high schools Explore DI&A <u>workshops</u> along with trainings from <u>SHAPE</u> Join the Mining department's DI&A Committee Serve as a panelist at <u>Making The Connection</u> or other recruitme events Coordinate an <u>S2S community service</u> event
Health & Wellness	 Participate in <u>Oredigger Camp</u> to build your Mines community before classes start Balance studying for finals with daily wellness activities during <u>Stress Less Week</u> Become familiar with the Counseling Center's <u>services</u> Attend a QPR suicide prevention <u>training</u> Attend a Bystander Intervention <u>workshop</u> Attend <u>Fresh Check Day</u> Take a <u>group fitness</u> class 	 Sign up to be a part of <u>intramural sports</u> Get financially savvy with <u>Money Matters</u> Participate in a Peer Educator led <u>workshop</u> Utilize <u>YOU@Mines</u> to find personalized wellness resources to succeed, thrive & matter at Mines <u>Apply</u> to be a Betsy's Friends Peer Educator Check on your own health at the <u>Sexual and Reproductive</u> <u>Wellness Fair</u> 	 Adventure with the <u>Outdoor Recreation Center</u> through an organized trip (domestic or international!) or rent gear to have o of your own Get <u>CPR/First Aid</u> certified Prioritize your sleep by grabbing a Bedside Box Organize a <u>suicide prevention training</u> or a <u>Peer Education works</u> for your student organization Destress with some therapy dogs at <u>Pause for Paws</u> Do a <u>personal training</u> session with Rec Sports
Academic Success	 Sign your family up for the <u>CASA First-Year Family Newsletter</u> so they can support your academic success 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 	 Participate in Summer Field Session this upcoming summer Explore 4+1 programs Check out CASA for academic <u>advising</u> to go over your schedule and academic opportunities Explore <u>Bounce Back</u> if you are needing to retake a course, on academic probation or returning from academic suspension. 	 Participate in department sponsored field trips and experiences Meet with <u>CASA</u> to go over your schedule and talk about possible graduate opportunities Start to request letters of recommendation from faculty or supervisors for graduate school or jobs



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