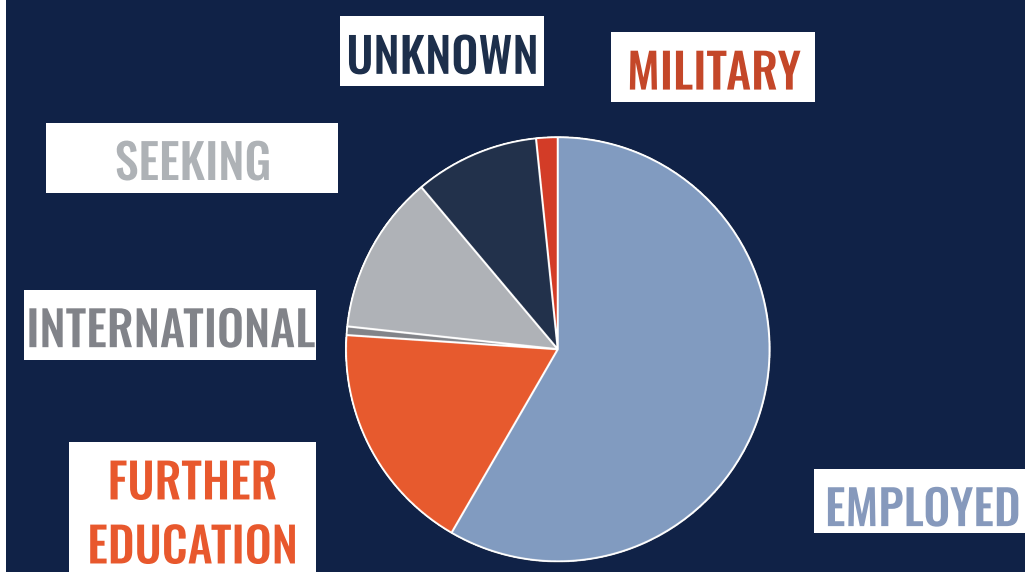


### WHERE MECHANICAL ENGINEERING STUDENTS GO

Student pursuits one-year post-graduation:



Industries of employment for students one year out:

- Aerospace/Defense/Aviation
- Energy- Oil & Gas
- Energy - Alternative/Renewable
- Manufacturing
- Transportation & Logistics
- Government/Public Sector
- Automotive
- Consulting
- High Tech/Information Technology

Job titles of our graduates one-year out:

- Systems Engineer
- Manufacturing Engineer
- Structural Analyst
- Mechanical Engineer
- Flight Test Engineer
- Project Engineer
- Controls 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 Mechanical Engineering

Our department prides itself in providing a challenging yet rewarding experience for undergraduate students to develop as engineers, scholars and citizens. A degree in Mechanical Engineering will give you a strong background in core engineering and science courses with course options in thermodynamics, fluids, mechanics of materials, machine design, computer-aided engineering and heat transfer.

Our students engage in our project-based courses in the middle years to build design and problem-solving skill sets valued by industry and to prepare for the senior year Capstone Design experience. Students are also encouraged to get involved in research with our faculty. These research areas include: biomechanics, solid mechanics and materials, thermal-fluid systems, and robotics. Students also have the opportunity to build depth within the degree by taking one of our 8 tracks, including Aerospace, Automotive and Biomechanics.



"Mines offers students the opportunity to engage with their course material through relevant and actionable projects."

ANNA CHRISTIANSEN

### Academic options in Mechanical Engineering

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

#### Commonly Pursued Minors

- [Robotics and Intelligent Systems](#)
- [Electrical Engineering](#)
- [Computer Science](#)
- [McBride Honors Program](#)
- [Teaching](#)

#### 4+1 Programs

- Mechanical Engineering or any other discipline







#### Academic Flow Chart

#### Academic Catalog

### 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](#)

	1st year	2nd year	3rd year	4th or final year
<b>Leadership &amp; Innovation</b> 	<ul style="list-style-type: none"> <li>Look into joining a ME specific <a href="#">student organization</a></li> <li>Explore opportunities to get involved with the <a href="#">Undergraduate Student Government</a></li> <li>Explore options to get involved with <a href="#">RHA</a> 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 style="list-style-type: none"> <li>Attend the <a href="#">Leadership Summit</a> and develop your leadership skills right on campus</li> <li>Participate in the <a href="#">Leadership Workshop Series</a> with SAIL</li> <li>Attend the <a href="#">Hennebach Program</a> lectures</li> <li>Sign up to engage in innovative thinking and real-world problem solving with <a href="#">Innov8x Challenge</a></li> </ul>	<ul style="list-style-type: none"> <li>Become an officer in your student organization</li> <li>Apply to be an Undergraduate Writing Fellow, a peer tutor in the Writing Center. Check the Daily Blast for information in early October.</li> </ul>	<ul style="list-style-type: none"> <li>Expand your leadership in your organization</li> <li>Take <a href="#">CSM 350</a>: Special Studies in Leadership &amp; Small Group Dynamics</li> </ul>
<b>Professional Development</b> 	<ul style="list-style-type: none"> <li>Attend <a href="#">Mechanical Mondays</a> to broaden your perspective of different careers and pathways</li> <li>Attend Career Day for summer internship positions</li> <li>Update or create a college resume and <a href="#">get it reviewed</a> with feedback</li> <li>Use <a href="#">DiggerNet</a> for employment opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Check out some <a href="#">professional organizations</a> to join</li> <li>Join the <a href="#">ME community</a> on LinkedIn</li> <li>Work on a professional profile using the <a href="#">Mines Strategy</a> guide</li> <li>Enroll in <a href="#">CSM 250</a> to plan your career path</li> <li>Explore <a href="#">ethics opportunities</a> across campus</li> <li>Attend <a href="#">VIP events</a> each semester</li> <li>Attend the <a href="#">Chevron Lecture Series</a> luncheon</li> </ul>	<ul style="list-style-type: none"> <li>Participate in Career Day to network</li> <li>Consider opportunities for graduate schools</li> <li>Take Introduction to Research Ethics (<a href="#">SYGN 502</a>) or Professional Oral Communication (<a href="#">LUCM 501</a>), both are graduate classes but accessible to Undergraduates.</li> <li>Write an article for SWE's annual <a href="#">newsletter</a></li> <li>Be a tutor or lead core review with CASA</li> </ul>	<ul style="list-style-type: none"> <li>Join the <a href="#">Mechanical Engineering Alumni @ Mines</a> group before you graduate</li> <li>Look for full time employment at Career Day and on DiggerNet.</li> <li>Take advantage of the Career Center's <a href="#">Offer Letter Review</a></li> <li>Participate in free Mines sponsored <a href="#">review sessions</a> for the FE and then <a href="#">register</a> to take the exam</li> </ul>
<b>Research, Creative &amp; Scholarly Achievement</b> 	<ul style="list-style-type: none"> <li>Explore the option of a summer with <a href="#">SURF</a></li> <li>Pick up copies of <a href="#">The Oredigger</a> to see what is going on at Mines and maybe contribute a written piece.</li> <li>Explore how to get involved with research through <a href="#">different opportunities</a> on campus</li> </ul>	<ul style="list-style-type: none"> <li>Attend the <a href="#">Emerging Scholars Seminar Series</a> to learn about various research topics</li> <li>Find a faculty member you are interested in working with and apply for <a href="#">MURE</a></li> <li>Explore classes offered through <a href="#">HASS</a></li> <li>Manage departmental or student organization's web and/or social media presence</li> </ul>	<ul style="list-style-type: none"> <li>Explore <a href="#">ME research areas</a> and connect with a faculty if you want to get involved</li> <li>Show your research outcomes in <a href="#">Reuleaux</a></li> <li>Explore options to join a <a href="#">musical group</a> on campus or <a href="#">Mines Little Theater</a></li> <li>Take Research, Values, and Communication (<a href="#">HASS 360</a>)</li> <li>Co-author a paper with a fellow student or faculty member</li> </ul>	<ul style="list-style-type: none"> <li>Submit a piece of visual art, fiction, poetry or music to <a href="#">High Grade</a></li> <li>Present at a conference</li> <li>Present at Mines <a href="#">Undergraduate Research Symposium</a></li> </ul>
<b>Inclusive &amp; Impactful Civic Engagement</b> 	<ul style="list-style-type: none"> <li>Apply to <a href="#">work</a> at College View Middle School in Denver as a tutor</li> <li>Join Society of Women Engineers as a <a href="#">mentee</a></li> <li>Attend the Study Abroad Fair this Fall to start exploring your options. Additional scholarships may be available. If you want a ME specific program apply to study with a cohort in <a href="#">Cyprus</a> next Spring</li> <li>Attend the annual <a href="#">Celebration of DI&amp;A at Mines</a></li> </ul>	<ul style="list-style-type: none"> <li>Participate in outreach at local elementary schools</li> <li>Participate in <a href="#">Girls Lead The Way</a></li> <li>Examine different viewpoints with the <a href="#">movie and book recommendations</a> from MEP</li> <li>See how you can contribute to <a href="#">Mines Without Borders</a> projects</li> <li>Join the Mines DI&amp;A <a href="#">general council meetings</a> or a <a href="#">learning community</a></li> </ul>	<ul style="list-style-type: none"> <li>Assist with Trick-or-Treat so Golden Can Eat, more information in Daily Blast</li> <li>Tutoring at local high schools</li> <li>Explore DI&amp;A <a href="#">workshops</a>, along with trainings from <a href="#">SHAPE</a></li> <li>Join the departmental DI&amp;A Council</li> <li>Serve as a panelist at <a href="#">Making The Connection</a> or other recruitment events</li> <li>Coordinate an <a href="#">S2S community service</a> event</li> </ul>	<ul style="list-style-type: none"> <li>Tutor at a local high school</li> <li>Volunteer as a mentor for K-14 student with <a href="#">Rocky Mountain MESA</a></li> <li>Take <a href="#">Art &amp; Environmentalism</a> in Italy</li> <li>Apply for a Mines DI&amp;A <a href="#">community grant</a> 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>
<b>Health &amp; Wellness</b> 	<ul style="list-style-type: none"> <li>Participate in <a href="#">Oredigger Camp</a> to build your Mines community before classes start</li> <li>Balance studying for finals with daily wellness activities during <a href="#">Stress Less Week</a></li> <li>Become familiar with the Counseling Center's <a href="#">services</a></li> <li>Attend a QPR suicide prevention <a href="#">training</a></li> <li>Attend a Bystander Intervention <a href="#">workshop</a></li> <li>Attend <a href="#">Fresh Check Day</a></li> <li>Take a <a href="#">group fitness</a> class</li> </ul>	<ul style="list-style-type: none"> <li>Sign up to be a part of <a href="#">intramural sports</a></li> <li>Get financially savvy with <a href="#">Money Matters</a></li> <li>Participate in a Peer Educator led <a href="#">workshop</a></li> <li>Utilize <a href="#">YOU@Mines</a> to find personalized wellness resources to succeed, thrive &amp; matter at Mines</li> <li><a href="#">Apply</a> to be a Betsy's Friends Peer Educator</li> <li>Check on your own health at the <a href="#">Sexual and Reproductive Wellness Fair</a></li> </ul>	<ul style="list-style-type: none"> <li>Adventure with the <a href="#">Outdoor Recreation Center</a> through an organized trip (domestic or international!) or rent gear to have one of your own</li> <li>Get <a href="#">CPR/First Aid</a> certified</li> <li>Prioritize your sleep by grabbing a Bedside Box</li> <li>Organize a <a href="#">suicide prevention training</a> or a <a href="#">Peer Education workshop</a> for your student organization</li> <li>Destress with some therapy dogs at <a href="#">Pause for Paws</a></li> <li>Do a <a href="#">personal training</a> session with Rec Sports</li> </ul>	<ul style="list-style-type: none"> <li>Show your loved ones everything you love about Mines at <a href="#">Family &amp; Friends weekend</a></li> <li>Participate in the <a href="#">Imposter Syndrome</a> 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 <a href="#">YOU@Mines</a></li> <li>Do a QPR <a href="#">refresh</a></li> </ul>
<b>Academic Success</b> 	<ul style="list-style-type: none"> <li>Sign your family up for the <a href="#">CASA First-Year Family Newsletter</a> so they can support your academic success</li> <li>Attend the <a href="#">Major Fair</a> and <a href="#">declare</a> a major in late April at Declaration Day with CASA. Keep an eye out for an announcement in the Daily Blast</li> </ul>	<ul style="list-style-type: none"> <li>Explore different <a href="#">Tracks</a> and decide if you want to focus in a sub-discipline of ME</li> <li>Check out CASA for academic <a href="#">advising</a> to go over your schedule and academic opportunities</li> <li>Explore <a href="#">Bounce Back</a> if you are needing to retake a course, on academic probation or returning from academic suspension.</li> </ul>	<ul style="list-style-type: none"> <li>Meet with <a href="#">CASA</a> to go over your schedule and talk about possible graduate opportunities including <a href="#">4+1 programs</a></li> <li>Start to request letters of recommendation from faculty or supervisors for graduate school or jobs</li> </ul>	<ul style="list-style-type: none"> <li>Choose a project in Senior Design that aligns with the skill sets developed in your ME Track</li> <li>Apply to graduate school and/or jobs</li> </ul>