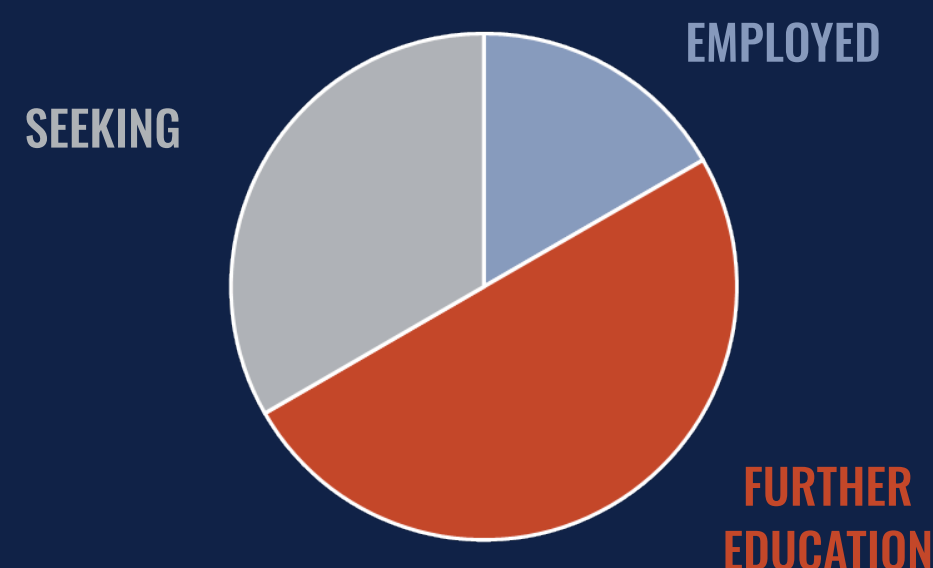


**WHAT QBE STUDENTS DO****Where do Mines QBE students go for graduate school?**

- 80% of them stay at Mines for either a Masters or PhD
 - Popular programs are QBE, and the Engineering and Technology Management,
- 20% go to another institution, mostly for a PhD in a program with a chemistry and biology focus

What career paths do students head towards?

- Biotech
- Clinical Research and Development
- Health Professions
- Data Science and Bioinformatics
- Energy - Alternative/Renewable

* Data projected based on current QBE Student survey of plans after graduation

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 QBE

The Quantitative Biosciences and Engineering (QBE) program at Mines offers students unique opportunities to not only build a strong foundation in modern cellular, molecular, and genomic biology topics, but to also apply their knowledge via the development of experimental, data science, and computational skills. We believe that some of the most transformative science and engineering happens at interfaces between topics; thus, this is the QBE program's primary goal.

As the first undergraduate interdisciplinary program at Mines, QBE will produce the next generation of quantitatively trained scientists needed for innovation in the biological sciences and other disciplines. QBE students can pursue opportunities at Mines and after graduation in healthcare and medicine, biotechnology, and computational biology, among many others.

"At our core, we are biologists with a strong quantitative background masquerading as computer scientists. We leverage rapidly advancing technologies and merge them with our ever-evolving understanding of biological systems. Our ultimate goal? To catalyze transformative changes that have a positive impact on our world."

MAYA MOWERY-EVANS, QBE '23

Academic options in QBE

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

- **Frequently Pursued Minors**
 - [Biomedical Engineering](#)
 - [Data Science](#)
 - [McBride Honors Program](#)
 - [Teaching](#)
- **Common 4+1 Programs**
 - [Data Science](#)
 - [QBE](#)
 - [Engineering and Technology Management](#)
- **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](#)

Experiential Major Menu B.S., Quantitative Biosciences and Engineering

Browse the opportunities within each year and themed Ore Cart to find ways to get involved. All activities in bold are departmental specific, whereas others are open to the general campus.

	1 st year	2 nd Year	3 rd Year	4 th or final year
Leadership & Innovation 	<ul style="list-style-type: none"> Explore opportunities to get involved with the Undergraduate Student Government Explore options to get involved with CLSA and Community Councils Apply for the Environmental Leadership Lab trip and Scholars Program. Check the Daily Blast for more information in April. 	<ul style="list-style-type: none"> Become an officer in a biology-related student organization such as Pre-Med Society, ISPE or iGEM Attend the Leadership Summit and develop your leadership skills right on campus Participate in the Leadership Workshop Series Attend the Hennebach Program lectures Sign up to engage in innovative thinking and real-world problem solving with Innov8x Challenge 	<ul style="list-style-type: none"> Join the QBE Student Advisory Board. Check the QBE Canvas page for more details. Represent QBE at the Mines Major Fair Become a grader or TA for QBE courses. Talk to the course instructor for more information. Become an officer in your society Apply to be an Undergraduate Writing Fellow, a peer tutor in the Writing Center. Check the Daily Blast for information in early October. 	<ul style="list-style-type: none"> Expand your leadership in your society or organization Take CSM 350: Special Studies in Leadership & Small Group Dynamics
Professional Development 	<ul style="list-style-type: none"> Update or create a college resume and get it reviewed with feedback Attend Career Day Use DiggerNet and Workday for employment opportunities 	<ul style="list-style-type: none"> Follow the QBE Instagram account @MinesQBE to get connected Participate in Career Day to network Create a LinkedIn Profile Enroll in CSM 250 to plan your career path Explore ethics opportunities across campus Attend VIP events each semester Attend the Chevron Lecture Series luncheon 	<ul style="list-style-type: none"> Attend Career Day for summer internship positions Consider opportunities for graduate schools Take Introduction to Research Ethics (SYGN 502) or Professional Oral Communication (LICM 501), both are graduate classes but accessible to Undergraduates. Write an article for SWE's annual newsletter Be a tutor or lead core review with CASA 	<ul style="list-style-type: none"> Look for full time employment at Career Day and on DiggerNet. Take advantage of the Career Center's Offer Letter Review Graduate School applications due this Fall, have cover letter and references ready to go by September 1 Apply for travel grants for professional conferences (Biomedical Engineering Society, Intelligent Systems for Molecular Biology, Biophysical Society, Pacific Symposium on Biocomputing, American Physiological Society, etc.)
Research, Creative & Scholarly Achievement 	<ul style="list-style-type: none"> Attend the Mines Bioscience Careers Panel hosted through the Career Center Explore the option of a summer with SURF Pick up copies of The Oredigger to see what is going on at Mines and maybe contribute a written piece. Explore how to get involved with research through different opportunities on campus 	<ul style="list-style-type: none"> Join BioBuilders Apply to biology related REU programs Apply to biology-related internships 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 	<ul style="list-style-type: none"> Show your research outcomes in Reuleaux Explore options to join a musical group on campus or Mines Little Theater Take Research, Values, and Communication (HASS 360) Co-author a paper with a fellow student or faculty member Manage departmental or student organization's web and/or social media presence 	<ul style="list-style-type: none"> Submit a piece of visual art, fiction, poetry or music to the High Grade Present at a conference Present at Mines Undergraduate Research Symposium
Inclusive & Impactful Civic Engagement 	<ul style="list-style-type: none"> Attend the QBE Seminar Series each year 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 Celebration of DI&A at Mines 	<ul style="list-style-type: none"> Participate in outreach at local elementary schools Participate in Girls Lead The Way Examine different viewpoints with the movie and book recommendations from MEP See how you can contribute to Mines Without Borders projects Join the Mines DI&A general council meetings or a learning community 	<ul style="list-style-type: none"> Volunteer with DECTech Assist with Trick-or-Treat so Golden Can Eat, more information in Daily Blast Explore DI&A workshops along with trainings from SHAPE Join the departmental DI&A Council Serve as a panelist at Making The Connection or other recruitment events Coordinate an S2S community service event 	<ul style="list-style-type: none"> Tutor at a local high school Volunteer as a mentor for K-14 student with Rocky Mountain MESA Take Art & Environmentalism in Italy Apply for a Mines DI&A community grant 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.
Health & Well-being 	<ul style="list-style-type: none"> Participate in Oredigger Camp to build your Mines community before classes Balance studying for finals with daily wellness activities during Stress Less Week Become familiar with the Counseling Center's services Attend a QPR suicide prevention training Attend a Bystander Intervention workshop Attend Fresh Check Day Take a group fitness class 	<ul style="list-style-type: none"> Attend Pizza with the Profs, check email for details Sign up to be a part of intramural sports Get financially savvy with Money Matters Participate in a Peer Educator led workshop Utilize YOU@Mines to find personalized wellness resources Apply to be a Betsy's Friends Peer Educator Check on your own health at the Sexual and Reproductive Wellness Fair 	<ul style="list-style-type: none"> Attend the QBE End of Year celebration, details on OreConnect Adventure with the Outdoor Recreation Center Get CPR/First Aid certified Prioritize your sleep by grabbing a Bedside Box Organize a suicide prevention training or a Peer Education workshop for your student organization Destress with some therapy dogs at Pause for Paws Do a personal training session with Rec Sports 	<ul style="list-style-type: none"> Show your loved ones everything you love about Mines at Family & Friends weekend Participate in the Imposter Syndrome 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 YOU@Mines Do a QPR refresh
Academic Success 	<ul style="list-style-type: none"> Sign your family up for the CASA First-Year Family Newsletter so they can support your academic success Attend the Major Fair and declare a major in late April at Declaration Day with CASA. Keep an eye out for an announcement in the Daily Blast. 	<ul style="list-style-type: none"> Mandatory Advising Explore Bounce Back if you are needing to retake a course, on academic probation or returning from academic suspension. 	<ul style="list-style-type: none"> Participate in Summer Field Session this upcoming summer or after senior year Mandatory Advising Start to request letters of recommendation 	<ul style="list-style-type: none"> Look for full time employment or into graduate school