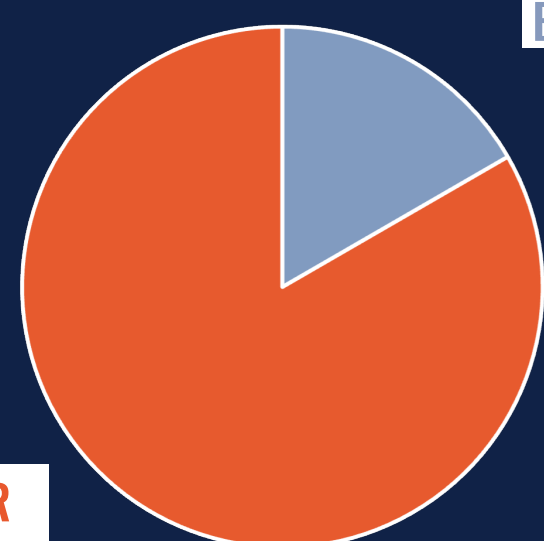


**WHAT QBE STUDENTS DO**

EMPLOYED

FURTHER
EDUCATION**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.

- **Minors**

- [Biomedical Engineering](#)
- [Data Science](#)
- [McBride Honors Program](#)
- [Teaching](#)

- **4+1 Programs**

- [Data Science](#)
- [QBE](#)
- [Engineering and Technology Management](#)

- **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

Leadership & Innovation



- Explore opportunities to get involved with the [Undergraduate Student Government](#)
- Explore options to get involved with [RHA](#) and Community Councils
- Apply for the Environmental Leadership Lab trip and Scholars Program. Check the Daily Blast for more information in April.
- Sign up to engage in innovative thinking and real-world problem solving with [Innov8x Challenge](#)

- **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](#) with SAIL
- Attend the [Hennebach Program](#) lectures

- **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.

- Expand your leadership in your society or organization
- Take [CSM 350](#): Special Studies in Leadership & Small Group Dynamics

Professional Development



- Update or create a college resume and [get it reviewed](#) with feedback
- Attend [Career Day](#)
- Use [DiggerNet](#) for employment opportunities

- **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

- Attend Career Day for summer internship positions
- Consider opportunities for graduate schools including exams you may need (GRE, MCAT, DAT, etc.)
- Join the Colorado Biosciences Association's [Mentor program](#)
- 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](#)

- 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



- **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

- **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](#)

- 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

- 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



- **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](#)

- Join the QBE Student Outreach Team, more info from the Student Advisory Board
- 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](#)

- **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

- 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 & Wellness



- Participate in [Oredigger Camp](#) to build your Mines community before classes start
- 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

- **Attend Pizza with the Profs, check email or 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 to succeed, thrive & matter at Mines
- **Apply** to be a Betsy's Friends Peer Educator
- Check on your own health at the [Sexual and Reproductive Wellness Fair](#)

- **Attend the QBE End of Year celebration, details on the QBE Canvas page or via email**
- 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

- 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



- 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

- Mandatory [Advising](#)
- Explore [Bounce Back](#) if you are needing to retake a course, on academic probation or returning from academic suspension.

- **Participate in Summer Field Session this upcoming summer or after senior year**
- Mandatory [Advising](#)
- Start to request letters of recommendation

- Look for full time employment or into graduate school