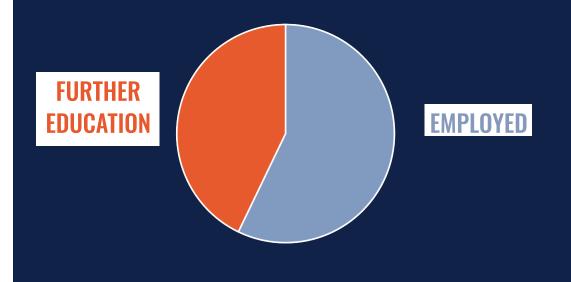
2023-24 **BS**, **Biochemistry**

Experiential Major Menu

WHERE BIOCHEMISTRY **STUDENTS GO**

Student pursuits one-year post-graduation:



Possible Industries of Employment:

- Manufacturing
- Academics
- High Tech/Information Technology
- Energy -Alternative/Renewable
- *Environmental Resources/Water*
- *Electronics/Electrical Components*
- *Biotech/BioEng/Pharmacueticals*

Possible Job Titles:

- Associate chemist
- Laboratory technician
- R&D associate
- Analytical chemist
- Biomedical scientist
- Clinical research associate
- Forensic scientist
- Healthcare scientist
- Research scientist
- Scientific laboratory technician
- Toxicologist

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 Biochemistry

The biochemistry degree program at Mines is designed to Explore the options below to see how to expand upon a prepare students for careers in the growing biotechnology **Biochemistry degree and what to expect from the** industry (including medical devices and pharmaceuticals) or course load. for those who desire to continue education in medical-based Minors professional or graduate schools in bio-related disciplines (e.g. biochemistry, biotechnology, molecular biology). The Mines Biomedical Engineering biochemistry degree is uniquely focused on analytics, gene • Environmental Engineering editing and microbiology.

This degree promotes a fundamental understanding of the fusion of chemistry and biology and an application toward technological problems. Professional biochemists apply their knowledge in many different areas ranging from environmental processes to the development of new biomaterials and novel renewable energy. They work in academic environments, high-tech start-ups, and research and development laboratories associated with practically every advanced technological field including medicine, energy, biotechnology, computing, and agriculture. **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:

1012 14th St., Golden, CO 80401

chemistry@mines.edu





Academic options in Biochemistry

- <u>Geology/Geological Engineering</u>
- Metallurgical and Materials Engineering
- <u>Petroleum Engineering</u>
- Physics
- McBride Honors Program
- <u>Teaching</u>

4+1 Programs

- Applied Mathematics and Statistics, Hydrologic Science and Engineering, Chemistry, Quantitative **Biosciences and Engineering, Hydrology, Nuclear** Engineering, Materials Science, Petroleum Engineering, Metallurgical & Materials **Engineering**, Physics
- Academic Flow Chart
- Academic Catalog

"Being able to receive a degree in Biochemistry while still experiencing the benefits of an engineering college has helped me to realize what opportunities are out there."

AYDEN MARLER

https://chemistry.mines.edu/biochemistry-degree/

303-273-3610

2023-24 EXPERIENTIAL MAJOR MENU BS, Biochemistry

	1st year	2nd year	3rd year
Leadership & Innovation	 Join the <u>American Chemical Society</u> or the <u>Society of Women in</u> <u>Chemistry plus allies</u> 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. 	 Attend the <u>Leadership Summit</u> and develop your leadership skills right on campus Participate in the <u>Leadership Workshop Series</u> with SAIL Attend the <u>Hennebach Program</u> lectures Sign up to engage in innovative thinking and real-world problem solving with <u>Innov8x Challenge</u> 	 TA/LA for General Chemistry 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 weekly Chemistry seminars Attend Career Day for summer internship positions Create a LinkedIn Profile Enroll in CSM 250 to plan your career path Explore ethics opportunities across campus Attend <u>VIP events</u> each semester Attend the <u>Chevron Lecture Series</u> luncheon 	 Participate in Career Day to network Consider opportunities for graduate schools Take Introduction to Research Ethics (<u>SYGN 502</u>)or Professional Oral Communication (<u>LICM 501</u>), both are graduate classes but accessible to Undergraduates. Write an article for SWE's annual <u>newsletter</u> Be a tutor or lead core review with CASA
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 	 Attend the <u>Emerging Scholars Seminar Series</u> to learn about various research topics Find a faculty member you are interested in working with and apply for <u>MURF</u> Explore classes offered through <u>HASS</u> 	 Show your research outcomes in <u>Reuleaux</u> Explore options to join a <u>musical group</u> on campus or <u>Mines</u> <u>Little 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 social media presence
Inclusive & Impactful Civic Engagement	 Apply to <u>work</u> at College View Middle School in Denver as a tutor Join Society of Women Engineers as a <u>mentee</u> 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 <u>learning</u> community 	 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 departmental DI&A Council Serve as a panelist at <u>Making The Connection</u> or other recruitment 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 one 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</u> workshop 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 	 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 <u>Summer Field Session</u> this upcoming summer Meet with <u>CASA</u> to go over your schedule and talk about possible graduate opportunities including <u>4+1 programs</u> Start to request letters of recommendation from faculty or supervisors for graduate school or jobs



4th or final year

- Expand your leadership in your organization
- Take <u>CSM 350:</u> Special Studies in Leadership & Small Group Dynamics

• Look for full time employment at Career Day and on DiggerNet.

• Take advantage of the Career Center's Offer Letter Review

- Submit a piece of visual art, fiction, poetry or music to High Grade
- Present at an academic conference
- Present at Mines <u>Undergraduate Research Symposium</u>
- 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 <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.
- 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>

• Apply to graduate school and/or jobs