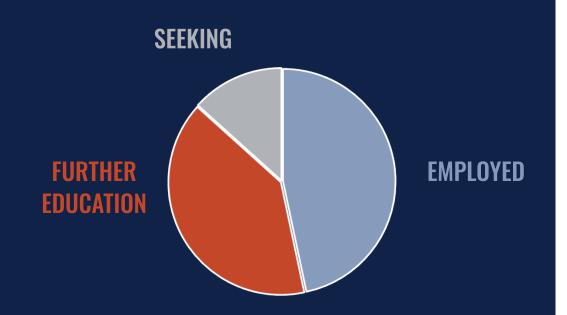
2024-25

BS, Applied Mathematics and Statistics

WHERE AMS **STUDENTS GO**



Student pursuits one-year post-graduation:



Industries of employment for students one-year out:

- Energy Alternative/Renewable
- Aerospace/Defense/Aviation
- Education
- Consulting
- Environmental Resources/Water
- High Tech/Information Technology
- Energy Oil & Gas

Job titles of our graduates one-year out:

- Implementation Consultant
- Analytics Systems Administrator
- Data Engineering Intern
- Analytics GDP
- Data Scientist
- Associate Software Engineer
- Project Specialist
- Predoctoral Technical Associate

Taken from 2023 graduate data

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 Applied Mathematics and Statistics

Mathematics plays a vital role in the education of all students at Colorado School of Mines. This is apparent through the advanced training of its own majors and graduate students, and through the support it provides to all the engineering and science disciplines. The **Department of Applied Mathematics and Statistics takes** pride in its teaching innovations, its contributions to research across campus, and in the quality of excellence among its alumni.

A degree in mathematics will prepare you for jobs in statistics, actuarial sciences, data science, mathematical modeling, cryptography, and mathematics education, as well as for graduate school leading to a research career in engineering, mathematics or statistics.

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: 1015 14th St., Golden, CO 80401

Experiential Major Menu



Academic options in Applied Mathematics and Statistics

Explore the options below to see how to expand upon an Applied Mathematics and Statistics degree and what to expect from the course load.

Frequently Pursued Minors

- Physics
- <u>Geophysics</u>
- Computer Science 0
- Information Systems and Science (EE)
- McBride Honors Program
- <u>Teaching</u>
- Common 4+1 Programs
 - Applied Mathematics and Statistics
- Academic Catalog

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	 Join <u>SWiM</u> or <u>Math Club</u> Explore opportunities to get involved with the <u>Undergraduate</u> <u>Student Government</u> Explore options to get involved with <u>CLSA</u> and Community Councils Apply for the Environmental Leadership Lab trip and Scholars Program. Check the Daily Blast for more information in April. 	 Join <u>AWM</u> for free if you're a SWiM member Join the <u>Mathematical Association of America</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 society Apply to be an Undergraduate Writing Fellow, a peer tutor in the Writing Center. Check the Daily Blast for information in early October. 	 Expand your leadership in your society or organization Take <u>CSM 350</u>: Special Studies in Leadership & Small Group Dynamics
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> or <u>Workday</u> for employment opportunities 	 Attend the Applied Mathematics and Statistics <u>Colloquium</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 	 Attend Career Day for summer internship positions 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 	 Be a <u>Math Learning Center Tutor</u> Look for full time employment at Career Day and on <u>DiggerNet</u>. Take advantage of the Career Center's <u>Offer Letter</u> <u>Review</u>
Research, Creative & Scholarly Achievement	 Look into competing at the <u>Putnam Mathematical</u> <u>Competition</u> 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 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 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 	 Join the Kernel Club Submit a piece of visual art, fiction, poetry or music to the <u>High Grade</u> Present at a conference Present at Mines <u>Undergraduate Research Symposium</u>
Inclusive & Impactful Civic Engagement	 Join_MMCC_to offer workshops for high schoolers 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_ 	 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 Explore DI&A workshops along with trainings from SHAPE- 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 	 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.
Health & Well- being	 Participate in <u>Oredigger Camp</u> to build your Mines community Balance studying for finals with daily wellness activities during <u>Stress Less</u> <u>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 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 workshop</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 	 Show your loved ones everything you love about Mines at <u>Family & 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>
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. 	 Mandatory <u>Advising</u> Explore <u>Bounce Back</u> if you are needing to retake a course, on academic probation or returning from academic suspension. 	 Mandatory <u>Advising</u> Start to request letters of recommendation Participate in the AMS Field Session this year 	 Mandatory senior design research experience

