ELEVATE YOUR CAREER

If you are ready to continue your education, enhance your research experience and connect with world-class faculty and industry experts, Colorado School of Mines offers an extensive list of graduate programs to help you achieve your academic and professional goals.

At Mines, we do more than focus on science, engineering and mathematics. We inspire students to further enhance their skills as innovators, experts and entrepreneurs and to address the greatest challenges that face our planet and beyond.

Colorado School of Mines is located in Golden, Colorado, surrounded by the Rocky Mountain foothills and 15 miles from the city of Denver. Our campus is within three blocks of downtown Golden, a city of approximately 20,000 residents that offers a small-town ambiance with an abundance of restaurants, museums, music venues and more. Golden is centrally located, making it a perfect hub to travel to the mountains for a weekend of snowboarding, or to downtown Denver to explore Colorado’s vibrant capital.

An R1 education & experience

As a graduate student at Mines, you will be a key partner in many of our groundbreaking research projects. Mines received more than $87 million in research awards last year alone, so there are plenty of opportunities for everyone to become the innovator they dream of being.

Live, learn, lead

At Mines, we take care of each other and offer support at all levels, from world-class labs and research facilities to counseling services and a student recreation center. We want everyone to feel challenged, yet balanced.

Get to know your community through monthly, in-person, graduate student socials to further enhance connection and collaboration within our graduate student community.

Enhance your leadership skills by considering a role on the Graduate Student Council to ensure graduate students and their interests are fully represented.

Look to the future with the Mines Career Center who is here to help strategize your next career step and enhance your professional network. Enhance your resume, strengthen interviewing skills and further build your professional network and affiliations to ensure the greatest professional opportunities with your Mines graduate degree.

As you explore your community, tap into your leadership skills and create future goals, the Office of Graduate Studies is also here to support you.

#54 best online master’s in engineering programs, US News, 2022
#1 best mining school in the world, QS World Uni Ranking, 2021
#33 public college in the U.S., top in Colorado, U.S News & World Report 2022

mines.edu/graduate-studies

Curious about life on campus, research news and student life? Visit Mines on social media!
A GLOBAL LEADER IN RESEARCH

In 2022, Colorado School of Mines joined the top tier of research universities in the United States as recognized by the Carnegie Classification of Institutions of Higher Education. In the latest Carnegie data, Mines was elevated to the Research 1 (R1) classification, the highest and most prestigious designation granted to U.S. research universities.

Through partnerships with national laboratories, industry funding agencies and more, you can be confident that the research you do at Mines will have a significant impact on real-world issues.

$87M+ in total research awards in fiscal year 2021

27 Research centers and institutes are affiliated with Mines

160 Research faculty were employed by Mines, as of Jan. 2022

World-class research

Mines graduate students have access to more than 30 research facilities on our Golden, CO campus as well as unique off-campus facilities and equipment such as the Nuclear Science and Engineering Center, the Ultrafast Science Research Lab and the We2st Water Technology Hub.

Our faculty and students are conducting research in many areas including renewable energy, chemical, space, robotics, biotech and more. Some of Mines’ major research partners are the National Renewable Energy Laboratory (NREL), the National Institute of Standards and Technology (NIST) and the United States Geological Survey (USGS).

Learn more about how Mines is leading the way in research and innovation.
Online programs at Mines help you continue your education through convenient, STEM-focused, online course offerings. These programs are built, managed and supported by world-class Mines faculty and staff who create relevant and innovative courses for the high-quality educational experience you’re looking for. You’ll gain the skills and knowledge to increase your marketability to your current or future employer.

And while learning online, you’re never alone. A dedicated team is here to make sure you’re set up for success. When you enroll in online courses at Mines, you become part of the Oredigger family.

**Benefits**

**Shortened semesters**
There are two consecutive sessions of online courses offered during the fall and spring semesters (each eight weeks long). Summer terms are also available.

**Collaborative environment**
Engage with classmates on projects, assignments and exams through our online classrooms.

**Functional & flexible**
Whether you’re returning to school after time spent in industry, looking for a career change or continuing to build on the skills you obtained in your undergraduate degree, we offer flexible class times and programs that work with your busy schedule.

Learn more at [online.mines.edu](http://online.mines.edu)

Mines offers online graduate certificates, master’s non-thesis, master’s thesis and doctorate programs.

For more information about admissions requirements and deadlines, visit [mines.edu/graduate-admissions](http://mines.edu/graduate-admissions).
Residential graduate programs

Additive Manufacturing  
MS-NT, Cert

Advanced Energy Systems  
PhD, MS-NT

Analytical Geochemistry  
MS Pro, Cert

Applied Chemistry  
PhD

Applied Mathematics & Statistics  
PhD, MS, MS-NT

Applied Physics  
MS

Business Analytics  
Cert

Chemical Engineering  
PhD, MS, MS-NT

Chemistry  
MS-NT

Civil & Environmental Engineering  
PhD, MS, MS-NT

Computer Science  
PhD, MS, MS-NT

Data Science  
MS-NT

Earth Resources Development Engineering  
PhD, MS, MS-NT

Economic Geology  
Cert

Electrical Engineering  
PhD, MS, MS-NT

Engineering & Technology Management  
MS, MS-NT

Environmental Engineering Science  
PhD, MS, MS-NT

Exploration Methods  
Cert

Geochemistry  
PhD, MS

Geological Engineering  
PhD, MS, ME-NT

Geology  
PhD, MS

Geophysical Engineering  
PhD, MS, MS-NT

Geophysics  
PhD, MS, MS-NT

GIS & Geoinformatics  
MS-NT, Cert

Humanitarian Engineering & Science  
MS, MS-NT, Cert

Hydrology  
PhD, MS, MS-NT

Materials Science  
PhD, MS, MS-NT

Mechanical Engineering  
PhD, MS

Metallurgical & Materials Engineering  
PhD, MS, ME-NT

Mineral & Energy Economics  
PhD, MS, MS-NT

Mineral Exploration  
MS Pro

Mining Engineering  
PhD, MS, MS-NT

Natural Resources & Energy Policy  
MS-NT, Cert

Nuclear Engineering  
PhD, MS, ME-NT

Operations Research with Engineering  
PhD, MS-NT

Optics for Engineering  
Cert

Petroleum Engineering  
PhD, MS, ME-NT

Petroleum Geophysics  
Cert

Physics  
PhD

Product Management  
Cert

Quantitative Biosciences & Engineering  
PhD, MS, MS-NT

Resource Commodity Analytics  
Cert

Robotics  
PhD, MS, MS-NT, Cert

Smart-Grid Power Electronics & Electrical Power Systems  
MS, MS-NT, Cert

Space Resources  
PhD, MS-NT, Cert

Underground Construction & Tunnel Engineering  
MS-NT, Cert

We are often enhancing our list of programs. A current list can be found at gradprograms.mines.edu.
INVEST IN YOUR FUTURE

Tuition and aid
To support your journey, Mines has numerous funding opportunities: fellowships, traineeships, scholarships and both teaching and research assistantships.

Cost of attendance

<table>
<thead>
<tr>
<th>2022-2023</th>
<th>RESIDENT</th>
<th>OUT-OF-STATE</th>
<th>ONLINE STUDENT</th>
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<tbody>
<tr>
<td>TUITION</td>
<td>$17,676</td>
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<tr>
<td>FEES</td>
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<td>ROOM AND BOARD</td>
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<td>BOOKS AND SUPPLIES</td>
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<td>PERSONAL ALLOWANCE</td>
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<tr>
<td>TRANSPORTATION</td>
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<td>TOTAL</td>
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<td>PER CREDIT HOUR</td>
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Students in qualifying states may be eligible for the Western Regional Graduate Program (WRGP) and could receive a discounted, non-resident tuition rate if they are part of a qualifying academic program at Mines. Find more information at mines.edu/graduate-admissions/wiche.

Career possibilities
Our graduate students enter the workforce with the highest standards of integrity and skill. They assume some of the top positions in industry, government and academia, becoming global leaders who advance their professions and have a lasting influence on the world and beyond. Learn more at mines.edu/career-outcomes.

Orediggers worldwide
Our alumni are everywhere. Whether traveling for business or pleasure, pursuing new opportunities or a career abroad, you can find an Oredigger in almost every major city around the world. And no matter where they are, the Mines community stays connected and frequently reunites to celebrate the Mines spirit. In addition to being placed in all 50 states, Mines alumni are employed all over the world.

“I chose to come to Mines because of the supportive facilities and learning environment. Also because Mines graduates are in high demand by companies.”

Nana Asmah, MS, Natural Resources and Energy Policy
Colorado School of Mines (Mines) is committed to equal opportunity for all persons. Mines does not discriminate on the basis of age, sex, gender (including gender identity and gender expression), pregnancy, creed, marital status, race, ethnicity, color, religion, national origin or ancestry, disability, sexual orientation, genetic information, veteran status or current military service. Further, Mines does not retaliate against community members for filing complaints regarding or implicating any of these protected statuses. Mines’ commitment to nondiscrimination, affirmative action, equal opportunity and equal access is reflected in the administration of its policies, procedures, programs and activities and in its efforts to achieve a diverse student body and workforce. More information can be found at mines.edu/equal-opportunity.