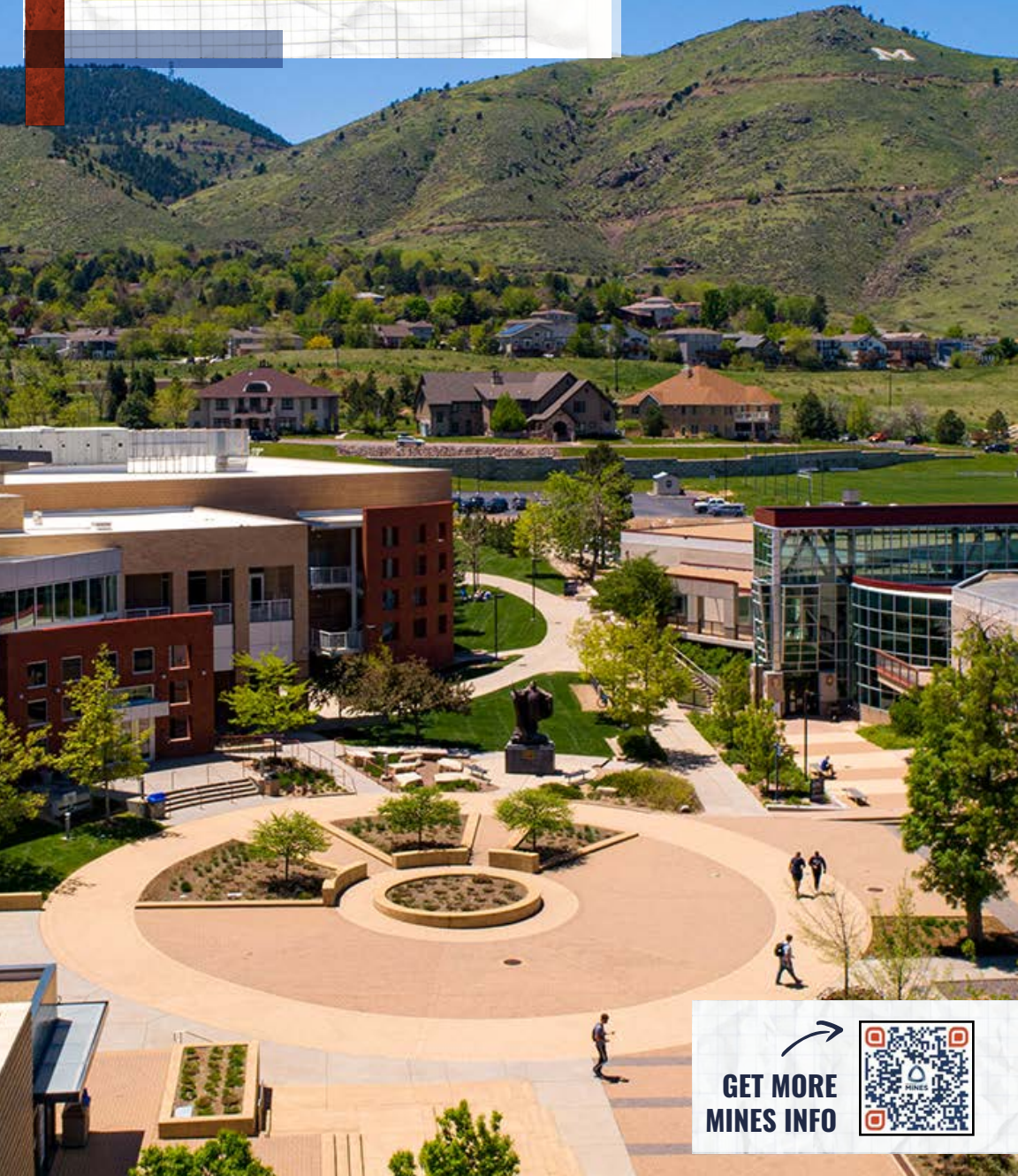




COLORADOSCHOOLOFMINES

# GRADUATE STUDIES



**GET MORE  
MINES INFO**





# ↑ 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.

## #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/about/rankings](https://mines.edu/about/rankings)

## 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.

[mines.edu/graduate-studies](https://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+**

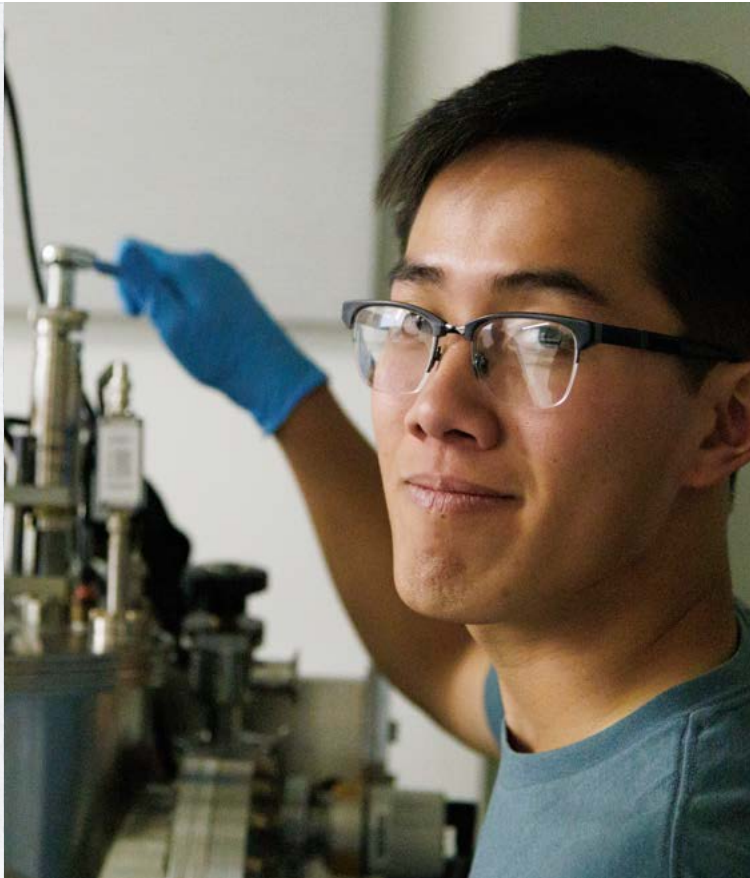
in total research awards in  
fiscal year 2021

**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.





# MINES ONLINE

## Continue your education

**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](https://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](https://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, 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

**Quantum Engineering**  
MS, MS-NT, Cert

**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**  
PhD, MS, MS-NT, Cert



# Online graduate programs

## Graduate Certificates

**Additive Manufacturing**

**Business Analytics**

**Carbon Capture,  
Utilization & Storage**

**Chemical Engineering Processes  
in Energy Transitions**

**Cybersecurity for Cyber Physical Systems**

**Data Science**

Computer Science

Earth Resources

Foundations

Petroleum Data Analytics

Statistical Learning

**Entrepreneurship**

**Environmental Modeling**

**Finite Element Analysis (FEA) Professional**

Learn more by visiting [online.mines.edu](https://online.mines.edu)

## GIS & Geoinformatics

Geospatial Information Technology

GIS for Environmental Studies

GIS for Geohazards Evaluation

GIS for Natural Resources Assessment

## Mining Engineering & Management

**Petroleum Geophysics**

**Product Management**

**Space Resources**

**Underground Construction & Tunneling  
(UCTE)**

## Master's Non-Thesis

**GIS & Geoinformatics**

**Mechanical Engineering**

**Mining Engineering & Management (MS Pro)**

**Space Resources**

## Doctor of Philosophy

**Space Resources**

We are often enhancing our list of programs. A current list can be found at [gradprograms.mines.edu](https://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.

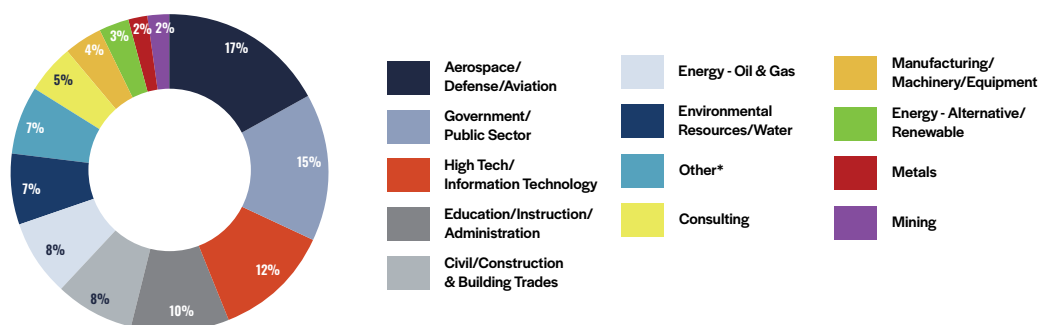
### Cost of attendance

2022-2023	RESIDENT	OUT-OF-STATE	ONLINE STUDENT
TUITION	\$17,676	\$39,618	\$19,080
FEES	\$2,520	\$2,520	\$182
ROOM AND BOARD	\$17,496	\$17,496	\$17,496
BOOKS AND SUPPLIES	\$1,500	\$1,500	\$1,500
PERSONAL ALLOWANCE	\$1,800	\$1,800	\$1,800
TRANSPORTATION	\$1,300	\$1,300	\$1,300
<b>TOTAL</b>	<b>\$42,292</b>	<b>\$64,234</b>	<b>\$41,358</b>
PER CREDIT HOUR	\$982	\$2,201	\$1,060

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](https://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](https://mines.edu/career-outcomes).



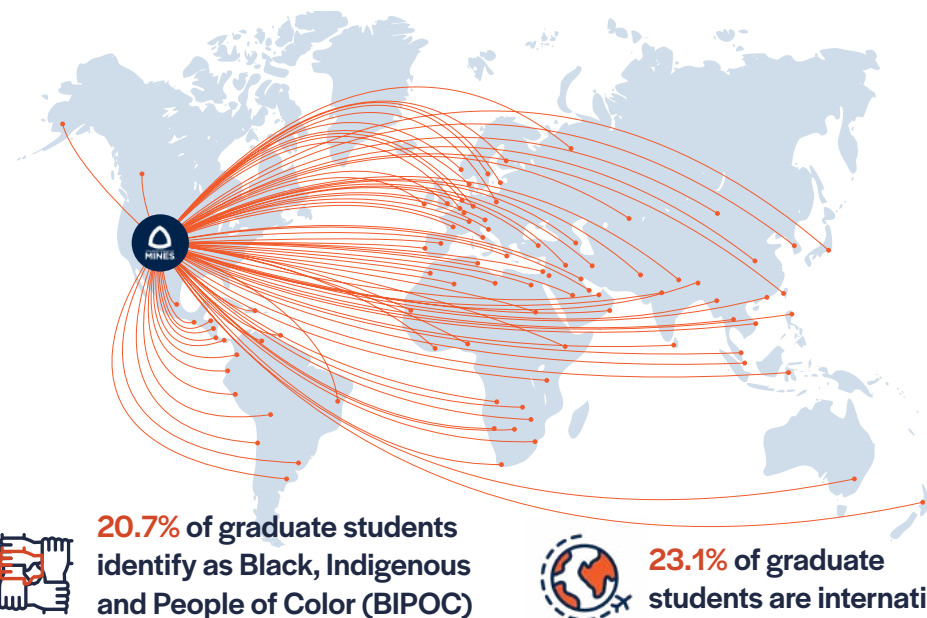
## Orediggers worldwide

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**



**Office of Admissions**

1812 Illinois Street  
Golden, CO 80401

(303) 273-3247

(800) 446-9488

grad-admissions@mines.edu

**[mines.edu/graduate-admissions](https://mines.edu/graduate-admissions)**

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](https://mines.edu/equal-opportunity).

2023 cycle

