

GEORGE S. ANSELL DEPARTMENT OF
**METALLURGICAL
& MATERIALS
ENGINEERING**

METALLURGY.MINES.EDU



PROGRAM SCOPE

Our goal is to provide students with a fundamental knowledge-base associated with materials-processing, their properties and their selection and application. Graduates from Mines in Metallurgical and Material Engineering work in a wide spectrum of manufacturing industries, including metal products, automotive and aerospace industries, and semiconductor fabrication.

\$61,500 AVERAGE SALARY OFFERS FOR 2016-17 MME GRADUATES*

HANDS-ON EXPERIENCE

There are several facilities available for undergraduate classes and projects: the foundry, the hot glass shop and other facilities providing materials analysis tools, welding and mechanical testing. These all provide students with spaces to apply concepts and gain hands-on experience.



FREE POUR FRIDAY

Free Pour Friday is offered weekly and allows students to learn about hands-on metallurgy by making objects out of liquid aluminum and casts. The hot glass shop also has weekly open hours during Soda Lime Sunday.

SUMMER FIELD SESSION

All students will complete a summer field session focused on the following topics:

- Characterization and production of particles
- Physical and interfacial phenomena associated with particulate processes
- Applications to metal and ceramic powder processing
- Laboratory projects and plant visits

AREAS OF STUDY

The Metallurgy and Materials Engineering Department was one of the first organized department at Mines and has been granting degrees since 1904.

DEGREES OFFERED

- ✓ **Metallurgical & Materials Engineering**
Minor, bachelor's, master's and PhD offered

MATERIALS ADVANTAGE CHAPTER

Comprised of four international professional societies, CSMMAC is a student chapter that participates in many competitions and has a long history of success.

- Awarded most outstanding chapter of over 100 chapters (2016-17), nationally and internationally. The Chapter has won this award six times in 12 years.
- Winners of the Materials Bowl brain bowl competition five times in the last 10 years. No other school has won more than twice in the history of the competition.

*Information is from the 2016-17 Mines Career Center Outcomes Survey



MME RESEARCH AND CAREER OPPORTUNITIES

Our faculty have close industrial, government laboratory and academic ties which provide opportunities for internship and employment for students and alumni. The department has a national and international reputation as a leader in Metallurgy and Materials Engineering.

TOP EMPLOYERS

- NASA
- Arcelor Mittal
- Boeing
- Lockheed Martin
- Chevron
- Phillips 66
- BP
- IBM



UNDERGRADUATE RESEARCH

The MME Department has the largest research expenditures of all departments at Mines, providing paid research opportunities to interested undergraduate students.

88%

Placement outcomes within three months of graduation*

ABOUT MINES

Colorado School of Mines is a public university focused on science and engineering, dedicated to pioneering research that addresses the great challenges society faces today and committed to educating students who will do the same.

Founded in 1874 as an institution specializing in silver and gold, Mines has expanded its mission beyond the extraction and use of natural resources, becoming a world leader in advancing responsible stewardship of the Earth and developing revolutionary technologies in numerous disciplines.

CONTACT

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MINES BY THE NUMBERS

Mines has the highest admissions standards of any public university in Colorado and among the highest of any public university in the United States.

#1 best value college in Colorado and #13 nationally by *SmartAsset*

#1 Mines has the largest collegiate section of the Society of Women Engineers in the United States

3 Rocky Mountain Athletic Conference All-Sports Competition Cup championships

18 Intercollegiate athletics teams at Mines

31 Average ACT score for freshmen

85%, 93%, 96% of bachelor's, master's and PhD graduates had positive outcomes upon graduation in 2016-17

92% Freshman-to-sophomore retention percentage

200+ Student organizations on campus

6,043 Degree-seeking undergraduate and graduate students

\$56.8 million Total research awards in fiscal year 2017, with roughly 39 percent funded by non-federal sources



COLORADO SCHOOL OF MINES
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