Institutional Student Outcomes:

Doctoral Programs

Graduate Student Profile

Mines graduates identify and address grand challenges of the 21st century using innovative applications of sound scientific and engineering principles. They act as contributors and leaders of multidisciplinary teams to deliver impactful results for the betterment of society.

Mines graduates are skilled in the acquisition, interpretation, and analysis of data as well as communication of information to diverse audiences. They exemplify ethical behavior including academic and professional integrity, respect for diversity of all types, and recognition of the value of living and working in an interdependent world. Mines graduates are global citizens who possess exceptional adaptability and grit in the face of challenges as stewards of the Earth, Energy, and Environment.

Institutional Values and Principles

Graduate Education

The Colorado School of Mines is dedicated to serving the people of Colorado, the nation and the global community by providing high quality educational and research experiences to students in science, engineering and related areas that support the institutional mission. Recognizing the importance of responsible stewardship of the Earth, Energy, and Environment, Mines places particular emphasis on those fields related to the discovery, production, and utilization of resources needed to improve the quality of life of the world's inhabitants and to sustain the earth system upon which all life and development depend. To this end, Mines is devoted to creating a learning community that provides students with perspectives informed by the humanities and social sciences, perspectives that also enhance students' understanding of themselves and their role in contemporary society. Mines, therefore, seeks to instill in all graduate students a broad class of developmental and educational attributes that are guided by a set of institutionally vetted educational objectives and student learning outcomes. For doctoral and master's degree programs, these are summarized below.

Doctoral Programs

Institutional Educational Objectives:

1. PhD graduates will advance the state of the art of their discipline (integrating existing knowledge and creating new knowledge) by conducting independent research that addresses relevant disciplinary issues and by disseminating their research results to appropriate target audiences.
2. PhD graduates will be scholars and international leaders who exhibit the highest standards of integrity.
3. PhD graduates will advance in their professions and assume leadership positions in industry, government, and academia.

Institutional Student Outcomes:

1. Demonstration of exemplary disciplinary expertise.
2. Demonstration of a set of skills and attitudes usually associated with our understanding of what it is to be an academic scholar (e.g., intellectual curiosity, intellectual integrity, ability to think critically and argue persuasively, the exercise of intellectual independence, a passion for life-long learning, etc.).
3. Demonstration of a set of professional skills (e.g., oral and written communication, time-management, project planning, teaching, teamwork and team leadership, cross-cultural and diversity awareness, etc.) necessary to succeed in a student's chosen career path.

Master's Programs

The Colorado School of Mines offers a wide variety of Master's-level degree programs that include thesis and non-thesis Master of Science programs, Master of Engineering programs and Professional Master's programs. While the objectives and outcomes provided below document expectations of all Master's-level programs, it is expected that given the diversity of program types, different programs will emphasize some objectives and outcomes more than others.

Institutional Educational Objectives:

1. Master's graduates will contribute to the advancement of their chosen fields through adopting, applying and evaluating state-of-the-art practices.
2. Master's graduates will be viewed within their organizations as technologically advanced and abreast of the latest scholarship.
3. Master's graduates will exhibit the highest standards of integrity in applying scholarship.
4. Master's graduates will advance in their professions.

Institutional Student Outcomes:

1. Graduates will demonstrate exemplary disciplinary expertise.
2. Graduates will demonstrate the ability to conduct direct research, the ability to assimilate and assess scholarship, and the ability to apply scholarship in new, creative and productive ways.
3. Graduates will demonstrate professional skills (e.g., oral and written communication, time-management, project planning, teamwork and team leadership, cross-cultural and diversity awareness, ethics, etc.) necessary to succeed in a student's chosen career path.

Research

The creation and dissemination of new knowledge are the primary responsibilities of all members of the university community and fundamental to the educational and societal missions of the institution. Public institutions have an additional responsibility to use that knowledge to contribute to the economic growth and public welfare of the society from which they receive their charter and support. As a public institution of higher education, a fundamental responsibility of Mines is to provide an environment that enables contribution to the public good by encouraging creative research and ensuring the free exchange of ideas, information, and results. To this end, the institution acknowledges the following responsibilities:

- To ensure that these activities are conducted in an environment of minimum influence and bias, it is essential that Mines protect the academic freedom of all members of its community.
- To provide the mechanisms for creation and dissemination of knowledge, the institution recognizes that access to information and information technology (e.g., library, computing and internet resources) are part of the basic infrastructure support to which every member of the community is entitled.
- To promote the utilization and application of knowledge, it is incumbent upon Mines to define and protect the intellectual-property
The seat of government for Jefferson County, Golden once
Geological Survey facility that also contains the National Earthquake
Company, the National Renewable Energy Laboratory, and a major U.S.
this community of 15,000 also serves as home to the Coors Brewing
in the foothills of the Rocky Mountains 20 minutes west of Denver,
Location
globe.
from nearly every nation, and alumni can be found in every corner of the
Mines long has had an international reputation. Students have come
As Mines grew, its mission expanded from the rather narrow initial
1883.
The creation and dissemination of knowledge are the primary
responsible stewardship of the earth and its resources.
Historical
In 1865, only six years after gold and silver were discovered in the
Colorado Territory, the fledgling mining industry was in trouble. The
nuggets had been picked out of streams and the rich veins had been
Early pioneers like W.A.H. Loveland, E.L. Berthoud, Arthur Lakes,
loans. These funds are augmented by government and privately
founded with respect to intellectual property which may be created
while an individual is employed as a faculty member or enrolled as a
student.
History of Colorado School of Mines
In 1865, only six years after gold and silver were discovered in the
Colorado Territory, the fledgling mining industry was in trouble. The
nuggets had been picked out of streams and the rich veins had been
worked, and new methods of exploration, mining, and recovery were
needed.
As Mines grew, its mission expanded from the rather narrow initial
focus on nonfuel minerals to programs in petroleum production and
refining as well. Recently, it has added programs in materials science
and engineering, energy and environmental engineering, and a broad
range of other engineering and applied science disciplines. Mines sees
its mission as education and research in engineering and applied science
with a special focus on the earth science disciplines in the context of
responsible stewardship of the earth and its resources.
Mines long has had an international reputation. Students have come
from nearly every nation, and alumni can be found in every corner of the
globe.
Location
Golden, Colorado, has always been the home of Mines. Located
in the foothills of the Rocky Mountains 20 minutes west of Denver,
this community of 15,000 also serves as home to the Coors Brewing
Company, the National Renewable Energy Laboratory, and a major U.S.
Geological Survey facility that also contains the National Earthquake
Center. The seat of government for Jefferson County, Golden once
served as the territorial capital of Colorado. Skiing is an hour away to the
west.
Administration
By State statute, the school is managed by a seven-member board of
trustees appointed by the governor, and the student and faculty bodies
elect one nonvoting board member each. The school is supported
financially by student tuition and fees and by the State through annual
appropriations. These funds are augmented by government and privately
sponsored research, private gift support from alumni, corporations,
foundations and other friends.
Colorado School of Mines Non-Discrimination Statement
In compliance with federal law, including the provisions of Titles VI and
VII of the Civil Rights Act of 1964, Title IX of the Education Amendment
of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, the
Americans with Disabilities Act (ADA) of 1990, the ADA Amendments Act
of 2008, Executive Order 11246, the Uniformed Services Employment
and Reemployment Rights Act, as amended, the Genetic Information
Nondiscrimination Act of 2008, and Board of Trustees Policy 10.6, the
Colorado School of Mines does not discriminate against individuals
on the basis of age, sex, sexual orientation, gender identity, gender
expression, race, religion, ethnicity, national origin, disability, military
service, or genetic information in its administration of educational
policies, programs, or activities, admissions policies, scholarship and
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Inquiries, concerns, or complaints should be directed by subject content
as follows:
EO and Discrimination contact:
Human Resources Office
1500 Illinois Street
Golden, Colorado 80401

The ADA Coordinator and the Section 504 Coordinator for employment:
Human Resources Office
1500 Illinois Street
Golden, Colorado 80401

The ADA Coordinator and the Section 504 Coordinator for students and
academic educational programs:
Maria Draper, Director of Disability Support Services
Ben H. Parker Student Center, Suite E110
Golden, Colorado 80401
(telephone: 303.273.3297)

The Title IX Coordinator:
Camille Torres, Associate Vice President - Title IX Programs and Human
Resources
Golden, Colorado 80401
(telephone: 303.384.2124)
(email: ctorres@mines.edu)

The ADA Coordinator for employees and employment:
Gary Bowersock, Director of Facilities Management
1318 Maple Street
Golden, Colorado 80401
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