

Making Higher Education Attainable

Student Success at
Colorado School of Mines
September 17, 2019



Unique University, Unique Name

A public research university focused on science and engineering, where students and faculty address the great challenges society faces today – particularly those related to the Earth, energy and the environment.

Our reputation is attributable in part to our unique mission and success at:

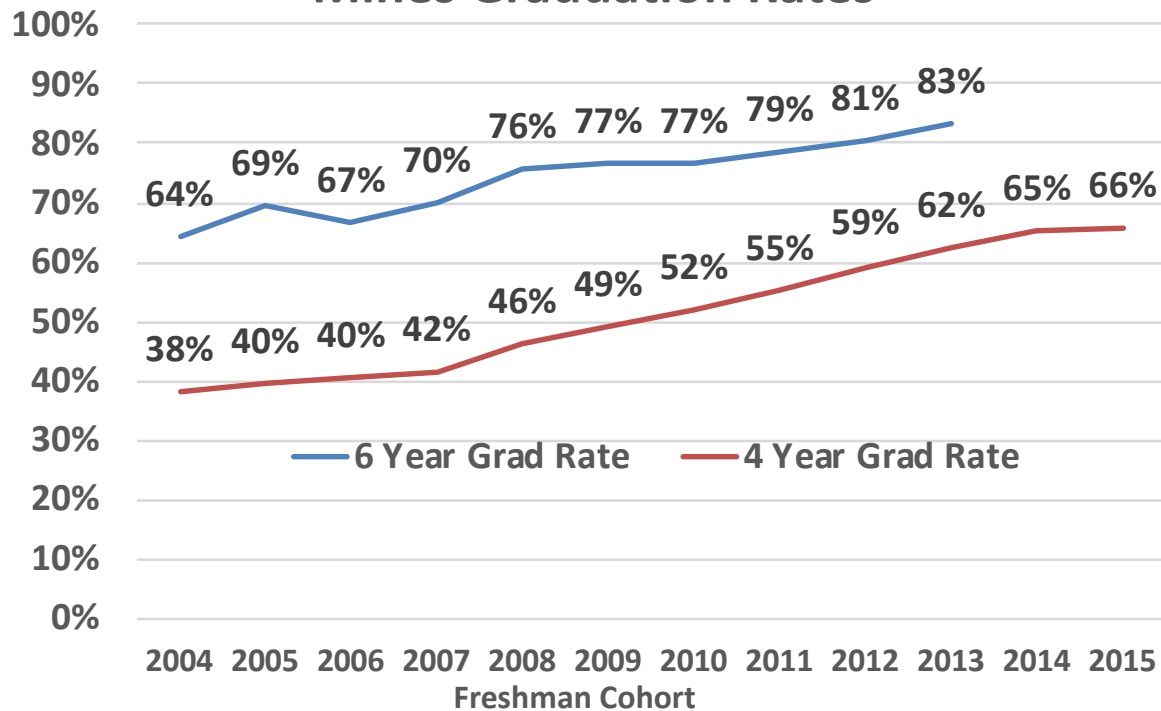
Producing distinctive graduates. Employers particularly value their success in teams, resilience, grit, hands-on experiences, and ability to get things done.

Creating transformative and enduring value through the students we graduate, the discoveries we make, and the challenges we solve for industry and society.

Being a pioneer at the frontiers of science and engineering, from locating and recovering earth resources, to new energy production processes, new materials, advanced manufacturing processes, health innovations, and space exploration.

Student Outcomes: Degrees

Mines Graduation Rates



Mines has increased UG degrees awarded by 110% since 2006.

- 26th most engineering degrees in nation

Student Outcomes: Career

88-90% BS Degrees Employed or in Graduate School Related to Degree or Career Goal within 4 months after graduation. Average offer \$70,000.

Largest employment sectors: oil & gas, construction/environmental, aerospace/defense, IT/high-tech, manufacturing.

Career Fair -- 2 per year. Fall 2019 had over 350 companies & organizations fill 3 gymnasiums



College ROI Report
8th

Success Investments: Pre-Collegiate

Student & Faculty Outreach Programs

- Hands-on projects, tutoring, sponsorships
- Ex. DecTech

SUMMET

- Tuition-free summer residency program.
- Serves 90 under-represented high school students per year.

Challenge

- Transitional Bridge summer program.
- Prepares students for rigor of freshman core-coursework.



Cindy Sanchez
Senior, Mechanical Engineering

Success Investments: Academic Support

Trefny Innovation Instruction Center



- Promotes research-based teaching and learning.
- Assists faculty in designing/redesigning courses, integrating technology, and creating inclusive classrooms.
- Summer Intensive – over 60% of faculty have redesigned courses.

Center for Academic Support and Student Advising (CASA)

- Launched in 2007. Offers tutoring, coaching, advising.
- Core curriculum faculty office hours are in CASA building.
- Peer advisors & mentors.
- Offers Bounce Back Course: Concentrated academic coaching.



Comprehensive campus-wide initiative aimed to promote mental health and champion resiliency



Evaleena Reyes
Senior, Chemical Engineering

Success Investments: Community of Learners

Strategic Goal: Every Mines student graduates with a Signature Learning Experience that builds and enhances professional traits valued by Employers

- Oredigger Camp
- Residential / Themed Living (e.g First Generation)
- Over 220 sponsored Student Organizations
- Student Competitions (e.g. Solar Decathlon Africa)
- Athletics
- Undergraduate Research
- Innovation Hub
- Alumni Special Interest Groups: e.g Aerospace

Mines Graduate Attributes

- Hard-working, creative, & collaborative problem solvers.
- Technical; applied scientific expertise.
- Academic rigor. Grit and resilience. Get things done.
- Business acumen, leadership, entrepreneurship, societal context & personal passion, global awareness.



Dan Topham

**Junior, Metallurgical and Materials
Engineering**



Thank You

Cost Containment Measures

- Optional Retirement Plan for new employees (\$1.2 million)
- Energy Performance and Utilities Savings (\$2.3 million)
- Re-allocate FTE and budgets to fund strategic priorities (\$1.3 million in FY19-20)
- Extensive business process re-engineering, including new academic budget and staffing models, to ensure greater value-added service, productivity, and cost efficiencies.