

MINES@150



COLORADO SCHOOL OF MINES
EARTH • ENERGY • ENVIRONMENT

Playbook, Priorities, and a Vision for the Future



THE CAMPAIGN FOR

MINES

@ 150

Signature Student Experience – Why?

Pipeline of Applicants

(conventional approach upended)

Yield of Admitted Students

Cost vs. Perceived Value and ROI

(families looking at this closer than ever)

Increasing Competition

Affinity & Philanthropy

Industrial & Other Partner Connections

(#1 reason for partnerships – access to graduates)

MINES@150 Signature Student Experience

Many Possible Paths to Graduation, But Consistent Results

Highly Qualified Students

STEM interests
 Academic achievement
 Strong work ethic
 Intellectually curious & multi-dimensional
 Challenge seekers
 Outstanding character & high potential
 All backgrounds (state-wide demographics)

Onboarding, Orientation, Readiness

[Oredigger Camp, Res Life, Every Oredigger, TLC's, CSM101, CASA...]

1st Year *Excite and Explore* Programs

[Thorson 1st-year Honors/IDEAS, Cornerstone...]

Experiential Learning

[internships, research, design challenges, field sessions, capstone, start-ups...]

Technical Competency

[disciplinary core + multi-disc. & thematic context]

Mines Traditions

[M-Climb, E-Days, Continuum...]

Business Competency

[business skills, entrepreneurship, etc.]

Vertically-Connected Communities

[clubs/orgs, visual & performing arts, athletics, Greek life, scholarship groups]

Professional Preparation/Career Readiness

[Career Center, Career Days, alumni, workshops, mentoring...]

Honors & Scholars Experiences

[McBride, pre-Med, pre-Law, study-abroad, X-cutting pursuits (energy, health, etc.)...]

Produce Distinctive and Highly-Valued Graduates

Hard-working, creative, collaborative, persistent and resilient ("Orediggers get things done")

Technical, business, and contextual competency

Professionally-prepared

Future-prepared and adaptable

Prepared to lead

Strong affinity to Mines

Pay-it-forward attitude



Signature Student Experience Components

	The Present (2020)	Future (2024)...Imagine that:
Onboarding, Orientation, Readiness	Only about ½ UG students fully access the existing programs and resources	All students are welcomed and positioned for success at the start (UG, Xfer, & Grad)
Vertically-Connected Communities	Mostly only athletics, fraternity/sorority life, a few scholar programs (Harvey/Daniels/etc.)	All students are placed in a vertically-connected community and they may seek out others
1st Year *Excite and Explore* Programs	Mostly non-existent; capacity for 10% - 20% students in one first-year honors flavor	100% of students have a first-year experience that excites them and helps them select a major
Technical Competency	This is Mines strength; rigid/narrow disciplinary focus (w/some "+" options)	A Mines strength; different disciplinary + thematic + career paths (many types of graduates)
Business Competency	Minimal, but opportunities exist along some paths to graduation	Students are prepared to excel in business & entrepreneurial pursuits; business major offered
Experiential Learning	Mostly internships and capstone projects; some by research experience	All students have four or more substantial experiential learning experiences at Mines
Honors & Scholars Experiences	Capacity exists for only about 10% - 20% of all students	Capacity exists for >75% of all students to have a complementary honors/scholars experience
Professional Preparation/ Career Readiness	Student initiative driven; no deliberate path; highly variable results	Very deliberate development of professional skills and leveraging of alumni, corporate relationships...

Student Life Assignment

- Every student has a vertically-integrated experience (freshman<->sophomore<->junior<->senior connections from Day 1)
- Every student is engaged in at least one local community
 - (Mines Athletics, Club Sports, Greek life, honors, Blue Key, etc.)
- Professional development is an over-arching theme
 - (pervasive in all components of Student Life)
- Students set, communicate, and reinforce community expectations for behavior, inclusion, ethical behavior, etc.
 - (students have ownership status in the community)
- Traditions, opportunities, and uniquely Mines activities
 - (M-Climb, Oredigger Camp, Continuum, % engagement in sports, etc.)
- Build Mines pride & external promotion of our students
 - (Athletics, community service, student org successes)

Academic Affairs Assignment

Creating the “Whole Engineer”

Our Roots

TECHNICAL
Science and Engineering

Early Exploration
Excite & Inspire
Balance: students also need time for non-curricular activities that are key to development of distinctive and highly-valued characteristics of graduates

The next step in many of our graduates' educations and careers

BUSINESS
Finance, Economics,
Management,
Operations
Research/Logistics,
Leadership,
Communication



CONTEXT & PASSION
Societal Needs,
Entrepreneurship &
Innovation, Arts,
Policy, Humanities,
Social Sciences

The reason why; The balance; This attracts & motivates our students

Resources?

MINES@150 Campaign Investments

(McNeil Hall, Labriola Innovation Complex, Beck Venture Center, Grewcock Scholars, Vallejo-Irvine Professional Development Program Fund, etc.)

Mines Foundation Board of Governors Catalyst Fund

(\$500K for Sustainable MINES@150 Signature Student Experience Projects, Driven by the Faculty Senate)



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Extra Slides

MINES@150 Vision: “Top-of-Mind/First-Choice”

To achieve our MINES@150 aspirations, we must:

- become **more accessible and attractive** to the students we want at Mines (affordability, success metrics, living/learning, culture, demographics)
- produce **distinctive graduates: highly-valued, future-prepared and adaptable.**
- **re-align our programs portfolio with the future; expand offerings and diversify delivery**, grow the professionally-oriented pre- and post-graduate education.
- **grow the scale and impact of our R&D and other innovation activities:** build thematic strengths, expand partnerships, diversify funding sources, increase tech transfer.
- **build/acquire the infrastructure** needed for MINES@150.
- **grow/acquire the leadership** needed for MINES@150.
- **strengthen affinity** for MINES among our students, alumni, and external partners.
- **attract investment** to support our strategic initiatives.

Progress: Student Success Metrics

Emphasis Areas

- **Student success metrics**
- Community demographics
- Supportive Living & Learning Environment
- Signature Student Experience/
Distinctive Education
- Financial accessibility & ROI

Student Success Metric	Comments
1st to 2nd year retention	Consistently 92% - 94% overall since 2012 (Goal 94%) 2018 cohorts: Pell 90%; and Hispanic 95%
4-Year Graduation Rate	Up from <50% for 2009 cohort to 63% for 2015 cohort (Goal: 75%)
6-Year Graduation Rate	Up from 77% for 2009 cohort to 83% for 2013 cohort (Goal: 85%)
Career Pursuit (employment or graduate school in field)	Typically 84% BS (\$70K avg), 90+% MS (\$78K avg), 92+% PhD (\$80K avg)
Student Debt	50%-60% of students have debt at graduation; \$30K - \$35K median for those with debt