Topics

• Blaster’s Challenge
• 2016-17 In Review
• Mines: By-the-Numbers
• Mines@150 Review
• Strategic Initiatives
• Mines@150 Exemplars
• Campus Engagement Opportunities
• G3 Changes
• Q&A
Blaster’s Challenge

► Go to kahoot.it in your browser
► Enter PIN and be prepared to answer questions…
Looking Back at 2016-17

- **The Election** *(immigration, research funding, agency budgets, shifting priorities)*
- **Transforming Lives Campaign**
- **Business of Mines** *(presentations, budget model, HB1140, State Risk, retirement)*
- **University Design** *(macro-design parameters, “pathways of distinction” drafts)*
- **Calibration** *(Mines@150 aspirations, benchmarking, perceptions of leadership)*
- **Threats** *(recruitment, funding)*
- **New Initiatives** *(1st Year Honors, Oredigger Camp, Leadership Institute, MMI)*
- **Success, Visibility, Recognition**
- **Alumni Engagement** *(mentoring, entrepreneurship & innovation, aerospace)*
Faculty Recognition

Jeramy Zimmerman
DOE Early Career Award

Ivar Reimanis
World Academy of Ceramics

Kim Williams
Fulbright

John McCray
Fellow, Geological Society of America

Emmanuel De Moor
Ralph R. Teetor Educational Award

Hugh Miller
AIME Honorary Member Award
# Points of Pride

#1 SmartAsset's Best Value Colleges in Colorado (#13 nationally); PayScale #7 in ROI and #22 in alumni earnings

The Wall Street Journal/Times Higher Education #1 for Public Schools in the West with highest salaries 10 years out

Wall Street Journal #2 nationally for combining scholarly research with classroom instruction

#1 Mineral Mining Engineering QS Global Ranking; US News & World Report: #5 in Petroleum; #33 in Top Public Schools; #36 in High School Counselor Rankings; #44 in Undergraduate Engineering Programs; #55 in Graduate Engineering Programs; #82 in National Universities

Forbes America’s Top Colleges #25 in the West; #29 Publics
Mines Graduates: Employment

Outcomes for Fall 2016 graduates (7/15/17):

• Employed or in graduate school: BS - 87%; MS – 91%; PhD – 98%.

• Avg. salary offers: BS - $65,905; MS - $77,746; PhD - $81,094.

• Wall Street Journal ranked Mines #1 among public universities in the West, for the salaries of its graduates.
Employer Interest

10-Year Career Day Employer Attendance

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-2009</td>
<td>219</td>
<td>181</td>
</tr>
<tr>
<td>2009-2010</td>
<td>187</td>
<td>111</td>
</tr>
<tr>
<td>2010-2011</td>
<td>178</td>
<td>145</td>
</tr>
<tr>
<td>2011-2012</td>
<td>208</td>
<td>192</td>
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<tr>
<td>2012-2013</td>
<td>219</td>
<td>203</td>
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<tr>
<td>2013-2014</td>
<td>227</td>
<td>203</td>
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<tr>
<td>2014-2015</td>
<td>230</td>
<td>217</td>
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<tr>
<td>2015-2016</td>
<td>240</td>
<td>197</td>
</tr>
<tr>
<td>2016-2017</td>
<td>234</td>
<td>220</td>
</tr>
<tr>
<td>2017-2018</td>
<td>247</td>
<td></td>
</tr>
</tbody>
</table>
Mines Graduates: Distinctive Traits

“Mines graduates get things done”

bright • hard-working • excellent team members
Student Success?

4-yr Grad Rate by Freshman Cohort

<table>
<thead>
<tr>
<th>Year</th>
<th>Hispanic</th>
<th>Pell</th>
<th>Women</th>
<th>All Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>37.3%</td>
<td>41.2%</td>
<td>52.0%</td>
<td>46.2%</td>
</tr>
<tr>
<td>2009</td>
<td>30.9%</td>
<td>40.6%</td>
<td>57.5%</td>
<td>49.0%</td>
</tr>
<tr>
<td>2010</td>
<td>46.1%</td>
<td>41.6%</td>
<td>58.0%</td>
<td>51.9%</td>
</tr>
<tr>
<td>2011</td>
<td>46.3%</td>
<td>43.1%</td>
<td>66.4%</td>
<td>55.1%</td>
</tr>
<tr>
<td>2012</td>
<td>42.4%</td>
<td>58.1%</td>
<td>65.9%</td>
<td>59.2%</td>
</tr>
<tr>
<td>2013</td>
<td>39.7%</td>
<td>50.7%</td>
<td>64.3%</td>
<td>60.0%</td>
</tr>
</tbody>
</table>

78% all-students 6-year rate
## Student Success: Benchmarking

<table>
<thead>
<tr>
<th>Rank</th>
<th>School Name</th>
<th>20 Year Net ROI</th>
<th>Total 4 Year Cost</th>
<th>Graduation Rate</th>
<th>Typical Years to Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Massachusetts Institute of Technology (MIT)</td>
<td>$1,106,000</td>
<td>$240,000</td>
<td>91%</td>
<td>4 Years</td>
</tr>
<tr>
<td>2</td>
<td>Harvey Mudd College</td>
<td>$1,084,000</td>
<td>$260,000</td>
<td>90%</td>
<td>4 Years</td>
</tr>
<tr>
<td>3</td>
<td>United States Merchant Marine Academy (USMMA)</td>
<td>$1,069,000</td>
<td>$33,100</td>
<td>72%</td>
<td>4 Years</td>
</tr>
<tr>
<td>4</td>
<td>Webb Institute</td>
<td>$1,028,000</td>
<td>$209,000</td>
<td>91%</td>
<td>4 Years</td>
</tr>
<tr>
<td>5</td>
<td>California Institute of Technology (Caltech)</td>
<td>$991,000</td>
<td>$240,000</td>
<td>92%</td>
<td>4 Years</td>
</tr>
<tr>
<td>6</td>
<td>Stanford University</td>
<td>$931,000</td>
<td>$247,000</td>
<td>95%</td>
<td>4 Years</td>
</tr>
<tr>
<td>7</td>
<td>Colorado School of Mines (In-State)</td>
<td>$920,000</td>
<td>$123,000</td>
<td>76%</td>
<td>5 Years</td>
</tr>
</tbody>
</table>
Mines: By-the-Numbers

6030 students
(4780 UG, 1250 Grad, 46 ND)

311 academic faculty
(223 T/TT, 88 TF & PoP’s)

$21.5M state investment
(7% of Mines FY18 budget)

$18,386 resident UG tuition & fees
(3% increase)

$57M research
($270M per T/TT faculty - flat)

Fall 2017: 1150 Freshmen + 200 transfer students
(31 ACT, 3.8 GPA, 1341 SAT; 30%/70% W/M)
(55% CO, 4% international, 41% non-resident US)
## Comparison vs. Macro-Design Values

<table>
<thead>
<tr>
<th></th>
<th>Fall 2017 Values</th>
<th>Mines@150 Aggregate Design Values*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Students</td>
<td>4780</td>
<td>4710</td>
</tr>
<tr>
<td>Masters/Non-Degree Students</td>
<td>687</td>
<td>1582</td>
</tr>
<tr>
<td>Doctoral Students</td>
<td>563</td>
<td>884</td>
</tr>
<tr>
<td>T/TT Faculty</td>
<td>223</td>
<td>243</td>
</tr>
<tr>
<td>Teaching Faculty &amp; Prof of Practice</td>
<td>88</td>
<td>81</td>
</tr>
<tr>
<td>Research Grants &amp; Contracts</td>
<td>$57M</td>
<td>$83M</td>
</tr>
</tbody>
</table>

* - values from departments
Calibrating Mines@150 Aspirations

Which school would you attend? Which school do you want to be?

<table>
<thead>
<tr>
<th>Metrics</th>
<th>School A</th>
<th>School B</th>
<th>School C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Enrollment</td>
<td>4500</td>
<td>4500</td>
<td>24000</td>
</tr>
<tr>
<td>US News National University Ranking</td>
<td>20</td>
<td>82</td>
<td>74</td>
</tr>
<tr>
<td>US News Undergraduate Engineering Ranking</td>
<td>8</td>
<td>44</td>
<td>16</td>
</tr>
<tr>
<td>Student:Faculty Ratio</td>
<td>8:1</td>
<td>17:1</td>
<td>18:1</td>
</tr>
<tr>
<td>Average Net Price</td>
<td>$31,356</td>
<td>$24,297</td>
<td>$16,951</td>
</tr>
<tr>
<td>Freshmen Retention</td>
<td>96%</td>
<td>94%</td>
<td>93%</td>
</tr>
<tr>
<td>4-Year Graduation</td>
<td>76%</td>
<td>49%</td>
<td>46%</td>
</tr>
<tr>
<td>6-Year Graduation</td>
<td>91%</td>
<td>77%</td>
<td>76%</td>
</tr>
</tbody>
</table>

Key Factors:
Reputation & Outcomes

Campus, BoT, BoG, & Alumni
Mines@150: We aspire to be…

A top-of-mind, destination, and first-choice university for students & their families, staff, and faculty

1. A great community to learn, live, and work in
2. Accessible & attractive to qualified students from all backgrounds
3. A leader in the education of STEM students & professionals
4. A producer of differentiated and highly-desired graduates that go on to careers of distinction
5. The go-to place for research and innovation needed to solve difficult challenges facing industry & society
6. A preferred partner for talent, solutions, & life-long learning
7. A leader in alumni affinity, visibility, and involvement
So...we have some work to do...

<table>
<thead>
<tr>
<th>Build a Great Community</th>
<th>Re-invent How STEM Students &amp; Professionals are Educated</th>
<th>Become Exemplar R&amp;D&amp;E Community</th>
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<td>Produce Distinctive &amp; Highly-Valued Graduates</td>
<td>Increase appeal of, and diversify access to a Mines Education</td>
<td>Develop Comprehensive External Partnerships</td>
</tr>
<tr>
<td>Grow Alumni Affinity and Involvement in our Mission</td>
<td>Build World-Class Facilities and Support Services</td>
<td>Attract Resources, Investments, and Incentives</td>
</tr>
</tbody>
</table>

R&D&E = research, development, & entrepreneurial efforts
Great Community

Goal: A great community to learn, live, and work in

strengths (size, affinity, people, campus setting, facilities, etc.)
weaknesses (silos, communication, etc.)

Strategy:

• Common Narrative
  (mission, core values, brand, aspirations, expectations)
• Family-Friendly
• Professional Development
• Cross-University Sub-Communities
• Compensation/Reward
• Diversify to Reflect CO

Family-Friendly Initiatives • **Leadership Institute** • Trefny Center Summer Program • Oredigger Camp • R&D Institutes • Campus Master Plan • President’s Council on Access, Inclusion & Diversity • Communication Blitz…?

*President’s Task Force on Community (TBD)*
<table>
<thead>
<tr>
<th><strong>Brand Identity</strong></th>
<th>MINES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mission</strong></td>
<td>educate • inspire • advance • impact</td>
</tr>
<tr>
<td><strong>Tag Line</strong></td>
<td>earth • energy • environment</td>
</tr>
<tr>
<td><strong>Core Values</strong></td>
<td>inquiry &amp; innovation • inspiration • challenge • collaboration • openness • diversity • respect • compassion • integrity</td>
</tr>
<tr>
<td><strong>Expectations</strong></td>
<td>promotion and tenure guidelines, faculty handbook, productivity guidelines, etc.</td>
</tr>
</tbody>
</table>
Exemplar R&D&E Community

- Move toward a more social research culture
- Establish the first pan-university theme-based research institute
- Identify other possible Institute-level efforts and investments
- Communicate the value, external impact, and importance of research and innovation at Mines
- Help faculty to increase their competitiveness at securing external funding
- Support larger center-scale proposal efforts & riskier initiatives
- Increase funding from industry and mission-oriented agencies
- Better integrate research activities to enhance the education of our undergraduate students
- Increase ROI from entrepreneurial efforts

VPRTT Interviews:
- Dr. Stefanie Tompkins, DARPA on August 28-29;
- Dr. John G. Speer, Mines on September 11-12,
- Dr. Mark Johnson, DOE on September 21-22
Exemplar R&D&E Community

**A VISION OF AWESOMENESS**

**Impact of the CoorsTek Center on Materials Education and Research at the Colorado School of Mines**

Generous contributions from the Coors Family and connectivity to CoorsTek have through the years inspired and enabled Mines to achieve global recognition for its programs in ceramic materials, chemical engineering, and other distinctive expertise. Their most recent investment in the new CoorsTek Center for Applied Science and Engineering (C-CASE), the CoorsTek Fellowship program, and the new high resolution analytical transmission electron microscope has again inspired the institution to think big and envision a global center of interdisciplinary excellence in the area of materials, with a specific world-class expertise in ceramics, and linked with best-in-class industrial partners, such as CoorsTek in the ceramics engineering area.

**Vision for the Mines Materials Institute (MMI)**

The vision for the MMI includes four materials “pillars” (Advanced Ceramics, Structural Alloys, Energy Materials and Molecular Materials) as shown in the figure below. In addition, the MMI will involve several cross-cutting and interdisciplinary areas that bridge these pillars (e.g., Advanced Characterization, Catalysts, Computational Materials, etc.). These are areas where Mines faculty have considerable strength and reputation and where the synergies that exist in these cross-disciplinary activities will lead to new discoveries. The Materials faculty at Mines are excited by this vision and are ready to step up to the challenge.

---

The campus is invited to tour the CoorsTek Center for Applied Science and Engineering on:

Sept. 28 beginning at 3 PM
Exemplar R&D&E Community

Become Exemplar R&D&E Community

Build World-Class Facilities and Support Services

Comprehensive External Partnerships

ADAPT Center
World-Class Facilities & Processes

CoorsTek Center
Campus Master Plan
Sibson Process Re-Engineering Initiative

New Web Site — (coming soon…really…)

Office of Industry Relations
Mines Foundation • VPRTT • ORA • Career Center • OGC
(Emily Kelton, Mines Foundation)
NREL, CoorsTek, USGS
Grow Alumni Affinity & Engagement

Grow Alumni Affinity and Involvement in our Mission

Alumni Interest Groups:

• Leadership in Social Responsibility
• STEAM: Arts and Humanities
• Student Mentoring Program
• Entrepreneurship & Innovation
• Aerospace

Alumni Interest Groups
Course Development/Instruction
Professional Development
Opportunities for Students

WOMAN TO WOMAN: ALUMNAAE ENCOURAGE FEMALE STUDENTS TO CONSIDER MINES
by Anica Wong | Jul 6, 2017 | Alumni Network, Summer 2017

Making the Connection Program
(Women of Mines)
So we have some work to do...

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<tr>
<td>Produce Distinctive &amp; Highly-Valued Graduates</td>
<td>Increase appeal of, and diversify access to a Mines Education</td>
<td>Formalize Comprehensive External Partnerships</td>
</tr>
<tr>
<td>Grow Alumni Affinity and Involvement in our Mission</td>
<td>Build World-Class Facilities and Support Services</td>
<td>Attract Resources, Investments, and Incentives</td>
</tr>
</tbody>
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**R&D&E** = research, development, & entrepreneurial efforts
Threats to Recruitment of Top Students

- Student and family demands increasing for greater ROI
- Greater transparency in student outcomes
- Aggressive recruitment of STEM majors & growth in programs
- New delivery models for education
- New business models for education
- Demographic shifts (geographic, socio-economic, ethnic, etc.)
- Global equalizing of higher education

Enrollment Trends by School Size (2010-13)

Bigger schools (Cohort B) plan to get bigger
Smallest schools are withering…

(Selingo, 2016)
## Are We Accessible and Attractive?

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Cohort A &lt;7000 UG</th>
<th>Cohort B &gt;7000 UG</th>
<th>Mines</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Applicants Admitted (Selectivity)</td>
<td>16%</td>
<td>58%</td>
<td>55%*</td>
</tr>
<tr>
<td>% Admits Enrolled (Yield)</td>
<td>34%</td>
<td>35%</td>
<td>21%*</td>
</tr>
<tr>
<td>Composite ACT (25\textsuperscript{th} – 75\textsuperscript{th} percentile)</td>
<td>32-35</td>
<td>26-31</td>
<td>28-32</td>
</tr>
<tr>
<td>In-State UG Students</td>
<td>25%</td>
<td>63%</td>
<td>58%</td>
</tr>
<tr>
<td>Out-of-State UG Students</td>
<td>64%</td>
<td>26%</td>
<td>38%</td>
</tr>
<tr>
<td>International UG Students</td>
<td>12%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>% Women</td>
<td>45%</td>
<td>45%</td>
<td>30%*</td>
</tr>
<tr>
<td>% STEM UR Ethnic</td>
<td>13%</td>
<td>13%</td>
<td>8%</td>
</tr>
</tbody>
</table>

* - values for incoming class in Fall 2017
Increasing Appeal of, and Diversify Access to a Mines Education:

- Student success metrics need to be similar to other top-of-mind schools (94% retention, 75% 4-year graduation rate, 85% 6-year graduation rate)
- More pathways to degree completion
- More delivery channels (4 BS (res) +1 MS (online*))
- Develop a Mines signature student experience – emphasize professional development
- Re-align/re-design programs to reflect the future needs of employers & interests of students
- Redesign recruiting/admissions/financial aid
- More connections to other academic programs and to grand challenge problems motivation
- More offerings along the continuum
Every student has a vertically-integrated experience (freshman<->sophomore<->junior<->senior connections from Day 1)

Every student is engaged in at least one sub-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)
Signature Student Experience

Freshmen Oredigger Camp (August 2017)
Signature Student Experience

IDEAS (Innovation and Discovery in Engineering, Art, and Science)
Thorson First-Year Honors Program
Signature Student Experience

- 2nd consecutive RMAC All-Sports Cup
- 8 RMAC Championships (Regular season champs)
- 25 All-Americans
- 7 Academic All-Americans
- 3 NCAA regional championships
- 3 RMAC Brechler Awards (teams with highest GPA in their sport)
- 4 RMAC Academic Players of the Year
- 88 current and former student-athletes earned degrees (77 bachelor's, 10 master's, and 1 PhD)
STEM Student and Professional Education

Re-invent How STEM Students & Professionals are Educated

Produce Distinctive & Highly-Valued Graduates

Increase appeal of, and diversify access to a Mines Education
Re-invent How
STEM Students & Professionals are Educated

Produce Distinctive & Highly-Valued Graduates

Increase appeal of, and diversify access to a Mines Education

Re-align/re-design programs to reflect the future needs of employers & interests of students

“The Mines student graduates with a strong sense of integrity, intellectual curiosity, demonstrated ability to get the job done in collaborative environments, passion to achieve goals, and an enhanced sense of responsibility to promote positive change in the world”
So...we have some work to do...

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R&D&E = research, development, & entrepreneurial efforts
Mines Innovation Fund
(internal funding for strategic initiatives)

Mines@150 Campaign Groundwork
(feasibility stage)

Fryrear Endowed Chairs for Innovation and Excellence
(“Each distinguished endowed chair and award offers the most highly-accomplished faculty recognition for demonstrating exceptional teaching and/or research AND for the important leadership roles they take to drive a strategic initiative and/or program that furthers the vision and mission of Mines“)

Alumni Contributors +400 (20%) 2015 to 2017
Total Contributors +2200 (70%) 2015 to 2017
G3 Updates

• Tony and Nigel Retire
• Tim Flynn now Director of Communications
• VPRTT Search in-progress
• Provost Succession: search to start Fall 2017 (volunteers?)
• President’s Council on Access, Inclusion and Diversity (Lead: Amy Landis, Faculty Fellow for Access, Attainment & Diversity)
• Other Task Forces (e.g., University Design)
Other Shout-Outs

• Concrete Canoe – National Competition (Jeff Holley et al.)
• Regional REU meeting – (Chuck Stone et al.)
• Local conferences (ICGH9: Carolyn Koh & Dendy Sloan, etc.)
• SUMMET+ TEAM-UP Program (rising juniors & seniors)
• WE²NG Research Experience for Teachers (JeffCo K-12)
• Physics Field Session
What Can Faculty Do?

Tell us how we can help free up more of your time and energy...so you can direct it toward your passions and the way that you can best contribute to Mines mission.

Tell us how we can help you be more successful at the things you want/need to be successful at (teaching, proposal writing, professional development, leadership, etc.)

Help create signature experiences/programs & expand our offerings and pathways, and look for ways to improve student success.

Help identify themes for our R&D efforts.

Be a proud advocate for Mines.

Be engaged. Take a leadership role. Attract others.
How to Get Involved

Pathways of Distinction
Design Exercises
Sibson Process Re-Engineering
Presidential Councils
Focused Task Forces
Hybrid Leadership Roles
Extras
Research Grants & Contracts

Sponsored Research Grants & Contract Awards ($MM)

- FY08: $41.5
- FY09: $51.4
- FY10: $53.6
- FY11: $46.7
- FY12: $55.7
- FY13: $61.8
- FY14: $53.8
- FY15: $63.9
- FY16: $60.3
- FY17: $56.8
2017-18 Projected Revenue

Total Revenue

- Tuition-Undergraduate: 34%
- Tuition-Graduate: 8%
- Student Fees: 5%
- Auxiliary: 9%
- State - FFS + COF: 7%
- State Capital Appropriations: 3%
- Sponsored Projects: 23%
- Gifts: 8%
- Other: 2%
- Technology Transfer: 0%

Total = $308K
Resident Tuition + Fees

Colorado Resident Tuition & Fees

<table>
<thead>
<tr>
<th>Year</th>
<th>Tuition &amp; Fees</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY12-13</td>
<td>15,654</td>
<td>8.30%</td>
</tr>
<tr>
<td>FY13-14</td>
<td>16,485</td>
<td>5.31%</td>
</tr>
<tr>
<td>FY14-15</td>
<td>16,918</td>
<td>2.63%</td>
</tr>
<tr>
<td>FY15-16</td>
<td>17,353</td>
<td>2.57%</td>
</tr>
<tr>
<td>FY16-17</td>
<td>17,842</td>
<td>2.82%</td>
</tr>
<tr>
<td>FY17-18</td>
<td>18,386</td>
<td>3.05%</td>
</tr>
</tbody>
</table>
State Budget

in millions

<table>
<thead>
<tr>
<th>FY 08</th>
<th>FY 09</th>
<th>FY 10</th>
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COF
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Our Narrative

**Mines** occupies a unique position among the world's top universities, recognized for our history, our focus on the scientists, engineers, leaders, and innovations needed by industry and society, and the impact we have through them on prosperity and stewardship of the earth and its resources.
Keys to Our Future

Interconnected academic programs that are distinctly Mines

Signature expertise and strengths (Institutes)

Alignment w/industry & mission-oriented agencies

People - fit & development (students, faculty, staff)

Technical
(Science & Engineering)

Business
(Economics, Management, Operations Research, Leadership, Communications, etc.)

Context & Passion
(Societal Needs, Complementary Skills (arts), E&I, Humanities, Social Sciences, Policy)

Alumni Affinity & Participation

Highly-desired signature student experiences for both UG and Grad students

Diversifying access to a Mines education

Expanding pathways & non-thesis/non-degree options

Student outcomes (graduation, employment)

Updated Processes

E&I = entrepreneurship & innovation
Mines@150: How the Pieces Fit

Education
(distinctive academic programs + signature student experience)

- Mission Values Aspirations Expectations
- Amazing Students Great Faculty & Staff
- Strategically Supported & Engaged Alumni Strategic Partners & Investors
- World-class support & facilities

Research & Innovation
(disciplinary expertise + thematic foci + societal need)

- Distinctive & Highly-Derived Graduates
- Graduates w/Strong Affinity for Mines
- Knowledge Innovations

Impact

Colorado School of Mines
Earth Energy Environment
Opportunities and Threats

Education
(distinctive academic programs + signature student experience)

Distinctive & Highly-Desired Graduates

Graduates w/Strong Affinity for Mines

Knowledge Innovations

Opportunities

Threats

Amazing Students
Great Faculty & Staff
Mission Values
Aspirations Expectations
Passionate & Engaged Alumni
Strategic Partners & Investors

world-class support & facilities

world-class support & facilities

world-class support & facilities

world-class support & facilities

world-class support & facilities

World-Class Support & Facilities

Mission Values
Aspirations Expectations

Passionate & Engaged Alumni
Strategic Partners & Investors

Opportunities & Threats

Impact

Research & Innovation

(disciplinary strengths + thematic foci + motivation)
Mines Pillars – The Constants as We Change

- Focused Public Mission
- Elite Institution (but not Elitist)
- Challenging Practical Education & Professional Preparation
- Collaborative Pursuits of Use-Inspired Innovation & Discovery
- Connections & Partnerships, Particularly with Industry & Mission-Oriented Agencies
- Honest Broker of Information
- Great People (students, faculty, staff, alumni)
- Immense Pride
Specific Near-Term Actions

• Undergraduate Programs:
  • Increase graduation rates and decrease time-to-graduation
  • Expand program offerings and pathways to completion
  • Create unique-to-Mines signature experience
  • Strengthen emphasis on professional preparation
  • Services/experiences have to be like other ToM schools

• Non-thesis Masters & Non-Degree Programs:
  • Need to grow these
  • Offer 4-year BS + 1 year MS (distance) while working
  • Need non-traditional delivery (times & method) for convenience and accelerated programs

• Research-based Masters & Doctoral Programs:
  • Signature graduate experience w/ professional preparation
  • Interdisciplinary and thematic opportunities
  • Emphasize unique programs
“One of the ideas uppermost in the mind of a virile young man is “When I finish my training can I get a job?” In 1939 of a class of 133, every graduate had been offered a job by September first. There is always a job for the well trained, willing, and reliable individual.

This training at Mines consists of the basic fundamentals of engineering together with a practical application in the field which gives especially effective results.

The major portion of three summer vacations is spent in field work where students learn to do as well as to think. This work is organized and supervised by faculty men, who are not only thoroughly trained academically, but who are recognized by industry as men who are superior in their fields.”

M. Coolbaugh, Mines Magazine, April 1940