

Colorado School of Mines

HLC Assurance Argument Summary

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1 - Mission

The institution's mission is clear and articulated publicly; it guides the institution's operations.

Argument

The Colorado School of Mines (Mines) Mission statement is defined as part of the Colorado Revised Statutes, Section 23-41-105, available [here](#). This Mission is discussed in greater detail in the sections that follow, is restated in both the [Undergraduate Bulletin](#) and [Graduate Bulletin](#), and reads as follows:

The Colorado School of Mines shall be a specialized baccalaureate and graduate research institution with high admission standards. The Colorado School of Mines shall have a unique mission in energy, mineral, and materials science and engineering and associated engineering and science fields. The school shall be the primary institution of higher education offering energy, mineral and materials science and mineral engineering degrees at both the graduate and undergraduate levels.

The Mines' mission:

- Is codified in [State statute](#) (Colorado Revised Statutes, Section 23-41-105);
- Has been clearly delineated by the Board, and has been vetted through our academic process;
- Is publicly available through a variety of materials ([Undergraduate Bulletin](#), [Graduate Bulletin](#), websites, [Alumni Magazine](#), [Energy and Earth Research Magazine](#));
- Was used to guide the development of the [2004-2014 Strategic plan](#);
- Has guided the development and definition of our academic programs, as determined by the Colorado Commission of Higher Education;
- Is consistent with the articulation of our values and goals for educational programs ([Profile of Mines Graduate](#) and [Graduate Program Objectives](#));
- Is consistent with our [enrollment profile](#);
- Is supported through our academic programs and student support services;
- Explicitly recognizes our role in a diverse society;
- Explicitly defines diversity enrollment goals; And
- Acknowledges through language and action our obligation to serving the public interest.

2 - Integrity: Ethical and Responsible Conduct

The institution acts with integrity; its conduct is ethical and responsible.

Argument

Mines has a selection of policies that are appropriate for our governing board (Board of Trustees), faculty and staff, and students. Statement of these policies can be found [here](#). How these policies are used to guide institutional efforts are described in the sections that follow. As is reflected through these policies, Mines is committed to ethical and responsible conduct, and freedom of speech and expression throughout our academic community.

Mines has:

- Established a full suite of policies that guide the integrity and ethics of its governing board, administration, faculty, students, and staff;
- A recently established Ethics Hotline that allows employees and students to anonymously report potential ethics and integrity violations;
- A suite of grievance procedures allowing employees and students to report integrity or ethical violations;
- A suite of grievance procedures that guide the institution in responding to integrity and ethics violations;
- An Office of Internal Audit that regularly audits functional areas for compliance to institutional policy;
- Publically available documents (available via the web) that advertise Mines admissions requirements and processes, faculty and staff qualifications, educational costs, and control and accreditation status;
- A Board of Trustees that is appointed by the Governor (as is defined through State statute), holds public meetings, and maintains an open website with meeting agendas and minutes posted;
- Mechanisms to delegate day-to-day management of the institution to the appropriate administrative officials and to the faculty;
- Policies that Mines is committed to freedom of expression and intellectual pursuit; and
- Mechanisms that insure faculty, students and staff apply knowledge responsibly and ethically.

3 - Teaching and Learning: Quality, Resources, and Support

The institution provides high quality education, wherever and however its offerings are delivered.

Argument

This section overviews and provides evidence to support that Mines provides a high quality education to its students, regardless of the mechanism that is used for delivery. This education is consistent with both the Mines Mission and the academic degrees which are sought by our students. All instructional programs are vetted through our faculty, who are recognized experts within their areas and who regularly participate in continuing professional development experiences. Over the last ten years, there has been a significant increase in the research that is being completed at Mines, as well as the research experiences that are available to our undergraduate and graduate students. In combination, these features of our institutions result in a high quality education for our students, which are evidenced via successful recruitment and placement in competitive professional positions. Additionally, Mines provides the appropriate resources and infrastructures (including laboratories, library, student support services etc.) to ensure a high quality learning experience at both the undergraduate and graduate level.

As demonstrated through this section, Mines provides a high quality education, regardless of wherever and however it offerings are delivered. This is supported by the following activities:

- Student credentials for entering a Mines degree program are delineated and monitored at both the undergraduate and graduate level. Students who are unlikely to succeed in their degree program are not admitted.
- Academic advising is available through a professionally trained advising staff, as well as through direct interaction with faculty from major or minor department.
- All degree programs are vetted through the Colorado Commission of Higher Education to be consistent with our mission.
- Our programs are reviewed and accredited by the appropriate professional organizations, including ABET, ACS and HLC.
- Our curriculum programs are regularly evaluated and reviewed by faculty, students and visiting committees.
- Faculty have direct oversight over course development and improvement.
- Goals and outcomes are clearly stated for the various levels and degree programs and assessment and revision is ongoing.
- Goals, outcomes and measurement are clearly defined and consistent regardless of delivery mode of course or program.
- Faculty and students contribute scholarly and creative work through research and other professional experiences.
- Faculty and staff are regularly evaluated based on their institutional role.
- Instructor credentials are controlled through our employment process.
- Many organizations are available to support the multicultural, social, athletic and academic needs of our students. Programs support the ongoing interaction of faculty with students.
- Our programs are appropriately staffed and our staff receives regular professional development opportunities.
- An appropriate infrastructure, including laboratories, classrooms, electronic resources and library, is available to all of the Mines community.

4 - Teaching and Learning: Evaluation and Improvement

The institution demonstrates responsibility for the quality of its educational programs, learning environments, and support services, and it evaluates their effectiveness for student learning through processes designed to promote continuous improvement.

Argument

As is discussed in the sections that follow, Mines participates in an ongoing and rigorous review of its curriculum and programs. This includes a statement of program objectives and student outcomes for both curricular and non-curricular programs. These programs are regularly reviewed through a formalized assessment system. Support for assessment is provided by a Director of Assessment and an Assessment Committee. Additionally, several appropriate agencies review and accredit our efforts. Retention, persistency and completion rates are formally monitored by the university. Specific goals have been established in each of these areas and adjustments are regularly made within the university structure to improve retention, persistency and completion rates.

Mines regularly participates in activities that are designed to improve our educational programs. These include:

- The production and revision of clear statements of expectations for student learning, through availability of a Graduate Student Profile, Program Objectives and Student Outcomes.
- Guidance in assessment provided by a Director of Assessment and a University Assessment Committee, which provides program reviews.
- Formal Visiting Committees that provide feedback to departments and programs.
- An active and engaged Faculty Senate.
- Accreditation through the Higher Learning Commission, ABET and the American Chemical Association.
- A clear process for the evaluation of all credits that are transcribed (this includes transfer credits).
- Faculty qualifications controlled through a defined and enforced set of minimum employment criteria.
- Rigorous courses designed by a highly qualified faculty.
- Review of placement and salary statistics, internship placement statistics and student performances on the Fundamentals of Engineering Exam.
- Review of alumni feedback.
- Review and response to pre-defined targets for retention, persistency and completion rates.
- Continuous review and revision of curricular and co-curricular programs based on assessment, feedback, and statistical reviews.

5 - Resources, Planning, and Institutional Effectiveness

The institution's resources, structures, and processes are sufficient to fulfill its mission, improve the quality of its educational offerings, and respond to future challenges and opportunities. The institution plans for the future.

Argument

Through careful planning and despite reduced State support, Mines has insured its' financial position through strategic resource allocation, planning and fund raising. Decisions concerning financial planning are directly linked to the institution's mission and are informed by a broad range of appropriate constituencies, who are both internal and external to the university. Additionally, funding decisions are aligned with institutional priorities, our mission and the assessment process. Various models have been used with the purpose of preparing and responding to our financial future and documentation of our operations is readily available. What has been learned through our prior experiences is continually utilized to inform improvement. These aspects of Mines are discussed in the sections that follow.

Mines has policies and procedures in place that insure the inclusion of the governing board, administration, faculty, staff and students in the governing process. Additionally, the university links its processes to the assessment of student learning, evaluation of operations, and planning. The policies of Mines are well documented and publically available.

Recently, Mines has strengthened its' financial position by:

- increasing operating reserves
- reducing its' reliance on State funding
- maximizing tuition revenues by applying what was learned from a market analysis
- implementing a fund raising campaign
- minimizing expenses by applying the budget to critical need areas
- institutional reorganization into three colleges, reducing cost of overhead expenses
- having a student technology fee to improve use of technology in academic setting
- self supported student housing and recreation fee

Additionally, all funds received by Mines are controlled by the Board and are not returned to the State's General fund. Academic and research funds are allocated and tracked separately and a plan is in place for monitoring the use of these funds and assuring the alignment of fund allocation with the Mines' Mission.

Mines has strengthened its' physical infrastructure by:

- building new academic infrastructure
- creating a new student advising center
- building of a new residence hall
- development of a pedestrian campus
- on-going capital projects
- controlled maintenance and renovations that align with mission and strategic plan
- increases and improvements in academic research space
- development of a campus infrastructure Master Plan

Mines has strengthened its' technological infrastructure by:

- reorganization of computing and networking services
- improved computing and networking services
- improved computing and networking support services
- implementation of a new financial and administrative system, i.e. Banner