

**The Master of Science degree in Mining Engineering and Management (MEM)** is a flexible, user friendly, and affordable online master's program that allows participants to maintain employment while advancing their knowledge and skills. Program coursework is designed with industry input and provides students with essential technical and management skills required by professionals in the industry today.

Students can enter the program at any one of the three semesters during the year and choose core classes and electives to match their individual interests and career goals. Students participate in classes face-to-face, streamed live, or watch recorded classes at their convenience.

## Program Overview

Designed to meet the growing need for mining engineers, this program offers advanced study with emphasis in either management-oriented or technically-oriented disciplines for professionals in mining, mine management or underground construction. **The technical track** emphasizes applied geomechanics, advanced rock mechanics, rock slope stability, tunneling, advanced mine ventilation, explosives and blasting, advanced geostatistics, and mine planning. **The management track** focuses on mining engineering management, mineral economics and finance, mining business management and general mining engineering.

## Accreditation

The South Dakota School of Mines and Technology is accredited by the regional Higher Learning Commission (HLC), a commission of the North Central Association of Colleges and Schools (NCA).

For more information, please visit [ncahlc.org](http://ncahlc.org).

## Tuition

The Mining Engineering and Management MS requires 32 credits. Cost for the distance program is \$643.75\* per credit hour, or approximately \$20,000 for your master's degree. Other than the one-time application fee of \$35, there are currently no other costs except for books. South Dakota residents are eligible for a discount to \$465.80\* per credit hour.

*\*Based on 2020/21 costs. See online price table for details.*

## Admission Requirements

- Completed graduate application form
- \$35 application fee
- Official transcript of prior academic work, sent directly to South Dakota Mines by the issuing institution, showing the undergraduate degree awarded
- 1 page statement of purpose, describing your goals in the program
- 3 letters of recommendation
- Additional requirements exist for international students, including a third-party foreign transcript evaluation and evidence of English proficiency.

The mining engineering coursework is geared primarily toward the working professional in the mining industry who requires distance delivery of the courses, although students can be admitted to the on-campus program. In either case, the student should have completed an appropriate undergraduate engineering degree, and for those holding a non-mining engineering undergraduate degree the applicant should have significant experience in the mining or underground construction industry. Additionally, an undergraduate course in probability and statistics is highly recommended.



## Program Requirements

The student selects one of two tracks, 1. technical or 2. management. The 32 credit hour non-thesis Master of Science in Mining Engineering includes 9 core credit hours in the select track (3 courses), 21 credit hours of elective courses, and 2 credit hours of Seminar (MEM 790).

### Technical Track Course List

- MEM 520** Advanced Tunneling and Underground Excavation
- MEM 525** Advanced Rock Mechanics
- MEM 533** Advanced Mine Planning & Design
- MEM 670** Advanced Mine Ventilation and Environmental Engineering
- MEM 545** Advanced Geostatistics and Grade Estimations
- MEM 550** Rock Slope Engineering
- MEM 680** Advanced Explosives and Blasting
- MEM 650** Mine Systems Optimization
- MEM 710** Bulk Materials Handling

### Management Track Course List

- MEM 510** Advanced Mineral Economics for Managers
- MEM 530** Resource Industry Mergers and Acquisitions
- MEM 535** Advanced Finance for the Minerals Industry
- MEM 560** Advanced Human Capital Management for the Mineral Industry
- MEM 610** Topics in Mineral Economics for the Minerals Industry
- MEM 620** Reputation Management for the Mineral Industry
- MEM 630** Mining Law and Environment for the Mineral Industry
- MEM 640** Advanced Mine Management for the Mineral Industry
- MEM 660** Mediation and Negotiation for the Mineral Industry
- MEM 570** Project Management for the Minerals Industry
- MEM 576** International Business for Engineers and Scientists

### Elective Courses

Elective courses consist of additional MEM courses from either track along with courses offered in Engineering Management or Construction Engineering and Management Program.

## Contact Us for More Information

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**[sdsmt.edu/DistanceEducation](https://sdsmt.edu/DistanceEducation)**

