

# Mining Engineering

## Bachelor of Science

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### What is Mining Engineering?

From TVs and toothpaste to cell phones and cars, the modern world depends on mining. Prepare to meet its 21st-century demands at one of only 13 programs nationwide.

Mining engineering has become highly automated, utilizing robots, unmanned aerial vehicles, advanced explosives, and simulation technology to provide the raw materials for industries ranging from automotive to aerospace.

### What does a mining engineer do?

Mining engineers identify the location of valuable and accessible material deposits and devise processes for extracting them safely from the earth for use in manufacturing and utilities. Mining engineers strive to extract the minerals for the least cost and the lowest environmental impact, and often specialize in one type of mineral or metal. Specific duties of a mining engineer might include:

- Design mines, both underground and open-pit
- Supervise construction of mines, tunnels and shafts
- Design transportation plans to move minerals to processing plants
- Write technical reports for miners, fellow engineers and mine managers
- Assess the effectiveness of a mining operation
- Solve problems relating to pollution, sustainability and land reclamation
- Monitor safety of mining operations

With 100% placement and average starting salaries of \$70,000 plus, graduates launch their careers at Kiewit, BHP Billiton, Newmont Mining, Freeport McMoRan, Cargill, Joy Global, Lafarge, Cloud Peak, and more.

### Careers include:

- mineral extraction
- construction
- operations, project and environmental management
- drilling, blasting
- mine design
- mine land reclamation
- health and safety
- geoscience modeling
- rock engineering

### For more information:

<https://www.sdsmt.edu/Academics/Degrees/Mining-Engineering-and-Management/>



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