

CAREERS IN MINERAL RESOURCES

Mining Engineer

What's a Mining Engineer?

Mining engineers ensure the economical, safe and environmentally responsible operation of underground and surface mines. Drawing on their technical knowledge and management skills, mining engineers are responsible for scheduling, production budgets, cost estimations, mine layouts, design work, mine safety and mine rehabilitation. They recommend appropriate drilling and blasting methods and supervise a technical team on all processes involved in a mining operation. They require strong computer skills and must keep detailed records and prepare technical reports. Mining engineers may oversee major projects such as new mine development and mill and refinery development for mineral processing and extraction.

Training Required

A prerequisite for this position is a Bachelor's Degree in Mining Engineering from a recognized university and qualification for Professional Engineer certification. A degree in Civil or Geological Engineering along with relevant pre-employment experience may be a suitable alternative. High school students should include mathematics (applied, pre-calculus, physics, chemistry, geology and drafting).



Working Conditions

Generally in an office environment although frequent trips underground and to surface mining and processing facilities may be required. Mining engineers generally work regular hours, however, some projects may require shift work. One must be physically capable of performing the duties assigned.

Mining Engineer Q & A

What kinds of employers hire mining engineers?

- Mining Companies
- Geotechnical Companies
- Environmental Consulting Companies
- Private Consulting Companies
- Self Employment
- Government (Provincial/Federal)

What specialties can mining engineers go into?

- Rock Mechanics
- Mine Ventilation
- Mine Safety
- Environmental Engineering
- Computer (Mine Design)

What are some occupations related to mining engineering?

- Geological Engineer
- Mechanical Engineer
- Surveyors
- Cartographers/GIS Specialist
- Metallurgist
- Hydrologist

What is the salary range for a mining engineer?

Provincial government salaries range from \$45,000 to \$115,000. Private sector salaries range from \$50,000 for a junior engineer to \$180,000 for a senior engineer.

Where can I get more information on becoming a mining engineer?

Engineers Geoscientists Manitoba
204-474-2736 / www.enggeomb.ca

Canadian Institute of Mining, Metallurgy and Petroleum
www.cim.org

Earth Sciences Canada
www.earthsciencescanada.com/careers

Mining Association of Manitoba Inc. (MAMI)
204-989-1890 / www.mines.ca

Manitoba Economic Development, Investment and Trade
204-945-6569 or 1-800-223-5215
manitoba.ca/minerals