

Bachelor of Engineering

Mining Engineering

Faculty of Engineering



What is mining engineering?

Mining is the business, science, and engineering of creating a profitable mining operation. Mining engineers design, develop, and implement processes and technologies for the economic extraction of minerals from the earth's crust in a safe, sustainable, and environmentally friendly way.

Is this program for me?

The Mining Engineering program is unique, allowing its graduates to choose from a wide variety of career paths globally. A degree in mining engineering builds the skills and experience necessary to work in fields such as a mining, energy and utilities, construction, engineering and management consulting, scientific and technical services, finance and mining investment, manufacturing and processing, and agriculture.

Coursework and research areas

Mining engineers study math, physics, chemistry, geology, economics, and a mix of applied engineering subjects such as materials handling, rock mechanics, ventilation, mining methods, mineral processing, and environmental mining. Students can apply this knowledge to large surface and deep underground mine designs, short and long-term mining production, and the assessment of mining project sustainability including environmental impact assessment and corporate social responsibility.

Why McGill?

McGill's Undergraduate Program in Mining Engineering was established in 1871, making it the oldest mining engineering program in Canada and the second oldest in North America. Students benefit from smaller class sizes as well as peer



and global industrial networks. Up to five paid work terms give students the opportunity to gain diverse and practical work experience in the mining sector before they graduate.

Since 1988, the Department's co-op program has provided students with a number of exciting and relevant job opportunities in industry. With the program's extensive network of employers, students often take more than the required three work-terms during their undergraduate studies.

How do I apply?

Admissions information:

www.mcgill.ca/undergraduate-admissions/apply



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What can I do when I graduate?

Most graduates work in the mining industry—their capacity for responsibility and management skills means that they often move onto larger project management roles, both in operations and consulting. Starting as junior mining/project engineers, graduates have quickly moved up in their careers, securing senior positions such as mine managers, principal engineers, and senior analysts within a few years from graduation.

Recent graduates from the program have gone on to careers in a variety of industries such as:

BHP

Long Range Mine Planner

Laurentian Bank Financial Group

Mining Analyst

IAMGOLD

Jr. Mining Engineer

Arcelor Mittal

Mining Optimization Engineer

Suncor

Field Engineer

Glencore

Process Engineer

Caterpillar

Technical Sales Representative

Contact us

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Engineering Career Centre (ECC)

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Souheil Bitar

Mining Engineering undergraduate student

Souheil Bitar is a U3 student in the Department of Mining Engineering. Since joining the program, he has participated in numerous projects, co-ops, and activities including optimizing drilling equipment in Nunavut, designing the ventilation and hauling network for a mine, and attending the Canadian Mining Games.

"I chose Mining Engineering because it's a branch of engineering which can result in a multidisciplinary career and a lot of travelling -- which I love! And through the program's coursework and internship opportunities, my passion for engineering and the financial aspects of mining projects, such as commodity markets, has grown exponentially."

Student life and engagement

The Faculty of Engineering provides several opportunities to participate in a variety of clubs, activities, and student government. Below are a few groups students can join to connect with others and enhance their lives outside of the classroom:

- ▲ Co-op Mining Engineering Undergraduate Society (CMEUS)
- ▲ Engineering Undergraduate Society (EUS)
- ▲ Engineers Without Borders – McGill Chapter
- ▲ Promoting Opportunities for Women in Engineering (POWE)
- ▲ The Canadian Mining Games
- ▲ CIM Student Chapter