Aside from the plant material we harvest, all of the raw material used by human society comes from minerals extracted from the earth. This program prepares you for careers in both the minerals industry and related environmental and technological fields. As a Mining Engineering student, you will study a broad range of disciplines involved in locating, extracting, refining, and disposing of mineral and metal products and byproducts. The program teaches students how these processes can be carried out efficiently and competitively, with a focus on sustainability and the environment.

"Our program is designed to address the entire mine life-cycle, from exploration to mine closure and offer solutions that not only enhance the competitiveness of the mining industry but also ensures compatibility with evolving societal values."

Queen’s ADMISSIONS
Students apply to Queen’s Engineering (QE) through the OUAC (Ontario University Application Centre) website. Secondary School prerequisites include five 4U and 4M courses, one of which must be English 4U. Calculus and Vectors 4U, Chemistry 4U, and Physics 4U are all required along with one of Advanced Functions 4U, Biology 4U, Data Management 4U, Computer Science 4U, Earth and Space Science 4U. A final grade of 70% must be obtained in English 4U. Applicants outside of Ontario may have additional requirements.

A Common START
Queen’s is unique in offering a common First Year along with an open discipline choice. When you do choose your program, you don’t have to worry about caps or quotas. Provided you pass all of your First Year courses, you are guaranteed a place in your engineering program of choice. Queen’s also offers Section 900, a special extended program for students struggling with First Year courses. Take things at a slower pace and recover in time for Second Year.

Degree OPTIONS
Bachelor of Applied Science in Engineering
Bachelor of Applied Science in Engineering with Professional Internship
Option in Mining / Minerals Processing and Environmental / Mine-Mechanical

Course HIGHLIGHTS
Mining Engineering students have the opportunity to take a wide range of technical courses to help prepare them for the many possible career destinations available. Such courses include:
- Mine Design and Planning
- Drilling and Blasting
- Mining and Sustainability
- Chemical Extraction of Metals
- Mineral Industry Economics
- Equipment Reliability and Maintenance

Acquire Skills. Gain Experience. Go Global. That is a degree from Queen’s.
mine.queensu.ca
GET THE COURSES YOU NEED

1ST YEAR

Queen's Engineering first year is common—courses include: Physics, Chemistry, Calculus, Algebra, Graphics, Computing and Earth Systems Engineering.

Also APSC100, the entry level course in our Engineering Design and Practice Sequence (EDPS), focusing on problem solving, experimentation principles and finishing off with a team-based engineering project.

Discipline selection will take place in February!

Courses include: Solid Mechanics, Differential Equations, Mining & Mineral Processing, Computer Applications & Instrumentation in Mining, Engineering Economics, Electric Circuits & Machines, Numerical Methods and Underground Mining.

You will take the second EDPS course—APSC200.

Your other 3-4 courses depend on your option!

GET RELEVANT EXPERIENCE

2ND YEAR

Look for summer jobs by talking to the department or Career Services about work through SWEP or NSERC.

Research summer job opportunities within the mining industry and attend information sessions offered by various companies.

Consider applying to do a 12-16 month Co-op internship. Consider a summer research position within the Mining Department.

GET CONNECTED WITH THE COMMUNITY

3RD YEAR

Volunteer on or off campus with different community organizations such as Engineers without Borders (EWB).

Continue to search for jobs within the Mining industry. If you worked in mining last summer, try to get a job with a different company or in a different area of mining.

Join in membership in the following organizations within the mining community: Prospects & Developers Association of Canada (PDAC), Canada Institute in Mining (CIM), and the Society for Mining Metallurgy and Exploration (SME).

Attend department complimentary presentations by industry members and organizations.

Getting Thinking Globally

GET READY FOR LIFE AFTER GRADUATION

4TH OR FINAL YEAR

Consider a 12-16 month Co-op Internship

Investigate requirements for full-time jobs or other opportunities related to careers of interest.

International students interested in staying in Canada can speak with an International Student Advisor.

Employability skills

Your time at Queen's will give you valuable skills to boost your employability, including:

• Proficiency in mathematics and physical sciences
• Proficiency in mining sciences
• Relevant analysis and designing skills
• Relevant work experience in mining engineering
• Working knowledge of design software for mining engineering
• Written and oral communication skills
• Time and resource management
• Ability to work independently and in a team on projects

Where could I go after graduation?

• Academia
• Banking and venture capital
• Business management (mine manager, director, vp, ceo, president)
• Environmental management
• Equipment designer
• Government (mine inspector, health and safety, environment)
• Law
• Mine construction
• Mine engineer
• Mine planner and scheduler
• Mine supervisor
• Mineral exploration and processing
• Mining consultant
• Mining financial analyst
• Mining sales representative
• Mining supply
• Occupational health and safety
• Petroleum and gas industry
• Project engineer
• Project manager
• Renewable resources
• Technical specialist
• Waste management

• Taking time to explore career options, build experience, and network can help you have a smoother transition to the world of work after graduation.

• Some careers may require additional training. Careers listed here are only suggestions. *some careers may require additional training. Careers listed here are only suggestions.

Visit careers.queens.ca/majormap for the online version with links!
How to use this map

Use the 5 rows of the map to explore possibilities and plan for success in the five overlapping areas of career and academics. The map just offers suggestions – you don’t have to do it all! To make your own custom map, use the My Major Map tool.

Get started thinking about the future now – where do you want to go after your degree? Having tentative goals (like careers or grad school) while working through your degree can help with short-term decisions about courses and experiences, but also help you keep motivated for success.

Get the help you need

Queen’s provides you with a broad range of support services from your first point of contact with the university through to graduation. At Queen’s, you are never alone. We have many offices dedicated to helping you learn, think and do.

Ranging from help with academics and careers, to physical, emotional, or spiritual resources – our welcoming living and learning environment offers the programs and services you need to be successful, both academically and personally, and Queen’s wants you to succeed! Check out the Student Affairs website for available resources.

Why study in Kingston?

For 175 years, our community has been more than a collection of bright minds – Queen’s has attracted students with an ambitious spirit. Queen’s has the highest retention rates, the highest graduation rates, and one of the highest employment rates among recent graduates. We are a research intensive university focused on the undergraduate experience. The BBC has identified us as one of the GREATEST UNIVERSITY TOWNS in the world – and is often awarded the safest city in Canada. We are a university city at the core; just a quick drive to Toronto, Montreal, Ottawa and even New York. A university with more clubs per capita than any other university in Canada, and a city with more restaurants per capita than any other city in North America – you will have the experience of a lifetime at Queen’s – and graduate with a degree that is globally recognized among the best.

For more information, contact quip@queensu.ca or visit the Program Website.