

Mining Engineering



Get to know

MINING ENGINEERING

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, Advanced Functions 4U, Chemistry 4U, and Physics 4U are all required. A final competitive minimum grade of 80% must be obtained in all courses. 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:

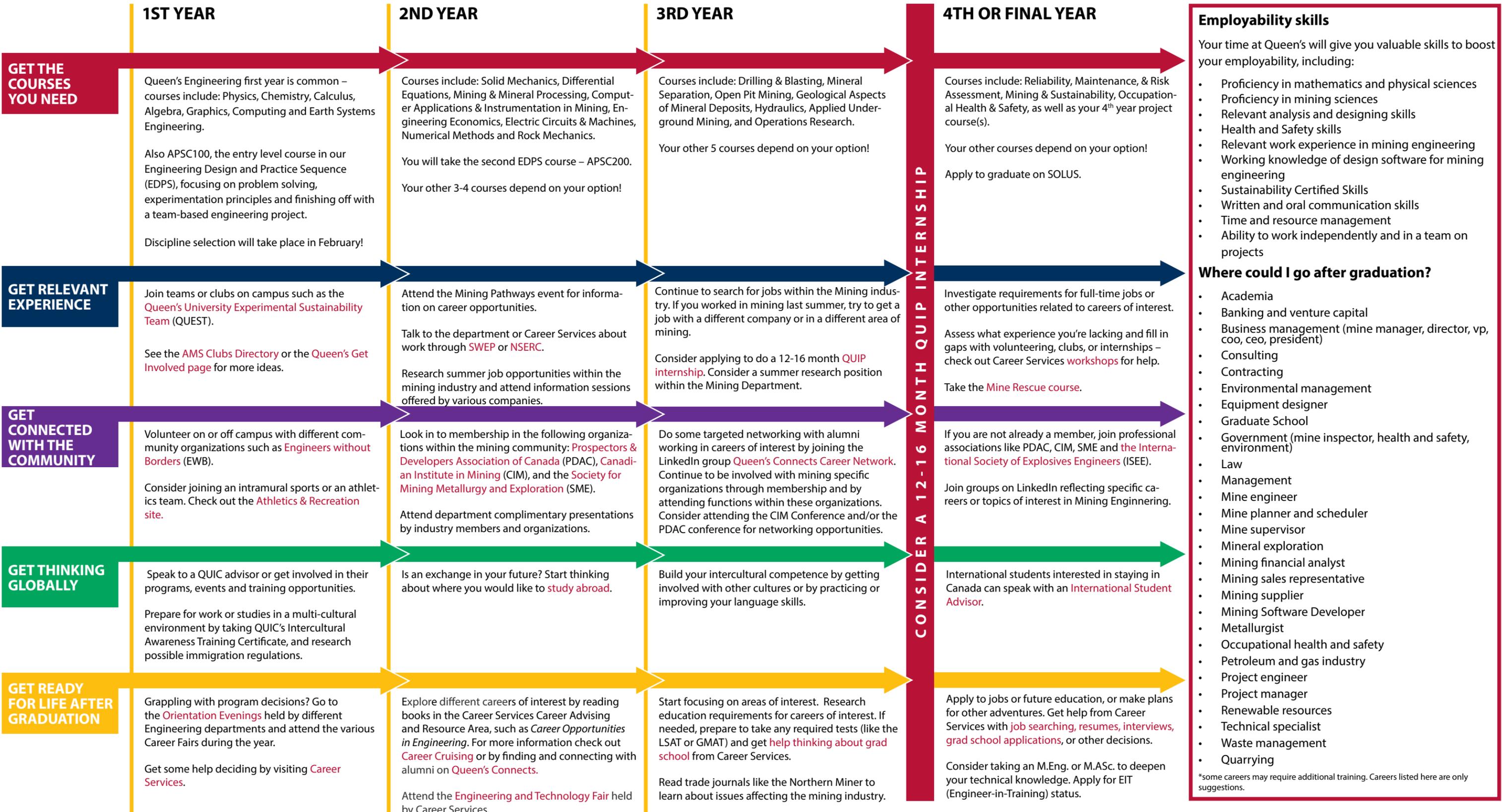
- Design and Planning
- Drilling and Blasting
- Mining and Sustainability
- Chemical Extraction of Metals
- Mineral Industry Economics
- Equipment Reliability and Maintenance
- Geostatistics
- Geomechanics
- Process Engineering
- Automatic Controls

Acquire Skills. Gain Experience. Go Global.
That is a degree from Queen's. mine.queensu.ca

2020-2021 Mining Engineering MAJOR MAP*

BACHELOR OF APPLIED SCIENCE | BACHELOR OF APPLIED SCIENCE WITH PROFESSIONAL INTERNSHIP

The coronavirus pandemic may impact how some activities are delivered in 2020-2021. Please check directly with the host of any activity on the map for the latest information.



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
- Health and Safety skills
- Relevant work experience in mining engineering
- Working knowledge of design software for mining engineering
- Sustainability Certified Skills
- 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, coo, ceo, president)
- Consulting
- Contracting
- Environmental management
- Equipment designer
- Graduate School
- Government (mine inspector, health and safety, environment)
- Law
- Management
- Mine engineer
- Mine planner and scheduler
- Mine supervisor
- Mineral exploration
- Mining financial analyst
- Mining sales representative
- Mining supplier
- Mining Software Developer
- Metallurgist
- Occupational health and safety
- Petroleum and gas industry
- Project engineer
- Project manager
- Renewable resources
- Technical specialist
- Waste management
- Quarrying

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

Visit careers.queensu.ca/majormaps for the online version with links!

* This map is intended to provide suggestions for potential extracurricular activities and career paths, but everyone's abilities, experiences, and constraints are different. Build your own Major Map using our online [My Major Map](#) tool.

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MAJOR MAP



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.

QUIP

QUEEN'S UNDERGRADUATE INTERNSHIP PROGRAM

START DATES
in May, September,
or January

POSITIONS
are paid and
full-time

WORK TERMS
are 12-16 months
long

PROGRAM OVERVIEW

- Graduate with "Professional Internship" on your degree.
- Learn about current advances, practices and technologies in business and industry.
- Test drive a career, earn a competitive salary, and get real world experience.

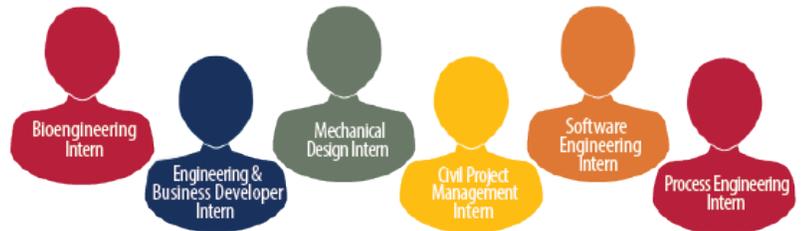
ELIGIBILITY

- 2nd or 3rd Year Students
- Minimum GPA of 1.9

WHY QUIP?

- Gain a year of career-related work experience.
- Build network connections.
- Receive support from Queen's staff in job search and during internship.

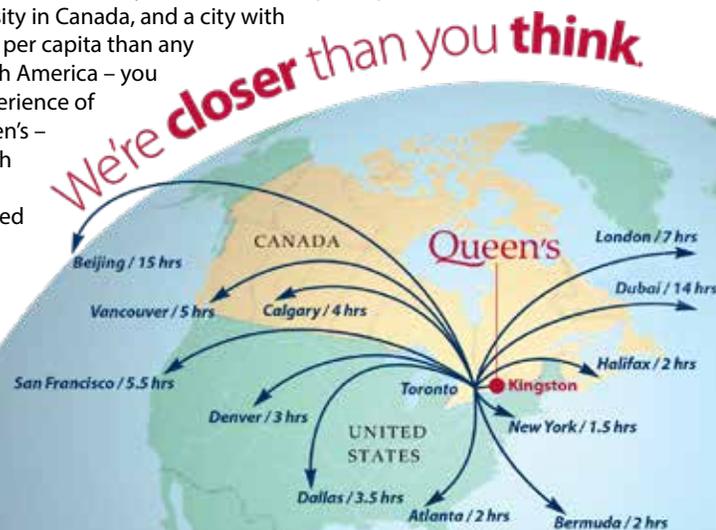
SAMPLE PAST INTERNSHIPS



For more information, contact quip@queensu.ca or visit the [Program Website](#).

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.



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