

# Mining Engineering Technology (BTech)



Get to know

## MINING ENGINEERING TECHNOLOGY (BTech)

The Bachelor of Mining Engineering Technology (BTech) is a new degree program designed to meet the needs of the modern mining industry and of college-educated professionals looking to advance their career through education. Designed for engineering technologists and technicians, the program features customized bridge courses and two years of online university study, including on-site field placements in Kingston and Timmins, ON. The BTech program combines the history, expertise, reputation and connections of two prestigious mining institutions—Queen's University's Robert M. Buchan Department of Mining and Northern College's Haileybury School of Mines.

The program combines asynchronous online lectures, tutorials and webinars with team assignments, group projects, and collaborative discussions. With a focus on Active Learning, Cooperative Learning, and Student-to-Professor Interactions, the BTech program is fully adaptable to your needs. Choose to study full-time, or work full-time and study part-time. This flexibility allows you to adjust your course load at any time during the program, in order to maintain a healthy balance between your personal and professional commitments.

The hub for the interactive elements of the online courses is OnQ (Brightspace by Desire2Learn). It is an advanced integrated learning platform that brings together the ability to interact with your fellow classmates, access course resources, and get fast feedback - when you want it. Working with a Program Coordinator, you will build an Individual Learning Plan, customized to your needs. Regular check-ins will allow you the flexibility to adjust your course load in order to meet any changing job or family commitments.



## Queen's **ADMISSIONS**

Graduates of any Engineering Technology or Mining Engineering Technician program from college, or students who have completed a minimum of two years of study in a science program at a recognized university, and have completed their studies with a minimum 75% passing grade, are eligible to apply to the BTech program. Applications can be submitted using the [webapp \(webapp.queensu.ca/admission/apply/index.php\)](http://webapp.queensu.ca/admission/apply/index.php).

## Field **SCHOOL**

Years 3 and 4 of the BTech program each include an intensive, two-week field placement at Queen's University in Kingston and at Northern College's Haileybury School of Mines in Timmins, ON. You will learn practical, hands-on skills in the use of modern tools and equipment, data acquisition and interpretation, group work and report writing. A focus on occupational health and safety is emphasized throughout. Field School I includes an introduction to laboratory techniques and data analysis, rock mechanics, blasting technology,

and mineral processing. Field School II includes a study of geology and rocks, mine ventilation, an introduction to metallurgical techniques, as well as surveying technologies.

## Course **HIGHLIGHTS**

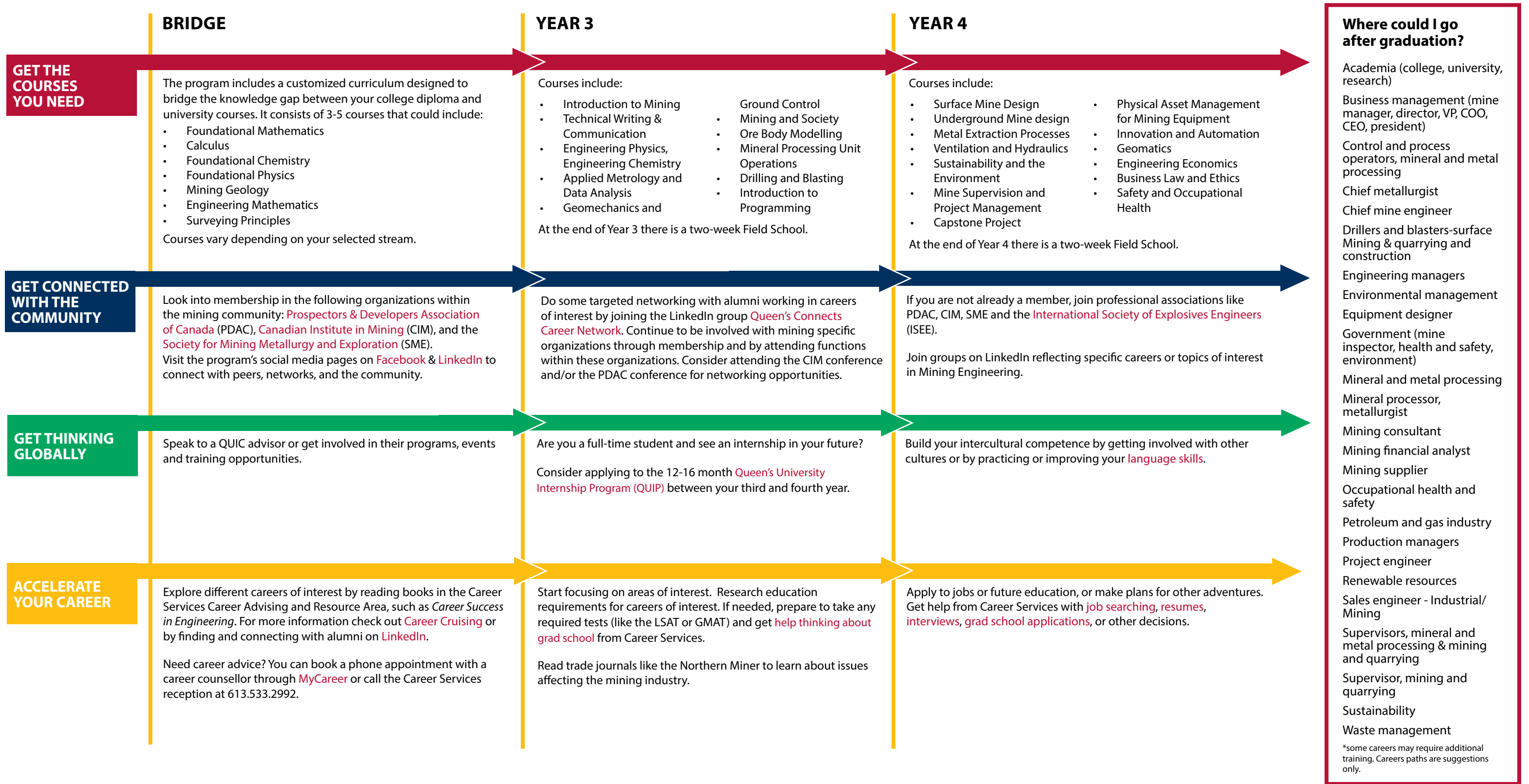
BTech students will take a wide range of technical courses to help prepare them for the many possible career destinations available. Such courses include:

- Mine Supervision and Project Management
- Surface and Underground Mine Design
- Applied Metrology and Data Analysis
- Geomechanics and Ground Control
- Business Law and Ethics
- Engineering Economics
- Ore Body Modelling and Resource Estimation

**Acquire Skills. Gain Experience. Go Global.**  
That is a degree from Queen's. [btech.engineering.queensu.ca](http://btech.engineering.queensu.ca)

# Mining Engineering Technology (BTech) MAJOR MAP \*

BACHELOR OF MINING ENGINEERING TECHNOLOGY (BTech)



# BTech

## MAJOR MAP



### How to use this map

Use this map to plan for success in five overlapping areas of your career and academic life. The map helps you explore possibilities, set goals and track your individual accomplishments. Everyone's journey is different – the guide offers options for finding your way at Queen's and setting the foundation for your future. To make your own customized map, use the online [My Major Map](#) tool.



### 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.

# Succeed in the workplace

## What employers want

The Canadian Council of Chief Executives list the top 6 skills sought by employers as:

- 1 People skills
- 2 Communication skills
- 3 Problem-solving skills
- 4 Analytical abilities
- 5 Leadership skills
- 6 Industry-specific knowledge

Take the time to think about the unique skills you have developed at Queen's, starting with the skills list here for ideas. Explaining your strengths with compelling examples will be important for applications to employers and further education.

## What will I learn studying MINING ENGINEERING TECHNOLOGY (BTech)?

- **Identify, formulate, analyze, and solve typical mining engineering problems using a balance of mathematics, physics, chemistry, and Earth sciences.**
- **Conduct experiments, analyze and interpret data.**
- **Choose and implement sustainable methods for the safe extraction, handling, and processing of mineral resources to meet the technical, economic, and environmental needs of society.**
- **Employ modern engineering tools effectively for the purpose of mine planning and design, as well as for data visualization, analysis and interpretation.**
- **Value the mining industry's unique characteristics in terms of its economic, legal, environmental and societal elements.**
- **Work professionally and communicate effectively in a team-based multi-disciplinary environment. Articulate and justify technical solutions to diverse audiences.**



## BTECH

The Robert M. Buchan  
Department of Mining  
Goodwin Hall, Room 354  
25 Union Street  
(613) 533-2230  
mine.office@queensu.ca