

# Geological Sciences

What is Geological Sciences? Geoscientists interpret our natural world. We use geophysics, geochemistry, geobiology, and field geology to understand the modern and ancient Earth. Rocks, minerals, fluids, fossils, mountains, sediments, glaciers, and volcanoes are all fundamental to constraining Earth processes at all scales. Managing water, mineral, and energy resources, designing sustainable strategies for infrastructure and industrial growth, and solving natural and anthropogenic hazards, including climate change, depend on a deep understanding of geological processes.

## TOP 5 Reasons To Study Geological Sciences

- 1 Most students in the department gain nearly 400 hours of hands-on experience on field trips.
- 2 We are a small, friendly department. You will get to know your classmates and professors very well.
- 3 The department boasts state-of-the-art facilities, including world-class Geochemistry and Applied Geophysics Labs.
- 4 The Miller Museum, our on-site museum right here at Queen's, is your classroom.
- 5 Our students have the opportunity to study abroad with the International Exchange Program.

## Alumni Story

"I can honestly say that the choice to study Geology at Queen's was the single best decision I have ever made. The department provided all the knowledge, opportunities, and support to develop a successful career in the geosciences along with relationships to friends and mentors that will last a lifetime."

*-Jonathan Savard, BSc'16*

## TOP ALUMNI JOBS

**21%** of alumni work in **ENERGY**

**16%** of alumni work in **MINING**

**15%** of alumni work in **EDUCATION**

**9%** of alumni work in **GOVERNMENT**

add a **CERTIFICATE**

Data Analytics

Disability and Physical Activity

Employment Relations

Entrepreneurship, Innovation and Creativity

French for Professionals

Geographic Information Science

Global Action and Engagement

Indigenous Languages and Cultures

International Studies

Media Studies

Sexual and Gender Diversity

Urban Planning Studies

[QUartsci.com/certs](https://quartsci.com/certs)

## 2023-24 Plan Thresholds

Thresholds are made on a competitive basis and are updated annually. To see the thresholds for all programs as well as the latest information, please visit [quartsci.com/planselection](https://quartsci.com/planselection)

Interested in finding out how to augment your degree with Experiential Learning? Learn what opportunities and resources are available for you on the [Experiential Learning website](#). You can also reach out to the team directly at [asc.el@queensu.ca](mailto:asc.el@queensu.ca).



## Acquire Skills. Gain Experience. Go Global.

That is a degree from Queen's.

[queensu.ca/geol](https://queensu.ca/geol)

# Geological Sciences MAJOR

BACHELOR OF SCIENCE (HONOURS): MAJOR, MINOR, SPECIALIZATION



CONSIDER A 12-16 MONTH QUIP INTERNSHIP

### What will I learn?

A degree in Geology can equip you with:

- Knowledge of principles and techniques of the earth sciences
- Practical applications of geological science techniques
- Understanding of the variability of Earth materials and their changes with time and environment.
- Fieldwork skills to design and carry out site investigations to solve problems
- Technical skills to use up-to-date geological analysis tools, equipment, and software
- Research skills to conduct scientific research and analyze quantitative information, develop multiple working hypotheses
- Problem solving to approach a range of problems from various perspectives
- Ability to work independently and in teams on projects.
- Oral and written communication to clearly explain technical information and write reports

### Where can I go?

A degree in Geological Science can take your career in many directions. Many students choose to continue their academics with a master's or connect with GARNET to network with alumni. Our students are equipped with a strong foundation for careers in:

- Ecology
- Environmental Geology
- Geological Hazards
- Geomatics
- Geomorphology
- Geophysics
- Geoscience
- Hydrology
- Museum Curation
- Nature Resources
- Paleontology
- Renewable Energy
- Resource Policy Analyst
- Toxicology
- Volcanology

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

### 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.

# Geological Sciences

# 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 a "Professional Internship" 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.



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. Queen's wants you to succeed! Check out the [Student Affairs website](#) for available resources.

## SAMPLE PAST INTERNSHIPS



For more information, contact [quip@queensu.ca](mailto: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 Kingston as one of the GREATEST UNIVERSITY TOWNS in the world – and it is often awarded the safest city in Canada. It is 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.

*We're closer than you think.*



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