

# Applied Geology MSc Map

## Applying to and Navigating Graduate Studies

### Why GRADUATE STUDIES in APPLIED GEOLOGY?

The Master of Science in Applied Geology is a one-year program leading to enhanced knowledge in Mineral Exploration/ Resource Geology or Geological Engineering. The program normally commences in September and can be completed by the end of April or August of the following year depending on the project and/or pattern.

### Why QUEEN'S?

As a Master's student in Geological Science you are part of one of the most research intensive universities in Canada. Our research program is internationally renowned with a wide range of research activities in all of the major specialization areas of geological science. As well, students are able to work in first-rate facilities with world-renowned scientists and research engineers, and have opportunities to collaborate with industrial leaders and engage in extensive fieldwork on six continents, making our program truly a world-class experience. Students can also collaborate with other departments at Queen's, including Mining, Environmental Studies, Chemistry, and Biology as well as other institutions like RMC.

### Program STRUCTURE

The Master of Science in Applied Geology degree is based either on a project/course-work option, or a course-work only option:

- **Option 1:** GEOL 898 (project) plus 6 term length course credits.
- **Option 2:** Eight term length course credits.

Under the project/course-work option, a student is required to complete six primary term length course credits. The project course is in addition to these six courses, and is taken under the code GEOL 898. At least four primary courses must be taken in the Department of Geological



Sciences & Geological Engineering. Up to 25% (1 course) of the primary courses can be 4th year and/or graduate courses which are co-taught and co-numbered with 4th year courses. The project culminates in a written report.



The requirements for the course-work only option are eight term length course credits, and at least four courses must be taken in the Department of Geological Sciences & Geological Engineering.

GRAD MAP FOR MSc STUDENTS 

Selection of courses in both the 2 year Research Master's and 1 year Master of Science in Applied Geology are subject to Supervisor and Graduate Coordinator approval. Students must obtain a satisfactory standing in all courses (minimum 70%) in both the 2 year Research Master's and 1 year Master of Science in Applied Geology.



**GRADUATE STUDIES AND  
POSTDOCTORAL AFFAIRS**

2023-2024

# Applied Geology MSc Map

MASTER OF SCIENCE (MSc)



## GETTING STARTED

## INTERMEDIATE STAGE

## WRAPPING UP

### ACHIEVE YOUR ACADEMIC GOALS

- Start with key priorities like developing your relationship with your supervisor, forming your committee, and doing your coursework.
- Find your way through the academic process with help from departmental and [School of Graduate Studies and Postdoctoral Affairs](#) and [professional development workshops](#), the department Grad Chair, and the [SGSPA website](#).

### MAXIMIZE RESEARCH IMPACT

- If you will be continuing graduate studies, apply for NSERC and OGS funding.

### BUILD SKILLS AND EXPERIENCE

- Consider positions in student services, the SGPS, or media outlets like the Queen's Journal, CFRC, and the SGSPA Blog. Look in the [AMS Clubs Directory](#) for more ideas.
- Serve on departmental or university committees. Talk to the Joliffe Club (graduate student society) for tips on getting involved.
- Check out professional development workshops from School of Graduate Studies and Postdoctoral Affairs professional development.

### ENGAGE WITH YOUR COMMUNITY

- Explore how you can connect with your community through experiential opportunities on- and off-campus.
- Consider volunteering with different local community organizations, such as [Martha's Table](#), or [Loving Spoonful](#).

### LAUNCH YOUR CAREER

- Finding a career that fits starts with knowing yourself. Get help by taking a [Career Services workshop](#) or meeting with a career educator and coach.
- Start reading publications like [University Affairs](#) and the [Chronicle of Higher Education](#). Browse non-academic labour market websites. Stay on the lookout for special events like School of Graduate Studies and Postdoctoral Affairs Career Week to explore your career pathways.
- Check admission test deadlines if needed for further studies.

- Continue your coursework.

- Attend or present at a graduate conference. Ask your supervisor for suggestions.
- Set up a meeting with the School of Graduate Studies and Postdoctoral Affairs for a [Grad Chat](#) to discuss your research interests.

- Start keeping an eportfolio of your skills, experiences, and competencies.
- Use a Research Assistant or Teaching Assistant position to develop your research or teaching skills.
- For help with teaching, get support from the [Centre for Teaching and Learning](#). Enrol in SG5902 or the PUTL Certificate for more professional development in teaching and learning.

- Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups.
- Prepare for work or studies in a multi-cultural environment by taking the Intercultural Awareness Training Certificate hosted by QUIC and FDISC.
- If you are an international student interested in staying in Canada, consider speaking with an [International Student Advisor](#).

- Explore different careers of interest by [QueensConnects](#) on LinkedIn to connect with Queen's alumni. Check out [Career Cruising](#) for more information.
- If you are considering a PhD, explore programs of interest reach out to faculty, and apply to PhD programs and external scholarships.

- Complete your coursework.
- Option 2 students must complete GEOL 898.

- Attend a major conference in your field, such as the [International Conference on Geology and Geoscience](#).
- Consider putting an article in [The Conversation](#).

- Practice articulating the skills you have been developing in settings outside the university, such as casual conversation, networking, and interviews. Get help from a Career Services workshop.
- Check out opportunities for extra training through CTL, School of Graduate Studies and Postdoctoral Affairs professional development, [MITACS](#), or other sources to boost your skills.

- Do some targeted networking with people working in careers of interest, through [QueensConnects](#) on LinkedIn, the [Queen's Alumni Association](#), professional associations, and at conferences. Get help from a [Career Services workshop](#).
- Consider joining professional associations like the [Geological Association of Canada](#).

- Participate in hiring committees and attend job talks. Start focusing on areas of interest. Research organizations of interest and start putting together your CV or resume for potential positions of interest. Get help from Career Services with job searching, resumes, and interviews.

### WHAT WILL I LEARN?

A graduate degree in Applied Geology can equip you with valuable and versatile skills, such as:

- **Knowledge and technical skills**
- **Effective communication skills** in multiple forms for diverse audiences
- **Information management:** prioritize, organize, and synthesize large amounts of information
- **Time management:** meet deadlines and manage responsibilities despite competing demands
- **Project management:** develop ideas, gather information, analyze, critically appraise findings, draw and act on conclusions
- **Creativity and innovation**
- **Perseverance**
- **Independence** and experience as a **collaborative** worker
- **Awareness**, an understanding of sound **ethical** practices, **social responsibility**, responsible research, and **cultural sensitivity**
- **Professionalism** in all aspects of work, research, and interactions
- **Leadership:** initiative and vision leading people and discussion

### WHERE CAN I GO?

A Master's degree in Applied Geology can take your career in many directions. Our Master's students are equipped with a strong foundation for careers in:

- Academia and research
- Environment assessment
- Mineral and oil exploration
- Mining and hydrocarbon extraction
- Policy analysis
- Protection and rehabilitation
- Resource management
- Surface and underground construction

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 Grad Map](#) tool.



# Graduate Studies FAQs

## How do I make the most of my time at Queen's?

Use the Grad Map to plan for success in five overlapping areas of your career and academic life. Everyone's journey is different - the ideas on the maps are just suggestions to help you explore possibilities. For more support with your professional development, take advantage of the SGSPA professional development framework and the new [Individual Development Plan \(IDP\)](#) process to set customized goals to help you get career ready when you graduate.

## Where can I get help?

Queen's provides you with a broad range of support services from your first point of contact with the university through to graduation. Ranging from help with academics and careers, to physical, emotional, or spiritual resources – our welcoming environment offers the programs and services you need to be successful, both academically and personally. Check out the [SGSPA website](#) for available resources.

## What is the community like?

At Queen's, graduate students from all disciplines learn and discover in a close-knit intellectual community. You will find friends, peers and support among the graduate students enrolled in Queen's more than 130 graduate programs within 50+ departments & research centres. With the world's best scholars, prize-winning professional development opportunities, excellent funding packages and life in the affordable, historic waterfront city of Kingston, Queen's offers a wonderful environment for graduate studies. Queen's is an integral part of the Kingston community, with the campus nestled in the core of the city, only a 10-minute walk to downtown with its shopping, dining and waterfront. For more about Kingston's history and culture, see Queen's University's [Discover Kingston](#) page.

# Application FAQs

## What do I need to know to APPLY?

### ACADEMIC REQUIREMENTS

- Bachelor degree in one of Geological Sciences, Geological Engineering, Mining Engineering, or Civil Engineering. Degrees in fields such as Biology, Chemistry, Physics, Environmental Sciences, or Geography are seriously considered, but may require additional Geology courses.
- **Grade requirements:** B average.

### ADDITIONAL REQUIREMENTS

- If English is not a native language, prospective students must meet the [English language proficiency requirements](#) in writing, speaking, reading, and listening. The following minimum scores are required: (1) TOEFL iBT: Writing (24/30); Speaking (22/30); Reading (22/30); Listening (20/30). Applicants must have the minimum score in each test as well as the minimum overall score, or (2) IELTS: 7.0 (academic module overall band score and a 7.0 for each test band), or (3) PTE Academics: 65, or (4) CAEL CE -70 (minimum overall score).

### KEY DATES & DEADLINES

- **Application due:** February 1st for September admission.
- **Notification of acceptance:** Normally 4 weeks after the full application has been received.

Before you start your application, please review the [Graduate studies application process](#).

## What about FUNDING?

There is no departmental or university funding available for 1 year Master of Science in Applied Geology students. Students are expected to obtain external funding prior to admission in the program. For more information, see the School of Graduate Studies and Postdoctoral Affairs' information on [awards and scholarships](#).



Kelly McCaugherty, Graduate Assistant  
(613) 533-2597  
[geolgradassistant@queensu.ca](mailto:geolgradassistant@queensu.ca)  
[queensu.ca/geol/graduate](https://queensu.ca/geol/graduate)