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.

Selection of courses in both the 2 year Research Master’s and 1 year Master of Science in Applied Geology is 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.
2019-2020

Applied Geology MSc Map *

**GETTING STARTED**

- **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 [Expanding Horizons](http://expandinghorizons.queensu.ca/) professional development workshops, the department Grad Chair and the SGS [Habitat](http://sgshabitat.queensu.ca/)

- **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](http://sgps.queensu.ca/), or media outlets like [Queen's Journal](http://journal.queensu.ca/), the [SGS Blog](http://sgs.queensu.ca/), the [CFRC](http://cfrc.queensu.ca/) for more ideas.
  - Serve on departmental or university committees. Talk to the J01life (graduate student society) for tips on getting involved.
  - Check out professional development workshops from [Expanding Horizons](http://expandinghorizons.queensu.ca/)

- **ENGAGE WITH YOUR COMMUNITY**
  - Explore how you can connect with your community through experiential opportunities on- and off-campus.
  - Participate in graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups.

- **LAUNCH YOUR CAREER**
  - Find a career that fits; start with knowing yourself. Get help by taking a [Career Services workshop](https://careers.queensu.ca/) or meeting with a career counsellor. Check out books like [So What Are You Going to do With That?](https://goodbooks.taleoftwojobs.com/)
  - Start reading publications like [University Affairs](https://ua.queensu.ca/) and the [Chronicle of Higher Education](https://chronicle.com/). Browse non-academic labour market websites. Look in the [SGS](http://sgs.queensu.ca/), and the [Queens Journal](http://journal.queensu.ca/), or media outlets like [SGPS](http://sgps.queensu.ca/), or [Mitacs](http://mitacs.ca/) to explore your career pathways.

**INTERMEDIATE STAGE**

- **ACHIEVE YOUR ACADEMIC GOALS**
  - Continue your coursework.

- **MAXIMIZE RESEARCH IMPACT**
  - Attend or present at a graduate conference. Ask your supervisor for suggestions.

- **BUILD SKILLS AND EXPERIENCE**
  - Start keeping an eportfolio of your skills, experiences and competencies.

- **ENGAGE WITH YOUR COMMUNITY**
  - Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups.

- **LAUNCH YOUR CAREER**
  - Check graduation test deadlines if needed for further studies.

**WRAPPING UP**

- **ACHIEVE YOUR ACADEMIC GOALS**
  - Complete your coursework.

- **MAXIMIZE RESEARCH IMPACT**
  - Attend a major conference in your field, such as the [International Conference on Geology and Geoscience](http://ican.org/)

- **BUILD SKILLS AND EXPERIENCE**
  - 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](https://careers.queensu.ca/)

- **ENGAGE WITH YOUR COMMUNITY**
  - Do some targeted networking with people working in careers of interest, through [QueensConnects](https://queensconnects.queensu.ca/) on LinkedIn, the [Queens Alumni Association](http://queensalumni.queensu.ca/), professional associations, and at conferences.

- **LAUNCH YOUR CAREER**
  - Consider putting an article in [The Conversation](https://theconversation.com/).

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

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

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

* This map is intended to provide suggestions for activities and careers, but everyone’s abilities, experiences, and constraints are different. Build your own Grad Map using our online My Grad Map tool.
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 School of Graduate Studies requires the following minimum scores: TOEFL (paper-based): 550, (2) TOEFL IBT: Writing (24/30); Speaking (22/30); Reading (22/30); Listening (20/30), for a total of 88/120 (applicants must have the minimum score in each test as well as the minimum overall score), or (3) IELTS: 7.0 (academic module overall band score), or (4) PTE Academics: 65.

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' information on awards and scholarships.