M.Sc. Map

FAQs

What do I need to know to apply?

ACADEMIC REQUIREMENTS

- Bachelor degree in one of Geological Sciences, Geophysical 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 TOEFL requirements in writing, speaking, reading, and listening.

KEY DATES & DEADLINES

- Application due: February 1 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.

How do I find a supervisor?

We encourage you to identify an area of research interest and contact a potential supervisor before applying.

Visit the Geological Sciences website to read faculty profiles and learn more about faculty members' research areas. When you find a faculty member with similar research interests to yours, contact him/her and tell them about your interest in graduate work and related experience.

What about funding?

M.Sc. students in Geological Sciences receive minimum funding of $21,000 per year. This basic funding package includes teaching assistantships.

Apply for external funding from OGS, NSERC, and other sources. Queen's will automatically issue a $5,000 top-up to Masters winners of federal government tri-council awards. Normally 4 weeks after the full application has been received.

Why do I USE THIS MAP?

Whether you are considering or have embarked on graduate studies at Queen's, 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 Grad Map tool.

Why GRADUATE STUDIES IN GEOLOGICAL SCIENCES?

Geoscientists and geological engineers interpret the natural world. They bring methods such as geophysics, geochemistry, geology and field geology together to understand the modern and ancient Earth. Clues concealed in rocks and minerals, fluids and fossils, mountains and sediments, glaciers and volcanoes are marshaled to understand and explain the Earth system at all scales. Managing water, mineral and energy resources, designing sustainable strategies for infrastructure and industrial growth, and coping with natural and anthropogenic hazards facing increasing global populations, including climate change, all depend on a deep understanding of natural processes.

Why QUEEN'S?

“The Queen's Master of Science program has been invaluable in refining not only my geological skills, but also in furthering my curiosity for the science. The research opportunities exist at a global scale and allow one to apply concepts learned (…) to cutting edge projects spanning all facets of geology.” – Cole McGill, MSc.

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.

Why KINGSTON?

Described by students as both “quaint” and “eclectic,” Kingston is big enough to provide all the conveniences of modern life, and small enough for students, staff, and faculty to feel instantly comfortable and at home.

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 many shopping and dining spots. For more about Kingston’s history and culture, see Queen’s University’s Discover Kingston page.

Program STRUCTURE

The Master’s of Geological Sciences is offered in both a 1-year and 2-year method of completion:

- Master of Science in Applied Geology
  - Method I (1 year): 6 term length courses and a project or 8 term length courses only
- Master of Science Method II (2 years): 4 term length courses and thesis.

RESEARCH AREAS

- Economic Geology & Mineral Exploration
- Petroleum & Structural Geology
- Sedimentology, Sedimentary Geochemistry & Paleontology
- Geophysics and Geochronology
- Applied Geoenvironmental Sciences & Geotechnique

GEOLOGICAL SCIENCES M.Sc. Map

Navigating Graduate Studies and Beyond

Visit the SGS Habitat online for student services

Building a Career and Making Connections

Playing Finding Funding and Scholarships

Staying Well Taking care of yourself and mental health

Navigating Academe Accessibility, supervision, the dissertation, and more

Coming Home Away For students new to Kingston

Managing Your Personal Life and more

M.Sc. Career Outcomes in the Physical Sciences

A Master’s degree in Geological Sciences can take your career in many directions. Many of our MSc students choose to continue their academic inquiry with a PhD. 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.

WHERE CAN A GRADUATE DEGREE TAKE ME?

DEPARTMENT OF GEOLOGICAL SCIENCES & GEOLOGICAL ENGINEERING

Department of Geological Sciences and Geological Engineering
613.533.2997
gdgsassistant@queensu.ca
www.queensu.ca/geolgraduate

Discover Kingston

Create an impact

www.queensu.ca/sgs

M.Sc. Map
**Geological Sciences M.Sc. MAP**

**GETTING STARTED**
- 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 professional development workshops, the department Grad Chair and the SGS Habitat.

**INTERMEDIATE STAGE**
- Complete your coursework, begin to research and write your thesis.
- Participate in hiring committees and attend job talks. Start focusing on the audiences for your research.
- Consider participating in the 3 Minute Thesis (3MT) competition. Consider publication options for your research.
- Serve on departmental or university committees. Talk to the Joliffe Club or meeting with a career counsellor. Check out books like So What Are You Going to do With That? for advice on various career options.

**WRAPPING UP**
- Complete and defend your thesis.
- Attend a major conference in your field.
- Practice articulating the skills you have been developing in settings outside the university, such as causal conversation, networking, and interviews. Get help with the Skills and Experience workshop.
- Consider positions in student services, the AMS Clubs Directory, or the SGS blog for tips on getting involved.

**EMPLOYABILITY SKILLS**
- Knowledge and technical skills in area of specialization
- Communication: effective and clear in written, oral and multimedia forms, for diverse audiences
- Information management: prioritize, organize and synthesize large amounts of information
- Time management: meet deadlines and responsibilities despite competing demands
- Project management: develop ideas, gather information, analyze, critically appraise findings, draw and act on conclusions
- Creativity and innovation to address complex, multifaceted challenges
- Perseverance: work through challenges to achieve desired outcome
- Independence and experience as a collaborative worker
- Awareness and 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 discussions

**ACHIEVE YOUR ACADEMIC GOALS**
- Start to think about the audiences for your research.
- Attend or present at a graduate conference. Ask your supervisor for suggestions. Consider participating in the 3 Minute Thesis (3MT) competition. Expand your research audience through social media.
- Consider publication options for your research. Attend a major conference in your field.

**MAXIMIZE RESEARCH IMPACT**
- Serve on departmental or university committees. Talk to the Joliffe Club or meeting with a career counsellor. Check out books like So What Are You Going to do With That? for advice on various career options.
- Check out professional development workshops from Expanding Horizons.
- 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. Check out Career Services’ networking workshops.

**BUILD SKILLS AND EXPERIENCE**
- Explore your career pathways. Visit careers.queensu.ca/gradmaps for the online version with links!
- Complete your coursework; begin to research and write your thesis.
- Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups like Material Matters.
- Enroll in SGS901 or the PUTL certificate for more professional development in teaching and learning.

**ENGAGE WITH YOUR COMMUNITY**
- Explore different careers of interest by reading alumni profiles on the SGS website, and using QueensConnects on LinkedIn to connect with Queen's alumni, or find alumni in various careers through Ask an Alum.
- Explore other free online modules at MyGradSkills to help you plan your career.
- 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, or interviews.

**LAUNCH YOUR CAREER**
- Complete your coursework; begin to research and write your thesis.
- Explore different careers of interest by reading alumni profiles on the SGS website, and using QueensConnects on LinkedIn to connect with Queen's alumni, or find alumni in various careers through Ask an Alum.
- Check out the free online modules at MyGradSkills to help you plan your career.
- If you are considering a PhD, explore programs of interest reach out to faculty, and apply to PhD programs and external scholarships.

**VISIT CAREERS.QUEENSU.CA/GRADMAPS FOR THE ONLINE VERSION WITH LINKS!**