Why GRADUATE STUDIES in GEOLOGICAL SCIENCES?

Geoscientists and geological engineers interpret the natural world. They bring methods such as geophysics, geochemistry, geobiology 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.

“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

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’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 a thesis.

RESEARCH Areas

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

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.
**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 professional development workshops, the department Grad Chair and the SGS website.

**MAXIMIZE RESEARCH IMPACT**
- Start to think about the audiences for your research.
- If you will be continuing graduate studies, apply for NSERC and OGS funding.

**BUILD SKILLS AND EXPERIENCE**
- Consider positions in student services, the SOPS, or media outlets like the Queen’s Journal, CFRC, and the SGS 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 Expanding Horizons.

**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 counsellor. Check out books like So What Are You Going to do With That? for advice on various career options.
- 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 Career Week to explore your career pathways.
- Check admission test deadlines if needed for further studies.

**INTERMEDIATE STAGE**

**COMPLETE YOUR COURSEWORK**
- Complete your coursework; begin to research and write your thesis.

**EXPAND 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.

**ADVANCE YOUR SKILLS**
- 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. Enroll in SGS902 or the PUTL Certificate for more professional development in teaching and learning.

**ENGAGE IN RESEARCH**
- 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 Adviser.

**WRAPPING UP**

**COMPLETE AND DEFEND**
- Complete and defend your thesis.

**PUBLISH AND PRESENT**
- Consider publication options for your research.
- Attend a major conference in your field, such as the International Conference on Geology and Geoscience.
- Set up a meeting with the School of Graduate Studies for a Grad Chat to discuss your research interests.
- Consider putting an article in The Conversation.

**EXPAND YOUR NETWORK**
- 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, Expanding Horizons, MITACS, or other sources to boost your skills.

**PREPARE FOR WORK**
- Do some targeted networking with people working in careers of interest, through Queens Connects 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.

**EXPAND YOUR AUDIENCE**
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**PREPARE FOR JOB SEARCH**
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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?

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 one time $5,000 top-up to Masters winners of federal government tri-council awards. For more information, see the School of Graduate Studies’ information on awards and scholarships.