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.

“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

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.

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 also collaborate with other departments at Queen’s, including Mining, Environmental Studies, Chemistry and Biology as well as other institutions like RMC.

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. For more information on awards and scholarships, see the School of Graduate Studies’ information on awards and scholarships.

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.

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, (i) TOEFL IBT: Writing (20/30), 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 Academic: 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.

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 SOS HABITAT for available resources.

Application FAQs

What do I need to know to APPLY?

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Geological Sciences MSc MAP *

Master of Science in Geological Sciences

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 GSS Habitat.
- 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 SGS, 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 career planning 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 Graduate Student Career Forum to explore your career pathways.
  - Check admission test deadlines if needed for further studies.

INTERMEDIATE STAGE
- Achieve your academic goals
  - Complete your coursework, begin to research and write your thesis.
  - Consider publication options for your research.
  - Attend or present at a graduate conference. Ask your supervisor for suggestions.
  - Attend a major conference in your field, such as the International Conference on Geology and Geosciences.
  - Consider participating in the 3 Minute Thesis (3MT) competition.
  - Expand your research audience through social media.
  - Check out opportunities for extra training through CTL, Expanding Horizons. Mitacs, or other sources to boost your skills.
- Maximize research impact
  - 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, the SGS901, or the PUTL certificate for more professional development in teaching and learning.
- Build skills and experience
  - Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups.
  - Prepare for work or study in a multinational environment by taking the QUC and Four Directions Aboriginal Student Centre's Training Certificate.
  - Do some targeted networking with people working in careers of interest, through Queen's Connects on LinkedIn, the Queen's Alumni Association, professional associations, and at conferences. Get help from a Career Services workshop.
  - Attend a major conference in your field, such as the Conference on Geology and Geosciences.
  - Consider joining professional associations like the Geological Association of Canada.
- Engage with your community
  - Participate in graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups.
  - Prepare for work or study in a multinational environment by taking the QUC and Four Directions Aboriginal Student Centre's Training Certificate.
  - If you are an international student interested in staying in Canada, prepare for work or study in a multinational environment by taking the QUC and Four Directions Aboriginal Student Centre's Training Certificate.
  - If you are continuing graduate studies, apply for NSERC and OGS funding.
  - Attend or present at a graduate conference. Ask your supervisor for suggestions.
  - Attend a major conference in your field, such as the International Conference on Geology and Geosciences.
  - Consider participating in the 3 Minute Thesis (3MT) competition.
  - Expand your research audience through social media.
- Launch your career
  - Explore different careers of interest by reading alumni profiles on the SGS website, and using Queen's Connects on LinkedIn to connect with Queen's alumni, or find alumni in various careers through "Ask an Alumni".
  - If you are considering a PhD, explore programs of interest reach out to faculty, and apply to PhD programs and external scholarships.
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  - If you are considering a PhD, explore programs of interest reach out to faculty, and apply to PhD programs and external scholarships.
  - 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.

WRAPPING UP
- Complete and defend your thesis.
- What will I learn?
  - A graduate degree in Geological Sciences 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 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
    - Environmental and-resource management
    - 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!