Ph.D. Map
FAQs

What do I need to know to apply?

ACADEMIC REQUIREMENTS
- MSc in Geological Sciences or Geological Engineering, Mining Engineering or Civil Engineering are acceptable.
- Grade requirements: minimum 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 deadline: February 1 for September submissions.
- Notification of acceptance: 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 Department 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. This is also an opportunity for you to find out if the faculty member is accepting new graduate students to supervise.

What about funding?
The minimum funding guarantee for Geological Sciences PhD program is $25,000 per year for domestic students and $30,000 for international students. Assistantships are in consultation with the student’s supervisor. For student and international students, funding from OGS, NSERC and other sources. Assistantships are in consultation with the student’s supervisor.

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 Sciences, Chemistry and Biology as well as other institutions like RMC.

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. Glaciers concealing rocks, 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 all scales. Managing water, mineral and energy resources, designing sustainable strategies for 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?
“Deciding to pursue a PhD in geology at Queen’s has allowed me to conduct original and exciting research, interact with knowledgeable and supportive faculty on a daily basis and form meaningful and long-lasting friendships with other graduate students. It has been a truly rewarding experience.” — Chris Schuh, PhD

As a PhD 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 the major specialization areas in geological science.

Where Can a Graduate Degree Take Me?
A PhD in Geological Sciences can take your career in many directions. In Canada, less than 40% of all PhDs will work in post-secondary education – the majority will work in industry, government, or non-profit.

Graduates from the Geological Sciences PhD program have found careers in:
- Academic 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.
# Geological Sciences PH.D. MAP

**DOCTOR OF PHILOSOPHY (PH.D.)**

## YEAR I

**ACHIEVE YOUR ACADEMIC GOALS**
- Key priorities include your relationship with your supervisor; forming your committee; coursework, field exams, and language exam.
- Look to **Student Academic Success Services** for a variety of supports.

**MAXIMIZE RESEARCH IMPACT**
- Think about audiences for your research.
- Complete ROMEO online module on research ethics if doing research with living people or sensitive topics.
- Apply to SSHRC, OGS, and other funding.
- Attend conferences in your field.

**BUILD SKILLS AND EXPERIENCE**
- Serve on departmental, faculty or university committees. Talk to the (S)talent Club (graduate student society) for tips on getting involved.
- Consider positions in student services, the SOPS, or media outlets like the Queen's Journal or CFRC. Look in the (M)arks Club Directory.
- Use a Teaching Assistant or Research Assistant position to develop your skills and experience.

**ENGAGE WITH YOUR COMMUNITY**
- Consider volunteering with different community organizations.

**LAUNCH YOUR CAREER**
- Finding career fit starts with knowing yourself. Take the Career Services Career Planning workshop or meet with a career counselor for help. 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** to get an idea of non-academic labour market websites.
- Stay on the lookout for special events like **Graduate Student Career Week** to explore your career pathways.

## YEAR II

**ACHIEVE YOUR ACADEMIC GOALS**
- Write and defend your thesis proposal.
- Embark on your substantive research.
- Find your way through the academic process with the help of Expanding Horizons.
- Attend or present at a graduate conference. Ask your supervisor for suggestions.

**MAXIMIZE RESEARCH IMPACT**
- Continue to research and write your dissertation. Check out the SGS *Dissertation Boot Camp* or *Dissertation on the Lake*.
- Consider publishing elements of your research. Learn from the Expanding Horizons *Publishing workshop*.

**BUILD SKILLS AND EXPERIENCE**
- Attend or present at a graduate conference.
- Expand your research audience through social media such as Twitter or a blog.
- Apply for the Graduate Dean's Travel Grant for Doctoral Field Research.

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

**LAUNCH YOUR CAREER**
- Start building your teaching portfolio including student evaluations, and seeking mentorship.
- Explore different careers of interest by reading alumni profiles on the SGS website, and using Queen'sConnects on LinkedIn to connect with Queen's alumni, or find alumni in various careers through *Ask an Alum*. For more information check out Career Cruising.
- Investigate requirements for professional positions or other opportunities related to careers of interest.

## YEAR III

**ACHIEVE YOUR ACADEMIC GOALS**
- Complete and defend your dissertation.
- Continue to pursue publication options for your research.

**MAXIMIZE RESEARCH IMPACT**
- Continue to present at conferences. Consider participating in the 3 Minute Thesis (3MT) competition.
- Contact the Queen's Media Centre for guidance on speaking to news outlets about your work. List yourself on the Arts and Science University Research website.

**BUILD SKILLS AND EXPERIENCE**
- Begin teaching as a departmental Teaching Fellow.
- Find opportunities for extra training through CTL, Expanding Horizons, Mitacs, or other sources to boost your skills. Investigate internships from Mitacs and other sources.
- Prepare for work or studies in a multi-cultural environment by taking QUIC's Intercultural Competency Certificate.

**ENGAGE WITH YOUR COMMUNITY**
- Do some targeted networking with people working in careers of interest, through Queen'sConnects on LinkedIn, the Queen's Alumni Association, professional associations, and at conferences. Check out Career Services' networking workshops.

**LAUNCH YOUR CAREER**
- Participate in hiring committees and attend job talks.
- Research academic careers of interest. Craft your CV and job application materials.
- Start focusing on non-academic areas of interest. Research organizations of interest and start putting together your resume for potential positions of interest.
- Check out the free online modules at MyGradSkills to help you plan your career.

## YEAR IV & TRANSITIONING

**ACHIEVE YOUR ACADEMIC GOALS**
- Complete and defend your dissertation.
- Continue to pursue publication options for your research.

**MAXIMIZE RESEARCH IMPACT**
- Continue to attend conferences and connect with scholars in your field and with community partners.
- Continue public outreach through social media and the Queen’s Media Centre.

**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 with the *Skills and Experience workshop*.

**ENGAGE WITH YOUR COMMUNITY**
- Consider joining professional associations like the Geological Association of Canada.
- Join groups on LinkedIn reflecting specific careers or topics of interest.

**LAUNCH YOUR CAREER**
- Build connections with faculty outside of your department. Pursue interviews for faculty positions and apply for post-doc fellowships and positions.
- Apply to jobs or make plans for other adventures. Get help from Career Services with *job searching, resumes, or interviews*.
- If considering jobs abroad, research possible immigration regulations. If you are an international student interested in staying in Canada, consider speaking with an *International Student Advisor*.

## 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 to work through challenges to achieve desired outcome**

**Independence and experience as a collaborative worker**

**Awareness and understanding of issues in 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

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