ENVIRONMENTAL GEOLOGY

Specialization, Bachelor of Science (Honours) | degree PLAN

Sample Year by Year

1ST YEAR
- BIOL 111/3.0 or BIOL 103/3.0
- CHEM 112/5.0
- GPHY 101/3.0
- GPHY 102/3.0
- GEOL 104/3.0
- GEOL 107/3.0
- 6.0 units from MATH 120/6.0, MATH 121/6.0, or MATH 123/3.0 and MATH 124/3.0
- ENSC 103/3.0
- 6.0 units from MATH 120/6.0, MATH 121/6.0, or MATH 123/3.0 and MATH 124/3.0

2ND YEAR
- One of PHYS 104/6.0, PHYS 106/6.0, PHYS 117/6.0, PHYS 118/6.0
- GEOL 200/3.0
- GEOL 221/3.0
- GEOL 232/3.0
- GEOL 235/3.0
- GEOL 238/3.0
- GEOL 249/3.0
- 6.0 units of electives

3RD YEAR
- ENSC 399/3.0
- 9.0 units from GEOL at the 300 level or above
- 9.0 units from GEOL 300/3.0, GEOL 321/3.0, GEOL 337/3.0, GEOL 365/3.0
- 3.0 units from ENSC Options
- 6.0 units of electives

4TH YEAR
- ENSC 430/6.0 or ENSC 501/6.0
- 15.0 units from ENSC Options
- 15.0 units of electives

Note that degree requirements are revised regularly. The most current requirements, including course lists and options, are found in the Academic Calendar at: Quarts.ical.com/academic-calendar

TOP 5 REASONS to study GEOLOGICAL SCIENCES

1. The department has state-of-the-art facilities, including X-ray Diffraction and Applied Geophysics Labs.
2. Most students in the department gain over 240 hours of hands-on experience on various field trips.
3. We are a small, friendly department. You will get to know your classmates and professors very well.
4. The Miller Museum, our on-site museum right here at Queen's, is your classroom.
5. Our internship program (QUIP) offers a wide range of careers to explore and companies to learn from.

9% of alumni work in GOVERNMENT
15% of alumni work in EDUCATION
16% of alumni work in MINING
21% of alumni work in ENERGY

*Thresholds are made on a competitive basis and are updated annually. For the latest information please visit: Quarts.ical.com

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1ST YEAR

In first year you will have the chance to explore the foundations of Geology in biology, chemistry, geography and geology along with some electives.

See the back page for specific courses to consider.

Attend Majors Night in the Winter term to learn more about Plan options.

GET THE COURSES YOU NEED

GET RELEVANT EXPERIENCE

Join teams or clubs on campus such as the Queen's University Experimental Sustainability Team (QUEST) and the Queen's Project on International Development (QPID).

See the AMS Clubs Directory or the Queen's Get Involved page for more ideas.

GET CONNECTED WITH THE COMMUNITY

Volunteer on or off campus with different community organizations, such as the Earth Centre and Women in Science and Engineering.

GET THINKING GLOBALLY

Prepare for work or studies in a multi-cultural environment by taking QUIC's Intercultural Competency Certificate, and research possible immigration regulations.

Speak to a QUIC advisor to get involved in their programs, events, and training opportunities.

GET READY FOR LIFE AFTER GRADUATION

Grappling with program decisions? Contact the Chair of Undergraduate studies in the Department of Geological Sciences and Geological Engineering.

Get some help wondering about career options from Career Services.

2ND YEAR

Start going deeper into the discipline of Environmental Geology, while considering a certificate such as Global Action and Engagement. Attend Degree + in the Fall term to learn more about Certificates and Internship options.

Want to make sure your academics are where you want them to be? Visit SASS (Student Academic Support Services) and the Writing Centre for some help.

3RD YEAR

A chance to start grouping courses in areas of interest, or to keep it more general and explore many areas of Geology. Meet with an Academic Advisor to make sure you are on track and have planned out your courses for next year — for some ideas, see the back page.

4TH OR FINAL YEAR

In fourth year you will have the chance to participate in research-based courses that can lead to Graduate School or to your future career path. Make sure to finish up all your courses for your degree and your optional certificate(s).

Investigate requirements for full-time jobs or other opportunities related to careers of interest.

Assess what experience you're lacking and fill in gaps with volunteering, clubs, or internships – consider applying to do a 12-16 month QUIP internship between your third and fourth year.

Where can I go?

A degree in Geology can take your career in many directions. Many students choose to continue their academic inquiry with a Master's. Our students are equipped with a strong foundation for careers in:

- Agricultural sciences
- Ecology
- Geomarites
- Landscape architecture
- Paleontology
- Renewable energy
- Surveying and cartography
- Toxicology
- Wildecology
- Water conservation

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

Consider joining professional organizations such as the Geological Association of Canada, the Canadian Society of Petroleum Geologists, the International Association of Hydrogeologists and the National Ground Water Association. Join groups on LinkedIn reflecting specific careers or topics of interest in Geology.

What will I learn?

A degree in Geology can equip you with valuable and versatile skills, such as:

- Knowledge of principles and techniques of the earth sciences
- Practical applications of geological science techniques
- Understanding of the variability of earth materials and their changes with time and environment
- Fieldwork skills to design and carry out site investigations to solve problems
- Technical skills to use up-to-date geological analysis tools, equipment and software
- Research skills to conduct scientific research and analyze quantitative information, develop multiple working hypotheses
- Problem solving to approach a range of problems from various perspectives
- Ability to work independently and in a team on a project
- Oral and written communication to clearly explain technical information and write reports