What is Geology? The discovery and development of water, mineral, and energy resources – and their sustainability – is a key part of it. But so is coping with climate change, the human impact on our world, and the natural hazards facing a growing global population. These all depend on a deep understanding of natural processes gained through the study of Geology.

**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.

**ALUMNI JOBS**

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

**alumni STORY**

"The department embraces a work-hard, play-hard ethic that I believe transfers well to the workplace. It teaches that balance is important, and that how you get the work done is as important as getting the work done – a valuable lesson."

-Kirsten Pugh, BSc ’02

**2018-19 thresholds**

- 1.9 cGPA AUTOMATIC ACCEPTANCE
- 0.7 cGPA PENDING LIST

*Thresholds are made on a competitive basis and are updated annually. For the latest information please visit: QUartscl.com
### GEOLGY MAJOR MAP

#### MAJOR BACHELOR OF SCIENCE (HONOURS)

**GET THE COURSES YOU NEED**
- **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 RELEVANT EXPERIENCE**
- **2ND YEAR**: Start going deeper into the discipline of Geology, while considering a minor and/or certificate such as Employment Relations. 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. Look into summer jobs by talking to the dept. or Career Services about work through SWEP or NSERC. Take more responsibility within different clubs or extracurricular activities. Consider entrepreneurial opportunities via programs like the Queen's Innovation Connector Summer Initiative (QICSI).

**GET CONNECTED WITH THE COMMUNITY**
- **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. Stay during the summer as an assistant to a faculty member or apply for an external summer research opportunity. Consider applying to do a 12-16 month QUIP internship between your third and fourth year. 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 – check out the Career Services skills workshop for help.

**GET THINKING GLOBALLY**
- **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 major and your optional minor and/or certificate(s). Do targeted networking with alumni working in careers of interest. Research education requirements for careers of interest. If needed, prepare to take any required tests (like the LSAT or GMAT) and get help thinking about Grad School from Career Services.

### What will I learn?
A degree in Geology can equip you with valuable and versatile skills, such as:
- **Interdisciplinary knowledge**: Geology is a field that draws from various disciplines such as biology, chemistry, physics, and mathematics. You will learn to apply these skills to real-world problems.
- **Problem-solving abilities**: Geologists are trained to think critically and solve complex problems using scientific methods.
- **Communication skills**: You will learn to communicate geological concepts clearly and effectively, both orally and in writing.
- **Research skills**: Geologists are adept at conducting research, analyzing data, and writing reports.
- **Technical skills**: You will develop skills in geological analysis tools, equipment, and techniques.

### 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
- Geomatics
- Landscape architecture
- Paleontology
- Renewable energy
- Surveying and cartography
- Toxicology
- Water conservation

### What job opportunities are available?
- Oil and Gas Industry
- Environmental Consulting
- Geologic Mapping
- Academic Research
- Government Agencies
- Non-profits
- Environmental Consulting
- Government Agencies
- Non-profits
- Environmental Consulting
- Government Agencies
- Non-profits
Sample Year by Year

1ST YEAR
- GEOL 104/3.0
- GEOL 107/3.0
- CHEM 112/6.0
- MATH 120/6.0 or MATH 121/6.0 or (MATH 123/3.0 and MATH 124/3.0)
- PHYS 104/6.0 or PHYS 106/6.0 or PHYS 117/6.0 or PHYS 118/6.0
- 6.0 units of electives

2ND YEAR
- GEOL 200/3.0
- GEOL 221/3.0
- GEOL 232/3.0
- GEOL 235/3.0
- GEOL 238/3.0
- GEOL 249/3.0
- STAT 263/3.0
- 9.0 units of electives and/or minor

3RD YEAR
- GEOL 300/3.0
- GEOL 301/1.5 or GEOL 302/1.5
- GEOL 321/3.0
- GEOL 365/3.0
- 18.0 units of electives and/or minor

4TH YEAR
- GEOL 401/1.5 or GEOL 402/1.5
- GEOL 488/3.0
- 12.0 units from GEOL
- 15.0 units of electives and/or minor

* Please note if you were admitted to the Plan prior to May 2018 your requirements are slightly different.

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