MAJOR IN GEOLOGY

Geology is a modern, dynamic and diverse science that involves investigating the composition and evolution of Earth and other planetary bodies.

Geologists and Earth scientists study the Earth, including its chemical, physical and biological evolution. Our programs teach students how to analyze Earth materials, probe the Earth from surface to core and model the processes that produced and shape its oceans and continents. The Ottawa region is a natural laboratory where students investigate resources (water, metals, minerals, petroleum), hazards (earthquakes, tsunamis, eruptions, landslides) and a variety of geological environments.

The Department of Earth and Environmental Sciences offers programs in geology and, along with the Department of Physics, a program in geology-physics. These programs balance field-based learning with theoretical and analytical investigations directly relevant to the needs of society. The final year involves an independent research project or equivalent units (credits) in advanced courses in the discipline.

The honours requirements meet the professional accreditation requirements of the Association of Professional Geoscientists of Ontario and l'Ordre des géologues du Québec.

This program is offered in English and in French.

Program Requirements

The table below includes only the discipline-specific courses. Please refer to the Academic Regulations (https://www.uottawa.ca/about-us/policies-regulations/academic-regulations/b-2-program-studies/) for information on the Honours bachelor's with double major and the Honours bachelor's with major and minor.

Co-operative education is available when taken as part of an honours degree.

The French immersion stream is available when taken as part of an honours degree.

Requirements for this program have been modified. Please consult the 2018-2019 calendars (https://catalogue.uottawa.ca/en/archives/) for the previous requirements.

Compulsory courses at the 1000 level

| BIO 1130 | Introduction to Organismal Biology | 3 Units | |
|--------------------------------------|---------------------------------------|---------|--|
| CHM 1311 | Principles of Chemistry | 3 Units | |
| EVS 1101 | Introduction to Environmental Science | 3 Units | |
| GEO 1111 | Introduction to Earth Systems | 3 Units | |
| GEO 1115 | Introduction to Earth Materials | 3 Units | |
| MAT 1330 | Calculus for the Life Sciences I | 3 Units | |
| MAT 1332 | Calculus for the Life Sciences II | 3 Units | |
| PHY 1121 | Fundamentals of Physics I | 3 Units | |
| PHY 1122 | Fundamentals of Physics II | 3 Units | |
| Compulsory courses at the 2000 level | | | |
| GEO 2163 | Introduction to Mineralogy | 3 Units | |
| GEO 2165 | Stratigraphy and Sedimentation | 3 Units | |
| GEO 2321 | Structural Geology and Tectonics | 3 Units | |
| Optional courses | | | |
| 6 optional course units from: | | | |

| Total: | 60 Units |
|---|----------|
| 6 optional course units in geology (GEO) at the 4000 level | 6 Units |
| 12 optional course units in geology (GEO) at the 3000 or 4000 level | 12 Units |
| GEO 2334 Quaternary Geology and Climate Change | |
| GEO 2166 Oceanography | |
| GEO 2113 Paleontology | |
| GEO 2020 Field Studies I | |