MAJOR IN GEOLOGY

The Department of Earth and Environmental Sciences offers programs in geology and, in co-operation with the Department of Physics, also offers a program in geology-physics. The Department is part of the Ottawa-Carleton Geoscience Centre, and its research areas include precambrian studies, tectonics, resource geology, northern studies, environmental geoscience and geochemistry.

Geology studies the composition and evolution of Earth and of other planetary bodies. The discipline extends into many areas: mineralogy, petrology, palaeontology, sedimentology, environmental geology, economic geology, geochemistry, structural geology, and geophysics.

Thus, geologists study matter and geological processes in all their diversity, from atoms and crystals to mountain ranges and the dynamics of the entire planet. The scientific methods used are equally diverse (field studies, instruments to probe the Earth's depths, microscope examination of minerals and fossils, elemental and isotopic analysis, experimental study of geochemical systems, and computer simulation of geological processes).

Although many program options are offered, students are encouraged to take the Honours B.Sc. in Geology or Geology-Physics, which allows them to meet the accreditation requirements of professional bodies and practice as geoscientists.

In first year, students increase their knowledge of mathematics, physics, chemistry, and biology. Later, they complete several geology courses, which consist of lectures, problem-solving assignments, laboratory work and field excursions.

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 (http://web5.uottawa.ca/admingov/regulations.html) 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 extended French stream is available when taken as part of an honours degree.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 1130</td>
<td>Introduction to Organismal Biology</td>
<td>3</td>
</tr>
<tr>
<td>CHM 1311</td>
<td>Principles of Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>GEO 1111</td>
<td>Introduction to Earth Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEO 1115</td>
<td>Introduction to Earth Materials</td>
<td>3</td>
</tr>
<tr>
<td>MAT 1330</td>
<td>Calculus for the Life Sciences I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 1332</td>
<td>Calculus for the Life Sciences II</td>
<td>3</td>
</tr>
<tr>
<td>PHY 1121</td>
<td>Fundamentals of Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHY 1122</td>
<td>Fundamentals of Physics II</td>
<td>3</td>
</tr>
<tr>
<td>GEO 2163</td>
<td>Introduction to Mineralogy</td>
<td>3</td>
</tr>
<tr>
<td>GEO 2164</td>
<td>Analytical Methods in Mineralogy</td>
<td>3</td>
</tr>
<tr>
<td>GEO 2165</td>
<td>Stratigraphy and Sedimentation</td>
<td>3</td>
</tr>
<tr>
<td>GEO 2321</td>
<td>Structural Geology and Tectonics</td>
<td>3</td>
</tr>
<tr>
<td>6 course units from:</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

| GEO 2113 Paleontology | 3 Units |
| GEO 2166 Oceanography | 3 Units |
| GEO 2334 Quaternary Geology and Climate Change | 3 Units |

12 optional course units in geology (GEO) at the 3000 or 4000 level 12 Units
6 optional course units in geology (GEO) at the 4000 level 6 Units
Total: 60 Units

This message is intended for students registered in the Faculty of Science. If the components of your program of study require common compulsory courses, you will have to replace the units as follows:

1. 1000-level courses must be replaced with electives;
2. 2000-level courses and above must be replaced with courses from either discipline at the same level or above.

Please note that all programs in the Faculty of Science require a minimum of 12 units from the Faculties of Arts, Education, Law, Social Science or the School of Management. Once you have decided on the replacement courses, please inform the Office of Undergraduate Programs of the Faculty of Science by email at infosci@uOttawa.ca so that we may amend your Academic Advisement accordingly.