B.Sc. Honours Program:  
Major in Environmental Geoscience and Geomatics

Name: ___________________________________________  Student # _________________________

About the Program

Students in this degree program combine two exciting and dynamic fields of study; geoscience and geomatics. Geoscience is concerned with the natural and human-induced forces shaping the surface of our planet. Geomatics, the science involving spatial analysis using Geographic Information Systems (GIS) and satellite imagery, is a core component of the rapidly growing information sector worldwide. Graduates of this program will apply their expertise to environmental problems in agriculture, forestry, transportation, fisheries, mining, and environmental consulting.

Check-list [based on 2017-18 calendar]

Bring this list with you when you come for counselling and leave it with your counsellor in your semester of graduation. A list of counsellors is posted in the first floor corridor of the Hutt Building during registration period. At other times check with the secretary in Hutt 119

Semester 1

____ GEOG*1350 [0.50]  Earth: Hazards and Global Change
____ BIOL*1070 [0.50]  Discovering Biodiversity
____ CHEM*1040 [0.50]  General Chemistry I
____ PHYS*1080 [0.50]  Physics for Life Science
One of:
____ MATH*1080 [0.50]  Elements of Calculus I
____ MATH*1200 [0.50]  Calculus I

Students who are lacking one 4U/grade 12 course in Biology, Chemistry or Physics must take the equivalent intro course in first semester. The required first-year science courses in that subject should be completed according to the revised schedule of studies available at bsc.uoguelphy.ca/revisedss.

Semester 2

____ BIOL*1090 [0.50]  Introduction to Molecular and Cellular Biology
____ CHEM*1050 [0.50]  General Chemistry II
____ GEOG*1300 [0.50]  Introduction to the Biophysical Environment
____ PHYS*1130 [0.50]  Physics with Applications
0.50 Arts or Social Science electives * (GEOG*1220 is recommended)

Semester 3

____ GEOG*2000 [0.50]  Geomorphology
____ GEOG*2420 [0.50]  The Earth from Space
____ GEOG*2480 [0.50]  Mapping and GIS
____ ENVS*2240 [0.50]  Fundamentals of Environmental Geology

0.50 Arts or Social Science electives
Semester 4

- GEOG*2110 [0.50] Climate and the Biophysical Environment
- GEOG*2210 [0.50] Environment and Resources
- STAT*2040 [0.50] Statistics I

One of:
- CIS*1200 [0.50] Introduction to Computing
- CIS*1500 [0.50] Introduction to Programming
- MATH*1210 [0.50] Calculus II
- MATH*2080 [0.50] Elements of Calculus II

1.00 approved Science electives

Semester 5

- GEOG*3000 [0.50] Fluvial Processes
- GEOG*3110 [0.50] Biotic and Natural Resources

One of:
- GEOG*3020 [0.50] Global Environmental Change
- GEOG*3090 [0.50] Gender and Environment
- GEOG*3210 [0.50] Management of the Biophysical Environment

1.00 electives, at least 0.50 from approved Science electives

Semester 6

- GEOG*3420 [0.50] Remote Sensing of the Environment
- GEOG*3480 [0.50] GIS and Spatial Analysis
- GEOG*3610 [0.50] Environmental Hydrology

1.00 electives, at least 0.50 from approved Science electives

Semester 7

- GEOG*4110 [1.00] Environmental Systems Analysis

1.50 electives, at least 1.00 from approved Science electives (GEOG*4690 is recommended)

Semester 8

- GEOG*4150 [0.50] Catchment Processes
- GEOG*4480 [1.00] Applied Geomatics

1.00 approved Science electives

Credit Summary

<table>
<thead>
<tr>
<th>First year Science credits</th>
<th>Approved Science electives</th>
<th>Arts and/or Social Science electives</th>
<th>Free electives</th>
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<tbody>
<tr>
<td>4.50</td>
<td>3.00</td>
<td>1.00</td>
<td>2.00</td>
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Course Substitutions

Required course

Course substituted

Date

Signature

Date of entry to program: November 16, 2015