

B.Sc. Honours Program: Major in Environmental Geomatics (Regular Program)

Name: _____ Student # _____

About the Program

This program provides opportunities for study of the processes and properties of the biophysical environment and a core foundation in the analytical techniques (i.e. Geographical Information Science and Remote Sensing) used for their interpretation, analysis and presentation. Graduates of the program will have unique specialty in the application of spatial technologies to the study and assessment of biophysical and Earth surface processes. This check-list applies to students enrolled in the regular program. Students enrolled in the Co-op stream should consult the check-list specifically for that program.

Check-list [based on 2019-20 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 <http://www.bsc.uoguelph.ca/revisedss.shtml>.

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*1070 [0.50] Physics for Life Sciences II

0.50 Liberal Education 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 Liberal Education 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*1090** [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 (20.00 total credits)

4.50	First year Science credits	3.00	Approved Science electives
8.50	Required Science courses semesters 3–8	1.00	Liberal Education electives
1.00	Required Social Science courses semesters 3–8	2.00	Free electives

Of the total credits required, students are required to complete 16.00 credits in science of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

Course Substitutions

Required course	_____	_____	_____
Course substituted	_____	_____	_____
Date	_____	_____	_____
Signature	_____	_____	_____

Date of entry to program: _____