B.Sc. Honours Program:
Major in Environmental Geomatics (Co-op)

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 Co-op program. Students enrolled in the regular stream should consult the check-list specifically for that program.

Check-list [based on 2020-21 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 - FALL

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 https://bsc.uoguelph.ca/revised_SS.

Semester 2 - WINTER

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 - FALL

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
COOP*1100	[0.50]	Introduction to Co-operative Education
STAT*2040	[0.50]	Statistics I

Semester 4 - WINTER

GEOG*2110	**[0.50]**	**Climate and the Biophysical Environment**
GEOG*2210	**[0.50]**	**Environment and Resources**
GEOG*3420	**[0.50]**	**Remote Sensing of the Environment**
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

0.50 approved Science electives

SUMMER SEMESTER

COOP*1000	[0.50]	Co-op Work Term I

Semester 5 - FALL

GEOG*3000	**[0.50]**	**Fluvial Processes**
GEOG*3110	**[0.50]**	**Biotic and Natural Resources**
GEOG*3480	**[0.50]**	**GIS and Spatial Analysis**

0.50 approved Science electives and 0.5 Liberal Education electives

WINTER SEMESTER

COOP*2000	[0.50]	Co-op Work Term II

Semester 6 - SUMMER

GEOG*3610	**[0.50]**	**Environmental Hydrology**
GEOG*4990	**[0.50]**	**Independent Study in Geography**
One of:		
GEOG*3020	**[0.50]**	**Global Environmental Change**
GEOG*3210	**[0.50]**	**Management of the Biophysical Environment**

1.00 electives

FALL SEMESTER

COOP*3000	[0.50]	Co-op Work Term III

WINTER SEMESTER

COOP*4000	[0.50]	Co-op Work Term IV

Semester 7 - FALL

GEOG*4110	**[1.00]**	**Environmental Systems Analysis**

1.50 electives, at least 1.00 from approved Science electives

Semester 8 - WINTER

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

1.00 electives, at least 0.50 from approved Science electives

Credit Summary (20.00 total credits)

4.50 First year Science credits
9.00 Required Science courses semesters 3–8
1.00 Required Social Science courses semesters 3–8
2.50 Approved Science electives
1.00 Liberal Education electives
2.00 Free electives (any approved elective for BSc students)

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: _____

November 17, 2022