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

4.50 First year Science credits
8.00 Required Science courses semesters 3–8
1.00 Required Social Science courses semesters 3–8
3.00 Approved Science electives
1.00 Arts and/or Social Science electives
2.00 Free electives

Course Substitutions

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

Date of entry to program: _____