

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 2013-14 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.

1. B.Sc. Core: 4.0 credits

GEOG*1300	[0.50]	Intro to the Biophysical Environment
One of:		
MATH*1080	[0.50]	Elements of Calculus I <u>OR</u>
MATH*1200	[0.50]	Calculus I
One of:		
MATH*1210	[0.50]	Calculus II <u>OR</u>
MATH*2080	[0.50]	Elements of Calculus II <u>OR</u>
CIS*1200	[0.50]	Introduction to Computing <u>OR</u>
CIS*1500	[0.50]	Introduction to Programming
PHYS *1080	[0.50]	Physics for Life Sciences
PHYS *1130	[0.50]	Physics with Applications
CHEM *1040	[0.50]	General Chemistry I
CHEM *1050	[0.50]	General Chemistry II
BIOL *1070	[0.50]	Discovering Biodiversity
BIOL *1090	[0.50]	Introduction to Molecular and Cellular Biology

Note: Students who transfer into the program may substitute other introductory science or mathematics courses for those listed here.

2. Geoscience and Geomatics Core: [9.0 credits] Choose from list below

GEOG*1050	[0.50]	Geology and the Environment
GEOG*2000	[0.50]	Geomorphology
GEOG*2420	[0.50]	The Earth from Space
GEOG *2480	[0.50]	Mapping and GIS

One of:

GEOG *2460	[0.50]	Analysis in Geography <u>OR</u>
STAT *2040	[0.50]	Statistics I
GEOG*2110	[0.50]	Climate and the Biophysical Environment
GEOG*2210	[0.50]	Environment and Resources
GEOG*3000	[0.50]	Fluvial Processes
GEOG*3110	[0.50]	Biotic and Natural Resources

One of:

GEOG *3210	[0.50]	Management of the Biophysical Environment <u>OR</u>
GEOG *3020	[0.50]	Global Environmental Change <u>OR</u>
GEOG *3090	[0.50]	Gender and Environment
GEOG*3420	[0.50]	Remote Sensing of the Environment
GEOG*3480	[0.50]	GIS and Spatial Analysis
GEOG*3610	[0.50]	Environmental Hydrology
GEOG*4110	[1.00]	Environmental Systems Analysis
GEOG 4480	[1.00]	Applied Geomatics

_____ TOTAL CREDITS = 9.0

3. Electives: [7.0 credits]

1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____
8. _____ 9. _____ 10. _____ 11. _____ 12. _____ 13. _____ 14. _____

4.0 credits from Approved Science electives

1.0 credits Arts or Social Science electives

Geog 1220 [0.50] Human Impact on the Environment is recommended

Geog 4690 [1.00] Geography Field Research is recommended

Program Requirements

1. Students are required to complete 16.00 credits in science of which a minimum of 6.00 credits must be 3000 or 4000 level, of which at least 2.00 must be at the 4000 level.
2. *Students should refer to the list of [Approved Science and Arts/Social Science electives](#) for BSc students: