

# B.Sc. (Env.) Honours Program: Major in Environmental and Resource Management (*Co-op*)

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Name: \_\_\_\_\_ Student # \_\_\_\_\_

## About the Program

The major focuses on environmental interactions and problem solving by developing an integrated biophysical environment - human environment perspective. In ERM, students will gain knowledge across the natural sciences, an understanding of how they interact, the skills (tools and techniques) needed to support decision making, as well as the methods of management and governance that are critical for environmental decision making. Beginning in first year students learn in the classroom and through hands-on work in labs and in the field. Students are expected to design and conduct experiments and problem solve using state-of-the-art computing and analytical tools. This major provides the knowledge, skills and methods an environmental scientist requires as environmental consultant, environmental manager, environmental and/or resource planner, geographic information systems analyst or to facilitate future graduate work.

## Program Requirements

The Co-op program in Environment and Resource Management is a four and a half year program including four work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: <https://www.recruitguelph.ca/cecs/>). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

## Check-list [based on 2020-2021 calendar]

*Bring this list with you when you come for counselling and leave it with your counsellor in your semester of graduation. Counsellors can be found on your program web page. [BSc Environment and Resource Management]*

### Semester 1 [Fall]

BIOL*1070	[0.50]	Discovering Biodiversity
CHEM*1040	[0.50]	General Chemistry I
ENVS*1030	[1.00]	Introduction to Environmental Sciences
MATH*1080	[0.10]	Elements of Calculus I

### Semester 2 [Winter Coop\*1100]

BIOL*1090	[0.50]	Introduction to Molecular and Cellular Biology
CHEM*1050	[0.50]	General Chemistry II
FARE*1040	[1.00]	Intro to Environmental Economics Law and Policy
<b>GEOG *1300</b>	[0.50]	<b>Introduction to the Biophysical Environment</b>

### [Summer Off]

### Semester 3 [Fall]

<b>GEOG*2000</b>	[0.50]	<b>Geomorphology</b>
<b>GEOG*2460</b>	[0.50]	<b>Analysis in Geography<sup>1</sup></b>

One of:

ECON*2100	[0.50]	Economic Growth and Environmental Quality <i>OR</i>
FARE*2700	[0.50]	Survey of Natural Resource Economics

1.00 electives or restricted electives

<sup>1</sup>STAT\*2040 may be substituted with permission of faculty advisor.

## [Winter Coop\*1000 Work Term 1]

### Semester 4 [Summer]

**GEOG\*2110** [0.50] **Climate and the Biophysical Environment**

**GEOG\*2210** [0.50] **Environment and Resources**

**GEOG \*2480** [0.50] **Mapping and GIS**

1.00 electives or restricted electives

Note: ENVS\*2120 may be substituted for ENVS\*2340 and could be taken in Semester 5.

## [Fall Coop\*2000 Work Term II]

### Semester 5 [Winter]

**ENVS\*2120** [0.50] **Introduction to Environmental Stewardship**

**GEOG\*3000** [0.50] **Fluvial Processes**

**GEOG\*3110** [0.50] **Biotic and Natural Resources**

**GEOG \*3210** [0.50] **Management of the Biophysical Environment**

1.00 electives or restricted electives

Note: *GEOG\*3610 may be substituted for GEOG\*3000 and would be taken in Semester 6.*

### Semester 6

**GEOG\*3480** [0.50] **GIS and Spatial analysis**

2.00 electives or restricted electives

### Semester 7

**ENVS\*4001** [0.50] **Project in Environmental Sciences**

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

**GEOG\*4210** [0.50] **Environmental Governance**

0.50 electives or restricted electives

### Semester 8

**ENVS\*4002** [0.50] **Project in Environmental Sciences**

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## Environment and Resource Management Academic and Co-op Work Term Schedule

Year	Fall	Winter	Summer
1	Academic Semester 1	Academic Semester 2 <b>COOP*1100</b>	Off
2	Academic Semester 3	<b>COOP*1000 Work Term I</b>	Academic Semester 4
3	<b>COOP*2000 Work Term II</b>	Academic Semester 5	<b>COOP*3000 Work Term III</b>
4	Academic Semester 6	Academic Semester 7	<b>COOP*4000 Work Term IV</b>
5	Academic Semester 8	N/A	N/A

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements. For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

**Restricted Electives**

1. A minimum 2 of the following courses:

- ENVS\*4390 [1.00] Soil Variability and Land Evaluation
- GEOG\*4220 [0.50] Local Environmental Management**
- GEOG\*4230 [0.50] Environmental Impact Assessment**

2. An additional 1.00 credits in Geography (GEOG) at the 3000 level or higher.

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Dates seen: \_\_\_\_\_

**Course Substitutions**

Required course \_\_\_\_\_

Course substituted \_\_\_\_\_

Date \_\_\_\_\_

Signature \_\_\_\_\_

**Date of entry to program:** \_\_\_\_\_

September 14, 2020