



1.0 Degree Title Specify the two degrees for concurrent degree programs 1 Ph.D. 1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.) 1.3 Minor (with Concentration, if applicable) (30 char. max.) 1.4 Category <table style="width: 100%; border: none;"><tr><td style="width: 50%; vertical-align: top;">Faculty Program (FP) Major Joint Major Major Concentration (CON) Minor Minor Concentration (CON)</td><td style="width: 50%; vertical-align: top;">Honours (HON) Joint Honours Component (HC) Internship/Co-op Thesis (T) Non-Thesis (N) Other Please specify</td></tr></table> 1.5 Doctor of Philosophy (Ph.D.); Earth and Planetary Sciences — Environment	Faculty Program (FP) Major Joint Major Major Concentration (CON) Minor Minor Concentration (CON)	Honours (HON) Joint Honours Component (HC) Internship/Co-op Thesis (T) Non-Thesis (N) Other Please specify	2.0 Administering Faculty/Unit Graduate and Postdoctoral Studies Offering Faculty/Department Earth and Planetary Sciences 3.0 Effective Term of revision or retirement Please give reasons in 5.0 "Rationale" in the case of retirement (Ex. Sept. 2004 = 200409) Retirement Term: 201409 4.0 Existing Credit Weight Proposed Credit Weight 5.0 Rationale for revised program Two revisions are proposed for our Ph.D programs: 1. After much consideration we decided that requiring students entering in the Ph.D. program at year 1 (Ph.D.1) should only have to take the same number of course credits as the sum of course credits required for M.Sc. students, 12 credits, and students entering the Ph.D. program at year 2 (Ph.D.2), 6 credits, for a total of 18 credits. This revision balances the credit requirements for students entering at the Ph.D.1 level with those of students who obtain both an M.Sc. followed by a Ph.D. degree in our department. 2. We no longer wish to require Ph.D. students to take EPSC 666 (Current Issues in Geosciences) because we have found that the goal of this course is better served by students attending departmental seminars by outside speakers whose areas of knowledge often extend to other subdisciplines of geoscience beyond those within the department, thus giving the students a better introduction to current issues in geoscience. The complementary courses have been raised accordingly.
Faculty Program (FP) Major Joint Major Major Concentration (CON) Minor Minor Concentration (CON)	Honours (HON) Joint Honours Component (HC) Internship/Co-op Thesis (T) Non-Thesis (N) Other Please specify		
6.0 Revised Program Description (Maximum 150 words) No change from what is currently written in the graduate calendar:			

7.0 List of existing program and proposed program

Existing program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

29.11.5.8 Doctor of Philosophy (Ph.D.); Earth and Planetary Sciences — Environment

Thesis

A thesis for the doctoral degree must constitute original scholarship and must be a distinct contribution to knowledge. It must show familiarity with previous work in the field and must demonstrate ability to plan and carry out research, organize results, and defend the approach and conclusions in a scholarly manner. The research presented must meet current standards of the discipline; as well, the thesis must clearly demonstrate how the research advances knowledge in the field. Finally, the thesis must be written in compliance with norms for academic and scholarly expression and for publication in the public domain.

Required Courses

ENVR 610 (3) Foundations of Environmental Policy
ENVR 650 (1) Environmental Seminar 1
ENVR 651 (1) Environmental Seminar 2
ENVR 652 (1) Environmental Seminar 3
EPSC 666 (3) Current Issues in Geosciences
EPSC 700 (0) Preliminary Doctoral Examination

Complementary Courses

One to five courses

One course chosen from the following courses:

ENVR 519 (3) Global Environmental Politics
ENVR 544 (3) Environmental Measurement and Modelling
ENVR 580 (3) Topics in Environment 3
ENVR 611 (3) The Economy of Nature
ENVR 620 (3) Environment and Health of Species
ENVR 622 (3) Sustainable Landscapes
ENVR 630 (3) Civilization and Environment
ENVR 680 (3) Topics in Environment 4
or another course at the 500, 600, or 700 level recommended by the advisory committee with the student's supervisor and approved by the Academic Standing Committee. **Zero to four** courses at the 500, 600, or 700 level selected in consultation with the student's supervisor and approved by the Academic Standing Committee.

Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

29.11.5.8 Doctor of Philosophy (Ph.D.); Earth and Planetary Sciences — Environment

Highly qualified B.Sc. graduates may be admitted directly to the Ph.D. 1 year. Students with the M.Sc. degree are normally admitted to the Ph.D. 2 year.

*Students are required to take four graduate-level courses (12 credits) in the Ph.D. 1 year, and two courses (6 credits) plus a comprehensive oral examination in the Ph.D. 2 year, as well as the Required Courses listed below.

Thesis

A thesis for the doctoral degree must constitute original scholarship and must be a distinct contribution to knowledge. It must show familiarity with previous work in the field and must demonstrate ability to plan and carry out research, organize results, and defend the approach and conclusions in a scholarly manner. The research presented must meet current standards of the discipline; as well, the thesis must clearly demonstrate how the research advances knowledge in the field. Finally, the thesis must be written in compliance with norms for academic and scholarly expression and for publication in the public domain.

Required Courses

ENVR 610 (3) Foundations of Environmental Policy
ENVR 650 (1) Environmental Seminar 1
ENVR 651 (1) Environmental Seminar 2
ENVR 652 (1) Environmental Seminar 3
EPSC 700 (0) Preliminary Doctoral Examination

Complementary Courses

Two to six courses (6 to 18 credits)*

One course chosen from the following courses:

ENVR 519 (3) Global Environmental Politics
ENVR 544 (3) Environmental Measurement and Modelling
ENVR 580 (3) Topics in Environment 3
ENVR 611 (3) The Economy of Nature
ENVR 620 (3) Environment and Health of Species
ENVR 622 (3) Sustainable Landscapes
ENVR 630 (3) Civilization and Environment
ENVR 680 (3) Topics in Environment 4
or another course at the 500, 600, or 700 level recommended by the advisory committee with the student's supervisor and approved by the Academic Standing Committee. **One to five** courses at the 500, 600, or 700 level selected in consultation with the student's supervisor and approved by the Academic Standing Committee.

Attach extra page(s) as needed

8.0 Consultation with
Related Units

☐ Yes ☐ No

Financial Consult ☐ Yes ☐ No

Attach list of consultations

9. Approvals

Routing Sequence

Name

Signature

Date

Department

Curric/Acad Committee

Faculty 1

Faculty 2

Faculty 3

SCTP

GS

APPC

Senate

Submitted by

Name

Phone

Email

Submission Date

To be completed by ARR:

CIP Code