## Faculty of Environmental Studies - Keele Campus

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## Faculty of Environmental Studies

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## The Bachelor in Environmental Studies

The four-year York Bachelor in Environmental Studies (BES) Specialized Honours program combines breadth and focus in its study of the environment. This broad approach to education, and the Faculty of Environmental Studies' (FES) interdisciplinary perspective, make York's BES program unique. Faculty members come from a wide range of backgrounds-from planning to philosophy, economics to education, architecture to anthropology. All share a commitment to exploring the complex questions and solutions of the human and environmental challenges facing the world.
The Faculty of Environmental Studies believes that an inclusion of nonWestern perspectives is essential to a fruitful discussion of all environmental issues. To that end, Faculty members strive to include a broad range of perspectives in their course offerings, and to introduce students to the links between the exploitation of the natural world and justice issues related to racism, gender inequity and poverty. York's BES program is designed to equip students with the knowledge and understanding to deal effectively yet sensitively with complex environmental and social problems arising at the local, national or global level.

In the first two years of the program, students take a number of required courses that introduce them to the wide range of environmental studies while building critical, analytical and writing skills. In the final two years of the program, there is only one required course per term, and the remainder of the courses are electives chosen from either within FES, or from other Faculties at York. These electives are chosen in consultation with the undergraduate program adviser, and are based on each student's Program Plan. This Plan, which is updated each year, ensures that students meet the degree requirements, and that they have the opportunity to pursue individual interests and goals related to their area of interest. The BES undergraduate adviser organizes advising sessions in the required courses of the BES program to assist students with the development of their Program Plan.

## What the BES program offers:

- interdisciplinary expertise to understand and solve environmental problems;
- opportunities to develop specific skills and in-depth learning;
- a wide range of courses covering the humanities, social sciences and environmental science;
- an outlook that includes local and global, philosophical and applied questions;
- an emphasis on bringing theoretical and practical matters together in the classroom;
- the knowledge and skills needed for environmental careers and graduate studies;
- an atmosphere in which you know that your learning matters.


## The BES Program

The four-year BES Specialized Honours program combines a structured core of required courses with a wide range of elective course choices. In the first two years of the BES program, students take a series of required
courses that introduce them to the range of environmental studies, while building critical, analytical and writing skills. This portion of the program is highly structured, with one elective course available each term, to give students the foundation upon which to design their own program and to meet their particular area of interest. In the final two years of the program, by contrast, there is only one required course per term and the remainder of the courses are electives. Elective courses can be chosen from either within the Faculty of Environmental Studies or from other Faculties at York which offer courses of related interest.

## Theme Areas

The BES program offers four theme areas that reflect the Faculty's broad understanding of environmental studies. Students in the program use these theme areas to help them begin to define their own theme concentration within the Program Plan. In their second year, each student will take at least two "foundation courses" based on the theme areas, in order to focus on their areas of interest.

## Nature, Technology and Society

This theme area encourages students to think critically and creatively about contemporary issues between human beings, "natures" and social techniques and technologies. Students examine cultural assumptions about nature and the ways in which technologies and economic forces mediate relationships between humans, other species and ecosystems. The curriculum stresses the complex interdependence of all life. Recognizing this we focus on theories and actions that build socially just and environmentally conscious communities. Topics include:

- biological conservation and biodiversity;
- environmental thought and ethics;
- applied environmental sciences;
- environmental writing;
- biotechnology and society;
- natural and environmental history;
- media, popular culture and nature;
- environmental education;
- ecological restoration, bioregionalism.


## Environmental Policy and Action

This theme area explores how environmental and related social policy are developed and carried out, and how they may be influenced by social movements and advocacy groups as well as by established interests. Topics include:

- environmental planning and impact studies;
- environmental policy and law;
- environmental politics and organizations;
- social movements and advocacy;
- gender and socio-political change;
- communications and attitude change.


## Global Development, Peace and Justice

This theme area focuses on global issues through an analysis of such areas as global-socio-economic development, environmental sustainability, peace and social justice. Topics include:

- globalization;
- international development;
- sustainable development;
- gender and development;
- human rights and refugee studies;
- social/environmental movements;
- global environmental politics;
- international political economy/ecology;
- development alternatives.


## Human Settlements

Students in this theme area study the evolution of human settlements in Canada and around the globe. Central to this theme area is an understanding of the relationships of humans to natural environments.

Students can study the sustainability of human habitats, urban landscapes and other settlements, as well as the diverse paths of urbanization. Lectures focus on governance, regulation and power in urban areas, and present urban environmentalism and urban ecology as distinct political practices of human settlements at the onset of the 21st century. Topics include:

- migration and settlement;
- urbanization and the urban process;
- environmental design/landscape design;
- urban sustainability;
- urban governance and regulation;
- global cities and global urbanization;
- urban social and environmental movements;
- urban and regional planning;
- healthy and sustainable community development;
- urban social relations (class, race, gender);
- native/Canadian relations.


## Degree Requirements

## Program Credit Requirements

- Students must pass courses worth a minimum of 120 credits (equivalent to 20 full-year courses) in order to graduate with the BES Specialized Honours Degree. At least 60 credits and a maximum of 90 credits shall be Environmental Studies courses. An overall grade point average of at least 5.0 (midpoint of the $C+$ range) must be maintained.


## Course Requirements

Students choose their courses in the BES program according to the following requirements:

## (a) General Education (at least 12 credits):

Following York's philosophy of undergraduate education, BES students are required to study in humanities and the natural sciences.

## Humanities Requirement

The BES humanities requirement can be satisfied by taking ENVS 1800 6.0 or a 1000 -level course (at least 6 credits) from the Division of Humanities, (Classical Studies; English; French Studies; History; Humanities; Languages, Literature and Linguistics; or Philosophy).
Natural Science Requirement
The natural science requirement is met by taking ENVS 15006.0 Introduction to Science for Environmental Studies or a first year (6 credit) course from the Faculty of Pure and Applied Science (excluding Natural Science courses).

## (b) Required Core Environmental Studies Courses (39 credits):

- ENVS 1000 6.0 Approaches to Environmental Studies;
- ENVS 1200 6.0 BES Workshop;
- ENVS 2000 3.0 Paradigms in Environmental Studies;
- ENVS 2010 6.0 Methods in Environmental Studies I;
- ENVS 2500 6.0 Applied Environmental Sciences;
- ENVS 3000 3.0 Environmental Ethics;
- ENVS 3011 3.0 Methods in Environmental Studies II;
- ENVS 4000 6.0 Senior Honours Work.
(c) Theme Foundation Requirement (at least 6 credits) two or more of:
- ENVS 2100 3.0 Foundations of Nature,Technology and Society;
- ENVS 2200 3.0 Foundations of Human Settlements;
- ENVS 2300 3.0 Foundations of Global Development, Peace and Justice;
- ENVS 2400 3.0 Foundations of Environmental Policy \& Action.
(d) Depth Requirement:
- 18 credits of environmental studies (ENVS) courses at the 3000 or 4000 level (in addition to (b) above);
- Of these, at least 6 credits must be at the $4000-l e v e l ~ E N V S ~ c o u r s e s . ~$ Courses are selected in the context of the Program Plan.
(e) Breadth Requirement:

In addition to the general education requirements, 24 credits are taken as electives outside of the Faculty. These courses are selected in the context of the Program Plan.

## (f) Free Elective Courses:

Up to 21 credits taken from any undergraduate Faculty (including FES). Courses are selected in the context of the Program Plan and with the assistance of the BES program adviser.

## Other Requirements

The Theme Concentration Requirement, and the 4000 Level Requirement, are met within the 63 credits of courses from the Depth, Breadth, and Free Elective Courses (i.e. (g) and (h) occur within (a) through (f)).

## (g) Theme Concentration Requirement:

At least 27 credits in courses inside or outside of FES (beyond the core and "foundation" courses) that are relevant to the student's chosen theme concentration. Relevance is established through approval of each student's individualized Program Plan; courses may include those taken in meeting depth, and breadth requirements, as well as free elective courses.
(h) 4000 Level Requirement (at least 18 credits):

Students must take at least 18 credits at the 4000 level, of which at least 12 must be ENVS credits, including:

- ENVS 4000 6.0 Senior Honours Work;
- 6 credits in ENVS courses at the 4000 level (see depth requirement);
- 6 credits of York courses at the 4000 level (may or may not include ENVS courses).


## Advising and the BES Program Plan

In addition to completing the credit requirements, all BES students must also develop and maintain a Program Plan (approved by the BES program adviser). This statement is intended to guide second and third year course selection, to indicate future program objectives, and to ensure that the courses chosen keep important options open to each student. The Program Plan also ensures that students meet the requirements of their theme concentration and the credit requirements of the BES program.
The BES program adviser organizes advising sessions in the required courses of the BES program in order to assist students with the development of the Program Plan. At the end of ENVS 12006.0 in their first year of study, students write the first version of their Program Plan - a concise statement of their theme concentration - in conjunction with the BES program adviser. At the end of the second year students write a more extensive statement of their educational objectives in ENVS 2010 6.0, Methods in Environmental Studies I. Advising for students' final Program Plan, including their Senior Honours Work proposal, takes place in ENVS 3011 3.0, Methods in Environmental Studies II. The undergraduate program director, the BES program adviser, and each student's senior Honours Work Supervisor approve both the final Program Plan and Senior Honours Work Proposal.

## Enriching Your BES Program

The BES Program allows you to take advantage of many diverse educational opportunities in addition to your own theme concentration:

- Pursue a double major, or a minor, in one of the disciplines in the Faculty of Arts;
- Pursue a minor with the Faculty of Fine Arts or with the Faculty of Pure and Applied Science (specific programs only);
- Pursue the Certificate in Environmental Landscape Design (ELD) (see below);
- Pursue the Certificate in Geographic Information Systems (GIS) and Remote Sensing (see below);
- Pursue the Certificate in Refugee and Migration Studies (see below); or
Faculty of Arts;
- Pursue a Concurrent degree program with the Faculty of Education leading to BES/BEd degrees (see Faculty of Education listing for details);
- Pursue a Joint program with Seneca College in Urban Sustainability;
- Pursue a Joint program with Sir Sandford Fleming in Ecosystems Management;
- Pursue a Joint program with Humber College in International Project Management.
The area or primary concentration is known as the "major"; an area of secondary concentration (if any) is known as the "minor." In such cases, an application must be made using the application form available through the FES Office of Student and Academic Services. This request is subject to approval by the undergraduate program director and the other academic unit involved. Each program sets the details of the requirements for each Double Major or Minor program in the Faculties of Arts, Pure and Applied Science, and Fine Arts. Students in Environmental Studies must meet the established degree requirements of the Major or Minor program selected in the Faculty of Arts, Pure and Applied Science or Fine Arts. BES students should consult the York University Undergraduate Calendar or the York University Web site, www.yorku.ca, for specific program requirements.
The following principles apply to all students in the Faculty of Environmental Studies or the Faculties of Arts, Pure and Applied Science and Fine Arts, who propose to pursue an Honours Double Major program or an Honours Major/Minor program between the Faculties of Environmental Studies and Arts, Pure and Applied Science or Fine Arts:


## General Requirements

All students will have a "home" Faculty; students enrolled in the Faculty of Environmental Studies will receive the BES degree upon successful completion of their program; students in the Faculty of Arts will receive the BA; students in the Faculty of Pure and Applied Science will receive a BSc and students in the Faculty of Fine Arts will receive a BFA or BA.

All students in these programs must maintain Honours standing; for Arts, Fine Arts and Science students that will mean a cumulative grade point average of 5.0 over all courses including those in Environmental Studies; for Environmental Studies students that will mean a cumulative grade point average of 5.0 over all courses including those in Arts, Science or Fine Arts. Students must meet the degree and program requirements of their home Faculty.

## Degree Double Major Requirements

For a Major in Environmental Studies, Arts students are required to complete seven full courses ( 42 credits) in Environmental Studies:

- ENVS 1000 6.0 Approaches to Environmental Studies;
- ENVS 2000 3.0 Paradigms in Environmental Studies;
- one half-course ( 3 credits) in the "foundations" series at the 2000 level (2100, 2200, 2300 or 2400);
- ENVS 2500 6.0 Applied Environmental Sciences;
- ENVS 3000 3.0 Environmental Ethics;
- 9 credits at the 3000 level;
- 12 credits at the 4000 level;
- Arts students in Linked Interdisciplinary programs: Science and Society and Urban Studies are required to complete six full courses ( 36 credits);
- The approval of the undergraduate program director for the selection of courses.


## Degree Minor Requirements

For a Minor in Environmental Studies, Arts, Pure and Applied Science, and Fine Arts students are required to complete five full courses ( 30 credits) in Environmental Studies:

- ENVS 1000 6.0 Approaches to Environmental Studies;
- ENVS 2000 3.0 Paradigms in Environmental Studies;
- one half-course ( 3 credits) in the "foundations" series at the 2000 level (2100, 2200, 2300 or 2400);
- ENVS 3000 3.0 Environmental Ethics;
- one full course ( 6 credits) at the 4000 level;
- 9 additional credits at the 3000 level or higher;
- the approval of the undergraduate program director for the selection of courses.

Students should be aware that in order to complete the requirements of the Honours Double Major or Honours Major/Minor programs it may be necessary to complete more than 20 full courses ( 120 credits).

## Application

For application procedures and forms, please visit the Office of Student and Academic Services, Room 352, Leonard G. Lumbers Building.

## Grading and Academic Standards

## Alternate Grading Method

## Pass/Fail

Students in the Faculty of Environment Studies can request a Pass/Fail option only after completing 24 credits. Courses taken under the Pass/Fail option will be annotated on their transcript as "Pass" or "Fail." Neither of these grades will be calculated into their grade point average. The following rules apply to the Pass/Fail option:

- Only students who have good academic standing may choose this option (i.e. above 5.0 grade point average);
- Students are required to have completed 24 credits before requesting this option;
- Courses taken under this option may not be used to satisfy major, minor, general education or certificate requirements or 1000-level science courses;
- Students can take a maximum of 12 credits on the Pass/Fail option;
- Students who intend to take a course on a Pass/Fail option must request to do so within the first two weeks of classes in the term in which the course is being offered;
- Students are required to fill out an application form - available at the Office of the Registrar, West Office Building. The student will return the completed form with the course director's approval to the Office of the Registrar;
- Students who select the Pass/Fail grading option can switch back to a graded option without academic penalties until the last day to drop the course.


## Grade Reappraisals

## Reappraisal of Final Course Grades:

A student may, with sufficient grounds, request that a final course grade be reappraised. Such requests must be submitted on the approved form (which is available from the respective office) to the departmental office responsible for offering the course within 21 calendar days of the release of the final grade in the course. The course director shall do the reappraisal personally, or recommend a qualified person to do so to the undergraduate program director (e.g. a teaching assistant from the same course or a faculty member familiar with the course material). A reappraisal may result in a lower, higher or unchanged grade. Whenever the grade reappraisal reflects a grade change it will be annotated on the student's transcript.

## Further Appeal for Reappraisal of a Final BES Course Grade:

If the student is not satisfied with a reappraised final course grade, the procedure shall be as follows:
i) The course director and the student shall discuss the matter with the undergraduate program director, who may or may not arrange another reappraisal;
ii) If the matter remains unresolved, the student may appeal the grade by petition on the appropriate form provided by the Office of Student and Academic Services to the BES Program and Admissions Subcommittee, clearly stating the grounds for appeal;
iii) The decision of the BES Program and Admissions Subcommittee shall be final, and may be appealed to the FES Appeals Committee only on grounds of procedural irregularity.

## Reappraisal of Grades Other Than Final Course Grades:

If a student is not satisfied with any grade -- other than a final course grade -- received from an instructor or teaching assistant, the student is expected to discuss the matter (and at such time may request a reappraisal) with the
person from whom the student received the grade, normally within two weeks. A reappraisal may result in a lower, higher or unchanged grade. If the student is not satisfied with the result of the reappraisal, the instructor or teaching assistant (where appropriate) shall discuss the matter with the course director. The course director shall decide whether or not to reappraise the student's work and his/her decision is final for all grades other than final course grades.

## Deferred Standing:

In some cases, students may be eligible for deferred standing (an extension) to write a test or final examination or to complete an assignment after the Faculty's deadline for submission of term work. Senate policy states that students must request deferred standing through the department responsible for the course within one week following a missed examination or the last day to submit course work.
Students are responsible for ensuring that full documentation (medical or other) is provided in support of a petition for Deferred Standing. Application forms are available at the Office of the Registrar, West Office Building or from the FES Office of Student and Academic Services.

## Aegrotat Standing

In cases where a student cannot be expected to complete the work for a course, the phrase "Aegrotat Standing" (from the Latin for "she/he is ill") is substituted for a grade on the transcript. Aegrotat Standing is seldom granted, and only in exceptional circumstances where deferred standing is inappropriate. For more information, please contact your course director.

## BES Term Work, Tests and Examinations

Term Work: Term work includes reports, assignments, essays, tests, and other written and oral work assigned in a course, with the exception of final examinations, as outlined in the approved course syllabus. Course directors set the deadlines for submission of term work. All term work must be submitted by the last day of classes of the term in which the course ends. Term work submitted after the last day of classes of the term in which the course ends will not be accepted for grading. Students will be penalized one-half grade point per day that their assignments are late. Exceptions to the lateness policy for valid reasons such as illness, compassionate grounds etc., will be entertained by the course director only when supported by written documentation (e.g. a doctor's letter).
Examinations: Examinations may be held in any BES course in such form and manner as decided by the course director and as described in the approved course syllabus. Examinations are an essential part of the learning and evaluation process. They must be conducted under fair conditions which allow students to analyze, synthesize and demonstrate what they have learned. Disruptions or attempts to obtain an unfair advantage are offences against due academic processes and carry severe penalties.
End of Term Restrictions: The total value of any test(s) or examination(s) given during the last two weeks of classes in a term must carry a combined weighting of no more that 20 per cent of the final mark for the course.
Scheduling of Tests: Except where testing is conducted during individual appointments which accommodate a student's schedule (e.g. individually scheduled make-up tests), tests or examinations given during the term must be held within the hours regularly scheduled for the course in question.
Students' Rights of Refusal: Students who are asked to write tests or examinations in contravention of the preceding two regulations may refuse to do so without academic penalty. They also have the right to raise the matter with the undergraduate program director.

## General Regulations for Tests and Examinations

Identification: Students who are being tested or examined are required to present their sessional identification card and YorkCard or an acceptable form of photographic identification when asked to do so by an instructor or invigilator. Acceptable forms of photographic identification include a valid driver's license with photograph attached, a valid passport or other certificate of citizenship with photograph attached.

## Formally Scheduled Examinations

Final Examination Period: There is a final examination period at the end of each term, as published in the York University Undergraduate Calendar.
Examination Schedules: The dates, times and places of formally scheduled examinations are published each term in the student newspaper, excalibur, and on the Office of the Registrar's Web site, www.registrar.yorku.ca. Examinations may last two or three hours. Students are responsible for making themselves aware of the appropriate examination details.

Missed Examinations: A student who misses an examination shall contact the Office of Student and Academic Services within 48 hours of the examination. A student who wishes to write a make-up examination must petition for deferred standing in the course.
Rewriting of Examinations: There shall be no rewriting of a final examination to improve a mark.

## Assessment of Students in BES Courses

(a) The course director shall assess students enrolled in each BES course in light of the requirements set at the beginning of the course as articulated in the course syllabus. These assessments shall be based on a combination of tests or formal examination(s), participation in classes, term work submitted, and other evidence as determined by the course director.
(b) Marking scheme:
i) Announcement in class: The means of determining the final grade in a course shall be provided to students by the course director. Such information must include the types of assignments, essays, examinations, and other components, which make up the grade, their relative weight(s), and any other procedures, which enter into the determination of the final grade.
ii) Subsequent changes: In exceptional circumstances, a previously announced marking scheme for a course may be changed, but only with the consent of all students and the approval of the undergraduate program director. The course director must distribute the new marking scheme in written form to the students.
iii) Feedback during course: Instructors are obliged to provide a mechanism by which students can be apprised of their progress in a course. Students must be able to make an informed decision on whether to withdraw from a course. This will normally mean that students will receive some graded feedback on work worth at least 10 per cent of the course grade before the deadline for withdrawing from that course. Instructors are urged to provide more feedback where possible.

## Academic Penalties

Conduct that violates the ethical or legal standards of the University community is a serious matter. In particular, any breach of academic honesty is a most serious offence to both the University community and the academic enterprise. Therefore, any breach of academic honesty is important, and as such, requires any faculty member to treat a breach of academic honesty, no matter how small the breach may appear, as a most serious matter requiring most thorough investigation.
In the Faculty of Environmental Studies it is a serious offence against academic honesty, among other things, to cheat, to impersonate, to plagiarize or misappropriate the work of others, to practise improper research procedures, to be dishonest in publication, to aid and abet academic misconduct, or to undertake any other action that runs counter to academic honesty. In addition, some forms of breach of academic honesty might constitute offences under the Criminal Code of Canada. While the pressures of school may be such that a student may feel pressured to breach academic honesty, students must completely resist such pressures. Students who are unsure of what may constitute a breach of academic honesty should consult the Senate Policy on Academic Honesty, or with the Faculty of Environmental Studies Office of Student and Academic Services.
Breach of Academic Honesty: The rules embodied in the Senate Policy on Academic Dishonesty apply to all BES students and are described in Appendix One of the FES Academic Regulations. Appendix Two of the

FES Academic Regulations describes the Procedures Governing Breach of Academic Honesty.
Copies of the FES Academic Regulations are available at the Office of Student and Academic Services, Room 352 Lumbers Building.

## Academic Program

A typical syllabus for students pursuing the BES Specialized Honours degree will be:

## Year 1:

- ES/ENVS 1000 6.0 Approaches to Environmental Studies
- ES/ENVS 1200 6.0 BES Workshop
- ES/ENVS 1500 6.0 Introduction to Science for Environmental Studies
- ES/ENVS 1800 6.0 Environmental Writing
- 6 credits - elective


## Year 2:

- ES/ENVS 2000 3.0 Paradigms in Environmental Studies
- ES/ENVS 2010 6.0 Methods in Environmental Studies I
- ES/ENVS 2500 6.0 Applied Environmental Sciences
- 6 credits in ES/ENVS theme foundation courses
- 6 credits - breadth
- 3 credits - elective


## Year 3:

- ES/ENVS 3000 3.0 Environmental Ethics
- ES/ENVS 3011 3.0 Methods in Environmental Studies II
- 9 credits in theme concentration
- 9 credits - breadth
- 6 credits - elective

Year 4:

- ES/ENVS 4000 6.0 Senior Honours Work
- 9 required credits in theme concentration
- 9 credits - breadth
- 6 credits - elective


## Certificate Programs

## Certificate in Environmental Landscape Design

BES students may earn a Certificate in Environmental Landscape Design (ELD) as part of their program. Students in ELD focus their study on the relationships between urban and natural environments. The program emphasizes design as an innovative and interactive practice to critically intervene in the social and environmental reclamation of urban landscapes, places, sites and ecologies. Lecture courses and studio workshops examine the social, experiential, political, ecological, artistic and technological aspects of ELD.

## General Education Courses (12 credits):

- ENVS 1800 6.0 Environmental Writing;
- GEOG 1400 6.0 Physical Geography (as a prerequisite of GEOG 2500 and GEOG 2700).


## BES Core Courses (30 credits):

- ENVS 1000 6.0 Approaches to Environmental Studies;
- ENVS 1200 6.0 BES Workshop;
- ENVS 2000 3.0 Paradigms in Environmental Studies;
- ENVS 2010 6.0 Methods in Environmental Studies I;
- ENVS 2200 3.0 Foundation of Human Settlements; and
- ENVS 3000 3.0 Environmental Ethics;
- one additional 3-credit theme foundation course.


## ELD Breadth Courses (21 credits):

- ENVS 3120 3.0 Environmental History;
- ENVS 3220 3.0 Urban Sustainability;
- ENVS 3520 3.0 GIS in Environmental Studies;
- ENVS 3720 3.0 Computer Appliations in ELD;
- GEOG 2500 3.0 Vegetation and Soils;
- GEOG 2700 3.0 Geomorphology;
- VISA 2081 3.0 Drawing.


## ELD Depth Courses (42 credits):

- ENVS 3700 6.0 ELD Studio;
- ENVS 3730 3.0 ELD Process and Practice;
- ENVS 3740 3.0 Urban Natural Processes in ELD;
- ENVS 3760 3.0 Native Plant Ecosystems;
- ENVS 3770 3.0 Ornamental Plants and Design;
- ENVS 4700 12.0 ELD Studio;
- EMVS 4740 3.0 Landscape Reclamation and Restoration;
- ENVS 4750 3.0 Landscape Theory, History and Criticism;
- ENVS 4760 3.0 Landscape Materials and Applications;
- ENVS 4770 3.0 Landscape Design Construction.
- Elective ( 15 credits) must be taken outside of FES


## Other Requirements:

- Minimum grade of $5.0(\mathrm{C}+)$ in each course credited to the ELD Certificate and a cumulative grade point average of 6.0 (B).


## Certificate in Geographic Information Systems (GIS) and Remote Sensing

York University students may earn a Certificate in GIS and Remote Sensing in addition to fulfilling the requirements of the BES program. GIS and Remote Sensing encompasses the art, science and technology involved in collecting and managing geographically-referenced information.

## Required Courses ( 24 credits):

- ENVS 1000 6.0 Approaches to Environmental Studies;
- ENVS 2010 6.0 Methods in Environmental Studies I;
- ENVS 3520 3.0 Geographical Information Systems;
- ENVS 3521 3.0 Environmental Remote Sensing;
- ENVS 4520 3.0 GIS Applications in Environmental Studies;
- ENVS 4521 3.0 Remote Sensing and Image Processing for Geographical Analysis and Environmental Monitoring.


## Elective Courses:

- EATS 4220 3.0 Remote Sensing of the Earth's Surface;
- EATS 4230 3.0 Remote Sensing of the Atmosphere;
- ENVS 3011 3.0 Methods in Environmental Studies II;
- GEOG 2130 3.0 Fundamentals of Map Design and Interpretation;
- GEOG 3140 3.0 Retailing, Shopping, Society and Space;
- GEOG 3421 3.0 Intermediate Statistics Methods in Geography;
- GEOG 4240 3.0 The Planning of Urban Public Facilities.


## Other Requirements:

- Maintain a cumulative grade point average of $6.0(\mathrm{~B})$ in the required courses and achieve a cumulative grade point average of $5.0(\mathrm{C}+)$ in all courses; and
- register in the program after completing 24 credits.

Students who have been exempted from any of the required courses or visiting students who have successfully completed the equivalent of any of the required courses must substitute additional credits from the Certificate program elective list, for an overall total of 24 credits in the Certificate program.

## Certificate Program in Refugee and Migration Studies

Faculty of Environmental Studies students may earn a General Certificate in Refugee and Migration Studies while, and in addition to, fulfilling the requirements for the BES program. To qualify for the General Certificate in Refugee and Migration Studies, students must complete AS/SOSC 1130 9.0 (International Migration) or AK/SOSC 20006.0 (Introduction to Refugee Studies) and three full (or equivalent) courses from a list of approved courses (as listed in the University Calendar) of which at least two will be at the 3000 or 4000 level. The cumulative grade point average in these courses must be 5.0 or higher; and FES's degree requirements must be met
FES students must submit a study plan to the Education Coordinator at the Centre for Refugee Studies, to ensure that all Certificate requirements have been considered. Further information is available from the Education Coordinator, Centre for Refugee Studies or his academically accredited designate.

## Required Courses:

- AS/SOSC 1130 9.0 International Migration; or
- AK/SOSC 2000 6.0 Introduction to Refugee and Migration Studies;
- Three full (or equivalent) appropriate courses.

A list of pre-approved ENVS courses follows. Other relevant courses may be selected and submitted for approval with the student's study plan, which must be reviewed by the Education Coordinator, Centre for Refugee Studies or his designate.

## ENVS Courses for the Refugee and Migration Studies Certificate:

- ENVS 2200 3.0 Foundations of Human Settlements;
- ENVS 2300 3.0 Foundations of Global Development, Peace and Justice;
- ENVS 3310 3.0 Environment and Development;
- ENVS 4210 3.0 World Population Issues and Problems;
- ENVS 4220 3.0 Urbanization in Developing Countries;
- ENVS 4311 3.0 Global Justice and the Environment;
- Other courses are listed in Arts, Glendon and Atkinson course lists.

For more information, please see the CRS Web site, www.yorku.ca/ research/crs.

## Joint Degree/Diploma Programs (with Ontario Colleges of Applied Arts and Technology)

The York Joint Programs offer students the opportunity to receive a university degree and a college diploma in five years, in what would otherwise be a seven-year requirement. These accelerated programs can begin either at the college or at York University (with the exception of the York-Humber Joint program) and are then completed at the partner institution. Students enrolled in Joint Programs must fulfill the requirements of both institutions before they are eligible to graduate.

Students who are enrolled in FES are required to complete a minimum of 90 credits within the first three years of the Joint program with a 5.0 grade point average (C+ average at York), including Core, Depth and General Education requirements. They are then required to submit an application to the Joint program at the respective College in December of their third year of study.
With the exception of the York-Humber Joint program: students who begin their Diploma at the college should apply to the Joint program in Environmental Studies through the normalYork Admission process in the final year of their Diploma. Acceptance is contingent upon students successfully completing the Diploma with a minimum 3.0 grade point average at the college. Successful applicants will be awarded 60 block credits toward their BES program. Students who choose to opt out of the Joint program at York and attend another program will have their advanced standing re-evaluated.

## York-Humber College Joint Program in International Project Management

York University students, after successful completion of three years in the BES program, may apply to the Joint program in International Project Management at Humber College. Upon successful completion of the Joint program, students receive a BES Honours Degree and a Post-Diploma Certificate in International Project Management.

## Degree Requirements for Students First Enrolling at York

Year 1 - (30 credits):

- ENVS 1000 6.0 Approaches to Environmental Studies;
- ENVS 1200 6.0 BES Workshop;
- ENVS 1500 6.0 Introduction to Science for Environmental Studies;
- Humanities (6 credits);
- Electives (6 credits).

Year 2 - (30 credits):

- ENVS 2500 6.0 Applied Environmental Sciences;
- ENVS 2000 3.0 Paradigms in Environmental Studies;
- ENVS 2010 6.0 Methods in Environmental Studies I;
- ENVS 2300 3.0 Foundations of Global Development, Peace and Justice (required);
- ENVS 2400 3.0 Foundations in Environmental Policy and Action;
- ANTH 1110 6.0 Introduction to Social Anthropology (recommended);
- Electives (3 credits).

Year 3 - (30 credits):

- ENVS 3000 3.0 Environmental Ethics;
- ENVS 3310 3.0 Environment and Development;
- ENVS 3340 3.0 Global Environmental Politics;
- ENVS 3430 3.0 Environmental Assessment;
- 18 credits at the 4000 level.

Year 4 - At Humber College:

- Course selections will be determined by the Humber College program coordinator during an individual advising appointment.


## York-Seneca Joint Program in Environmental Studies and Urban Sustainability

York University students, after successful completion of three years in the BES Honours program with a minimum GPA of 5.0 may apply to the Joint Program in Urban Sustainability (JPUS) at Seneca College. After successfully completing the JPUS, students will receive their Bachelor in Environmental Studies Honours Degree and their Civil Engineering Technology Diploma.

Degree Requirements for Students First Enrolling in the BES Program at York
Year 1 - Five full courses ( 30 credits):

- ENVS 1000 6.0 Approaches to Environmental Studies;
- ENVS 1200 6.0 BES Workshop;
- ENVS 1500 6.0 Introduction to Science for Environmental Studies (students may take BIOL 10106.0 or GEOG 14006.0 instead if they have OACs or equivalents in both chemistry and biology);
- Humanities (6 credits);
- Electives (6 credits, recommend SOSC 1730 6.0 Urbanization: A World Perspective).

Year 2 - Five full courses ( 30 credits):

- ENVS 2500 6.0 Applied Environmental Sciences;
- ENVS 2000 3.0 Paradigms in Environmental Studies;
- ENVS 2010 6.0 Methods in Environmental Studies I;
- ENVS 2200 3.0 Foundations in Human Settlements and Population (recommended);
- ENVS 2400 3.0 Foundations in Environmental Policy and Action (recommended);
- AS/SOSC 2710 6.0 City Lives and City Forms: An Introduction to Urban Studies; or
- AS/SOSC 2730 6.0 The Culture of Cities: Visual Journeys Through Time and Space;
- Electives (3 credits).

Year 3 - Five full courses ( 30 credits):

- ENVS 3000 3.0 Environmental Ethics;
- 9 credits at the 3000 level;
- 18 credits at the 4000 level.

Years 4 and 5 - at Seneca College:

- Course selections will be determined with the Seneca program coordinator during an individual advising appointment.


## Degree Requirements for Students Enrolling at York After Completing their Technologist Program at Seneca College

Year 1 - ( 30 credits):

- ENVS 1000 6.0 Approaches to Environmental Studies;
- ENVS 2000 3.0 Paradigms in Environmental Studies;
- Humanities Requirement (6 credits general education);
- two of the following three foundation courses:

Year 2 - (30 Credits):

- ENVS 3000 3.0 Environmental Ethics;
- 9 credits in FES at the 3000 level;
- 18 credits in FES at the 4000 level (including the Joint program colloquium).
Degree Credit Exclusions for Seneca Technologist Students at York
Students entering the Joint program in Environmental Studies from Seneca College will be exempted from the following courses: ENVS 1500 6.0, ENVS 2500 6.0, ENVS 1200 6.0.


## York-Sir Sandford Fleming Joint Program in Ecosystem Management (JPEM)

After successful completion of three years in the BES Honours program with a minimum grade point average of 5.0, York University students may apply to the Joint Program in Ecosystem Management (JPEM) at Sir Sandford Fleming College (SSFC). After successfully completing the JPEM, students will receive their BES Honours Degree and their Ecosystem ManagementTechnologist Diploma.

Degree Requirements for Students First Enrolling in the BES Program at York
Year 1 - (30 credits):

- ENVS 1000 6.0 Approaches to Environmental Studies;
- ENVS 1200 6.0 BES Workshop;
- ENVS 1500 6.0 Introduction to Science in Environmental Studies (students may take BIOL 10106.0 or GEOG 14006.0 instead if they have OACs or equivalents in both chemistry and biology);
- Humanities (6 credits);
- Electives ( 6 credits: COSC 15203.0 and 15403.0 recommended).

Year 2 - (30 credits):

- ENVS 2500 6.0 Applied Environmental Sciences;
- ENVS 2000 3.0 Paradigms in Environmental Studies;
- ENVS 2010 6.0 Methods in Environmental Studies I;
- ENVS 2100 3.0 Foundations in Nature, Technology and Society;
- ENVS 2400 3.0 Foundations in Environmental Policy and Action;
- BIOL 2050 3.0 Ecology;
- Electives ( 6 credits).

Year 3 - (30 credits):

- ENVS 3000 3.0 Environmental Ethics;
- 9 credits at the 3000 level;
- 18 credits of BES courses at the 4000 level.

Note:
Years 4 and $5-$ at SSFC:

- Course selections will be determined by the Sir Sandford Fleming program coordinator during an individual advising appointment.


## York Degree Credit Exclusions for SSFC

York students who have taken ENVS 3520 and ENVS 3521 while in the BES program will be exempted from the introductory course in GIS at SSFC, and will take an elective course instead.

Degree Requirements for Students Enrolling at York After Completing their SSFC Technologist Program
Year 1 - (Fall/Winter):

- ENVS 1000 6.0 Approaches to Environmental Studies;
- ENVS 2000 3.0 Paradigms in Environmental Studies;
- Humanities (6 credits);
- ENVS 2100 3.0 Foundations of Nature,Technology and Society; or
- ENVS 2300 3.0 Foundations of Global Development, Peace and Justice;
- Electives (9 to 12 credits depending on whether Foundation courses are taken).
Year 2 - (Fall):
- ENVS 3000 3.0 Environmental Ethics
- ENVS 2200 3.0 Foundations of Human Settlements and Population; or
- ENVS 2400 3.0 Foundations of Environmental Policy and Action;
- 9 to 12 credits in FES at the 3000 or 4000 level, depending on whether Foundations courses are taken.
Year 2 - (Winter):
15 credits in FES at the 3000 and 4000 level [Note: At least 18 credits (six half courses) are required to be at the 4000 level. This includes the Joint program colloquium].


## Degree Credit Exclusions for SSFC Technologist Students

Students entering the Joint program in Environmental Studies from SSFC will be exempted from the following courses: ENVS 1500 6.0, ENVS 2010 6.0, ENVS 2500 6.0, ENVS 1200. Degree credit exclusions may apply to ENVS 35203.0 (GIS), ENVS 35213.0 (Remote Sensing), ENVS 44423.0 (Environmental Monitoring), ENVS 45203.0 (GIS Applications), depending on what courses students have taken at SSFC.

