

Faculty of Environmental Studies - Keele Campus

The Bachelor in Environmental Studies

Theme Areas

The BES Program

Degree Requirements

Grading System and Academic Standards

Academic Program

Certificate Programs

New Joint Programs

Faculty of Environmental Studies

Dean:

P. Victor, 355 Lumbers, (416) 736-5284

Associate Deans:

M. Campbell and L. Molot, (416) 736-5252

Undergraduate Program Director:

R. Rogers, (416) 736-5252

Director, Student Programs:

J. Morrison, (416) 736-2100 x55286

BES Student Program Advisor:

S. Hermans (416) 736-2100 x30399

BES Student Program Assistant:

S. Sattaur (416) 736-2100 x30397

The Bachelor in Environmental Studies

The York Bachelor in Environmental Studies (BES) Specialized Honours Degree is a four-year, interdisciplinary program which combines breadth and focus in the field of environmental studies. Members of the Faculty of Environmental Studies (FES) include people from a wide range of backgrounds — from planning to philosophy, economics to education, architecture to anthropology — but all share a commitment to exploring the complex questions and solutions of the human and environmental problems facing the world. If you have a strong interest in understanding these problems and are serious about wanting to play a part in looking for possible, sustainable solutions, then York's BES program is designed for you!

York's BES program is designed to equip graduates with the knowledge and understanding to deal effectively yet sensitively with complex environmental and social problems arising at the local, national or global level. This broad mission, and our interdisciplinary perspective, make York's BES different. We are looking for students who are environmentally and socially committed. At York, you will join an interdisciplinary community of teaching faculty, other undergraduates, and graduate students who share this ideal.

Using the four theme areas as a guide (see below for descriptions), you will develop - in consultation with an advisor - your own Program Plan. This plan will ensure that you meet the requirements of the degree and that you have the opportunity to pursue your own interests and goals. This self-directed approach to your education is what makes the BES program so unique.

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.

Theme Areas

Nature, Technology and Society

This theme area is chosen by students who want to gain an understanding of the intricacies of natural systems, stressing the dependence of human society on nature and our impact on it. Students can examine the impacts of human intervention in the environment, along with the cultural, technological, and economic forces that shape such impacts. Topics in this area include:

- environmental conservation;
- resource management;
- technology and society;
- global ecology;
- environmental thought and ethics;

- environmental writing;
- natural history.

Global Development, Peace and Justice

This theme area involves the study of the relationships among world issues such as global socio-economic development, environmental sustainability, peace and social justice. Topics include:

- global development;
- international development;
- human needs;
- conflict resolution and peace studies;
- sustainable development;
- gender and development;
- human rights and refugee studies.

Environmental Policy and Action

Students in this theme area explore how environmental and 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.

Human Settlement and Population

Students in this theme area study the dynamics of human populations, and the relationships between populations and their natural and cultural environments. Studies focus on how settled environments have evolved as human habitats, the processes by which they are now being managed, and on the problems human settlements -- cities and villages alike -- will face in future. Topics in this area include:

- demography and migration;
- urban management;
- urban and regional planning and design;
- community development;
- gender relations;
- healthy environments;
- native/Canadian relations;
- landscape architecture.

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, analytic 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.

BES Program Plan

In order to link required courses with chosen elective courses, and to set out a specific research focus, students develop their own Program Plan. The Program Plan is an evolving document which is updated at least once annually. Given that environmental studies is an interdisciplinary program which does not limit analytical approaches, or the subjects to be studied, the Program Plan provides each student with the opportunity to define individual interests within the broad field of environmental studies.

The Program Plan records the required courses the student has taken or still needs to take, as well as outlining a specific research interest which students develop in the elective part of their program. Beginning in the fall

of their first year with a Program Statement, the Program Plan develops into a record of learning for each student as they move through the program; a process that culminates in the writing of a Senior Honours Work (ES/ENVS 4000 6.0).

Advising and the Program Plan

To assist students with the development of their own Program Plan, advising sessions are organized in the required courses of the BES program. In first year, students develop their Program Plan Statement and Theme Concentration Statement in the BES Workshop (ES/ENVS 1200 6.0). In second year, the Program Plan is developed in Methods in Environmental Studies I (ES/ENVS 2010 6.0) and in third year BES students develop their final Program Plan and Honours Senior Work Proposal in Methods in Environmental Studies II (ES/ENVS 3011 3.0). Sessions within these required courses are organized to provide students with the opportunity to meet and experience lectures from faculty members in their specific areas of interest. Peer advising will also be organized in small group sessions to aid students in the development of their Program Plan.

Enriching your BES Program

The BES Program Plan 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
- Pursue a Concurrent degree program with the Faculty of Education leading to BES/BED degrees (see Faculty of Education listing for details).

Practical Experience in the BES Program

You can take advantage of the flexibility in the BES program to gain practical experience:

- Gain field experience in landscape architecture through the Certificate in Environmental Landscape Design;
- Through your honours thesis, engage in relevant paid or volunteer experience that will assist you in your honours thesis work;
- Through directed study, engage in a relevant activity under the supervision of a professor;
- Through a practicum, you may elect to do 12 weeks or more of practical experience in your field of study.

Degree Requirements

Program Credit Requirements

To graduate with the BES Specialized Honours Degree, a student must pass courses worth 120 credits (equivalent to 20 full-year courses). At least 60 credits and a maximum of 90 credits shall be in Environmental Studies courses. To remain in the BES program, an overall grade point average (gpa) of at least 5 (midpoint of the C+ range) must be maintained.

Program Coherence Requirements

BES students are required to present the following non-credit requirements as part of their program towards the BES Degree (see also "Journey through the BES Program" in the BES Supplementary Calendar.)

Program Plan

At the end of ES/ENVS 1200 6.0 students write a concise statement of their theme concentration in conjunction with a faculty advisor. This statement is intended to guide your second year course selection, to indicate your future program objectives, and to ensure that the courses you

have chosen keep important options open to you. The statement is submitted and approved at the end of the first year of study. Advising for second year course selection and your Program Plan happens in the BES Workshop ES/ENVS 1200 6.0

At the end of your second year a more extensive statement of your educational objectives is written. Advising and course selection approval for this Program Plan takes place in ES/ENVS 2010 6.0, Methods in Environmental Studies I. The Program Plan ensures that you meet your theme concentration and other requirements of the BES Degree are met.

Advising for your final Program Plan, including your Senior Honours Work Proposal will take place in ES/ENVS 3011 3.0, Methods in Environmental Studies II. Both the final Program Plan and Senior Honours Work Proposal are approved by the appointed Senior Honours Work Supervisor and the Undergraduate Program Director.

Practicum

BES students may also submit a proposal for a non-credit learning experience, or Practicum, to be gained in 12 weeks or more of practical experience at the end of the third year of full-time study, subject to the Undergraduate Program Director's approval. A report on the learning experience is submitted to the Undergraduate Program Director.

Course Requirements

Courses in the BES program are chosen according to the following requirements:

(a) General Education:

Following York's philosophy of undergraduate education, study in humanities and the natural sciences is required of all BES students. The BES humanities requirement can be satisfied by taking ES/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 & Linguistics; or Philosophy). The natural science requirement is met by taking ES/ENVS 1500 6.0 Introduction to Science for Environmental Studies or a first year (6 credit) course from the Faculty of Pure and Applied Science.

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

- ES/ENVS 1000 6.0 Approaches to Environmental Studies
- ES/ENVS 1200 6.0 BES Workshop
- 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
- ES/ENVS 3000 3.0 Environmental Ethics
- ES/ENVS 3011 3.0 Methods in Environmental Studies II
- ES/ENVS 4000 6.0 Senior Honours Work

(c) Theme Foundation Requirement (at least 6 credits) two or more of:

- ES/ENVS 2100 3.0 Foundations of Nature, Technology and Society;
- ES/ENVS 2200 3.0 Foundations of Human Settlements and Population;
- ES/ENVS 2300 3.0 Foundations of Global Development, Peace and Justice;
- ES/ENVS 2400 3.0 Foundations of Environmental Policy & Action.

(d) Depth Requirement:

18 credits of Environmental Studies (ES/ENVS) courses at the 3000 and 4000 level. Of these, at least 6 credits (not including Senior Honours Work, ES/ENVS 4000 6.0) must be at the 4000 level. Courses are selected in the context of the Program Plan.

(e) Breadth Requirement:

24 credits, in addition to the general education requirements, are taken 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 an advisor.

Other Requirements

The *Theme Concentration Requirement*, and the 4000 level Requirement below, are met within the 63 credits of courses from the *Depth Requirement, Breadth Requirement and Free Elective Courses*.

(g) Theme Concentration Requirement:

At least 27 credits in courses inside or outside of FES (beyond the "foundation" course in the theme) 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):

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

Combined Programs

A BES student may apply to pursue a Double Major program or a Major/Minor program in the Faculty of Arts, or a Major/Minor program in the Faculty of Pure and Applied Science or the Faculty of Fine Arts. In such cases, application must be made using the application form available through the FES Student Programs Office, subject to approval by the Undergraduate Program Director and the other academic unit involved. The details of the requirements for each Double Major or Minor program in the Faculties of Arts, Pure and Applied Science and Fine Arts are set by the program involved. BES students should consult the appropriate section of this Calendar to determine the general requirements of the Arts, Science, or Fine Arts program in which they are interested. Further details can be obtained from the department supplementary calendars or the York University Web site (<http://www.yorku.ca/>).

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:

1. All students will have a "home" Faculty; students enrolled in the Faculty of Environmental Studies will receive the BES 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 the BSc and students in the Faculty of Fine Arts will receive the BFA or BA;
2. All students in combined programs must maintain Honours standing; a cumulative g.p.a. of at least 5.0 over all courses, including courses taken in the second major or the minor;
3. Students must meet the in-Faculty course requirements of their home Faculty;
4. Students must meet the General Education requirements of their home Faculty;
5. For a Major in Environmental Studies, Arts students require seven full courses (42 credits) in Environmental Studies, including:
 - ES/ENVS 1000 6.0 Approaches to Environmental Studies;
 - ES/ENVS 2000 3.0 Paradigms in Environmental Studies;
 - One half-course (3 credits) in the "foundations" series at the 2000-level;
 - ES/ENVS 2500 6.0 Applied Environmental Sciences;
 - ES/ENVS 3000 3.0 Environmental Ethics;
 - 21 credits at the 3000 level or higher, including two full courses (12 credits) at the 4000 level;
 - Arts students in Linked Interdisciplinary Programs (Science and Society and Urban Studies) require six full courses (36 credits) in Environmental Studies;
 - approval of the BES Undergraduate Program Director for the selection of courses.
6. For a Minor in Environmental Studies, Arts, Pure and Applied Science and Fine Arts students require five full courses (30 credits) in Environmental Studies, including:
 - ES/ENVS 1000 6.0 Approaches to Environmental Studies;

- ES/ENVS 2000 3.0 Paradigms in Environmental Studies; one half-course (3 credits) "Foundations" series at the 2000-level;
- ES/ENVS 3000 3.0 Environmental Ethics; one full course (6 credits) at the 4000-level; and 9 additional credits at the 3000 level or higher;
- the approval of the Undergraduate Program Director is required for the selection of courses.

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.

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 Student Programs Office, Room 352, Leonard G. Lumbers Building.

Grading and Academic Standards

Refer to the Grades and Grading Schemes section.

Academic Program

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

Year One:

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

Year Two:

- 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 Three:

- 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 Four:

- 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 Bachelor in Environmental Studies degree. Students interested in environmental landscape design (landscape architecture) focus their study on the relationship between urban and natural environments in the Human Settlements Theme Area.

Required Courses

- AS/GEOG 1400 6.0 during first year instead of ES/ENVS 1500 6.0, in order to meet the prerequisite for GEOG 2500 3.0 and GEOG 2700 3.0;
- ES/ENVS 2200 3.0 Foundations of Human Settlements is required plus one other theme foundation course from: ES/ENVS 2100 3.0, ES/ENVS 2300 3.0, or ES/ENVS 2400 3.0;
- SC/COSC 1520 3.0 Introduction to Computer Use I
- AS/GEOG 2500 3.0 Introduction to Vegetation and Soils
- AS/GEOG 2700 3.0 Geomorphology
- FA/VISA 2081 3.0 Drawing
- ES/ENVS 3120 3.0 Environmental History
- ES/ENVS 3220 3.0 Urban Sustainability
- ES/ENVS 3520 3.0 GIS in Environmental Studies
- *ES/ELD 3XXX 3.0 Native Plants
- * ES/ELD 3XXX 3.0 Natural Processes in Urban Design
- ES/ENVS 4120 3.0 Natural History
- * ES/ELD 4XXX 6.0 Design Workshop I
- * ES/ELD 4XXX 6.0 Design Workshop II
- * ES/ELD 4XXX 3.0 Principles of Landscape Construction
- * ES/ELD 4XXX 3.0 Landscape Materials
- * ES/ELD 4XXX 3.0 Horticulture of Native and Ornamental Plants
- * ES/ELD 4XXX 3.0 Ecological Restoration and Bio-engineering
- 24 additional credits;
- Students must ensure that they meet the Depth and Breadth requirements of the BES program.
- The BES degree requirements of ES/ENVS 2500 6.0 Applied Environmental Sciences, ES/ENVS 3011 3.0 Methods in Environmental Studies II, and ES/ENVS 4000 6.0 Senior Honours Work are waived for students enrolled in this certificate program.

*Courses marked with an asterisk will be offered beginning Fall 2001 and 2002.

Other Requirements

- A minimum grade of 5.0 (C+) in each course credited to the Environmental Landscape Design Certificate and a cumulative grade point average of 6.0 (B) in these courses;
- Field Placement: All students will be required to complete a field placement.

Certificate in Geographic Information Systems (GIS) and Remote Sensing

York University students may earn a Certificate in Geographic Information Systems and Remote Sensing (GIS) in addition to fulfilling the requirements for the Bachelor in Environmental Studies Degree. Geographic Information Systems and Remote Sensing encompasses the art, science and technology involved in collecting and managing geographically-referenced information.

Required Courses (24 credits)

- ES/ENVS 1000 6.0 Approaches to Environmental Studies
- ES/ENVS 2010 6.0 Methods in Environmental Studies I
- ES/ENVS 3520 3.0 Geographical Information Systems
- ES/ENVS 3521 3.0 Environmental Remote Sensing
- ES/ENVS 4520 3.0 GIS Applications in Environmental Studies
- ES/ENVS 4521 3.0 Remote Sensing and Image Processing

Other Requirements

- Maintain a cumulative grade point average of 6.0 (B) in the required courses.

Students who have been exempted from any of the required courses or Special 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. Elective courses: AS/SC/GEOG 2130 3.0, AS/GEOG 3140 3.0, AS/SC/GEOG 3421 3.0, AS/GEOG 4240 3.0, ES/ENVS 3011 3.0, SC/EATS 4220 3.0, SC/EATS 4230 3.0.

Further information can be obtained from the Student Programs Office, Room 352, Leonard G. Lumbers Building.

Certificate Program in Refugee and Migration Studies

York University students may earn a General Certificate in Refugee and Migration Studies in addition to fulfilling the requirements for the BES Degree. Building on York's strong interdisciplinary tradition, faculty members take an interdisciplinary approach to development and refugee issues, and demonstrate an ongoing commitment to Canada's dedication to solving international problems. Further information is available from the Associate Director, Education, Centre for Refugee Studies.

Required Courses

- AS/SOSC 1130 9.0 International Migration
OR
- AK/SOSC 2000 6.0 Introduction to Refugee and Migration Studies
- Three full (18 credits) courses of which at least two will be at the 3000 or 4000 level from the following list of pre-approved courses.
- ES/ENVS 2200 3.0 Foundations of Human Settlements and Population
- ES/ENVS 2300 3.0 Foundations of Global Development, Peace and Justice
- ES/ENVS 3310 3.0 Environment and Development
- ES/ENVS 3340 3.0 Global Environmental Politics
- ES/ENVS 4210 3.0 World Populations Issues and Problems
- ES/ENVS 4220 3.0 Urbanization in Developing Countries
- ES/ENVS 4311 3.0 Global Justice and the Environment
- ES/ENVS 4320 3.0 Gender and Development

Other relevant courses may be selected and submitted for approval.

Note: Students are required to meet any prerequisites for required courses.

Other Requirements

- Maintain a cumulative grade point average of 5.0 or higher in required courses.

Joint Degree/Diploma Programs (with Ontario Community Colleges - New)

Joint Program in Urban Sustainability with Seneca College, Centre for the Built Environment

- A five year program for York students: 3 years in the BES program plus 2 years in the Civil Engineering Technologist Diploma Program at Seneca College.
- Skills include: environmental assessment, water resources management, municipal and transportation planning, community land management, soil management, surveying, GIS.

Joint Program in Ecosystem Management at Sir Sandford Fleming College (SSFC)

- A five year program for York students: 3 years in the BES program plus 2 years in the Ecosystem Management Technologist Diploma Program at Sir Sandford Fleming College.
- Skills include: ecosystem management, fish and wildlife practices, ecosystem monitoring and assessment, applications of GIS in natural resources.

Joint Program in International Project Management with Humber College

- A four year program for York students: 3 years in the BES program plus one year in the Post-Diploma Program in International Project Management at Humber College.
- Skills include the practical and transferable management skills necessary to plan, implement, monitor and evaluate international project activities and results.

For advising and application procedures, please contact the Undergraduate Student Programs Office, Room 352, Leonard G. Lumbers Building.
