

# Environmental Studies

## Graduation Requirements

In addition to the requirements listed below, students must satisfy:

1. the University regulations (see the *Academic Regulations of the University* section of this Calendar),
2. the common regulations applying to all B.A. students (see *Academic Regulations for the Bachelor of Arts Degree*). Environmental Studies students are exempt from the Breadth requirements.

Students should consult with the Department when planning their program and selecting courses. Suggested thematic groupings of approved electives are outlined on the departmental website. Some of the Environmental Studies Approved Electives have prerequisites, which are not explicitly included in the program. Students should plan to obtain all necessary prerequisites or waivers for courses selected for this program.

## Program Requirements

### Environmental Studies

#### B.A. Honours (20.0 credits)

##### A. Credits Included in the Major CGPA (12.0 credits)

<b>1. 0.5 credit in:</b>	0.5
ISCI 1001 [0.5]	Introduction to the Environment
<b>2. 1.0 credit from:</b>	1.0
(ENST 1020/GEOG 1020 and GEOG 1010)	
ENST 1001 [1.0]	Envisioning Earth's Environments
FYSM 1100 [1.0]	Sustainable Environments
<b>3. 1.5 credits in:</b>	1.5
ENST 2000 [0.5]	Nature and Environment
ISCI 2000 [0.5]	Natural Laws
ISCI 2002 [0.5]	Human Impacts on the Environment
<b>4. 1.0 credit from:</b>	1.0
ECON 2201 [0.5]	Statistical Methods in Economics
& ECON 2202 [0.5]	and Business I and Statistical Methods in Economics and Business II
GEOG 2005 [0.5]	Geographic Inquiry
& GEOG 2006 [0.5]	and Statistical Methods in Geography
PSCI 2701 [0.5]	Introduction to Research Methods
& PSCI 2702 [0.5]	in Political Science and Quantitative Research Methods in Political Science
PSYC 2001 [0.5]	Introduction to Research Methods
& PSYC 2002 [0.5]	in Psychology and Introduction to Statistics in Psychology
SOCI 2001 [0.5]	Introduction to Qualitative
& SOCI 2002 [0.5]	Research Methods and Introduction to Quantitative Research Methods
<b>5. 0.5 credit in:</b>	0.5
ENST 3000 [0.5]	Environmental Studies Colloquium

<b>6. 0.5 credit in:</b>	0.5
PHIL 2380 [0.5]	Introduction to Environmental Ethics
<b>7. 0.5 credit from:</b>	0.5
LAWS 3800 [0.5]	Law of Environmental Quality
PHIL 3380 [0.5]	Environments, Technology and Values
RELI 3710 [0.5]	Religions and the Environment
ENST 3900 [0.5]	Intensive Field Course
<b>8. 0.5 credit from:</b>	0.5
ENSC 2001 [0.5]	Earth Resources and Natural Hazards: Environmental Impacts
ENST 3900 [0.5]	Intensive Field Course
Science Continuation courses [0.5]	
<b>9. 0.5 credit in:</b>	0.5
ENST 4000 [0.5]	Environmental Studies Seminar
<b>10. 1.0 credit in:</b>	1.0
<b>a) Thesis stream</b>	
1.0 credit from:	
ENST 4906 [1.0]	Honours Research Project
ENST 4907 [1.0]	Honours Research Essay
or	
<b>b) Course stream</b>	
1.0 credit in Approved Environmental Studies Electives at the 4000-level	
<b>11. 0.5 credit from:</b>	0.5
ENST 4001 [0.5]	Environmental Studies Practicum I
ENST 4002 [0.5]	Environmental Studies Practicum II
<b>12. 1.5 credits in Approved Environmental Studies Electives at the 3000-level or above</b>	1.5
<b>13. 2.5 credits in Approved Environmental Studies Electives</b>	2.5
<b>B. Credits Not Included in the Major CGPA (8.0 credits)</b>	
<b>14. 8.0 credits in free electives</b>	8.0
Total Credits	20.0

**Note:** It may be necessary to use some of the free elective credits to fulfill prerequisite requirements for courses in the Major.

### Environmental Studies

#### B.A. General (15.0 credits)

##### A. Credits Included in the Major CGPA (8.0 credits)

<b>1. 1.5 credits in:</b>	1.5
ISCI 1001 [0.5]	Introduction to the Environment
ISCI 2000 [0.5]	Natural Laws
ISCI 2002 [0.5]	Human Impacts on the Environment
<b>2. 1.0 credit from:</b>	1.0
(ENST 1020/GEOG 1020 and GEOG 1010)	
ENST 1001 [1.0]	Envisioning Earth's Environments
FYSM 1100 [1.0]	Sustainable Environments
<b>3. 1.0 credit in:</b>	1.0
ENST 2000 [0.5]	Nature and Environment
ENST 3000 [0.5]	Environmental Studies Colloquium
<b>4. 1.0 credit from:</b>	1.0

ECON 2201 [0.5]	Statistical Methods in Economics and Business I	
& ECON 2202 [0.5]	and Statistical Methods in Economics and Business II	
GEOG 2005 [0.5]	Geographic Inquiry	
& GEOG 2006 [0.5]	and Statistical Methods in Geography	
PSCI 2701 [0.5]	Introduction to Research Methods in Political Science	
& PSCI 2702 [0.5]	and Quantitative Research Methods in Political Science	
PSYC 2001 [0.5]	Introduction to Research Methods in Psychology	
& PSYC 2002 [0.5]	and Introduction to Statistics in Psychology	
SOCI 2001 [0.5]	Introduction to Qualitative Research Methods	
& SOCI 2002 [0.5]	and Introduction to Quantitative Research Methods	
<b>5. 0.5 credit in:</b>		<b>0.5</b>
PHIL 2380 [0.5]	Introduction to Environmental Ethics	
<b>6. 0.5 credit from:</b>		<b>0.5</b>
LAWS 3800 [0.5]	Law of Environmental Quality	
PHIL 3380 [0.5]	Environments, Technology and Values	
RELI 3710 [0.5]	Religions and the Environment	
ENST 3900 [0.5]	Intensive Field Course	
<b>7. 1.5 credits in</b>	Approved Environmental Studies Electives	<b>1.5</b>
<b>8. 1.0 credit in</b>	Approved Environmental Studies Electives at the 3000-level or above	<b>1.0</b>
<b>B. Credits Not Included in the Major CGPA (7.0 credits)</b>		
<b>9. 7.0 credits in</b>	free electives.	<b>7.0</b>
Total Credits		<b>15.0</b>

## Approved Environmental Studies Electives

### Architecture

ARCU 3902 [0.5]	Urban Studies (Section A)
ARCC 3004 [0.5]	Workshop: Energy and Form
ARCC 4103 [0.5]	Energy and Form
ARCH 4105 [0.5]	Theories of Landscape Design

### Biology

BIOL 1902 [0.5]	Natural History
BIOL 2600 [0.5]	Introduction to Ecology
BIOL 2903 [0.5]	Natural History of Ontario
BIOL 3601 [0.5]	Ecosystems and Environmental Change
BIOL 3602 [0.5]	Conservation Biology

### Earth Sciences

ERTH 1006 [0.5]	Exploring Planet Earth
ERTH 2401 [0.5]	Dinosaurs
ERTH 2402 [0.5]	Climate Change: An Earth Sciences Perspective
ERTH 2403 [0.5]	Introduction to Oceanography
ERTH 4303 [0.5]	Resources of the Earth

## Economics

ECON 3803 [0.5]	The Economics of Natural Resources
ECON 3804 [0.5]	Environmental Economics

## Environmental Science

ENSC 2001 [0.5]	Earth Resources and Natural Hazards: Environmental Impacts
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## Environmental Studies

ENST 3900 [0.5]	Intensive Field Course
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## European and Eurasian Studies

EURR 4005 [0.5]	Environmental Problems and Politics in East/Central Europe and Eurasia
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## Geomatics

GEOM 1004 [0.5]	Maps, Satellites and the Geospatial Revolution
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## Geography

GEOG 2020 [0.5]	Physical Environments of Canada
GEOG 2200 [0.5]	Global Connections
GEOG 2300 [0.5]	Space, Place and Identity
GEOG 2600 [0.5]	Geography Behind the Headlines
GEOG 3021 [0.5]	Culture, Place and Time
GEOG 3022 [0.5]	Environmental and Natural Resources
GEOG 3023 [0.5]	Cities in a Global World
GEOG 3024 [0.5]	Understanding Globalization
GEOG 3105 [0.5]	Climate and Atmospheric Change
GEOG 3108 [0.5]	Soil Properties
GEOG 3206 [0.5]	Health, Environment, and Society
GEOG 3209 [0.5]	Sustainability and Environment in the South
GEOG 3700 [0.5]	Population Geography
GEOG 4004 [0.5]	Environmental Impact Assessment
GEOG 4022 [0.5]	Seminar in People, Resources and Environmental Change
GEOG 4023 [0.5]	Seminar in Sustainable Urban Environments
GEOG 4050 [0.5]	Environmental and Geographic Education
GEOG 4303 [0.5]	Urban Planning

## History

HIST 2310 [0.5]	Canadian Environmental History to 1920
HIST 2311 [0.5]	Canadian Environmental History from 1890
HIST 3209 [0.5]	Canadian Urban History
HIST 3310 [0.5]	Animals in Human History

## Law

LAWS 3005 [0.5]	Law and Regulation
LAWS 3800 [0.5]	Law of Environmental Quality
LAWS 4800 [0.5]	Environment and Social Justice

## Philosophy

PHIL 3320 [0.5]	Contemporary Ethical Theory
PHIL 3330 [0.5]	Topics in History of Social and Political Philosophy
PHIL 3340 [0.5]	Topics in Contemporary Social and Political Philosophy
PHIL 3350 [0.5]	Philosophy, Ethics, and Public Affairs
PHIL 3380 [0.5]	Environments, Technology and Values
PHIL 4320 [0.5]	Seminar in Ethics or Moral Philosophy
PHIL 4330 [0.5]	Seminar in Social or Political Philosophy

## Political Science

PSCI 2002 [0.5]	Canadian Political Environment
PSCI 2003 [0.5]	Canadian Political Institutions
PSCI 2601 [0.5]	International Relations: Global Politics
PSCI 2602 [0.5]	International Relations: Global Political Economy
PSCI 3801 [0.5]	Environmental Politics

## Religion

RELI 3710 [0.5]	Religions and the Environment
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## Sociology and Anthropology

ANTH 2035/ SOC 2035 [0.5]	Technology, Culture and Society
ANTH 3033/ SOC 3033 [0.5]	Science, Technology and the Environment
SOC 3038 [0.5]	Studies in Urban Sociology
ANTH 3355 [0.5]	Studies in Cultural Adaptations and the Environment
ANTH 3570/ SOC 3570 [0.5]	Studies in Art, Culture and Society
SOC 3805 [0.5]	Studies in Population
ANTH 4036/ SOC 4036 [0.5]	Science and Technology Studies: Selected Topics
SOC 4038 [0.5]	Advanced Studies in Urban Cultures

## Technology, Society, Environment

TSES 2305 [1.0]	Ancient Science and Technology
TSES 3001 [0.5]	Technology-Society Interactions
TSES 3002 [0.5]	Energy and Sustainability
TSES 4001 [0.5]	Technology and Society: Risk
TSES 4002 [0.5]	Technology and Society: Forecasting
TSES 4003 [0.5]	Technology and Society: Innovation
TSES 4005 [0.5]	Information Technology and Society
TSES 4006 [0.5]	Technology and Society: Work
TSES 4007 [0.5]	Product Life Cycle Analysis
TSES 4008 [0.5]	Environmentally Harmonious Lifestyles

## Environmental Studies (ENST) Courses

### Geography and Env.St.

### Faculty of Arts & Social Sciences

#### ENST 1001 [1.0 credit]

##### Envisioning Earth's Environments

Sustainability requires broadened perspectives on the Earth's natural systems. Geographic and geomatics perspectives help us examine physical and biological environments as the basis of human societies. Includes: landscape interpretation, resources, hazards, inferring meaning from data, and predicting potential impacts of/on human actions.

Lecture two hours and workshops/tutorials two hours weekly.

#### ENST 1020 [0.5 credit]

##### People, Places and Environments

Examination of the relationships between people, society and the natural environment at scales ranging from the local community to the global one. Population change, cultural patterns, and the major historical, economic and political forces that shape human activity and experiences from place to place.

Also listed as GEOG 1020.

Precludes additional credit for GEOG 1001/ENST 1001 [if taken before 2006/07].

Lectures two hours a week and laboratory or tutorial one hour a week.

#### ENST 2000 [0.5 credit]

##### Nature and Environment

Conceptual and practical approaches to understanding nature and the environment, involving descriptive, analytic, investigative and experiential methods. Through reading, participation, research and writing, students should demonstrate an ability to integrate various approaches to environmental awareness and analysis.

Prerequisite(s): second-year standing in the Environmental Studies program or permission of Environmental Studies.

Lectures, seminars and field work three hours a week.

#### ENST 3000 [0.5 credit]

##### Environmental Studies Colloquium

Interactions among complex natural systems, social values and attitudes and economic, political and legal concerns are explored through invited speakers from various disciplines and agencies addressing specific environmental issues.

Prerequisite(s): third-year standing in Environmental Studies or permission of Environmental Studies.

Lecture and discussion three hours a week.

**ENST 3900 [0.5 credit]****Intensive Field Course**

Training in fields of research or practice related to careers in Environmental Studies, linking human values and environment. Training could include engaging in action learning in environmental education, environmental auditing, environmental assessment, watershed protection or living resource inventories. Topics may change from year to year.

Precludes additional credit for ENST 2900 [no longer offered] and GEOG 3000.

Prerequisite(s): third-year standing or higher in Environmental Studies, and permission of the Environmental Studies Coordinator.

**ENST 4000 [0.5 credit]****Environmental Studies Seminar**

How societal institutions respond to environmental concerns, how various stakeholders understand the environment and how environmental priorities may be implemented in social, political and economic decision-making. Interdisciplinary case studies are used.

Prerequisite(s): registration is restricted to students eligible for fourth-year standing in the B.A. (Environmental Studies) Honours program.

Seminar three hours per week.

**ENST 4001 [0.5 credit]****Environmental Studies Practicum I**

External agency setting provides the basis for translating academic training into practical involvement with environmental issues. Observation and involvement in issues and research methods used by professional environmental practitioners.

Prerequisite(s): registration is restricted to students eligible for fourth-year standing in the B.A. (Environmental Studies) Honours program, and permission of the Environmental Studies Co-ordinator.

**ENST 4002 [0.5 credit]****Environmental Studies Practicum II**

External agency setting provides the basis for translating academic training into practical involvement with environmental issues. Observation and involvement in issues and research methods used by environmental practitioners.

Prerequisite(s): restricted to students in the fourth year of the Environmental Studies Honours program, and permission of the Environmental Studies Co-ordinator.

**ENST 4005 [0.5 credit]****Directed Studies in Environmental Studies**

Students pursue their interest in a selected theme in environmental studies on a tutorial basis with a faculty member.

Also listed as GEOG 4005.

Prerequisite(s): permission of the Department.

Hours to be arranged.

**ENST 4400 [0.5 credit]****Field Studies**

Field observation and methodology in a selected region, special topic or contemporary problem; on an individual or group basis.

Also listed as GEOG 4000.

Prerequisite(s): permission of the Department.

Hours to be arranged.

**ENST 4906 [1.0 credit]****Honours Research Project**

An independent investigation into a select aspect of environmental studies, supervised by a faculty member.

Possible outcomes might include: workshops, audio-visual productions, lay publications, and field projects accompanied by an essay demonstrating the student's capacity to critically reflect on the research project.

Precludes additional credit for GEOG 4904/GEOM 4904 (no longer offered), GEOG 4909/GEOM 4909, GEOG 4906, ENST 4907.

Prerequisite(s): fourth-year Honours standing in Environmental Studies, an Environmental Studies CGPA of 9.00 or higher, an approved research topic, and permission of the Department.

**ENST 4907 [1.0 credit]****Honours Research Essay**

Interdisciplinary research essay on an environmental issue, carried out in consultation with a faculty supervisor. The student must consult with the undergraduate student advisor in selecting a project and a supervisor.

Precludes additional credit for ENST 4906, GEOG 4909/GEOM 4909, GEOG 4904/GEOM 4904 (no longer offered), and GEOG 4906.

Prerequisite(s): fourth-year Honours standing in Environmental Studies, an Environmental Studies CGPA of 9.00 or higher, an approved research topic, and permission of the Department.

**Summer session:** some of the courses listed in this Calendar are offered during the summer. Hours and scheduling for summer session courses will differ significantly from those reported in the fall/winter Calendar. To determine the scheduling and hours for summer session classes, consult the class schedule at [central.carleton.ca](http://central.carleton.ca)

Not all courses listed are offered in a given year. For an up-to-date statement of course offerings for the current session and to determine the term of offering, consult the class schedule at [central.carleton.ca](http://central.carleton.ca)