

Environmental studies

Convener: Peter Christoff (Geography and Environmental Studies)

Environmental studies at the University of Melbourne is amongst the top-ranking programs of its kind in Australia and New Zealand. Talented academic staff enjoy international recognition for their scholarship and original research, often conducted in collaboration with international colleagues and directed to project-based outcomes. This versatile program enables students to gain practical and relevant experience in laboratory classes, group project work and field trips, including fieldwork research in China.

These activities and the excellent facilities and resources provided by the Department of Geography and Environmental Studies ensure that students will obtain maximal benefits from their study. Students have the option of undertaking the Specialist Program and tailoring their course to specific environmental interests or vocational pursuits. The major in environmental studies can be used as a pathway to postgraduate study in landscape architecture or the articulated structure of higher degree study options in Arts at the University of Melbourne. Graduates of environmental studies at the University of Melbourne gain the experience and qualifications required for professional careers with government agencies, regulatory bodies and in private industry with environmental consulting firms.

Environmental studies combines a knowledge of natural environments with an understanding of how human societies work, in order to address a range of issues and problems concerned with environmental management. It addresses the biogeography and sustainability of environments, particularly as these are impacted upon by forces of development. Ecological and hydrological issues are addressed in the context of risk assessment and management approaches within regulatory frameworks.

For information on the major in geography, see *Geography* (p.179).

Faculty of Arts requirements

Within the environmental studies program, only those subjects offered by the departments within the Faculty of Arts are Arts-approved subjects. See *Arts-approved subject requirement* (p.37) for more information.

Prerequisites

The environmental studies program commences in first year. There are no prerequisites for first year environmental studies subjects.

However, students who have completed 50 points of first year Arts subjects may apply to the environmental studies coordinator for second year entry.

Requirements for a major

A major in environmental studies usually consists of nine 12.5 point subjects, totalling 112.5 points. It comprises:

- two first year subjects from the list below (25 points) and;
- seven second/third year subjects in environmental studies (totalling 87.5 points). These must include:
 - the program's two compulsory units:
 - 121-021 Environmental Politics and Management (p.181)
 - 121-028 Sustainable Development (p.182) and;
 - at least two, and up to four, core subjects listed below and;
 - no more than two optional subjects listed below.

Environmental studies subjects

First year

Students must complete **two** of the following first year subjects toward their environmental studies major:

First year subjects	Sem.
Geography	
121-012 Environmental Change (p.180)	1
121-013 Global Ecology and Biogeography (p.180)	2
Biology	
600-141 Biology of Cells and Organisms (p.791)	1
600-142 Genetics & The Evolution of Life (p.792)	2
Earth Sciences	
625-101 Earth Sciences - The Global Environment (p.811)	1

Second/third year

Students must complete the following **two compulsory subjects**, and **between two and four core subjects**, towards their environmental studies major.

Students complete **no more than two optional subjects** towards their environmental studies major, and may choose **one** optional subject other than those listed below. The subject may be offered by the Department of Geography and Environmental Studies or another department. It must be relevant to the student's program of study within the environmental studies major and approved by the environmental studies convener.

Compulsory subjects	Sem.
121-021 Environmental Politics and Management (p.181)	1
121-028 Sustainable Development (p.182)	2
Core subjects	Points
Geography	
121-025 Biodiversity (p.182)	12.5
121-029 Environmental Hydrology B (p.183)	12.5
121-033 Environmental Hydrology A (p.183)	25
121-017 Society and Environments (p.181)	12.5
121-022 Urban Environments (p.181)	12.5
121-024 GIS and Remote Sensing in Geography (p.182)	12.5
121-030 Ecological Biogeography (p.183)	25
121-031 Ecological Biogeography (Theory) (p.183)	12.5
121-039 Environmental Management Systems (p.184)	12.5
121-071 Coastal Geomorphology (p.184)	12.5
Optional subjects	Points
Geography	
121-034 Environmental Field Class (p.184)	25
121-032 Australian Quaternary Environments (p.184)	25
121-036 China Field Class (p.184)	25
121-037 Fieldwork Research Project (p.184)	12.5
Agricultural science	
212-201 Soil Resources (p.627)	12
Philosophy	
161-014 Environmental Philosophy (p.289)	12.5
Forest Science	
211-441 Advanced Agroforestry (p.632)	12.5
211-444 Parks and Recreation (p.635)	12.5
Economics	
316-324 Environmental Economics (p.408)	12.5

Recommended subjects

The following subjects are recommended for students intending their major in environmental studies to encompass a general introduction to the field as an accompaniment to another major within the Faculty of Arts.

Recommended introductory subjects	Sem.
121-021 Environmental Politics and Management (p.181)	1
121-034 Environmental Field Class (p.184)	1
121-039 Environmental Management Systems (p.184)	1
121-028 Sustainable Development (p.182)	2
121-031 Ecological Biogeography (Theory) (p.183)	2

and two environmental studies optional subjects

The following subjects are recommended for students who seek vocational training in environmental studies. The subjects could be taken as part of a major in environmental studies taken alongside a major in geography specialising in physical geography.

Recommended subjects for a double major with Geography	Sem.
Geography	
121-021 Environmental Politics and Management (p.181)	1
121-034 Environmental Field Class (p.184)	1
121-028 Sustainable Development (p.182)	2
121-022 Urban Environments (p.181)	2

and two additional subjects.

Alternatively, students planning a career in environmental studies should consider enrolling in the *Specialist Program in Environmental studies* (p.163).

Honours entry

The prerequisites for entry to Fourth Year Honours in Environmental Studies are:

- completion of all the requirements for the BA and;
- completion of a major in environmental studies and;
- an average grade of H2B or higher over the second/third year subjects within the major.

Entry to honours must be approved by the environmental studies convener and the Faculty of Arts honours course adviser.

Honours requirements

Pure honours only

Environmental studies offers pure honours study only. Students must complete:

- 121-519 Environmental Studies Thesis (*p.160*) or 121-520 Environmental Studies Thesis (MYE) (*p.160*) (50 points) and;
- 121-008 Environmental Studies Coursework (*p.160*) or 121-009 Environmental Honours Coursework (MYE) (*p.161*) (50 points);

Part-time honours is only permitted in exceptional circumstances, subject to approval by the head of department.

Further study

Geography and Environmental Studies offers a range of postgraduate programs in environmental studies. These include:

- Graduate Certificate in Arts (Environmental Studies)
- Graduate Diploma in Arts (Environmental Studies)
- Postgraduate Diploma in Arts (Environmental Studies)
- Master of Environmental Studies by Coursework
- MA (Environmental Studies) by research thesis only

The department also offers PhD supervision to students undertaking research in a wide range of areas in environmental studies.

In addition, a major in environmental studies offers a pathway for students who wish to gain privileged entry into the Master of Landscape Architecture: see *Faculty of Architecture, Building and Planning (p.7)*.

Career opportunities

Graduates with a major in environmental studies can expect to find creative and useful employment in a wide variety of situations. Some of the most common opportunities are:

- as scientific, planning or education officers in government departments and authorities (Conservation and Natural Resources, Housing, Transport, Melbourne Water, and their interstate counterparts);
- in private environmental consultancy, planning or exploration firms;
- as teachers and lecturers in educational institutions;
- as planning and project officers for nature conservation bodies such as the Australian Conservation Foundation, the National Trust or Greenpeace;
- as environmental officers for major development companies such as BHP, oil companies or any number of smaller organisations;
- as environmental consultants to overseas nations either through aid programs or direct employment.

For more information

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Fourth year subjects

121-519 Environmental Studies Thesis

Credit points: 50

HECS-band: 1

Coordinator: Dr Barbara Downes

Prerequisites: Admission to the Postgraduate Diploma or Fourth Year Honours in Environmental Studies.

Contact: Regular contact with the supervisor (*Year long*).

Description: An original, supervised research project on a topic devised in consultation with members of the Department and involving regular meetings with the supervisor/s.

Assessment: A thesis of 15 000 words.

121-520 Environmental Studies Thesis (MYE)

Credit points: 50

HECS-band: 1

Coordinator: Dr Barbara Downes

Prerequisites: Mid-year admission to the Postgraduate Diploma or Fourth Year Honours in Environmental Studies.

Contact: Regular contact with the supervisor (*Semester 1, repeat 2*).

Description: An original, supervised research project on a topic devised in consultation with members of the Department and involving regular meetings with the supervisor(s).

Assessment: A thesis of 15 000 words.

121-003 Environmental Impact Assessment (Theory)

Credit points: 12.5

HECS-band: 1

Coordinator: Dr Ian Thomas

Prerequisites: Admission to the Postgraduate Diploma or Fourth Year Honours in Environmental Studies.

Contact: Two hours per week plus field work to be advised (*Semester 1*).

Description: This subject prepares students for environmental management roles by providing them with the principles of how human activities act upon natural and cultural systems; how physical and ecological processes fit into political and other regulatory frameworks; and how human impacts on the environment might be mitigated. At the completion of the subject students should understand the theory of Environmental Impact Assessment. Key areas of interest include the characteristics of ecosystems which are most sensitive to change; rates of change in ecosystems; global practice in the preparation of EIS documentation; the regulatory framework that exists between formulation of EIS and implementation of recommendations; case studies of particular environmental problems from a number of ecosystems.

Assessment: Individual reports on group assignment totalling 3000 words and a 2000 word essay.

121-004 Social Impact Assessment (Theory)

Credit points: 12.5

HECS-band: 1

Coordinator: Peter Christoff

Prerequisites: Admission to the Postgraduate Diploma or Fourth Year Honours in Environmental Studies.

Contact: Two hours of lectures/seminars per week plus field work to be advised plus seven hours research workshops for one semester (*Semester 2*).

Description: This subject focuses on the nature and range of the social impacts of development, including externalities, risk, benefit; procedures for assessing social impacts of development; the role of various political formations (the state, non-government organisations and grass roots action) in regulating the social impacts of development. The subject also deals with community consultation and dispute resolution, particularly in relation to the capacities of different sectors to deal with impacts and the relationship between economic restructuring and social impacts of development. The subject should provide students with the conceptual and technical skills to understand the relationship between society and development; assess the social impact of development; and identify the techniques needed to undertake social impact assessments.

Assessment: Individual and group reports equivalent to 5000 words.

121-008 Environmental Studies Coursework

Note: Research modules are offered in intensive mode over January and February. Students should consult the Department for details by November in the year prior to their enrolment.

Credit points: 50

HECS-band: 1

Coordinator: Dr Barbara Downes

Prerequisites: Admission to the Postgraduate Diploma or Fourth Year Honours in Environmental Studies.

Contact: Regular contact with the supervisor (*Year long*).

Description: The subject comprises three components: a course of lectures and seminars on the principles and practice of environmental or social impact assessment; preparation of an extended review of the literature related to the subject matter of the student's individual thesis, covering both specific research in this area, and also the broader context within which the survey is situated; research modules covering two methodology areas chosen from the following list: Geographical Information Systems; SPSS; Writing Skills for Thesis Students; Library Skills; Questionnaire Design; Survey Analysis; Managing Your Thesis; Ethics in Research; Researching Culture; Using Computers in Research; Research Design; Evaluation Research; Observation Methods; Introduction to Statistics; Painting as an Entry to History; Researching Vulnerable Groups; Storytelling and Narrative Analysis; History and the New Critical Theory; Geocomputing; The Sociological Intervention; Planning a Fourth Year Research Project; Field Methods; Research for Professional Practice.

Assessment: Literature review of 6000 words. Practical exercises on research methods for two elective modules totalling 5000 words. An essay and short seminar papers totalling 5000 words. Two oral presentations (totaling 40 minutes) on research proposal and research results. Attendance at Departmental and other prescribed seminars is compulsory, as is completion of two methodology modules.

121-009 Environmental Honours Coursework (MYE)

Note: Research modules are offered in intensive mode over January and February. Students should consult the Department for details by November in the year prior to enrolment.

Credit points: 50

HECS-band: 1

Coordinator: Dr Barbara Downes

Prerequisites: Admission to the Postgraduate Diploma or Fourth Year Honours in Environmental Studies.

Contact: Regular contact with supervisor (*Semester 1, repeat 2*).

Description: This subject comprises three components: a course of lectures and seminars on the principles and practice of environmental or social impact assessment; preparation of an extended review of the literature related to the subject matter of the student's individual thesis, covering both specific research in this area, and also the broader context within which the survey is situated; research modules covering two methodology areas chosen from the following list: Geographical Information Systems; SPSS; Writing Skills for Thesis Students; Library Skills; Questionnaire Design; Survey Analysis; Managing Your Thesis; Ethics in Research; Researching Culture; Using Computers in Research; Research Design; Evaluation Research; Observation Methods; Introduction to Statistics; Painting as an Entry to History; Researching Vulnerable Groups; Storytelling and Narrative Analysis; History and the New Critical Theory; Geocomputing; The Sociological Intervention; Planning a Fourth Year Research Project; Field Methods; Research for Professional Practice.

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