



THE UNIVERSITY OF WINNIPEG

For more information visit www.uwinnipeg.ca or contact a student recruitment officer at welcome@uwinnipeg.ca or 204.786.9844. In any case where The University of Winnipeg Course Calendar and this fact sheet differ, the current Calendar takes precedence.

Environmental Studies BSc

The Department of Environmental Studies and Sciences (DESS) provides interdisciplinary programs that have a holistic view of the environment. Following the general principles of sustainability, these courses provide an integrated approach to understanding the environment, acknowledging human impact, and providing a framework to develop solutions to environmental problems.

Forest Ecology: Students who choose this area of concentration will engage in an intense study of forest ecology, biology, and Sustainable Forest Management and the role our forests play within the overall management of other natural resources - an internationally recognized approach to how we care for our forests.

Forest Policy and Management: Like Forest Ecology, this area of study provides students with a basic understanding of forest ecology and biology, which then allows students to explore administrative and cultural practices which are important to developing and maintaining forest policy and forest management. This program considers the role of stakeholders including those groups and organizations interested in forest conservation and forest economic development.

Environmental Chemistry: In addition to the core set of Environmental Studies courses, students in the Chemistry area study the fundamental chemical nature of the environment with a focus on organic and inorganic chemistry and biochemistry.

Global Environmental Systems: Students who focus on this area will not only study physical geography, but also regional geography, systematic human geography, geographical techniques, and human impact on the environment.

This program leads to a **Bachelor of Science degree (4-year or Honours).**

SAMPLE CAREERS

Graduates have found successful employment in a wide range of fields. These include ecology, parks management, natural resource management, Geographic Information Systems land evaluation, trace contaminant and hazardous waste management, and global environment issues. The primary employers are private consultants, multinationals, government departments, and crown corporations. For example, The United Nations, The Atomic Energy Corporation of Canada, The Canadian International Development Agency, and various municipal and government departments and crown corporations all have our graduates on staff.

There continues to be growth within the environmental job market. According to Environmental Careers Organization (ECO) Canada, over 2 million workers in Canada spend some portion of their time on environmental activities, representing 12% of the total Canadian labour force. For more information, visit ECO Canada's website: <http://www.eco.ca>

SAMPLE COURSES

Human-Environmental Interactions is a first-year course that illustrates the complexity and diversity of environmental issues. The central theme is “understanding natural processes in the environment,” as a means of measuring human impact.

Environmental Chemistry is a third-year Chemistry course that provides students with an understanding of the behaviour of chemicals in the environment and includes a discussion of environmental contaminants.

Environmental Impact Assessment is a compulsory course for all science majors. Students explore the methodology of environmental impact assessment (EIA). Each student learns how to complete her or his own EIA, working both internally and externally, often alongside individuals with professional expertise in the student’s chosen topic.

MORE SAMPLE COURSES

Basic Principles of Chemical Reactivity

Business and the Environment

Environment and Health

Environmental Ethics

Environmental Sustainability

Forest Ecology

Forest Policy and Management

Forest Wildlife Management

Forests and the Environment

Principles of Geographic Information Systems

Soils and Vegetation

Statistical Techniques in Environmental Analysis

STUDENT LIFE

- Students can join the Environmental Studies and Geography Student Association (GESA) and other student-based environmental organizations.
- Students have put their learning into practice by getting involved with SUNSET (Sustainable University Now, Sustainable Earth Tomorrow), helping to lead The University of Winnipeg’s campus sustainability project.

DID YOU KNOW?

- Canada’s first undergraduate environmental studies program was established at The University of Winnipeg in 1969. DESS now trains and educates over 100 students per year, giving them one of the most innovative and marketable science degrees currently available.
- The interdisciplinary nature of the programs offered by DESS allow you to customize your university education to fit your educational and career goals by taking courses from a number of different disciplines or areas.
- Students have many opportunities to work alongside professors as research assistants, to do fieldwork, and to take field courses to complete their training within the stream of their choice.

SAMPLE FIRST YEAR

NOTE: *This sample first year is representative of the courses you may take. For many of our programs, you may choose another set of courses and still be well on your way to a degree. Also, for most programs you do not have to take 30 credit hours (five full courses) in your first year.*

ENV-1600(3) Human-Environmental Interactions

BIOL-1115(3) Cells and Cellular Processes

BIOL-1116(3) Evolution, Ecology, and Biodiversity

CHEM-1111(3) Introduction to the Chemical Properties of Matter

CHEM-1112(3) Basic Principles of Chemical Reactivity

ECON-1104(3) Introduction to Economic Theory GEOG-1201(3) Introductory Atmospheric Science GEOG-

1202(3) Introductory Earth Science

RHET-1103(3) Academic Writing: Science or any other section of Academic Writing (if required)

3 credit hours Humanities

NOTE: PHIL-2233(3) Environmental Ethics counts both as a Humanities course and as a core course in Environmental Studies.

REQUIRED HIGH SCHOOL COURSES

In addition to meeting The University of Winnipeg's general admission requirements, you must have **Chemistry 40S** and either **Pre-Calculus Mathematics 40S** or **Applied Mathematics 40S**. **Pre-Calculus Mathematics 40S** is required for the Chemistry stream.

HOW TO APPLY – Domestic Student

Apply online at uwinnipeg.ca or pick up an Application for Admission from your high school counsellor's office or the Admissions Office at The University of Winnipeg. To meet Scholarship deadline submit your application and \$80 application fee by **March 1st**

HOW TO APPLY – International Student

Apply online at uwinnipeg.ca/index/intl-apply and submit all official documents by mail. To meet Scholarship deadline submit application, fee, and documents by **March 1st**. International application fee is \$100, which includes a one-time courier fee.

CONTACT US

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