

Environmental Science (BSc)

Life Science Stream

Admission Requirements

Prerequisite Requirements for BSc:

- ENG4U, SBI4U, SCH4U, MHF4U, MCV4U
- Recommended: SPH4U
- Expected minimum admission average: high 70s – mid 80s

Program Overview

York's Environmental Science program offers a multidisciplinary four-year Specialized Honours degree organized around the major interacting systems of the atmosphere, water, living organisms, landforms, and the effects of human activities on these systems.

Studies in the Life Sciences stream **integrate physical geography with ecology and population biology**, and builds knowledge on the biological dynamics of plant and animal communities and their relationships with landforms, soils, and movement of water and nutrients in the landscape.

As part of your degree in Environmental Science at York, you may also complete a Certificate in Geographic Information Systems (GIS) and Remote Sensing. Geographic Information Systems (GIS) analyze and display environmental data in interactive maps, while remote sensing uses data gathered by instruments mounted on orbiting satellites or aircraft to measure and monitor environmental change. Both GIS and remote sensing are powerful tools for environmental analysis and management, and completion of the Certificate will significantly augment your Environmental Science studies at York and your ultimate career prospects.

First Year Life Science Stream Major Courses:

- Biology
- Physical Geography
- Chemistry or Earth & Atmospheric Science
- Calculus
- Computer Use
- General Education Course

Second Year Life Science Stream Major Courses:

- Plant Biology
- Animals
- Ecology
- Statistics
- The Hydrosphere
- Vegetation and Soils
- Geomorphology

Upper Year Life Science Stream Course Options:

- Water Quality and Stream Ecosystems
- Applied Plant Ecology
- Ecological Climatology
- Remote Sensing of the Earth's Surface
- Climate and Climate Change
- Desert Ecosystems
- Physical Hydrology and Water Resource
- Dynamics of Snow and Ice
- Fluvial Geomorphology
- Pollutants, Invaders and Global Change
- Terrestrial Ecosystems
- Rivers: Environment and Process
- Hydrometeorology

Experiential Education

The Faculty of Science provides a rich diversity of opportunities for undergraduate students to engage in Experiential Education. The Co-op Program provides students in this program with the opportunity to integrate their classroom learning with hands-on, paid, work experiences related to their field of study. Co-op students will begin their first work term after their second year of classroom study and can take part in three, full-time, four-month work terms that alternate with periods of academic study.

Here are just a few of the companies you could have the opportunity to work for:

- Sanofi Pasteur
- Health Gene Corporation
- Parks Canada
- City of Toronto
- Grande Prairie Regional College

Visit yorku.ca/science/students/experiential-education/ for more information.



Career Pathways for Environmental Science

Your studies in Environmental Science at York will help prepare you for leadership roles in environmental fields of critical and increasing global demand. It will also prepare you for a very diverse range of career options.

- Environmental Consultant
- Environmental Pollution Assessment and Control
- Natural Resource Conservation
- Air Quality Specialist
- Education – elementary, high school, college, university
- Postgraduate Studies/Academic Career