

Bachelor of Indigenous Environmental Science

Indigenous Environmental Science and Practice



ABOUT THE PROGRAM

By braiding together Indigenous and non-Indigenous practices, students in the Bachelor of Indigenous Environmental Science and Practice will learn to see the world through multiple perspectives. Students will develop the foundation in the theoretical and applied aspects of environmental science, technology, management and land-use and policy development practices that are grounded in Indigenous ways of knowing and being.

Students in this program will have a broad range of interests and skills that can be applied in many workplaces. Students will work in consulting, private industry, government and non-profit organizations. With such a broad scope of career possibilities, Indigenous Environmental Science and Practice co-op students will build transferrable skills in co-op work environments contributing to their work readiness and career prospects upon graduation.

WHY CO-OP?

As a co-op student, you will gain relevant work experience, build professional networks, and develop essential interpersonal skills needed to succeed in the workplace, all while getting paid and earning your university degree. Guelph's co-op program is unique due to the exceptional level of support provided, including an online preparatory course, a personal connection with Co-op Coordinators to assist you during the employment process, and access to senior student mentors.

COURSE SEQUENCING

In the Indigenous Environmental Science and Practice Co-op program, you will participate in four co-op work terms in addition to eight academic semesters throughout your five years at the University of Guelph. This sequencing is viewable below.

YEAR	FALL	WINTER	SUMMER
ONE	Academic	Academic	Off
TWO	Academic	Academic	Work
THREE	Academic	Academic	Work
FOUR	Work	Work	Off
FIVE	Academic	Academic	



SAMPLE JOBS

There is a diverse selection of jobs made available to Indigenous Environmental Science and Practice Co-op students, in government, academia, and the private sector within various industries. You may conduct research, perform environmental assessments, participate in literature searches, or may assist in data collection and analysis. Students may work in an office environment and/or in a field setting. Below are some examples of positions for Indigenous Environmental Science and Practice Co-op students:

Junior Policy Analyst

The ongoing decline of caribou populations across the country prompted the creation of a Federal Action Plan for boreal caribou recovery in 2017. Provinces, territories, Indigenous peoples and others are working together to find solutions to advance caribou recovery and foster sustainable development. An analyst is needed to assist with policy brief development, stakeholder analysis and the development of briefing material and correspondence.

Environmental Consultant Co-op

The successful candidate will provide support on a diverse set of projects related to energy planning, capital planning, water and wastewater infrastructure design, life cycle cost analysis, GIS or environmental assessment. Duties will include fieldwork, such as sample collection and construction site surveying, as well as office work such as proposal and report writing, data management and analysis, and providing energy modelling support for Indigenous Community Energy Plans.

Additional Sample Job Titles: Conservation Officer, Assistant Evaluator, Environmental Quality Guidelines Assistant, Junior Program Analyst, Data Technician

SAMPLE EMPLOYERS*

- Environment and Climate Change Canada
- Shared Value Solutions
- Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA)
- Natural Resources Canada

*Sample co-op employer list only. Employers will vary depending on recruitment needs. Students are encouraged to be actively engaged during a job search by applying to various job opportunities through the Experience Guelph job posting system. In addition, students are supported in establishing and maintaining their own personal contacts.

SALARY INFORMATION

Students receive compensation from their employer for co-op work terms. The rate of pay will vary depending on a number of factors including the industry, the student's program of study, and work term level. For your reference, a Co-operative Education Salary Guide is available on our website, which provides hourly rates (averages and ranges) for each degree program.

ABILITIES AND KNOWLEDGE ACQUIRED

- Apply a critical and decolonial lens to the existing approach to environmental stewardship in Canada through the exploration of the historical and ongoing legacy of colonization, land dispossession, and intergenerational trauma.
- Build awareness of Indigenous cultural frameworks of environmental stewardship including the role of traditional knowledge keepers, right relations, multi-generational environmental stewardship, and inclusion of non-human beings.
- Demonstrate appropriate technical and analytical expertise and skills (environmental risk assessment, GIS, remote sensing) for environmental management across different knowledge systems.
- Communicate ideas, arguments and analyses to Indigenous and non-Indigenous audiences accurately and effectively, recognizing personal values, strengths and limitations, and respecting diverse perspectives.
- Develop and sustain positive relationships by respectful engagement with Indigenous and non-Indigenous communities to address environmental challenges utilizing both Indigenous and western scientific knowledge systems.