Camosun College

Academic Calendar 2024-25

Environmental Technology (Diploma)

Visit Program Webpage

Total Credits:	60+
Credential:	Diploma in Environmental Technology
Program Code:	ENVR.DIP
CIP:	03.0104

Overview

Students in the Environmental Technology program develop the foundational knowledge, skills and personal attributes necessary to work as Environmental Technologists. Through a combination of field, lab and lecture-based learning, students learn to collect, analyse, interpret and communicate environmental data, and to formulate solutions to environmental issues. The program emphasizes applied and collaborative learning, technical communications and critical thinking. Students will gain a broad range of applied field and laboratory skills highly sought after in the field and foundational knowledge of environmental science and Indigenous approaches to knowing and stewarding the environment.

The Environmental Technology program is accredited by the College of Applied Biology and graduates are eligible to apply to become Registered Biology Technologists.

Graduates obtain a Diploma in Environmental Technology and will possess up to two years of transfer credit to various university programs, including Environmental Science, Biology and Geography. Students may opt to participate in the co-operative education program where one co-op will lead to a co-operative education designation on their credential; they may also complete an additional co-op if they wish.

Admissions

One of:

- C+ in English 12

- C in English 12 Camosun Alternative

One of:

- C in Pre-calculus 11
- C in Math 11 Camosun Alternative

One of:

- C+ in Biology 11
- C+ in Biology 11 Camosun Alternative
- C+ in Anatomy and Physiology 12
- C+ in Anatomy and Physiology 12 Camosun Alternative

And one of:

- C in Chemistry 11
- C in Chemistry 11 Camosun Alternative

Learning Outcomes

At the completion of the program, students will be able to:

- Explain the foundational principles of environmental science.
  - Describe the function of Earth's major environmental systems, including the atmosphere, biosphere, hydrosphere and lithosphere.
  - Describe examples of local and regional ecosystems and environmental processes.
- Apply knowledge of environmental sciences to ecosystem sustainability.
  - Describe how human activities impact ecosystems.
  - Identify opportunities and means to improve the sustainability of ecosystems.
  - Select and apply scientific concepts and models in the context of environmental impact assessments, management, and remediation/restoration.
- Apply Traditional Ecological Knowledge (TEK) and Indigenous relationships with land and water in biodiverse ecosystems.
  - Describe through examples the importance of Indigenous perspectives in environmental technology.
  - Identify examples of TEK relevant to solving problems of environmental sustainability.
- Use the appropriate tools and technology to sample and assess elements of the environment.

- Design terrestrial, aquatic, and atmospheric sampling programs.
- Use a wide range of lab and field equipment in compliance with technical specifications and safety protocols.
- Use data management and analysis software as it applies to environmental technology.

- Critically analyze and interpret scientific data to characterize environmental problems, formulate solutions, and inform decision-making.
  - Interpret data from scientific, societal, and cultural perspectives to characterize environmental problems, formulate solutions, and inform decision-making.
- Apply knowledge of legislation, regulations, standards and guidelines to environmental practices.
  - Conduct all work within the legal and ethical scope of environmental practice.
  - Use safe working practices in a range of environmental conditions in accordance with occupational health and safety legislation.
- Design and implement team-based environmental projects.
  - Communicate clearly and effectively to promote productive working relationships and collaboration.
  - Contribute to the development and maintenance of an inclusive, equitable, respectful and safe workplace.
  - Design and implement team-based environmental projects using project management skills and creative problem solving techniques.
- Communicate technical information and complex ideas clearly, concisely, and accurately for diverse audiences and purposes.
  - Prepare and deliver reports and presentations that support conclusions.
  - Consider social and cultural diversity when making decisions and communicating in diverse contexts.

Curriculum

Year One

Academic Term One

All of:

- BIOL 124 - Evolution and Diversity **Credits:** 3
- ENGL 170 - Technical & Professional Communication 1 **Credits:** 3
- ENVR 115 - Atmosphere and Hydrosphere **Credits:** 3
- GEOG 100 - Environment and Sustainability **Credits:** 3

One of:

- CHEM 110 - General College Chemistry 1 **Credits:** 3
- CHEM 120 - College Chemistry 1 **Credits:** 3

Academic Term Two

All of:

- BIOL 228 - Ecology **Credits:** 3
- BIOL 240 - Wildlife and Habitat **Credits:** 3
- CHEM 253 - Environmental Chemistry **Credits:** 3
- IST 142 - Land, Water, & Stewardship **Credits:** 3

One of:

- GEOG 216 - Statistics in Geography **Credits:** 3
- STAT 216 - Applied Statistics **Credits:** 3

Year Two

Academic Term Three

All of:

- BIOL 241 - Applied Botany **Credits:** 3
- ENVR 112 - Environmental Research and Practice **Credits:** 3
- ENVR 160 - Environmental Sampling and Analysis **Credits:** 3
- ENVR 217 - Field Skills **Credits:** 3
- GEOG 217 - Maps and GIS **Credits:** 3

Academic Term Four

All of:

- ENVR 100 - Climate Solutions **Credits:** 3
- ENVR 212 - Capstone Project **Credits:** 3
- ENVR 260 - Environmental Remediation **Credits:** 3
- GEOG 227 - Advanced GIS Applications **Credits:** 3

One of:

- GEOG 276 - Geomorphology **Credits:** 3
- GEOS 100 - Physical Geology **Credits:** 3

Optional Program Credential Designation

Cooperative Education

All of:

- CDEV WPS - Workplace Preparation Skills **Credits:** 0
- ENVR 101 - Co-operative Work Experience 1 **Credits:** 6

Optional:

- ENVR 201 - Co-operative Work Experience 2 **Credits:** 6

Additional Information

- Graduates obtain a Diploma in Environmental Technology and will possess up to two years of transfer credit to various university programs, including Environmental Science, Biology and Geography.