ENVIRONMENTAL SCIENCE (A.S.)

The Environmental Science program is designed to prepare students for employment in areas of the environment or for transfer to a four-year institution of higher learning. Students choose a focus area geared toward conservation/preservation of natural resources or energy efficiency. In this multidisciplinary program, you will learn to relate underlying scientific theory to environmental considerations affecting our everyday lives. You will gain an understanding of environmental problems and obtain the knowledge and skills to begin developing solutions.

All associate degrees include completion of general education requirements which, together with program requirements, constitute a minimum of 60 credits. In some cases program requirements also fulfill general education requirements. You may not use a single course to meet two general education requirements.

General Education Requirements

Core Competencies

Complete at least one course in each of the following:

- ❑ First semester seminar _____
- ❑ Technological Literacy
  CIS 1041 - Computer Applications
- ❑ Communication _____
  Meets graduation standard in oral communication
- ❑ English Composition
  ENG 1061 - English Composition
- ❑ Mathematics _____
- ❑ Research & Writing Intensive _____

Areas of Inquiry

Complete at least one course in each of the following:

- ❑ Scientific Method
  ENV 1010 - Introduction to Environmental Science
- ❑ Human Expression _____
- ❑ Human Behavior
  ECO 2020 - Macroeconomics
  or
  ECO 2030 - Microeconomics

Integrative Approaches

- ❑ Global Perspectives & Sustainability
  ENV 1230 - Current Environmental Issues
- ❑ HUM 2010 -Seminar in Educational Inquiry
  Meets graduation standard in writing and information literacy
- ❑ Quantitative Reasoning Assessment
  Meets graduation standard in quantitative reasoning

Program Requirements

Courses are listed in the order in which we recommend you take them. These courses meet both program and general education requirements.*

- ❑ CIS 1041 - Computer Applications *
- ❑ ENV 1010 - Introduction to Environmental Science *
- ❑ ENV 1055 - Fundamentals of Earth Science
- ❑ BIO 1020 - Introduction to Environmental Biology
  or
  BIO 1211 - Introductory Biology: Ecology & Evolution
- ❑ ENV 1230 - Current Environmental Issues *
- ❑ ENV 2310 - Field Methods in Environmental Science
- ❑ ECO 2020 - Macroeconomics *
  or
  ECO 2030 - Microeconomics *

Choose one of the following focus areas:

Natural Resources

- ❑ CHE 1020 - Introductory Chemistry
  or
  CHE 1031 - General Chemistry I
- ❑ ENV 2050 - Natural History of Vermont

Choose three of the following:

- ❑ BIO 1240 - Forest Ecology
- ❑ BIO 1250 - Wildlife Ecology
- ❑ BIO 2250 - Aquatic Ecology
- ❑ BIO 2260 - Principles of Conservation Biology

Electives: 1-3 credits

Sustainable Building Technology

- ❑ ENV 1310 - Sustainable Buildings
- ❑ ARC 1011 - Introduction to Drafting & Blueprint Reading
- ❑ ARC 1211 - CAD I
- ❑ PHY 2025 - Physics for the Environment
- ❑ BUS 2230 - Principles of Marketing
  or
  BUS 2430 - Small Business Marketing
- ❑ BUS 2020 - Principles of Management
  or
  BUS 2210 - Small Business Management

Note(s)

*You may use a course to meet both a program requirement and a general education requirement; however, you may not use a single course to meet two general education requirements.

Minimum Total Credits in Degree: 60

Program Outcomes

Graduates of the Environmental Science program will be able to:

- examine the impact of humankind on the environment from scientific, sociological, political, and economic viewpoints both locally and globally;
- address real-world environmental issues by applying methods and concepts learned in the sciences, mathematics, and humanities;
- analyze scientific evidence regarding how human activities affect ecosystems;
- demonstrate academic skills required of all CCV graduates, including competency in writing, information literacy, oral communication, and quantitative reasoning; and
- explore pathways for educational and career development in the student's field of study.

The Environmental Science program is great for you if:

- you are curious about natural and physical sciences;
- you have good math, science, reading, writing, and communication skills;
- you benefit from hands-on, field-based, and service learning course activities;
- you have a passion for participating in environmental inquiry and solutions; and
- you enjoy working in interdisciplinary teams.

Key information and advice for students in the Environmental Science program:

- A core curriculum helps students develop key skills for applying biological, physical, and chemical principles to the study of the environment and the developing solutions to environmental problems.
- Students choose a focus area in either Natural Resources or Sustainable Building Technologies to further deepen learning.
- The required Field Methods in Environmental Science course at the end of the degree program gives students an opportunity to make connections with local environmental agencies and employers.
- Required courses for the Environmental Science degree are offered at CCV academic centers throughout the state and in online and hybrid formats. Students can choose to do a majority of their courses online.

The Environmental Science program prepares you for careers such as:

- Agriculture & Food Science Technician
- Energy Efficiency Specialist
- Environmental Engineering Technician
- Environmental Science & Protection Technician
- Forest & Conservation Technician
- Water and Waste Water Operator
- Water Conservation Technician

Job outlook in Environmental Science in the state of Vermont:

Title	*Median Salary*	*Projected Growth (10 Yrs)*
Environmental Engineering Technician	$36,820	11%
Environmental Science & Protection Technician	$42,370	38%
Water and Wastewater Treatment Plant and System Operator	$42,250	10%

Source: Vermont Department of Labor, http://www.vtlmi.info/oic.cfm