

ENVIRONMENTAL TECHNOLOGY AND SUSTAINABILITY

The Environmental Technology and Sustainability degree program is an interdisciplinary course of study that provides students with an introduction to environmental components, processes, and issues. The core areas covered by the degree are environmental science, biology, physical and earth sciences, and sustainability. Students pursuing this major have the option of exploring diverse fields in environmental management and restoration, natural resources conservation, and sustainability. Many of the courses emphasize exploration and study of the Lake Tahoe Basin and the surrounding areas, a natural lab of outstanding beauty and richness.

Student Learning Outcomes for this major are:

- Apply the scientific method to analyze organisms, structures, processes, and issues associated with local, regional, national, and global environments.
- Dissect, model, and communicate the complexity of the natural environment into its component interconnected systems.

A. GENERAL EDUCATION REQUIREMENTS

See pages 55-57 for details.

B. CORE COURSES FOR THE ASSOCIATE DEGREE IN ENVIRONMENTAL TECHNOLOGY AND SUSTAINABILITY:

The following core courses are required of all Environmental Technology and Sustainability degree students (18 units).

Select one course from the following (minimum 3.5 units):

CHM 100	Introduction to General Chemistry
CHM 101	General Chemistry
CIS 135A/GEG 134	Introduction to Geographic Information Systems
MAT 201	Elementary Statistics

All courses as follows (11.5 units):

EVS 102	Environmental Science: System Dynamics
EVS 103	Environmental Science: Human Impacts
EVS 104	Environmental Technology and Sustainability Laboratory Methods
EVS 105	Environmental Technology and Sustainability Field Methods

A minimum of 3 units of Occupational Work Experience:

EVS 133	Internship Occupational Work Experience
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AREAS OF CONCENTRATION: (Choose one option)

In addition to the required core courses listed above, students seeking an Environmental Technology and Sustainable degree must select a single area of concentration from the three listed. Students must complete all required courses within the single area of concentration selected.

1. ETS: BIOLOGICAL RESOURCES

A minimum of 10 units distributed as follows:

The following course (5 units):

BIO 111	Introduction to Plant and Animal Biology
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Select a minimum 5 units from the following:

BIO 112	Systems Biology
BIO 113	Field Methods in Wildlife Ecology
BIO 141A	Birds of the Lake Tahoe Basin
BIO 149	Ecology
BIO 201	Botany
BIO 212	Zoology

TOTAL UNITS IN MAJOR (INCLUDING CORE) = 28

2. ETS: PHYSICAL RESOURCES

A minimum of 10 units distributed as follows:

Select a minimum 5 units from the following:

GEG 101	Physical Geography
GEL 102	Physical Geology

Select a minimum 5 units from the following (not already used above):

GEG 101	Physical Geography
GEG 105	Conservation of Natural Resources
GEG 106	California Geography
GEG 107	Water Quality Monitoring of Streams and Lakes
GEG 108	Water Resources
GEG 113	Meteorology
GEG 114	Economic Geography
GEL 101	Geology of California
GEL 102	Physical Geology
GEL 103	History of Earth and its Life
GEL 104	Geology of the Tahoe Basin
GEL 105	Geology of Desolation Wilderness
GEL 107	Geology of the Eastern Sierra
GEL 108	Environmental Geology
GEL 110	Geology of the National Parks and Monuments
GSE 110	History of Taming Water in the West
GSE 111	Water Conservation

TOTAL UNITS IN MAJOR (INCLUDING CORE) = 28

3. ETS: SUSTAINABILITY

A minimum of 10 units distributed as follows:

Select a minimum 5 units from the following:

GSE 101	Introduction to Sustainability
GSE 103	Lake Tahoe Issues and Agencies
GSE 107	Energy, Society and Sustainability

Select a minimum 5 units from the following (not already used above):

BIO 149	Ecology
GEG 107	Water Quality Monitoring of Streams and Lakes
GSE 101	Introduction to Sustainability
GSE 103	Lake Tahoe Issues and Agencies
GSE 105	Introduction to Green Business
GSE 106	Landscape Design and Sustainable Site Plan
GSE 107	Energy, Society and Sustainability
GSE 110	History of Taming Water in the West
GSE 111	Water Conservation
GSE 115	Introduction to Geotourism
GSE 120	Residential and Small Business Energy Auditing
GSE 126	Introduction to Solar Energy: Thermal, Photovoltaic, Passive Design
WLD 100	Foundations of Recreation Land Management

TOTAL UNITS IN MAJOR (INCLUDING CORE) = 28

C. ELECTIVE UNITS to bring the total to 90.