

# Bachelor of Science in Environmental Science

## Required courses: 4 courses

GEO101 Earth Systems Science, GEO106 Global Climate Change and GEO105 Earth, Environment and Climate Laboratory

**OR**

GLY101 Natural Hazards, GLY102 Climate Change and GLY105 Natural Hazards and Climate Change: Past, Present and Future Laboratory

BIO200 Evolutionary Biology

## Field Methods and Data Collection: 1 course

EVS310 Ecological Methods

## Core Science: 4 courses

**Chemistry:** CHE101 & CHE113–CHE102 & CHE114, **OR** CHE105–CHE106 **OR** CHE107–CHE108

**Physics:** PHY101–PHY102 **OR** PHY107–PHY108

## Core Math: 2 courses

MTH121–MTH122 Survey of Calculus and Its Applications I & II **OR** MTH141–MTH142

## Statistics: 1 course

GEO211 Univariate Statistics in Geography  
PSY207 Psychological Statistics  
SOC294 Basic Statistics for Social Sci  
STA119 Statistical Methods

## Core Environmental: 5 courses

CIE340 Environmental Engineering

EVS250 Environmental Justice **OR** PHI234 Environmental Ethics

EVS309 Ecology

GEO481 Geographic Information Systems

GLY308 Intro to Geochemistry **OR** GLY462 Aqueous Geochemistry

## Senior Capstone: 1 course

CIE447 Sustainability

GEO470 Integrated Environmental Mgmt.

GLY479 Carbon Reduction Challenge

## Electives: 5 courses

Electives provide a body of course work that will prepare a student for a defined area within the field of environmental science. We call this “your jam”, and the electives you choose from below will develop this specialty. This is the pre-approved list but we will accept petitions in advance for individualized coursework within your chosen focus area. Please see the Environmental Science Advisors for further information.

BIO318 Plant Biology  
BIO437 Pattern & Process  
CHE349 Physical Chemistry for Life Sciences  
CHE413 & CHE 414 Instrument Analysis and Lab  
CHE470 Analytical Chemistry of Pollution  
CIE341 Environmental Engineering Science  
CIE441 Pollutant Fate and Transport

CIE447 Sustainability \*Capstone Approved  
EVS310 Ecological Methods  
EVS315 Field Ecology  
EVS321 The Environmental Impact of War  
EVS326 Great Lakes Ecology  
EVS345 Water and Society  
EVS350 Water Quality

Continued on Reverse

Rev: 1/15/24

EVS360 Environmental Impact Statement  
 EVS385 Energy, Environment and Society  
 EVS409 Advanced Ecology  
 EVS411 Marine Ecology  
 EVS412 Field Course in Tropical Marine Ecology  
 EVS424 Environmental Sustainability in Practice  
 EVS441 Wildlife and Wildlands Management  
 EVS445 Restoration Ecology  
 EVS452 Limnology  
 EVS463 Soil Ecology  
 EVS472 Tropical Environments  
 EVS413 Ecology of Invasive Species  
 EVS493 Ecology of Unique Environments  
 EVS495 Undergraduate Student Teaching  
 EVS496 Environmental Internship  
 EVS498 Undergraduate Research  
 EVS499 Independent Study  
 GEO344 Climate and Weather  
 GEO345 Water Resources  
 GEO347 Climatic Geomorphology  
 GEO350 Landform Field and Laboratory Techniques  
 GEO352 Introduction to Soils

GEO356 Forest Ecology  
 GEO381 Cartography  
 GEO435 Conservation Biogeography  
 GEO446 Global Change Ecology  
 GEO449 Fluvial Geomorphology  
 GEO470 Integrated Env Management \*Capstone Approved  
 GEO475 Landscape modeling with GIS  
 GEO479 GIS for Environ Modeling (with lab)  
 GEO483 Remote Sensing  
 GEO498 Undergraduate Research  
 GLY308 Intro to Geochemistry  
 GLY312 Surface Process and Hydrology  
 GLY414 Hydrogeology  
 GLY419 Environmental Geophysics  
 GLY428 Geological Hazards and Risk  
 GLY429 Analysis of Geologic Data  
 GLY453 Quaternary Dating and Paleoclimate  
 GLY458 Macroevolution  
 GLY465 Environmental and Geological Remote Sensing  
 GLY479 Climate Reduction Challenge \*Capstone Approved

**Credits for major: 79**

**Additional credits for UB curriculum: 32**  
**Total credits for degree: 120**

**Additional Electives: 9**