Bachelor of Science in Environmental Science

Required courses: 4 courses

GEO101 Earth Systems Science, GEO106 Global Climate Change and GEO105 Earth, Env. and Climate Lab

OR

GLY101 Natural Hazards, GLY102 Climate Change and GLY105 Natural Hazards and Climate Change Lab

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 Geo STA119 Statistical Methods Or equivalent

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 Env. 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 info.

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

EVS315 Field Ecology

EVS321 The Environmental Impact of War

EVS326 Great Lakes Ecology

EVS345 Water and Society

EVS350 Water Quality

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

Credits for major: 79

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

Additional credits for UB curriculum: 32 Additional Electives: 9

Total credits for degree: 120