B.S. in Environmental Studies: Environmental Science Concentration

Program Description

The environmental science concentration of the Bachelor of Science in Environmental Studies degree is an interdisciplinary program that combines the biological and physical sciences with chemistry to provide solutions to today's environmental problems. Students gain a broad background in environmental pollution (including air, water and waste); environmental policy; and the technical skills required of today's professional environmental scientist.

Delivery Mode

Traditional (on campus)

Curriculum

Course	Credits
General Education Courses	**42**
Building a Sense of Community **UNI 100** First-Year Seminar	1
Composition **ENG 101** English Composition I	3
Public Speaking **CDC 101** Public Speaking	3
Mathematics and Quantitative Literacy **MAT 281** OR **MAT 199** OR **MAT 273** OR **MAT 281***	3
Health and Wellness Any Health and Wellness Course	3
Technological Literacy **GIS 311** Geographic Information Systems	3
Humanities Any Humanities Course	3
Fine Arts Any Fine Arts Course	3
Natural Sciences **GLG 150** Introduction to Geology	4
Social Sciences Any Social Science Course	3
General Education Options • Any Ethics and Multicultural Awareness Emphasis Course • **ENG 102** Composition II	13

Course	Credits
• **PHY 121** General Physics I • **MAT 215** Statistics	
Required Major Courses	**49 or 50**
Select two courses from the following: • **BIO 120** General Zoology • **BIO 125** General Botany • **BIO 215** Cellular and Molecular Biology	8
BIO 248 General Ecology	4
BIO 488 Water Pollution Biology	4
ENS 435 Natural Resource Law and Policy	3
ENS 440 Environmental Pollution Control	4
ENS 475 Wetlands Ecology	4
ENS 495 Design and Analysis	4
GLG 303 Hydrology	3
CHE 101 General Chemistry I	4
CHE 102 General Chemistry II	4
CHE 331 Organic Chemistry I	4
CHE 381 Environmental Chemistry OR **GLG 333** Geochemistry	3 or 4
Related Electives	**10 or 11**
Select two upper-division BIO/ENS courses	
Select two courses from the following: • **GLG 210** Intro to Soils • **GLG 343** Geomorphology • **GLG 402** Groundwater Hydrology • **GLG 448** Watershed Evaluation • **GIS 413** Environmental Applications in GIS	
Free Electives	**18 or 19**
Total	**120**

Additional requirements, not counted toward the General Education requirements, include:

- **Special Experience Course (1 course required):** Any Special Experience Course
- **Writing-Intensive Component Courses (2 courses required):** Any two BIO or ENS Upper-Division Writing Component Courses
- **Laboratory Course (1 course required):** CHE 101 General Chemistry I

* MAT 273 or 281 recommended for graduate studies.

Program Webpage

https://www.calu.edu/academics/undergraduate/bachelors/environmental-studies/environmental-science.aspx