

Environment and Sustainability Certificate

Required Courses (4 hours):

- Introduction to Environmental Science (ENS 2103)
- Introduction to Environmental Science Lab (ENS 2101)

Electives (12 hours):

Student must take three hours from each of three categories: Humanities, Social Sciences, and Science and Engineering. The final 3 hours course may be chosen from any category not directly related to the student's major.

Humanities Elective

- AN 3163 Maritime and Fishing People
- AN 8123 Environmental Anthropology
- AN 8523 Environmental Archaeology
- AN/SO 4173 Environment-Society
- ARC 2713 Passive Building Systems
- ARC 2723 Materials
- HI 3183 World Environmental History
- HI 4193 US Environmental History
- HI 4393/6393 Rural America
- HI 8803 Special Topics Courses
- HI 8973 US Environmental and Agricultural History
- HS/ID 3673 Environments for Special Needs
- LA 4463 Community Food Systems
- LA 4843 Sustainable Communities
- PHI 3313 Environmental Ethics
- REL 3113 Religions and Environment

Social Sciences Elective

- AEC 2223 Sustainability Economics
- AEC 2611 Environmental Economics and Sustainability Seminar
- AEC 3233 Intro to Environmental Economics and Policy
- AEC 4233 Environmental Economics
- AEC 4243 Natural Resource Economics
- AEC 4413 Public Problems of Agriculture
- AEC 8233 Applied Welfare and Env. Economics
- BL 4263 Environmental Law
- FO 1101 Forest Resource Survey
- FO 4343 Forest Administration and Organization

- FO 4413 Natural Resource Policy
- FO/NREC 4353 Natural Resource Law
- LA 3623 Urban Planning
- LA 8731 Seminar in Community Based Planning
- SO 4173 Environment-Society
- SO 4703 Population Problems

Science and Engineering Elective

- ABE 2873 Land Surveying
- ABE 3303 Transport in Bio Engineering
- ABE 4163 Machinery for Agro-Ecosystems
- ABE 4263 Soil and Water Management
- ABE 4803 Biosystems Simulation - Env.
- BIO 2503 Environmental Quality
- BIO 3104 Ecology
- BIO 4213 Plant Ecology
- BIO 4224 Aquatic Botany
- BIO 4324 Soil Microbiology (same as PSS 4314)
- CE 2803 Environmental Engineering Issues
- CE 3501 Water Resource Engineering Lab
- CE 3503 Water Resource Engineering
- CE 3801 Environmental Engineering and Water Resources Engineering Lab
- CE 3823 Environmental Engineering
- CE 4513 Engineering Hydrology
- CE 4523 Open Channel Hydraulics
- CE 4533 Computational Methods in Water Resources Engineering
- CE 4843 Environmental Engineering Chemistry
- CE 4863 Water and Wastewater Engineering
- CE 4883 Engineered Environmental Systems
- CE 4893 Hazardous Waste Management
- CH 4303 Environmental Chemistry
- CHE 4423 Fundamental of Industrial Corrosion
- CHE 4613 Air Pollution Control Design
- CHE 4673 Industrial Microbiology
- CHE 4683 Fund of Biofuels Production
- CHE 4990 Special Topics in CHE - Fund of Biorefineries
- CVM 4513 Environmental Toxicology
- ECE 4613 Power Transmission Systems
- IE 4543 Logistics Engineering
- FNH 4773 Intro. to Environmental Health
- FO 4123 Forest Ecology
- FO 4473 GIS for Natural Resource Management

- FO 4483 Forest Soils
- FO 8163 Nonmarket Forest Values
- FO 8323 Forest Ecophysiology
- FO 8333 Silviculture for Multiple Ecosystem Services
- FO 8433 Ecological Silviculture
- FO 8443 International Forest Resources and Trade
- FO/NREC 3113 Forest Recreation Management
- FO/NREC 4313 Spatial Technology for Natural Resource Management
- FO/NREC 4463 Forest Hydrology and Watershed Management
- FO/PSS/ECE/GR 4411 Remote Sensing Policy
- GG 3133 Intro Environmental Geology
- GG 3603 Intro to Oceanography
- GG 3613 Water Resources
- GG 4304 Principles Sediment Deposition I
- GG 4423 Chemical Hydrogeology
- GG 4443 Principles Sediment Deposition II
- GG 4523 Coastal Environments
- GG 4613 Physical Hydrogeology
- GG 8233 Environmental Geosciences
- GR 2313 Maps and Remote Sensing
- GR 3113 Conservation of Natural Resources
- GR 4613 Applied Climatology
- GR 4643 Physical Climatology
- GR 4813 Natural Hazards
- LA 1333 Landscape Systems
- LA 4514 Ecological Planting Design
- LA 4753 Sustainable Landscape Management
- LA 8711 Seminar in Watershed Management
- ME 4353 Alt Energy Sources
- ME 4543 Combustion Engines
- PSS 3133 Intro to Weed Science
- PSS 3303 Soils
- PSS 4153 Sustainable Agroecology
- PSS 4313 Soil Fertility
- PSS 4314 Soil Microbiology (same as BIO 4324/6324)
- PSS 4333 Soil Conservation
- PSS 4363 Sustainable Nursery Production
- PSS/ABE 2543 Precision Agric. I
- PSS/ABE 4543 Precision Agric. II
- SBP 1103 Intro to Sustainable Bioproducts
- SBP 3123 Biomass to Bioproducts
- SBP 4213 Deterioration and Preservation of Biomaterials

- SBP 4313 Bioproducts and the Environment
- SBP 8013 Advanced Wood Science and Technology
- SBP 8133 Environmental Issues in SBP
- WFA 4183 Principles and Practices of Aquaculture
- WFA 4373 Principles of Conserv Ag
- WFA 4463 Human Dimensions of Wildlife Management
- WFA 4623 Conservation Biology
- WFA 4633 Problem Solving in Conservation Biology
- WFA 4881 Current Topics in Conservation Biology