



Undergraduate Certificate in Sustainability

www.Engineering.Pitt.edu/MCSI/Sustainability-Requirements

Revised: 11/2020

Overview

Environmental and sustainability programs study coupled human-natural systems using interdisciplinary approaches and knowledge. Such programs work at the science-engineering, science-policy, and policy management interfaces and aim to prepare sustainability-oriented problem solvers through interdisciplinary research, scholarship, and practice. This certificate addresses the need for education and research to strengthen our understanding of the links between human behavior and natural processes by integrating the behavioral and social sciences, earth sciences, physical sciences, engineering, and information sciences.

Completion of the certificate in the Dietrich School requires 18 credits. Satisfactory completion of the certificate satisfies the Dietrich School of Arts and Sciences requirement of a related area. The following requirements are for Dietrich School students who pursue this certificate. Be advised that Swanson School of Engineering Students may have different requirements. Visit the certificate's Web page at www.Engineering.Pitt.edu/MCSI/Sustainability-Requirements for more details on the certificate.

Required courses

ENGR 1905 Current Issues in Sustainability
ENGR 1907 Sustainability Capstone
GEOL 1030 Atmosphere, Oceans, and Climate

Elective courses

Choose three of the following courses.

BIOSC 0740 Yellowstone Field Course (UHC, in Wyoming)
BIOSC 1160 Forest Ecology (Pymatuning Laboratory of Ecology)
BIOSC 1220 Ecological Field Studies (Pymatuning Laboratory of Ecology)
BIOSC 1310 Wetland Ecology and Management (Pymatuning Laboratory of Ecology)
BIOSC 1610 Conservation Biology (Pymatuning Laboratory of Ecology)
CEE 1209 Life Cycle Assessment Methods and Tools
CEE 1217 Green Building Design and Construction
CEE 1218 Design for the Environment
CEE1503 Introduction to Environmental Engineering
CS 0090 Computers and Sustainability
ECE 1769 Power Systems Analysis
ECON 0360 Introduction to Resource and Environmental Economics
ECON 0530 Introduction to Development Economics
ECON 1360, has prerequisite Environmental Economics

ENGLIT 0710 Contemporary Environmental Literature
ENGLIT 1005 Environmental Literature
ENGR 1060 Engineering for Humanity
GEOL 0860 Environmental Geology
GEOL 1051 Groundwater Geology
GEOL 1060 Geomorphology
GEOL 1333 Sustainability
GEOL 1334 Environmental Policy
GEOL 1445 GIS, GPS, and Computer Methods
GEOL 1515 Environmental Geochemistry
GEOL 1904 Sustainability Flash Lab
GSWS 1450 Gender and Sustainability
HAA 0940 Approaches to the Built Environment
HIST 1019 Cities in Historical Perspective
HIST 1695 Environmental History
HONORS 1544 Reading the Earth (in Wyoming)
MEMS 1065 Thermal Systems Design
PIA 2008 Economics for Public Affairs
PIA 2231 Contemporary U.S. Energy Policy
PS 1542 Global Environmental Politics
SA 1340 Sculpture Studio: Projects
SOC 1445 Society and the Environment
URBNST 0080 Introduction to Urban Studies
URBNST 1614 Urban Sustainability

Grade Requirements

A minimum GPA of 2.0 is required for all courses that count toward the certificate.

Satisfactory/No Credit Option

No course that counts toward this certificate may be taken on the S/NC basis.