

Certificate in Sustainability

University College offers a twelve-credit, four-course interdisciplinary Certificate in Sustainability. This undergraduate certificate provides an opportunity for students to advance their knowledge of sustainability from the orientation of different disciplines, to introduce them to concepts of systems thinking to make them more competitive in a job market that increasingly is requiring sustainability expertise and skills.

Students will select from an existing array of courses in various disciplines. A faculty committee will regularly review new courses proposed by the schools and colleges to be included in available offerings for the certificate.

The certificate is available to all undergraduate degree seeking students to complete as part of their studies. Consult a school academic advisor about how the required classes fit into academic and career plans.

This credit certificate may be conferred upon a student upon satisfactory completion of the required credits with a minimum cumulative GPA of 2.0.

For questions about the Certificate in Sustainability contact: sustainabilitycertificate@temple.edu.

Certificate Requirements

1. The undergraduate Certificate in Sustainability will require four (4) courses and a minimum of twelve (12) credit hours.
2. The four courses will be selected as follows:
 - a. One course (or 3 credits) from the Sustainable Environment category (SE).
 - b. One course (or 3 credits) from the Sustainable Social and Culture category (SS).
 - c. One course (or 3 credits) from the Sustainable Economics and Politics category (SP).
 - d. The final course taken will be Sustainability in Action (UC 3101).
3. One course may be from the student's major department if it is not fulfilling a requirement within that major.
4. General Education courses can be included in the array of courses, but can constitute no more than one of the four courses toward the certificate.
5. The certificate courses in sustainability can satisfy other minors and/or certificates.

Approved Courses

Students will select from an existing array of courses in various disciplines (see course list below). The three categories (Sustainable Environment (SE), Sustainable Social and Culture (SS), and Sustainable Economics and Politics (SP)) within the Certificate of Sustainability have a list of courses that satisfy the requirements for that area. To find courses offered in a specific term, see the "Finding Courses" instructions below. The codes (SE, SS, and SP) indicate which categories the course will fulfill. Please note that some courses may be offered only once a year.

Finding Courses

To find the Certificate in Sustainability courses offered in a semester within each area, students may locate the information in two primary ways:

- Go directly to the Class Schedule Search page on the university's web site. Select a semester, click Continue and click Advanced Search. Use the Attribute filter to find courses that are available in any of the following areas: Sustainable Environment (SE), Sustainable Social and Culture (SS), and/or Sustainable Economics and Politics (SP).
- Go to the TUportal. Students must log into TUportal with their username and password. Select the **Student** tab. Select **Browse Class Schedule** in the Registration channel. Select a semester and click Advanced Search. Use the Attribute filter to find courses that are available in either Sustainable Environment (SE), Sustainable Social and Culture (SS), and/or Sustainable Economics and Politics (SP).

Code	Title	Credit Hours
Art and Architecture, Tyler School of		
ARCH 1001	Introduction to Design and the Environment (SE, SS)	3
ARCH 2124	Facility Management Foundation II (SE, SP)	3
ARCH 2151	Architecture, Technology, and the Environment (SE, SS)	3
ARCH 3111	Introduction to Historic Preservation (SS, SP)	3
ARCH 3354	Sustainability and Architecture (SE, SP)	3
ARTH 2005	Cultural Heritage Preservation (SE, SS)	4
ARTH 2753	Art and Environment in American Culture (SS)	4
BOT 1112	Plant Ecology (SE)	3
CDEV 1113	Introduction to Community Development (SE, SS, SP)	3
CDEV 2255	Environmental Justice in Communities (SS)	3
CDEV 2354	Cooperatives (SS, SP)	3

CDEV 3155	Healthy Community Design and Development (SE, SS)	3
CDEV 3334	Community Economic Development (SS, SP)	3
CDEV 3455	Community Engagement and Empowerment (SS)	3
CTRP 0807	People, Places, and Environment (SE, SP)	3
CTRP 2114	Urban Form and Design (SS)	3
CTRP 2166	Land Use Planning (SE, SS, SP)	3
CTRP 2213	Environmental Planning (SE)	3
CTRP 2251	Sustainable Food Systems Planning (SE, SS, SP)	3
CTRP 3155	Ecological Planning and Development (SE, SP)	3
CTRP 3255	Sustainability in Suburban Communities (SE, SS, SP)	3
CTRP 3256	Sustainable Community Design and Development (SS, SP)	3
CTRP 3655	Transportation Planning (SE, SS, SP)	3
HORT 2221	Herbaceous Plants I (SE)	3
HORT 2222	Herbaceous Plants II (SE)	3
HORT 2334	Food Crops I (SE)	3
HORT 2353	Food Crops II (SE, SS)	3
HORT 2552	Trees in the Urban Landscape (SE, SS, SP)	2
HORT 2556	Introduction to Beekeeping (SE)	3
HORT 3514	Landscape Restoration (SE)	3
LARC 0841	Sustainable Design (SE)	3
LARC 0852	Green vs. Gray: Improving and Sustaining Urban Ecosystems (SE, SS, SP)	3
LARC 1013	Natural and the Built Environment (SE)	3
LARC 1111	Introduction to Green Careers in Landscape Architecture (SE)	1
LARC 2243	Landscape Engineering II (SE)	3
LARC 2754	Water Design in the City (SE)	2
LARC 2758	Summer Field Ecology (SE)	3
Business and Management, Fox School of		
BA 3531	Sustainability on the Ground (SS)	3
HRM 2511	Corporate Sustainability: People, Profits & Planet (SE, SS, SP)	3
HRM 3505	Sustainable Organizational Leadership (SE, SS, SP)	3
LGLS 3511	Environmental Law and Sustainability (SE, SS, SP)	3
MKTG 2511	Marketing for the Sustainable Enterprise (SE, SS)	3
SGM 3511	Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact (SE, SS, SP)	3
Education and Human Development, College of		
AOD 3319	Skill Building for Social Entrepreneurship and Community Engagement (SS, SP)	3
Media and Communication, Lew Klein College of		
CSI 3401	Social Activism and Community Organizing (SS)	3
JRN 3253	Health and Environmental Writing (SS)	3
MSP 3473	Media and the Environment (SS)	3
Engineering, College of		
CEE 0845	The Environment (SE)	3
or CEE 0945	Honors: The Environment	
or ENVT 0845	The Environment	
or ENVT 0945	Honors: The Environment	
CEE 1051	Introduction to the Environment (SE, SS)	3
CEE 2711	Environmental Chemistry & Microbiology (SE)	3
CEE 2712	Introduction to Environmental Engineering (SE)	3
CEE 2715	Principles of Sustainable Engineering (SE, SS)	3
CEE 3711	Environmental Engineering (SE)	3
CEE 3712	Environmental Fluids and Contaminant Dynamics (SE)	3
CEE 3715	Microbiological Principles of Environmental Engineering (SE)	3
CEE 3725	Water Quality and Analysis Lab (SE)	1

CEE 3727	Environmental Hydrology and Stormwater Management (SE)	3
CEE 4531	Life Cycle Assessment and Carbon Footprinting (SP)	3
CEE 4631	Environmental Hydrology (SE)	3
CEE 4641	Urban Streams and Stormwater Management (SE)	3
CEE 4711	Air Pollution Control System (SE)	3
CEE 4725	Environmental Systems Design (SE)	3
CEE 4773	Sustainability Aspects of Water Supply and Wastewater Treatment (SE, SS, SP)	3
CMT 3341	Environmental and Safety Aspects of Construction (SE, SS)	2
ENGR 4577	Nanotechnology Solutions for a Sustainable Urban Environment (SE)	3
ENVT 4741	Environmental Modeling (SE)	3
MEE 4506	Energy Conversion Laboratory (SE)	1
MEE 4575	Renewable and Alternative Energy (SE)	3
MEE 4577	Power Generation and Storage Technologies (SE)	3
Public Health, College of		
ENVH 1103 or ENVH 1903	International Health (SS) Honors International Health	3
ENVH 2102	Environmental Health (SE, SS)	3
HRPR 1001	Public Health: The Way We Live, Work and Play (SS)	3
SBS 2301	Contemporary Slavery and Public Health (SS)	3
Liberal Arts, College of		
ANTH 0814 or GUS 0814	Human Ecology (SE, SS) Human Ecology	3
ANTH 2001	Evolution and Human Environments (SE, SS)	3
ASST 3001 or ASST 3904 or ENST 3001 or ENST 3904 or REL 3001 or REL 3904	Earth Ethics (SS) Honors Earth Ethics Earth Ethics Honors Earth Ethics Earth Ethics Honors Earth Ethics	3
ASST 3052 or ENST 3052 or GUS 3052	Environmental Problems in Asia (SE, SS, SP) Environmental Problems in Asia Environmental Problems in Asia	3
ECON 3596 or ENST 3596	Energy, Ecology, and Economy (SE, SP) Energy, Ecology, and Economy	3
ENST 0842 or ENST 0942 or GUS 0842 or GUS 0942	Sustainable Environments (SE, SS, SP) Honors Sustainable Environments Sustainable Environments Honors Sustainable Environments	3
ENST 2002	Physical Geography (SE, SS)	4
ENST 2025	Environmental Law and Regulation (SS, SP)	3
ENST 2051 or GUS 2051	The Urban Environment (SE, SS, SP) Urban Environment	3
ENST 2157 or ENST 2957 or PHIL 2157 or PHIL 2957	Environmental Ethics (SS) Honors Environmental Ethics Environmental Ethics Honors Environmental Ethics	3
ENST 3004	Geography of Natural Resources (SE, SS, SP)	3
ENST 3023 or GUS 3023	Police, Prisons, and Pollution (SE, SS) Police, Prisons, and Pollution	3
ENST 3051 or GUS 3051	Environmental Policy Issues (SS) Environmental Policy Issues	3
ENST 3053	Climatology (SE)	3

or GUS 3053	Climatology	
ENST 3054	Energy, Resources, and Conservation (SE)	3
ENST 3056	Political Ecology (SE, SS)	3
or GUS 3056	Political Ecology	
ENST 3057	Sustainable Cities (SE, SS)	3
or GUS 3057	Sustainable Cities	
ENST 3058	Environment and Development (SE, SP)	3
or GUS 3058	Environment and Development	
ENST 3152	U.S. Environmental Policy (SS)	3
or POLS 3152	U.S. Environmental Policy	
ENST 3214	North American Environmental History (SS)	3
or HIST 3214	North American Environmental History	
ENST 3265	International Environmental Policy (SE, SS)	3
or POLS 3265	International Environmental Policy	
ENST 3314	Food Studies: A Geographical Perspective (SS)	3
or GUS 3314	Food Studies: A Geographical Perspective	
ENST 4017	Health and Environment Seminar (SE, SS)	3
or ENST 4917	Honors Health and Environment Seminar	
or GUS 4017	Health and Environment Seminar	
or GUS 4917	Honors: Health and Environment Seminar	
ENST 4066	Environmental GIS (SE)	3
GUS 3016	Contemporary Issues in City Planning (SE, SS)	3
GUS 3307	Transportation & Culture (SS)	3
or ENST 3307	Transportation and Culture	
SOC 3511	Environmental Sociology: The End of the World as We Know It? (SS)	3
Science and Technology, College of		
BIOL 2227	Principles of Ecology (SE)	3
BIOL 3275	Ecology of Invasive Species (SE, SP)	3
BIOL 3307	Conservation Biology (SE, SS, SP)	3
BIOL 3316	Tropical Marine Biology (SE)	4
BIOL 3321	Plant Community Ecology (SE, SS)	3
BIOL 3323	Global Change Science: Analytics with R (SE, SS)	3
BIOL 3335	Life at the Extremes - Polar Biology (SE)	3
BIOL 3336	Freshwater Ecology (SE)	4
BIOL 3389	Field Research in Community Ecology (SE)	4
BIOL 4327	Biological Impacts of Global Climate Change (SE, SS, SP)	3
CHEM 0877	The Chemistry of Global Environmental Issues (SE)	3
EES 0837	Evolution of Earth and Its Life (SE, SS)	3
EES 0842	Sustainable Environments (SE, SS, SP)	3
EES 0854	Geology of the National Parks (SE, SS, SP)	3
or EES 0954	Honors Geology of the National Parks	
EES 0874	Environmental Life Cycle Analysis: Does Buying "Green" Matter? (SE, SS, SP)	4
EES 2002	Energy and Environment (SE, SS)	3
EES 2096	Climate Change: Oceans To Atmosphere (SE)	4
PHYS 0839	Powering the Future (SE, SP)	3
or PHYS 0939	Honors Powering the Future	