

SUSTAINABILITY, GRADUATE/ PROFESSIONAL CERTIFICATE

The graduate certificate in sustainability provides students with the opportunity to customize their graduate experience, adding sustainability training to any graduate degree program offered at the University of Wisconsin–Madison. Graduate students can complete the sustainability certificate by selecting courses that meet both their degree and Sustainability requirements. As such, most students can add the sustainability certificate onto a degree without any additional time or cost. PhD students may use the sustainability certificate to fulfill their doctoral breadth requirement (<https://policy.wisc.edu/library/UW-1200/>), though in this case courses may not be double-counted for major requirements.

The certificate's interdisciplinary curriculum considers environmental, economic, and social factors of sustainability. Through coursework and co-curricular activities focused on solving sustainability challenges across the state, students deepen their understanding of the complexities and solutions involved in addressing today's most pressing challenges. Students may wish to add this certificate as they prepare for a sustainability-related career pathway in industry, academia, NGO's, government agencies, or consulting. The certificate includes coursework across three thematic areas:

1. Economics & Development (Economy)
2. Systems Analysis, Planning & Engineering (Systems)
3. Environmental Policy, Health & Social Studies (Environment, Culture and Society)

ADMISSIONS

The Sustainability certificate welcomes applications from students in any graduate degree program at UW-Madison that allows students to pursue a certificate. Students may apply to the certificate program concurrently with their graduate school application or once they have matriculated at UW-Madison. Acceptance into the certificate program is contingent on enrollment in a graduate degree program.

HOW TO APPLY

To declare the certificate, students must apply to the certificate through the Graduate Student Portal in MyUW (MyUW -> Graduate Student Portal -> Add/Change Programs), and also complete the online Certificate in Sustainability application form (https://uwmadison.col.qualtrics.com/jfe/form/SV_56VqQxNbZMEg2XA/), which includes the following elements:

1. Information on prior educational attainment
2. Information on degree program being pursued
3. A brief statement of interest in the Sustainability certificate

DEADLINES

Applications may be submitted at any time, but applicants are encouraged to apply before the end of their first year in graduate school to ensure timely completion of certificate requirements.

REQUIREMENTS

This certificate requires 12 credits. Each student must complete one course representing each of the following three categories (for at least 9 credits) and complete ENVIR ST 900 Seminar (Topic: Sustainability Capstone):

1. Economics & Development (Economy)
2. Systems Analysis, Planning & Engineering (Systems)
3. Environmental Policy, Health & Social Studies (Environment, Culture and Society)

Students also pursuing the Certificate in Business, Environment, and Social Responsibility (<http://guide.wisc.edu/graduate/business-school-wide/business-environment-social-responsibility-graduate-professional-certificate/>) can overlap a maximum of 6 credits between the two certificates.

Economics & Development (Economy) (Pick one course from the list below)

Code	Title	Credits
GEOG/ ENVIR ST 557	Development and Environment in Southeast Asia	3
ENVIR ST/A A E/ ECON/URB R PL 671	Energy Economics	3
GEOG/ ENVIR ST 534	Environmental Governance: Markets, States and Nature	3
A A E 643	Foundations of Environmental and Natural Resource Economics	3
R M I 650	Sustainability, Environmental and Social Risk Management	2-3
REAL EST 651	Green - Sustainable Development	3
A A E/ECON/ F&W ECOL 531	Natural Resource Economics	3
OTM 770	Sustainable Approaches to System Improvement	4
ENVIR ST 977	Sustainable Development - Integral Perspective	3

Systems Analysis, Planning & Engineering (Systems) (Pick one course from the list below)

Code	Title	Credits
CIV ENGR 494	Civil and Environmental Engineering Decision Making	3
E P D 660	Core Competencies of Sustainability	3
CIV ENGR/G L E 421	Environmental Sustainability Engineering	3
ENVIR ST 900	Seminar (Topic: Infrastructure & Indigenous Water Resources)	1-3
ENVIR ST/BSE 367	Renewable Energy Systems	3

URB R PL 841	Urban Functions, Spatial Organization and Environmental Form	2-3
GEOG 507	Waste Geographies: Politics, People, and Infrastructures	3
BSE 473	Water Management Systems	3
CIV ENGR 629	Special Topics in Environmental Engineering (Topic: Infrastructure: Case Studies Exploring Sustainability and Climate Change in Engineered Works)	1-3
GEOG/ENVIR ST/ LAND ARC/ URB R PL 532	Applications of Geographic Information Systems in Planning	3
ENVIR ST/ LAND ARC/ SOIL SCI 695	Applications of Geographic Information Systems in Natural Resources	3
LAND ARC 511	Geodesign Methods and Applications	3

3. Prepare for a sustainability-related career pathway in industry, academia, NGO's, agencies, and consulting.

Environmental Policy, Health & Social Studies (Environment, Culture and Society) (Pick one course from the list below)

Code	Title	Credits
AGRONOMY/ AGROECOL/ ENVIR ST 724	Agroecosystems and Global Change	3
PUB AFFR/ ENVIR ST/ POLI SCI 866	Global Environmental Governance	3
ENVIR ST/ ECON/POLI SCI/ URB R PL 449	Government and Natural Resources	3-4
ENVIR ST/ CURRIC 932	Foundations of Environmental and Sustainability Education	3
ENVIR ST/ URB R PL 843	Land Use Policy and Planning	3
HISTORY/ENVIR ST/ LEGAL ST 430	Law and Environment: Historical and Contemporary Perspectives	3
LSC/ENVIR ST/ JOURN 823	Science and Environment Communication	3
GEOG/ ENVIR ST 439	US Environmental Policy and Regulation	3-4
ENVIR ST/ URB R PL 865	Water Resources Institutions and Policies	3
GEOG/ ENVIR ST 537	Culture and Environment	4
GEN&WS/ INTL ST 535	Women's Global Health and Human Rights	3
ANTHRO 917	Globalization and Transnational Cultures	3

LEARNING OUTCOMES

1. Demonstrate an awareness of the three paradigms (environment, economy, and society) of sustainability, in a systems context.
2. Apply the three paradigms of sustainability to an interdisciplinary real world project.