

INTEGRATIVE DESIGN OF BUILT AND NATURAL ENVIRONMENTS, CERTIFICATE

The Certificate in Integrative Design of Built and Natural Environments, offered through the Department of Planning and Landscape Architecture, is focused around an exciting transdisciplinary design approach that relies on design processes and thinking. It integrates spatial data technologies to effectively and efficiently inventory, represent, analyze, evaluate, and communicate planning and design alternatives for landscapes, cities, and regions.

Proactively codesigning and coproducing healthy places comprehends, plans, and acts on social and environmental information and, therefore, a diverse suite of elective courses addresses social and environmental considerations through stakeholder engagement, environmental justice, policy, conservation, and management. Required courses will apply spatial technologies (GIS, Geodesign) to enable collaborations among the design professions (landscape architects, planners, engineers, and scientists and humanists from various disciplines), and community members. This collaborative process will help prepare you to work in interdisciplinary teams and to appreciate diverse perspectives and values while addressing complex problems.

HOW TO GET IN

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Undergraduate students from across campus are encouraged to consider completing the Certificate. To declare the Certificate in Integrative Design of Built and Natural Environments through the Department of Planning and Landscape Architecture, students must have completed at least one class that meets Certificate requirements, or be enrolled in at least one class in the current or upcoming semester that meets Certificate requirements. Students pursuing the program are encouraged to declare as early as possible so that they can best align the coursework with their interests. Students can declare the program by scheduling an appointment with the Department of Planning and Landscape Architecture Undergraduate Academic Advising Manager, or by filling out the online declaration form on the Department of Planning and Landscape Architecture website.

Students declared in the certificate should plan to complete the program before, or alongside, their degree and major requirements, as they are not able to extend their time on campus to complete a certificate.

REQUIREMENTS

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Students are required to a minimum of 14 credits to include one introductory course, one methods and applications course, and elective courses.

Code	Title	Credits
Introductory Course (complete one)		2-4
LAND ARC 311	Introduction to Design Frameworks and Spatial Technologies	
GEOG/ CIV ENGR/ ENVIR ST 377	An Introduction to Geographic Information Systems	
Methods and Applications		3
LAND ARC 511	Geodesign Methods and Applications	
Elective Courses		7-9
<i>Stakeholder Engagement</i>		
LSC 561	Writing Science for the Public	
LSC 625	Risk Communication	
LSC 250	Research Methods in the Communication Industry	
GEOG/ ENVIR ST 309	People, Land and Food: Comparative Study of Agriculture Systems	
<i>Environmental Justice and Policy</i>		
LAND ARC 363	Earth Partnership: Restoration Education for Equity and Resilience	
AMER IND/ ENVIR ST 306	Indigenous Peoples and the Environment	
AMER IND/ ENVIR ST/ GEOG 345	Caring for Nature in Native North America	
CHICLA/ LEGAL ST/ SOC 440	Ethnicity, Race, and Justice	
CHICLA/ LAND ARC 475	Latino Urbanism: Design and Engagement in the American City	
ENVIR ST 308	Outdoors For All: Inequities in Environmentalism	
GEOG/ URB R PL 305	Introduction to the City	
GEOG/ ENVIR ST 439	US Environmental Policy and Regulation	
GEOG/ ENVIR ST 534	Environmental Governance: Markets, States and Nature	
GEOG/ENVIR ST/ LAND ARC/ URB R PL 532	Applications of Geographic Information Systems in Planning	
GEOG/ ENVIR ST 537	Culture and Environment	
SOC/ C&E SOC 140	Introduction to Community and Environmental Sociology	

URB R PL 512	Gentrification and Urban Restructuring
<i>Environmental Conservation & Management</i>	
LAND ARC 668	Restoration Ecology
LAND ARC/ ENVIR ST/ SOIL SCI 695	Applications of Geographic Information Systems in Natural Resources
A A E/ F&W ECOL 430	Decision Methods for Natural Resource Managers
BOTANY/ ENVIR ST/ F&W ECOL/ ZOOLOGY 516	Conservation Biology
C&E SOC/ F&W ECOL/ SOC 248	Environment, Natural Resources, and Society
C&E SOC/ ENVIR ST/ GEOG 434	People, Wildlife and Landscapes
ENVIR ST/ GEOG 339	Environmental Conservation
ENVIR ST 413	Preserving Nature
GEOG/ ENVIR ST 333	Green Urbanism
GEOG/ ENVIR ST 337	Nature, Power and Society
GEOG/ AMER IND 410	Critical Indigenous Ecological Knowledges
GEOG/ART HIST/ ENVIR ST/ HISTORY/ LAND ARC 239	Making the American Landscape
GEOG 538	The Humid Tropics: Ecology, Subsistence, and Development

Total Credits**14**

PASS/FAIL COURSES

Courses taken on a pass/fail basis will not count toward the certificate.

RESIDENCE AND QUALITY OF WORK

- At least 8 certificate credits must be completed in residence
- Minimum 3.000 GPA on all certificate courses

CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

LEARNING OUTCOMES

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1. Demonstrate an understanding of the frameworks and processes involved in integrative design of built and natural environments

2. Understand and demonstrate how to use techniques and research from biological, physical sciences, and social sciences in design, planning, and management contexts to create frameworks and designs
3. Select and evaluate geospatial technologies appropriate for a variety of design, planning, and management contexts
4. Understand and evaluate the role of stakeholder values and ethics in design frameworks relative to design, planning, and management of the built environment within social and natural systems

ADVISING AND CAREERS

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Contact Debi Griffin (dagriffin@wisc.edu), undergraduate academic advising manager, to learn more about the certificate or for guidance as a current certificate student.

CAREERS

The interdisciplinary education provided through the Certificate in Integrative Design of the Built and Natural Environment will make graduates highly sought after by employers in local government, landscape and urban design, environmental science, management, and policy.

SUCCESSWORKS

SuccessWorks (<https://successworks.wisc.edu/>) at the College of Letters & Science helps you turn the academic skills learned in your classes into a fulfilling life, guiding you every step of the way to securing jobs, internships, or admission to graduate school.

Through one-on-one career advising, events, and resources, you can explore career options, build valuable internship and research experience, and connect with supportive alumni and employers who open doors of opportunity.

- What you can do with your major (<https://successworks.wisc.edu/what-you-can-do-with-your-major/>) (Major Skills & Outcomes Sheets)
- Make a career advising appointment (<https://successworks.wisc.edu/make-an-appointment/>)
- Learn about internships and internship funding (<https://successworks.wisc.edu/finding-a-job-or-internship/>)
- Try "Jobs, Internships, & How to Get Them," (<https://successworks.wisc.edu/canvas/>) an interactive guide in Canvas for enrolled UW-Madison students