Environment and Resources, Ph.D.

Environment and Resources is a research program offering master's and Ph.D. degrees based on the premise that solutions to environmental challenges require interdisciplinary approaches. Faculty and students are oriented to environmental problems rather than to disciplines. Students are encouraged to explore the specific area that interests them by drawing on the insights and methods of multiple disciplines. The focus is on gaining the knowledge needed to understand the intellectual context of their work and the skills necessary to conduct original research. The program fosters experimentation and innovation, not the mastering of a narrowly defined set of prepackaged competencies. The objective is to produce graduates who are prepared to function comfortably in the complex professional and social communities within which solutions to environmental problems must be found.

The program mandates interdisciplinarity through curriculum requirements, the structure of the student's faculty advisory committee, and the research endeavor. Students are required to take some courses in diverse disciplinary topics and other courses that are intended to strengthen problem-solving skills. A thesis (M.S.) or a dissertation (Ph.D.) is required of all students. Each student's faculty advisory committee must consist of persons who collectively ensure interdisciplinary support and evaluation. Students can pursue interests over the full range of environmental studies from more of a physical or biological science research project to those emphasizing more of the social sciences or humanities including policy, environmental history, community action, or social justice. Students who feel a need to follow a more structured course of study may also pursue certificates in culture, history, and environment; energy analysis and policy; or transportation management and policy. Any bachelor’s degree from an accredited institution may be acceptable.

Funding

Prospective students should see the program website for funding information.

Requirements

Minimum Degree Requirements and Satisfactory Progress

To make progress toward a graduate degree, students must meet the Graduate School Minimum Degree Requirements and Satisfactory Progress (http://guide.wisc.edu/graduate/#policiesandrequirementstext) in addition to the requirements of the program.

Doctoral Degrees

Ph.D.

Minimum Graduate Degree Credit Requirement

51 credits

Minimum Graduate Residence Credit Requirement

32 credits

Minimum Graduate Coursework (50%) Requirement

Half of degree coursework (26 credits out of 51 total credits) must be completed in graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university's Course Guide (http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle).

Prior Coursework Requirements: Graduate Work from Other Institutions

With dissertation committee and program chair approval, students are allowed to count up to 24 credits of graduate coursework from other institutions. Coursework completed ten or more years prior to admission to the doctoral degree is not allowed to satisfy graduate degree or graduate coursework requirements.

Prior Coursework Requirements: UW–Madison Undergraduate

No credits from a UW–Madison undergraduate degree are allowed to count toward the program.

Prior Coursework Requirements: UW–Madison University Special

With dissertation committee and program chair approval, students are allowed to count up to 15 credits of coursework taken as a UW–Madison Special student. Such credits from courses numbered 300 and higher can count toward graduate residency and graduate degree requirements. Such credits from courses numbered 700 and higher can count toward the graduate coursework (50%) requirement. Coursework completed ten or more years prior to admission to the program is not allowed to satisfy graduate residency, graduate degree, or graduate coursework requirements.

Credits per Term Allowed

15 credits

Program-Specific Courses Required

Two graduate seminars (research or topical) are required for the individual program focus category.

Doctoral Minor/Breadth Requirements

Due to the breadth and interdisciplinary nature of the program, environment and resources doctoral students are not required to pursue a minor.

Overall Graduate GPA Requirement

3.00 GPA required

Other Grade Requirements

Grades of BC or C may be counted toward program requirements if they are offset by equivalent AB or A grades in other courses. A 3.00 average must be maintained in the student's breadth categories as well as their individual program focus category. With the exception of research credits, a maximum of 2 credits graded S may be counted toward program requirements if approved by the student's dissertation committee and the
program chair. Courses that are audited or graded pass/fail or credit/no credit will not count toward program requirements.

PROBATION POLICY
A semester GPA below 3.00 will result in the student being placed on academic probation. If a semester GPA of 3.00 is not attained during the subsequent semester of full time enrollment (or 12 credits of enrollment if enrolled part-time) the student may be dismissed from the program or allowed to continue for one additional semester based on advisor appeal to the Graduate School.

ADVISOR / COMMITTEE
All students must assemble a five-member dissertation committee that represents a minimum of three departments, preferably no later than their fourth semester in the program. To meet the interdisciplinary requirement the committee must include members tenured in one of the natural sciences divisions (Biological Sciences, Physical Sciences) and one of the social sciences divisions (Social Studies, Arts & Humanities). Four of the five committee members must be members of the Graduate Faculty. The fifth, subject to approval of the program chair, may be any qualified person, on or off campus, who holds a doctoral degree.

ASSESSMENTS AND EXAMINATIONS
All students must complete an initial coursework proposal, preferably after their first year, as well as a final coursework proposal. Students must pass a qualifying examination, a preliminary examination, and a final dissertation defense which constitutes the final examination.

TIME CONSTRAINTS
A candidate for a doctoral degree who fails to take the final oral examination and deposit the dissertation within five years after passing the preliminary examination may be required to take another preliminary examination and be admitted to candidacy a second time. Doctoral degree students who have been absent for ten or more consecutive years lose all credits that they have earned before their absence. Individual programs may count the coursework students completed prior to their absence for meeting program requirements; that coursework may not count toward Graduate School credit requirements.

LANGUAGE REQUIREMENTS
No language requirements.

ADMISSIONS

DEADLINES
Application materials for Environment and Resources must be received by December 1 for admission to the following summer session or fall semester and by October 15 for admission to the following spring semester.

LEARNING OUTCOMES

KNOWLEDGE AND SKILLS
• Familiarity with methods and concepts from a range of disciplines relevant to environmental issues and outcomes (interdisciplinarity).
• Broad understanding of environmental issues and solutions (breadth requirement).
• A coherent and rigorous course of study related to the dissertation topic (depth requirement).
• Familiarity with quantitative and qualitative methods and methods of data analysis and presentation appropriate to the study of the environment (measurement and analysis requirement).
• A capacity to integrate knowledge and to make original contributions that improve understanding of environmental problems.
• A commitment and ability to communicate research findings and environmental information generally in writing and orally to a broad audience, including stakeholders and the general public.

PROFESSIONAL CONDUCT
• An understanding of professional and ethical responsibility.