

# Doctor of Philosophy in Earth System Science and Policy

## Admission Requirements

Applicants who are seeking admission to the School of Graduate Studies must meet all of the minimum general education requirements identified in the graduate catalog. In addition, students must fulfill the requirements below for admission to the Earth System Science and Policy Ph.D. degree program.

1. Hold a Master's degree from a recognized college or university.
2. Have satisfactorily completed a minimum of college-level algebra plus 3 credits of college statistics or calculus, AND a minimum of 12 semester credit hours in natural or physical sciences, e.g., physics, chemistry, geosciences, biology or related sciences, AND 6 semester credits in social sciences, e.g., economics, geography, environmental studies, sociology, psychology, anthropology, archeology, political science or related fields.
3. Have earned a minimum average GPA of 3.50 on a 4.00 scale on all graduate-level coursework.
4. Satisfy the School of Graduate Studies' English Language Proficiency requirements as published in the graduate catalog.
5. Submit a personal statement which describes the applicants academic and/or professional background and experience. As well, the personal statement must address the following questions: What are your research interests? What dissertation research topics or objectives would you like to pursue, and why? Which ESSP faculty member best fits your research interests, and why? How do your research interests fit within the context of Earth System Science and Policy?

## Degree Requirements

Students seeking the Doctorate degree at the University of North Dakota must satisfy all general requirements set forth by the School of Graduate Studies as well as particular requirements set forth by the Earth System Science and Policy Department.

The overarching goal of all the degree programs offered in Earth System Science and Policy is to facilitate the acquisition of skills required to solve environmental problems or to seize opportunities presented by a changing environment. Much of the responsibility for learning rests upon the student.

1. Students enrolled in the Ph.D. program will take (in most cases) the following sequences. Students will complete the basic two-semester core sequence of courses during their first year of study.

Code	Title	Credits
ESSP 503	Environmental Policy Science	3
ESSP 504	The Biosphere	3
ESSP 505	Energy Issues and Earth Systems	3
ESSP 506	Ecosystem Services: Valuing Nature in a Market Society	3
ESSP 507	Earth Systems Processes and Vulnerability Analysis	3
ESSP 590	Colloquium Series	2

2. A minimum of 90 credits (30 of which must be taken in the Earth System Science and Policy Program) beyond the baccalaureate, including acceptable master's degree work, and up to 18 credits for dissertation is required for the Ph.D. degree.
3. On-campus Ph.D. students will be required to spend a minimum of two semesters, full-time, on the UND campus after receiving a master's degree. Online Ph.D. students can complete this degree completely online.
4. Students must complete at least 6 credits of approved academic work per year.
5. By the end of the second semester in the doctoral program, the student will select a chair of her/his Advisory Committee. By the end of the third semester, the student will select membership of the Advisory Committee,

in consultation with the chair. The Advisory Committee will have at least four members, at least three of which must be from the ESSP faculty. One of the committee members will be appointed by the Dean of the School of Graduate Studies. That member will be from outside the ESSP Department. The committee will assist the student in course selection and definition of a research topic and will also administer and evaluate all examinations that are required for completion of the degree.

6. ESSP Ph.D. students must file with the School of Graduate Studies an approved program of study by the end of their third semester.
7. Students must maintain a GPA of at least 3.00 from the start of the Ph.D. program in ESSP, with no grades below "B" and comply with the requirements of the School of Graduate Studies. Any student whose GPA falls below 3.00 will be placed on probation and will have one semester to raise the GPA to 3.00 or above.
8. All students must take a qualifying exam to advance to candidacy in the Ph.D. program. The qualifying exam will be administered once all ESSP core courses are completed, which will typically occur during the second year for a full-time student.
9. All students are required to write a dissertation proposal in a style appropriate for submission to a funding organization or agency. Students will present and defend their proposal no later than two years from the date of admission to the ESSP doctoral program. Successful completion, and oral defense, of a dissertation is also required for the Ph.D. degree.
10. All exams will be administered and evaluated by the student's Advisory Committee.

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ESSP 503	Environmental Policy Science	3
ESSP 504	The Biosphere	3
ESSP 505	Energy Issues and Earth Systems	3
ESSP 506	Ecosystem Services: Valuing Nature in a Market Society	3
ESSP 507	Earth Systems Processes and Vulnerability Analysis	3
ESSP 590	Colloquium Series	2
Electives		6-40
ESSP 596	Doctoral Research	24-48
ESSP 999	Dissertation	6-18
<b>Total Credits</b>		<b>53-123</b>