

Sample 6-Year Schedule: J.D./Ph.D. in Environmental Science and Policy (ECS) Students Entering through the School of Law**

The joint program will enable students to obtain both a JD and PhD in 6 years. The first year will be spent in the School of Law, and the remaining five years will be spent taking both Law and ECS courses. Students must complete 79 credits in the School of Law and 9 credits from ECS will be double counted to complete the total of 88 JD credits. Students must complete 48 credits toward the ECS PhD and 12 Law credits will be double counted toward the total of 60 ECS credits. (Students entering with a master's degree are eligible to have 24 of the 60 ECS credits waived.)

The sample schedule below is intended as a general scheme that shows how a student would proceed through the program, entering with Law first and is not intended to be prescriptive. Students who commence law study first will complete 32 credits the first year. In subsequent years, students will take a combination of law and ECS-related courses, with the caveat that all work toward the law degree, including a required professionalism/ethics course, an upper-level writing requirement, and a skills course, must be completed within 5 years of entering the JD program.

	Fall	Spring	Law CR	ECS CR	Cumulative credits
Year 1					
	LAW 16 CR	LAW 16 CR	32 CR	0 CR	32 LAW
Year 2					
	LAW 9 CR ECS 6 CR	LAW 9 CR ECS 6 CR	18 CR	12 CR	50 LAW 12 ECS
Summer 2					
	LAW Externship 6 CR		6 CR		56 LAW 12 ECS
Year 3					
	LAW 6 CR ECS 6 CR	LAW 6 CR ECS 6 CR	12 CR	12 CR	68 LAW 24 ECS
Year 4					
	LAW 5 CR ECS 6 CR	LAW 6 CR ECS 5 CR	7 CR	11CR	79 LAW 35 ECS
Year 5					
	ECS 3 CR	ECS 3 CR	0 CR	6 CR	79 LAW 41 ECS
Year 6					
	ECS 3 CR	ECS 4 CR	0 CR	7 CR	79 LAW 48 ECS

Students will also complete an environmentally related law externship for 6 credits. Students must complete 79 credits in the School of Law and 9 credits from ECS will be double counted to complete the total of 88 JD credits. Students must complete 48 credits toward the ECS PhD and 12 Law credits will be double counted toward the total of 60 ECS credits. (Students entering with a master's degree are eligible to have 24 of the 60 ECS credits waived.)

**** Schedule for Entering Through the Ph.D. Program**

We have not included a sample schedule for students entering through the ECS PhD program. They would follow a similar course, but details would be worked out on a case-by-case basis. Students may also begin in the PhD program, completing a year of coursework, including the 4 core ECS courses, before taking up their legal studies. PhD students who take courses in the School of Law prior to admission to the School of Law will not be able to count any of these courses toward their JD; consequently, it is expected that ECS students exploring the possibility of the JD will be advised to take only Law electives. For the PhD, students must also pass comprehensive examinations and take at least 13 dissertation credits. To be awarded the doctoral degree, students must successfully complete and defend a dissertation.

Appendix A: Comparable JD/PhD Programs

(Note: all material below has been cut and paste from the individual program websites)

University of Colorado, Boulder Environmental Studies

MS/JD or PhD/JD

This is a dual degree program offered in conjunction with the Law School. The Law School will grant credit for acceptable performance in graduate level Environmental Studies courses towards the JD degree for up to nine (for MS students) or 12 (for PhD students) hours of the required 89 credits for the JD degree. Environmental Studies will grant up to 9 credits (for MS students) and 12 credit hours (for PhD students) of acceptable performance in Law courses. The JD program will be considered the student's primary program.

University of Minnesota Environmental Studies

1) JD/PhD in Ecology, Evolution & Behavior

The Ecology, Evolution, and Behavior program is administered by the Department of Ecology, Evolution and Behavior (EEB) within the College of Biological Sciences, although its graduate faculty includes members from other departments and colleges. PhD students are required to have competence in quantitative methods, most students take statistics to satisfy this requirement. In addition, a course in the history and philosophy of science is required. Field or lab experience is required of all students and this is usually obtained as part of the student's dissertation research. Students are required to take one course each in ecology, evolution, and behavior. They also attend a Journal Club Seminar throughout their first 3 semesters. They further attend EEB seminars and receive ethics training during their course of study. PhD students must additionally take at least 12 course credits in a declared minor or supporting program, which may be Law. Research experience is encouraged early in the student's graduate training.

Though PhD students normally must teach for at least 2 semesters at half-time during their course of study, this requirement is waived for JD/PhD joint degree students.

PhD students present a pre-research seminar at the end of the second or start of the third year. They then typically write a research proposal in the form of a proposal to the National Science Foundation for a Doctoral Dissertation Improvement Grant, which constitutes the preliminary written examination. After passing that exam, students take the preliminary oral examination. After that, the student focuses on research and preparing the doctoral dissertation, taking 24 thesis credits. Once the dissertation is complete, the student offers a public presentation, then defends the dissertation in a final oral examination.

2) JD/PhD in Natural Resources Science and Management

Interdisciplinary NRSRM degree programs are tailored to individual student backgrounds, subject matter interests, and objectives. Graduate students are expected to acquire 2 sets of knowledge and skills: (1) an understanding of the basic components of natural resource management and the science needed to

support that management, and (2) specialized knowledge and skills applicable to one or more of the 8 specified tracks of study:

Forests: biology, ecology, conservation, and management
Economics, policy, management, and society
Assessment, monitoring, and geospatial analysis
Recreation resources, tourism, and environmental education
Forest hydrology and watershed management
Forest products
Paper science and engineering
Wildlife ecology and management

The PhD program is designed to ensure that students gain necessary competence in their chosen track for independent research. Incoming graduate students' academic and experience backgrounds are carefully reviewed and, with the guidance of an advisor and the Graduate Study Committee, a coursework program is developed to provide the necessary background to meet the student's objectives and to enable specialization in the track. Coursework requirements for each track and degree program are determined by the student's adviser and committee and must be approved by the Graduate Study Committee. There are no specific courses required for all students, but all PhD students must take at least 2 graduate seminars during their program, one of which may be the Joint Degree Program Pro-seminar (LAW 6875, 1 credit) if a student so petitions. In addition, students must have either taken at some point in their background, or take during their program, advanced coursework in both statistics and in their track.

Students are allowed to enroll and graduate in the NRSM umbrella program without a chosen track. However, they are strongly encouraged to select a single track by the end of their first year of study. Students will not be allowed to pursue more than one track simultaneously. Under the semester system, PhD degree programs normally vary from 40 to 60 course credits. Although the Graduate School does not specify a minimum number of required credits for the major field, PhD students take at least 12 credits in a minor or supporting program (which may be Law) and register for 24 doctoral thesis credits. Preliminary written, preliminary oral, and final oral examinations are required, as well as a thesis that shows originality, the ability to conduct independent research, mastery of the relevant literature, and familiarity with the sources and methods of research, and that contributes new knowledge to the field.

3) JD/PhD in Conservation Biology

The Conservation Biology Graduate Program is an interdisciplinary program within the Graduate School. Program administration is done by the unit in which the current Director of Graduate Studies holds his or her academic appointment (now the College of Natural Resources). Faculty hold primary academic appointments in more than 15 departments in the University (e.g., Anthropology, EEB, Fisheries and Wildlife, Forest Resources, Horticulture, Geography, Political Science, and the Humphrey School).

Courses in the PhD program are prescribed in accordance with an individual's needs and career direction. There is no specific number of credits needed for a PhD in Conservation Biology, but students are required to complete the following: 11 credits of core integrative courses, 3 courses in the biological dimensions of Conservation Biology, 2 courses in the human dimensions of Conservation Biology, and 24 thesis credits. A minimum of 12 credits is required for the minor or supporting program, which may be Law. Additional course work in methodology may be needed for research. Students with their advisory committee develop a program that emphasizes the ecological and social

aspects of Conservation Biology. Students are required to take written and oral preliminary exams, to prepare a dissertation, and to present a final oral defense.

Combining Curricula

Students in the Joint Degree Program combine their Law and science/health curricula by cross-counting up to 12 Law credits in their science or health program and up to 12 non-law credits in their Law School program. For more details, click on "Cross-Counting Courses" above.

Stanford University

Law and Environment and Resources

JD/MS, JD/PhD

Stanford joint degree programs really do help law students begin to "think like a client." The interdisciplinary background I'm building will help me be a better lawyer and a more effective advocate.
– Brian Shillinglaw, JD/MS, Emmett Interdisciplinary Program in Environment and Resources (E-IPER) '08

Addressing the ecological and resource challenges of our rapidly changing world requires more than a passion for the environment. It takes a mastery of analytical tools, strong problem-solving skills, and a commitment to thinking and working across disciplines as diverse as law, biology, history, economics, psychology, and engineering.

Stanford's Emmett Interdisciplinary Program in Environment and Resources (E-IPER) allows students to combine expertise in the natural and social sciences, engineering, law, and business to address pressing environmental and natural resource problems. Formally part of the School of Earth Sciences, E-IPER offers a rigorous joint degree program that pushes students to understand and use natural and social science approaches, skills, and concepts to re-imagine and address legal and policy questions with a fresh mind-set and novel analytical tools. By giving students the opportunity to delve into both the qualitative and quantitative aspects of environmental issues, course work prepares them to analyze environmental and resource problems from multiple perspectives and use diverse analytical approaches from multiple disciplines. For example, a student interested in exploring the potential for open-ocean fin-fish aquaculture can use classic economic analysis as well as business market studies, coupled with biological risk assessment and legal gap analysis, to understand and evaluate both the potential for and important environmental issues raised by such a venture.

E-IPER students who earn a JD/MS are poised to move into a multitude of potential professional opportunities that merge law with environmental concerns, including academia, policy development, private industry, NGOs, government, or in-house lawyering. There is also a JD/PhD option for students who want to conduct in-depth, original research in preparation for careers in academia or government, or with an NGO.