

Environment and Sustainability

Requirements for the Major in Environment and Sustainability

The major requires successful completion of the following:

Code	Title	Semester Hours
Course Requirements		
ENST 101	Introduction to Environmental Studies	4
ESCI 220	The Science of Sustainability	4
ENST 421	Environment and Sustainability Capstone	4
ECON 335	Environmental Economics	4
ENST 334 or POLS 313	Environmental Policy and Law Environmental Politics and Policy	4
Select one of the following:		4
ENST 217	Fundamentals of GIS	
STAT 204	Elementary Statistics	
In addition to any courses completed to fulfill the G5 requirement, select one course numbered 100 or above in Biology, Chemistry, Environmental Science, Forestry, Geology, or Physics. ¹		4
Select three additional approved electives to fulfill the designated focus topic ²		12
Total Semester Hours		40

Code	Title	Semester Hours
Additional Requirements		
A comprehensive examination		

¹

ESCI 220 cannot be used to satisfy this requirement.

²

Students should select a focus in collaboration with their advisor and faculty mentors before the end of their second year. Any self-designed focus must be approved by the Environment and Sustainability Steering Committee prior to the junior year. This focus must contain three courses from a minimum of two departments (preferably three) that have a central theme related to the student's senior capstone project. Courses in environmental economics and policy not selected to fulfill a requirement may be applied toward a focus. An appropriate special topics course or independent study (ESCI 444) may also be used to satisfy one of the foci requirements. The ultimate goal of the foci is to provide students with a cohesive interdisciplinary experience while preparing them to complete substantive capstone projects.

Student Learning Outcomes

A student majoring in Environment & Sustainability will:

1. Explain fundamental concepts from the social sciences (policy, economics and cultural values that motivate environmental thought, action and governance).
2. Identify and appraise fundamental principles in sustainability, and in particular, five global challenges (food systems, water, biodiversity loss, climate change and energy, and waste and pollution) with emphasis on the environmental justice dimensions of each challenge.
3. Demonstrate how addressing any environmental issue requires study and approaches from multiple perspectives and recognition of connections among disciplinary perspectives.
4. Apply the scientific method and/or social science research tools using real world data, including the formulation and testing of hypotheses and appropriate interpretation of data.
5. Analyze and evaluate a complex environmental challenge through the processes of problem identification, proposal development, project implementation, interpretation of results, review of literature and communication of integrated perspectives as written and oral arguments to both professional and lay audiences.