

# Environmental Natural Sciences Concentration

The curriculum for the M.S. in Environmental Sciences with a concentration in Environmental Natural Sciences allows students to gain a strong scientific understanding of ways to study, evaluate, and interpret environmental realities and their impacts, as well as to manage and mitigate environmental problems.

Objectives are to enable students to:

1. Develop a basic literacy in the natural and social sciences and humanities as they contribute to an understanding of environmental issues
2. Critically analyze environmental problems
3. Identify, research, and evaluate environmental problems
4. Compare, contrast, implement, and manage short- and long-term solutions to environmental problems.

Students complete three core courses and 24 credits of electives chosen in consultation with their advisor based on their research and/or professional interests. The curriculum for this concentration is flexible so that students can pursue a variety of research projects in the natural sciences.

## Requirements

### Core Requirements

ENS 551	Environmental Natural Sciences	4
ENS 552	Environmental Social Sciences and Humanities	4
ENS 543	Environmental Data Analysis with R <sup>1</sup>	4

**Concentration Electives <sup>2</sup>** **24**

Select elective courses in consultation with academic advisor

### Closure

ENS 510	Thesis	4
or ENS 520	Graduate Project	

**Total Hours** **40**

<sup>1</sup> Student may select another methods course approved by academic advisor before enrollment

<sup>2</sup> Provides students with competency in research and management of interactions among physical, chemical, and biological systems in the environment.

## Research Supervisor and Natural Sciences Background Requirements (Environmental Natural Sciences concentration only)

Students applying for the Environmental Natural Sciences concentration must have a significant background in the environmental natural (physical and life) sciences and must identify a Research Supervisor from among the ENS faculty in advance of application submission. Students in this concentration are required to complete a research thesis or graduate project. The capstone closure (internship) option is not available for this concentration.

To identify a potential research supervisor, visit the faculty profiles linked from the Environmental Studies Program webpage and reach out to one or more faculty members by email. Be sure to explain the

topic you would like to research, the methods you might like to use, and why you think this faculty member might be a good match for your interests. Students planning to complete a thesis or graduate project should have a clear and fairly specific idea of what they want to research.

If your interests are very general and/or you do not have a significant background in the natural sciences, you might want to consider the Environmental Planning and Management or Sustainable Development and Policy concentrations within the MS in Environmental Sciences. These concentrations do not require you to identify a Research Supervisor in advance, are open to students from all disciplinary backgrounds, and allow students to complete the degree using a 240-hour capstone internship. Thesis and graduate project closure options are also available for these two concentrations.