# **Core Sequence**



All MES students take four required programs in sequence to complete the core curriculum. Each program earns eight credits per quarter (eight quarter-hours) for a total of 32 credits. Each core program meets on Tuesday and Thursday, 6-10 p.m., and is taught by two to three faculty with different disciplinary specialties.

The programs start with a general view of environmental study and grow more specific as the core progression unfolds.

### Political Economic and Ecological Processes (fall, first year)

This program provides a framework for understanding current environmental issues from an interdisciplinary perspective. Students will begin to develop the skills to become producers of new knowledge, rather than being strictly learners of information already available. Multiple methods of data acquisition and analysis will be introduced through examples drawn from many fields of study. The philosophy of science and the problematic relationship between science and policy are also introduced.

#### Ecological and Social Sustainability (winter, first year)

This course addresses central issues in contemporary sustainability studies on theoretical and practical levels. Emphasis is on ways to promote both environmental and social sustainability. Areas covered may include environmental quality at regional, national and global scales; energy use and alternative energies; resource availability and access to resources; social and cultural issues of sustainability; and indicators to guide policy. As part of this program, students write and present a research paper to provide evidence of their readiness to advance to candidacy.

## Quantitative and Qualitative Data Analysis for Environmental Studies (spring, first year)

Students learn how to integrate the use of inferential statistics and qualitative data analysis to conduct rigorous examinations of the social, biological, and physical aspects of environmental issues. This knowledge will prepare students for their own research and for understanding and critiquing research articles and reports in fields of their choosing.

## Case Studies and Thesis Research Design (fall, second year)

Students will examine in detail a variety of environmental problems, using the skills they gained in their first year of MES core studies to carry out individual or small group projects. Students and faculty will also work together to apply what has been learned throughout the core sequence about interdisciplinary environmental research to design individual thesis research plans that will be ready to carry out by the end of the fall quarter of the student's second year.