# Environmental Studies, M.S. master

The Master of Science program accommodates individual student needs and backgrounds and provides students with several curricular and research opportunities. The interdisciplinary curriculum focuses on the natural and social sciences as they relate to environmental problem solving. Each student should contact a faculty member in the Center for Sustainability Studies to identify potential projects. Once accepted into the program students will complete course work requirements and either a thesis (for the thesis option) or internship (for the non-thesis option).

#### **Environmental Studies, MS**

Required Credits: 30 (Thesis) or 32 (Non-Thesis)

Required GPA: 3.0

## Pathway 1: Thesis Option

### I. Required Core

Complete the following courses:

- ENVR 5800 Sustainability Analytics & Modeling (3 credits)
- ENVR 6250 Advanced Environmental Studies (3 credits)
- ENVR 6400 Research and Project Design (3 credits)
- ENVR 6700 Graduate Sustainability Seminar (1-3 credits)
  Complete for 3 credits
- ENVR 6790 Environmental Project Management (3 credits)

#### II. Required Elective Courses

Select, with the consent of thesis advisor, at least 9 credits of graduate level coursework in Environmental Studies, Geology, or related field. Course options include:

- ECON 5040 Environmental Economics (3 credits)
  or ENVR 5040 Environmental Economics (3 credits)
- ENVR 5050 Geochemistry (3 credits)
- ENVR 5110 Environmental Chemistry (3 credits)
- ENVR 5200 Wastewater Treatment (3 credits)
- ENVR 5210 Environmental Law and Policy (3 credits)
- ENVR 5220 Sampling and Analysis (4 credits)
- ENVR 5230 Air Pollution Technology (4 credits)
- ENVR 5240 Waste Management (4 credits)
- ENVR 5260 Risk, Resilience and Sustainable Community Development (3 credits)
- ENVR 5300 Environmental Management and Safety (3 credits)
- ENVR 5400 Environmental Microbiology (3 credits)
- ENVR 5500 Environmental Toxicology (4 credits)
- ENVR 5600 Environmental Justice and Sustainability (3 credits)
- ENVR 5610 Sustainability: Theory and Practice (4 credits)
- ENVR 5710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
- ENVR 5720 Food Sovereignty, Health & Indigenous Environments (3 credits)
- ENVR 5730 Sustainable Communities: Local Indigenous Perspective (3 credits)
- ENVR 5740 Environment, Wellness & the Sacred Connection to Place (3 credits)
- ENVR 5750 Sustainable Communities: Global Indigenous Perspective (3 credits)
- ENVR 5840 Wetlands Ecology (3 credits)
  or BIOL 5840 Wetlands Ecology (3 credits)
- ENVR 6920 Directed Group Study: Seminar (2 credits)
- GEOG 5125 Weather and Climate (3 credits)
- GEOG 5130 Biogeography (3 credits)
- GEOG 5140 Landscape Ecology (3 credits)

- GEOG 5231 Introduction to Geographic Information Systems (3 credits)
- GEOG 5232 Intermediate Geographic Information Systems (3 credits)
- GEOG 5255 Introduction to Remote Sensing (3 credits)
- GEOG 5265 Spatial Analysis (3 credits)
- GEOG 5275 Advanced Geographic Information Systems (3 credits)
- GEOG 5532 Political Ecology (3 credits)
- GEOG 5570 Recreational Lands Management for Sustainable Tourism (3 credits)
- GEOG 5630 Conservation Biology (3 credits)
  or BIOL 5630 Conservation Biology (3 credits)
- GEOL 5120 Soils (4 credits)
  or BIOL 5120 Soils (4 credits)
- GEOL 5211 Environmental Hydrology (3 credits)
- GEOL 5212 Hydrogeology (3 credits)
- GEOL 5300 Global Environmental Change (3 credits)
- GEOL 5400 Glacial and Pleistocene Geology (3 credits)
- GEOL 5500 Topics in Paleontology (3 credits)
- GEOL 5600 Stratigraphy and Sedimentation (3 credits)
- GEOL 5700 Environmental Geophysics (3 credits)

### III. Thesis Option

Complete the following course for 6 credits:

• ENVR 6990 Thesis (1-6 credits)

## Pathway 2: Non-Thesis Option: course work only

#### I. Required Core

Complete the following courses:

- ENVR 5800 Sustainability Analytics & Modeling (3 credits)
- ENVR 6250 Advanced Environmental Studies (3 credits)
- ENVR 6400 Research and Project Design (3 credits)
- ENVR 6700 Graduate Sustainability Seminar (1-3 credits) Complete for 3 credits
- ENVR 6790 Environmental Project Management (3 credits)

# II. Required Elective Courses

Select, with the consent of thesis advisor, at least 12 credits of graduate level coursework in Environmental Studies, Geology, or related field. Course options include:

- ECON 5040 Environmental Economics (3 credits)
  or ENVR 5040 Environmental Economics (3 credits)
- ENVR 5050 Geochemistry (3 credits)
- ENVR 5110 Environmental Chemistry (3 credits)
- ENVR 5200 Wastewater Treatment (3 credits)
- ENVR 5210 Environmental Law and Policy (3 credits)
- ENVR 5220 Sampling and Analysis (4 credits)
- ENVR 5230 Air Pollution Technology (4 credits)
- ENVR 5240 Waste Management (4 credits)
- ENVR 5260 Risk, Resilience and Sustainable Community Development (3 credits)
- ENVR 5300 Environmental Management and Safety (3 credits)
- ENVR 5400 Environmental Microbiology (3 credits)
- ENVR 5500 Environmental Toxicology (4 credits)
- ENVR 5600 Environmental Justice and Sustainability (3 credits)
- ENVR 5610 Sustainability: Theory and Practice (4 credits)
- ENVR 5710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
- ENVR 5720 Food Sovereignty, Health & Indigenous Environments (3 credits)
- ENVR 5730 Sustainable Communities: Local Indigenous Perspective (3 credits)

- ENVR 5740 Environment, Wellness & the Sacred Connection to Place (3 credits)
- ENVR 5750 Sustainable Communities: Global Indigenous Perspective (3 credits)
- ENVR 5840 Wetlands Ecology (3 credits) or BIOL 5840 Wetlands Ecology (3 credits)
- ENVR 6920 Directed Group Study: Seminar (2 credits)
- GEOG 5125 Weather and Climate (3 credits)
- GEOG 5130 Biogeography (3 credits)
- GEOG 5140 Landscape Ecology (3 credits)
- GEOG 5231 Introduction to Geographic Information Systems (3 credits)
- GEOG 5232 Intermediate Geographic Information Systems (3 credits)
- GEOG 5255 Introduction to Remote Sensing (3 credits)
- GEOG 5265 Spatial Analysis (3 credits)
- GEOG 5275 Advanced Geographic Information Systems (3 credits)
- GEOG 5532 Political Ecology (3 credits)
- GEOG 5570 Recreational Lands Management for Sustainable Tourism (3 credits)
- GEOG 5630 Conservation Biology (3 credits)
  or BIOL 5630 Conservation Biology (3 credits)
- GEOL 5120 Soils (4 credits)
  or BIOL 5120 Soils (4 credits)
- GEOL 5211 Environmental Hydrology (3 credits)
- GEOL 5212 Hydrogeology (3 credits)
- GEOL 5300 Global Environmental Change (3 credits)
- GEOL 5400 Glacial and Pleistocene Geology (3 credits)
- GEOL 5500 Topics in Paleontology (3 credits)
- GEOL 5600 Stratigraphy and Sedimentation (3 credits)
- GEOL 5700 Environmental Geophysics (3 credits)

#### III. Non-Thesis Option

Complete the following:

- ENVR 6600 Capstone Report (2 credits)
- ENVR 6970 Internship (3 credits)

## **COMPETENCY REQUIREMENT**

All graduate students in Environmental Studies are required to demonstrate competency in the computer applications of statistics. This requirement is to be satisfied by the completion of the following course with a grade of B or better: ENVR 5800, Environmental Data Analysis, 3 credits, or equivalent.

#### WRITTEN EXAMINATION

All major programs require satisfactory completion of a final written examination which needs to be successfully completed prior to scheduling the oral examination. Please consult with your academic advisor for requirements specific to your area of study.