

Environmental Science M.S. 2016-2017

Environmental Science Core Requirements

The core requirements must be taken in the order listed:

[STAT 5135](#) Applied Statistical Methods

[ENSC 5530](#) Research Methods: Environmental Science

[ENSC 6731](#) Graduate Seminar

Or

[ENSC 6838](#) Research Project

Or

[ENSC 6939](#) Master's Thesis Research

Environmental Science Thesis Option (36 hours)

[STAT 5135](#) Applied Statistical Methods

[ENSC 5530](#) Research Methods: Environmental Science

[ENSC 6939](#) Master's Thesis Research

Designated electives 24 hours (maximum of six hours of 4000-level credit) and 6 hours of thesis. Electives are selected in consultation with the faculty adviser and must include at least one course from three of the following rubrics: BIOL, CHEM, GEOL or INDH. A maximum of six hours of environmental management (ENVR) courses may be included.

Environmental Science Research Project Course Option (36 hours)

[STAT 5135](#) Applied Statistical Methods

[ENSC 5530](#) Research Methods: Environmental Science

[ENSC 6838](#) Research Project

Or

[ENSC 6731](#) Graduate Seminar

Designated electives 27 hours (maximum 6 hours of 4000-level credit). Electives are selected in consultation with the faculty adviser and must include at least one course from three of the following rubrics: BIOL, CHEM, ENSC, GEOL or INDH. A maximum of six hours of environmental management (ENVR) courses may be included.

Environmental Science Specializations

Environmental Biology Specialization Electives:

Selected in consultation with adviser (24-27 hours).

[BIOL 5233](#) Ecotoxicology

[BIOL 5234](#) Population and Community Dynamics

[BIOL 5235](#) Ichthyology

And

[BIOL 5215](#) Laboratory for Ichthyology

[BIOL 5332](#) Toxicology

[BIOL 5333](#) Industrial Microbiology

[BIOL 5531](#) Aquatic Toxicity Testing

[BIOL 5532](#) Coastal and Estuarine Ecology

[BIOL 5533](#) Ecological Methods

[BIOL 5534](#) Conservation Biology

[BIOL 5535](#) Neotropical Rainforest Ecology

[BIOL 5537](#) Limnology and Aquatic Biology

[BIOL 5931](#) Research Topics in Biology

[ENSC 5931](#) Research Topics in Environmental Science

[ENSC 5939](#) Independent Study in Environmental Science

Cross discipline courses (12 hours maximum) selected from: [CHEM 5431](#), [CHEM 5535](#), [CHEM 5731](#), [GEOL 5331](#), [GEOL 5333](#), [GEOL 5532](#), [GEOL 5631](#), [GEOL 5632](#), [GEOL 5931](#), [INDH 5333](#), [ENVR 5332](#), [ENVR 6132](#).

Environmental Chemistry Specialization Electives:

Selected in consultation with adviser (24-27 hours).

[CHEM 4251](#) Laboratory for Environmental Analysis

[CHEM 4356](#) Soil & Groundwater Remediation

[CHEM 5431](#) Contaminant Fate and Transport

[CHEM 5536](#) Environmental Remediation

[CHEM 5731](#) Environmental Organic Chemistry

[CHEM 5535](#) Sampling & Analysis of Environmental Contaminants

[CHEM 5631](#) Environmental Chemodynamics

[BIOT 5535](#) Environmental Biotechnology

[ENSC 5333](#) Fundamentals of Environmental Engineering

[ENSC 5939](#) Independent Study in Environmental Science

Cross discipline courses (12 hours maximum) selected from: [BIOL 5233](#), [BIOL 5332](#), [BIOL 5333](#), [CHEM 5133](#), [GEOL 5331](#), [GEOL 5532](#), [GEOL 5632](#), [INDH 5333](#), [ENVR 5332](#), [ENVR 6132](#).

Environmental Geology Specialization Electives:

[GEOL 4323](#) Soils in the Environment

[GEOL 4356](#) Soil and Groundwater Remediation

[GEOL 5531](#) Hydrology of Groundwater

[GEOL 5532](#) Hydrology of Surface Water

[GEOL 5632](#) Hazardous Materials in The Geologic Environment

[BIOL 5332](#) Toxicology

[CHEM 5431](#) Contaminant Fate and Transport

[CHEM 5535](#) Sampling & Analysis of Environmental Contaminants

Cross-discipline courses (12 hour maximum) must be selected in consultation with faculty adviser.

Industrial Hygiene Specialization Electives:

[INDH 5131](#) Control of Occupational and Environmental Hazards

[INDH 5233](#) Recognition of Occupational Diseases

[INDH 5333](#) Air Pollution

[INDH 5335](#) Ergonomic Methods and Analysis Techniques

[INDH 6135](#) Radiation Protection

[INDH 6232](#) Analytical Methods for Evaluation of Health Hazards

[INDH 6332](#) Safety Engineering

[BIOL 5332](#) Toxicology

Cross-discipline (12 hour maximum) CHEM/GEOL courses must be approved in advance by the adviser.

Safety Specialization Electives:

[INDH 5131](#) Control of Occupational and Environmental Hazards

[INDH 5334](#) Human Factors Engineering

[INDH 5335](#) Ergonomic Methods and Analysis Techniques

[INDH 5931](#) Research Topics in Industrial Hygiene and Safety

[INDH 6232](#) Analytical Methods for Evaluation of Health Hazards

[INDH 6332](#) Safety Engineering

Cross-discipline (12 hours maximum) BIOL/CHEM/GEOL courses must be approved in advance by the adviser.