EARTH AND ENVIRONMENTAL SCIENCE M.S.

Program Requirements

Required Core Courses
EAES 505  Environmental Geoscience  3
EAES 700  Earth Systems Science  3

Research in Geoscience Literature
EAES 594  Research in Geoscience Literature  1

Required Specialization Courses
Complete 9-12 semester hours from the following:  9-12

Earth Surface Processes and Hydrology
EAES 530  Numerical Modeling of Earth Systems
EAES 531  Hydroclimatology
EAES 532  Applied Groundwater Modeling
EAES 533  Water Resource Management
EAES 539  Principles of Soil Science
EAES 551  Coastal Geomorphology

Environmental Quality and Remediation
EAES 526  Geochemistry
EAES 527  Organic Geochemistry
EAES 528  Environmental Forensics
EAES 529  Instrumental Environmental Analysis
EAES 586  Urban Contamination
EAES 591  Methods in Environmental Research

Geology and Geophysics
EAES 507  Tectonics
EAES 508  Field Geology
EAES 524  Igneous and Metamorphic Geology
EAES 525  X-ray Microanalysis
EAES 535  Geophysics
EAES 544  Sedimentology
EAES 550  Advanced Marine Geology

GIS and Remote Sensing
EAES 510  Geographic Information Systems
EAES 511  Fundamentals of Remote Sensing of the Environment
EAES 610  Spatial Analysis
EAES 611  Advanced Environmental Remote Sensing and Image Processing
EAES 710  Advanced Geographic Information Systems

Free Elective Courses
Complete 0-10 semester hours from the following:

EAES 506  Introduction to Geographic Information Science and Remote Sensing
EAES 541  Stratigraphy
EAES 521  Optical Mineralogy
EAES 522  Igneous Metamorphic Petrology
EAES 592  Pro Seminar
EAES 509  Current Issues in Sustainability Science
EAES 562  Waste Management

EAES 563  Natural Resource Management
EAES 565  Environmental Change and Communication
EAES 566  Environmental Problem Solving
EAES 575  Environmental Economics
EAES 660  Seminar in Environmental Management
BIOL 550  Topics in Microbiology
BIOL 570  Ecology
HLTH 502  Determinants of Environmental Health
HLTH 528  Program Planning and Evaluation
HLTH 565  Foundations of Epidemiology
STAT 541  Applied Statistics
CHEM 510  Hazardous Materials Management
CHEM 534  Separation and Analysis
CHEM 570  Advanced Biochemistry

Culminating Experience
Select one of the following two options:  3-6

Thesis
EAES 698  Master’s Thesis
Submit the completed Thesis original and one copy to the Graduate Office. See Thesis Guidelines for details.

Research & Comprehensive Examination
EAES 593  Research Seminar
GRAD CMP  Comprehensive Examination
In the semester you will sit for exam, register for the section which matches your major & advisor. Successfully pass exam.

Total Credits  32

1 With the Thesis option, complete a minimum of 9 semester hours from one area of specialization. With the Research Seminar and Comprehensive Exam option, complete a minimum of 12 semester hours, either from one area of specialization only or from multiple areas.