EARTH AND ENVIRONMENTAL SCIENCE (M.S.)

Program Requirements

Code	Title	Credits
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: [1]		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 710	Advanced Geographic Information Systems	
Free Elective Courses		**0-10**
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 575	Environmental Economics	
EAES 660	Seminar in Environmental Management	
BIOL 550	Special Topics in Microbiology	
BIOL 570	Ecology	
HLTH 502	Determinants of Environmental Health	
HLTH 528	Program Planning and Evaluation	
HLTH 565	Foundations of Epidemiology	
CHEM 510	Hazardous Materials Management	
CHEM 534	Separation and Analysis	
CHEM 570	Advanced Biochemistry	
STAT 532	Fundamentals of Statistics	
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.