

ENVIRONMENTAL & SPATIAL SCIENCES, B.S.

Major in Environmental & Spatial Sciences

Code	Title	Hours
REQUIRED CORE GEOGRAPHY		
GEOG 130	Intro to Environmental Science	3
GEOG 120	Human Geography	3
Physical Geography or Geomorphology - Choose 1 of the following:		3
GEOG 230	Physical Geography	
ESCI 225	Geomorphology	
GEOG 289	Field and Research Methods in Geography	3
GEOG 408	Sustainable Development	3
REQUIRED SPATIAL SCIENCE		
GEOG 281	Maps and GIS	3
GEOG 292	Quantitative and Spatial Analysis	3
GEOG 295	GIS I: Vector Data Analysis	3
GEOG 296	GIS II: Raster Data Analysis	3
SPATIAL SCIENCE ELECTIVES		
undefined - Choose 2 of the following:		6
GEOG 395	GIS for Web Development	
GEOG 384	Cartography	
GEOG 396	GIS Modeling	
GEOG 397	GIS Data Management	
ENVIRONMENTAL STUDIES ELECTIVES		
undefined - Choose 3 of the following:		9
GEOG 304	Water Resources Management	
GEOG 305	Energy Sustainability	
GEOG 306	Environmental Impact Assessmnt	
GEOG 307	US Environmental Policy	
GEOG 333	Biogeography	
GEOG 336	Climate And Society	
GEOG 407	Glbl Envrnmtl Policy/Negotiatn	
REQUIRED CAPSTONE		
undefined - Choose 1 of the following:		3-12
GEOG 300	Co-Op Ed Experience in Geog	
GEOG 488	Senior Thesis	
GEOG 489	Honors Thesis	
Total Hours		45-54

Req Related for Environmental & Spatial Sciences

Code	Title	Hours
REQUIRED RELATED ENVIRONMENTAL SCIENCE		
BIOL 100	General Biology	3
CHEM 111	Introductory Chemistry 1	4
CHEM 112	Introductory Chemistry 2	4
Physical Geology or Intro to Oceanography - Choose 1 of the following:		4
ESCI 221	Physical Geology	
ESCI 261	Introduction to Oceanography	
MATH 161	Calculus 1	4

Physics I with Algebra or with Calculus - Choose 1 of the following: 4-5

PHYS 131	Physics 1 with Algebra
PHYS 231	Physics 1 with Calculus

ENVIRONMENTAL SCIENCE REQ RELATED ELECTIVES

undefined - Choose 6 hours from: 6

BIOL 211	Concepts of Zoology
BIOL 221	Concepts of Botany
BIOL 340	Prspctv in Environm Awareness
BIOL 343	Principles of Ecology & Evolution
CHEM 235	Organic Chemistry
CHEM 265	Quantitative Analysis
CHEM 375	Environmental Chemistry
CHEM 476	Environmental Chemistry 2
ESCI 226	Geology of Earth and Energy Resources
ESCI 241	Meteorology
ESCI 245	Environmental Meteorology
ESCI 322	Environmental Hydrology
ESCI 326	Sedimentation and Stratigraphy
ESCI 329	Aqueous Geochemistry
ESCI 366	Marine Resources and Policy
ESCI 385	Global Climate Change: Sci & Policy
ESCI 422	Geological Field Mapping
ESCI 426	Groundwater Resources and Contamination
ESCI 466	Environmental Oceanography
OSEH 435	Environmental Health
PHYS 132	Physics 2 with Algebra
PHYS 232	Physics 2 with Calculus

A minor program of study is highly recommended. Examples include Biology, Chemistry, Computer Science, Earth Sciences, Environmental Chemistry, Environmental Hazards and Emergency Management, Environmental Policy Regulation, General Economics, Geology, Government and Political Affairs, Hydrology, Industrial and Environmental Health, Land Use, Mathematics, Meteorology, Occupational Safety Environmental Health, Oceanography, Physics, Quantitative Methods in Environmental Science, Science Writing, Social Justice, Sustainability Studies, Water Resources.

Total Hours **29-30**