

ENVIRONMENTAL SCIENCE, BS

Program Description

Environmental Science is the study of human interaction with the environment by seeking sustainable solutions for environmental problems such as water pollution, energy and climate, and ecosystem integrity, environmental scientists help ensure a safe, healthful environment for all living things.

Graduates with a bachelor of science in Environmental Science work in many disciplines, government agencies, and industries. Environmental Science graduates have a wide range of career opportunities including areas such as sustainability, field sampling, hydrology, environmental health, pollution control, environmental toxicology, climate science, ecology, and water quality analysis. While many graduates enter the workforce with a bachelors degree, some students proceed on to graduate school in natural sciences, policy, law, or sustainability studies. Internships in Environmental Science are encouraged where students can gain valuable real-world experience while gaining college credit – a faculty advisor can assist students in identifying internship opportunities locally, regionally, and internationally. In addition to their course work, all students participate in an applied research project in close collaboration with a faculty member to address a meaningful environmental-based problem. These projects, through the excellent preparation they provide our students, are often cited as important factors in successful job searches and entry into graduate programs.

Program Learning Outcomes

- **Knowledge & Skills** – The Environmental Science graduate will demonstrate: factual and theoretical knowledge of chemistry, biology, earth, and environmental science; cross-disciplinary field & laboratory knowledge and skills; applied analytical skills; communication skills; information retrieval skills; and safe laboratory practices.
- **Employability** – The Environmental Science graduate will demonstrate readiness for employment in business or industry as an environmental scientist, biological technician, GIS Analyst, physical science technician, pollution control specialist, laboratory chemist environmental specialist or environmental field technician.
- **Readiness for Graduate Study** – The Environmental Science graduate will demonstrate readiness for graduate study in environmental science, environmental chemistry, environmental toxicology, Environmental management, environmental policy, biochemistry, or other related fields.
- **Technical Skills** – The Environmental Science graduate will demonstrate proficiency and familiarity with combination of chemical instrumentation and modern computer software for environmental and chemical analysis and for environmental research.

Degree Requirements

Code	Title	Hours
Environmental Science Core Requirements		
NSCI 103	Environmental Science	3
EVRN 131	Introduction to GIS and GPS	3
EVRN 211	Field Data Methods	1
EVRN 225	Intermediate GIS	3

EVRN 311	Environmental Law	3
EVRN 315	Human Impacts on Environment	4
EVRN 317	Environmental Health Apps	4
EVRN 325	Geospatial Analysis	3
EVRN 341	Fate & Transport Environment	4
EVRN 389	Environmental Research Methods	3
EVRN 435	Environmental Systems	3
BIOL 131	General Biology: Cells	4
BIOL 132	General Biology: Organisms	4
BIOL 337	General Ecology	3
CHEM 115	General Chemistry I	5
CHEM 116	General Chemistry II	5
GEOL 121	Physical Geology	4
GEOL 122	Historical Geology	4
NRES 199	Freshman Seminar	1
NRES 230	Introduction to Soil Science	4
NRES 299	Sophomore Seminar	1
NRES 399	Research Project Design	1
NRES 499	Senior Capstone	1
EVRN 495	Senior Project	2
or NRES 497	Experiential Learning Project	
NSCI 116	Introduction to Oceanography	4
or GEOG 108	Phy Geog: Meteorology/Climatol	
MATH 112	Calculus Business/Life Science	4
or MATH 151	Calculus I	
Select one of the following:		3
BUSN 211	Business Statistics	
MATH 207	Prin of Statistical Methods	
BIOL 280	Biostatistics	
Select one of the following:		3-4
GEOL 334	Hydrologic Sys: Sur/Grd Water	
NRES 286	Principles of Watersheds	
NRES 345	Limnology	

Total Hours 87-88

Complete requirements for at least one of the following approved Minors (other minors may be substituted with advisor approval). Note: Courses taken toward completion of the program/general education requirements can be applied toward this requirement:

- Biology
- Biochemistry
- Chemistry
- Environmental Policy
- Geographic Information Science (GIS)
- Geology
- International Studies
- Marine Freshwater Sciences
- Mathematics
- Natural Resources
- Outdoor Leadership
- Political Science
- Pre-Law

- Public Health
- Sociology
- Society & Environment
- Sustainability

General Education: All LSSU bachelor's degree candidates must complete the LSSU General Education Requirements.

A minimum of 124 credits (at the 100 level or higher) must be earned for graduation with a cumulative gpa of 2.00 or higher. A gpa of 2.00 or higher is also required in your Major, and a gpa of 2.00 or higher is required in your General Education Requirements.