

BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCE

The Bachelor of Science in Environmental Science encompasses the study of natural environmental systems and the interaction of humans with these systems. It includes a strong foundation in the basic sciences, requiring core content in mathematics, physics, chemistry, biology, Earth sciences, and environmental policy. Upper-level coursework builds lab, field, communication, and computational skills. Students will be encouraged to create a focused pathway of electives that matches their interests and career goals. This degree program will prepare students for careers in environmental consulting, conservation, environmental sustainability, and environmental education. It will also provide a strong base for students interested in pursuing graduate programs and careers in environmental policy, environmental law, medicine, and other master's and Ph.D. programs in environmentally related disciplines.

Code	Title	Credit Hours
Wellness Requirement		
APPH 1040	Scientific Foundations of Health	2
	or APPH 10 The Science of Physical Activity and Health	
	or APPH 10 Flourishing: Strategies for Well-being and Resilience	
Core IMPACTS		
Institutional Priority		
CS 1301	Introduction to Computing	3
	or CS 1315 Introduction to Media Computation	
	or CS 1371 Computing for Engineers	
Mathematics and Quantitative Skills		
MATH 1552	Integral Calculus	4
Political Science and U.S. History		
INTA 1200	American Government in Comparative Perspective	3
	or POL 1101 Government of the United States	
	or HIST 2111 The United States to 1877	
	or HIST 2112 The United States since 1877	
	or PUBP 3000 American Constitutional Issues	
Arts, Humanities, and Ethics		
Any HUM		6
Communicating in Writing		
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
Technology, Mathematics, and Sciences		
Lab Science		8
MATH 1551	Differential Calculus	2
MATH 1553	Introduction to Linear Algebra	2
Social Sciences		
Any SS		9
Field of Study		
CHEM 1212K	Chemical Principles II	4
	or CHEM 133 Survey of Organic Chemistry for Engineers	
EAS 1600	Introduction to Environmental Science	4
EAS 2600	Earth Processes	4

Must complete one:		3
BIOS 1207	Biological Principles for Majors	
BIOS 1107	Biological Principles	
Must complete one:		3
BIOS 2300	Ecology	
BIOS 2310	Problems in Ecology	
Major Requirements		
BIOS 1107L	Biological Principles Laboratory	1
	or BIOS 120 Biological Principles Project Laboratory	
BIOS 2301	Ecology Laboratory	1
	or BIOS 230 Ecology Laboratory	
EAS 4480	Environmental Data Analysis	3
	or BIOS 440 Experimental Design and Statistical Methods in Biological Sciences	
PUBP 4530	Introduction to Geographic Information Systems	3
	or CP 4510 Fundamentals of Geographic Information Systems	
	or EAS 4380 Land Remote Sensing	
PUBP 3315	Environmental Policy and Politics	3
EAS 4410	Climate and Global Change	3
EAS 4420	Environmental Field Methods	4
Must complete one:		4
BIOS 3380	Microbiology	
	& BIOS 338' and Microbiology Lab	
EAS 4220	Environmental Geochemistry	
	& EAS 4221 and Environmental Geochemistry Lab	
Environmental Science Electives		9
BIOS 3380	Microbiology	
BIOS 3600	Evolutionary Biology	
BIOS 4221	Biological Oceanography	
BIOS 4340	Medical Microbiology	
BIOS 4401	Experimental Design and Statistical Methods in Biological Sciences	
BIOS 4417	Marine Ecology	
BIOS 4418	Microbial Physiology	
BIOS 4428	Population Dynamics	
BIOS 4515	Community Ecology	
BIOS 4607	Molecular Biology of Microbes: Disease, Nature, and Biotechnology	
BIOS 4620	Aquatic Chemical Ecology	
BIOS 4651	Bioethics	
BIOS 4690	Independent Research Project	
BIOS 4699	Undergraduate Research	
BIOS 4803	Special Topics (Conservation Biology)	
BIOS 4803	Special Topics (Biology of Terrestrial Vertebrates)	
BIOS 4803	Special Topics (Ornithology)	
BIOS 4813	Special Topics (Biodiversity on a Changing Planet)	
CEE 4300	Environmental Engineering Systems	
CEE 4330	Air Pollution Engineering	
CEE 4350	Environmental Technology in the Developing World	
CEE 4360	Energy and Resource Recovery	

CHEM 3700	The Science of Alternative Energy
CHEM 4740	Atmospheric Chemistry
CP 4052	Sustainable Cities Studio
CP 4105	Land Conservation
CP 4190	Introduction to Climate Change Planning
CP 4210	Environmental Planning and Impact Assessment
EAS 3110	Energy, Environment, and Society
EAS 3603	Thermodynamics of Earth Systems
EAS 3803	Special Topics (Geologic History)
EAS 4205	Geomorphology
EAS 4220	Environmental Geochemistry
EAS 4221	Environmental Geochemistry Lab
EAS 4224	Mineral Surface Geochemistry
EAS 4300	Introduction to Physical and Chemical Oceanography
EAS 4305	Physical and Chemical Oceanography
EAS 4350	Paleoclimatology and Paleoceanography
EAS 4375	Earth and Planetary Materials
EAS 4380	Land Remote Sensing
EAS 4430	Remote Sensing and Data Analysis
EAS 4515	Fluids in the Earth's Crust I
EAS 4525	Weather Risk and Catastrophe Modeling
EAS 4602	Biogeochemical Cycles
EAS 4699	Undergraduate Research
EAS 4740	Atmospheric Chemistry Laboratory
EAS 4795	Groundwater Hydrology
EAS 4803	Special Topics (Glacier and Ice Sheet Dynamics)
EAS 4803	Special Topics (Basics of Geoengineering)
EAS 4803	Special Topics (Sea-level Rise and Coastal Engineering)
EAS 4813	Special Topics (Extreme Atlanta: Climate Change in Urban Spaces)
ECON 3300	Economics of International Energy Markets
ECON 4440	Economics of Natural Resources and the Environment
HTS 3005	American Environmental History
HTS 3081	Technology and the Environment
INTA 3040	Energy, Environment, and Policy
INTA 4040	Environmental Politics
PHIL 4176	Environmental Ethics
PUBP 3320	Climate Policy
PUBP 3350	Energy Policy
PUBP 3600	Sustainability, Technology, and Policy
PUBP 4440	Science, Technology, and Regulation
PUBP 4530	Introduction to Geographic Information Systems
PUBP 4620	Environmental Law
Upper Division Electives ²	
Free Electives	
Total Credit Hours	
	7
	21
	122

Students must complete a minimum of 39-hours of 3000/4000-level coursework.

¹ Pass/Fail allowed only for Free electives

² 3000/4000-level courses in any field chosen by the student