

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 | | |
| 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 A - Essential Skills | | |
| ENGL 1101 | English Composition I | 3 |
| ENGL 1102 | English Composition II | 3 |
| MATH 1552 | Integral Calculus | 4 |
| Core B - Institutional Options | | |
| CS 1301 | Introduction to Computing | 3 |
| | or CS 1315 Introduction to Media Computation | |
| | or CS 1371 Computing for Engineers | |
| Core C - Humanities¹ | | |
| Any HUM | | 6 |
| Core D - Science, Math, & Technology | | |
| PHYS 2211 | Introductory Physics I | 4 |
| CHEM 1211K | Chemical Principles I | 4 |
| MATH 1551 | Differential Calculus | 2 |
| MATH 1553 | Introduction to Linear Algebra | 2 |
| Core E - Social Sciences¹ | | |
| Select one of the following: | | 3 |
| INTA 1200 | American Government in Comparative Perspective | |
| POL 1101 | Government of the United States | |
| Any SS | | 9 |
| Core F - Courses Related to Major | | |
| CHEM 1212K | Chemical Principles II | 4 |
| | or CHEM 13 Survey of Organic Chemistry for Engineers | |
| EAS 1600 | Introduction to Environmental Science | 4 |
| EAS 2600 | Earth Processes | 4 |
| Must complete one: | | 4 |
| BIOS 1207 | Biological Principles for Majors | |
| & 1207L | and Biological Principles Project Laboratory | |

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| BIOS 1107 | Biological Principles | |
| & 1107L | and Biological Principles Laboratory | |
| Must complete one: | | 4 |
| BIOS 2300 | Ecology | |
| & BIOS 2301 | and Ecology Laboratory | |
| BIOS 2310 | Problems in Ecology | |
| & BIOS 2311 | and Problems in Ecology Laboratory | |
| Major Requirements | | |
| EAS 4480 | Environmental Data Analysis | 3 |
| 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 3381 | and Microbiology Lab | |
| EAS 4220 | Environmental Geochemistry | |
| & EAS 4221 | and Environmental Geochemistry Lab | |
| Environmental Science Electives | | 9 |
| BIOS 3100 | Ecology & Evolution: An Australian Perspective | |
| 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 | |

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| 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 Paleooceanography |
| 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 |

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

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

¹ Pass/Fail allowed only for Humanities, Social Sciences, and Free electives