

## Environmental Science (ENVS) Major

| Requirement                          | Credit Hours | Course(s)   |
|--------------------------------------|--------------|---|
| Wellness                             | 2            | APPH 1040 or APPH 1050 or APPH 1060                   |
| Core A – Essential Skills            | 3            | ENGL 1101   |
|                                      | 3            | ENGL 1102   |
|                                      | 4            | MATH 1552   |
| Core B – Institutional Options       | 3            | CS 1301 or CS 1315 or CS 1371                         |
| Core C – Humanities                  | 6            | Choose from institute approved Humanities courses     |
| Core D – Science, Math, & Technology | 4            | PHYS 2211   |
|                                      | 4            | CHEM 1310 or CHEM 1211K                               |
|                                      | 2            | MATH 1551   |
|                                      | 2            | MATH 1553 or MATH 1554 or MATH 1564                   |
| Core E – Social Sciences             | 3            | INTA 1200 or POL 1101                                 |
|                                      | 9            | Choose from institute approved Social Science courses |
| Core F – Courses Relate to Major     | 4            | CHEM 1315 or CHEM 1212K                               |
|                                      | 4            | EAS 1600  |
|                                      | 4            | EAS 2600  |
|                                      | 4            | BIOS 1107/1107L or BIOS 1207/1207L                    |
|                                      | 4            | BIOS 2300/2301 or BIOS 2310/2311                      |
| Major Requirements                   | 4            | BIOS 3380/3381 or EAS 4220/4221                       |
|                                      | 3            | EAS 4410  |
|                                      | 3            | CP 4510   |
|                                      | 3            | PUBP 3315   |
|                                      | 3            | EAS 4480 or BIOS 4401                                 |
|                                      | 4            | EAS 4420 or BIOS 4590 or BIOS 4460                    |
|                                      | 9            | ENVS Approved Electives (6 credits must be in COS)    |
| Upper Level Electives                | 10           | Courses must be 3000 level or above                   |
| Free Electives                       | 18           |   |
| <b>TOTAL:</b>                        | 122          |   |

\* Pass/fail allowed only for Humanities, Social Sciences, and Free Electives.

\* GT1000 is recommended under Free Electives

\* 39 hours out of total 122 must be at 3000 level or above

## Approved ENVS Electives

*Other courses may be Technical Electives if approved by the ENVS advisor.*

### COS Electives

BIOS 3100. Ecology & Evolution: An Australian Perspective.  
BIOS 3380. Microbiology  
BIOS 3381. Microbiology Lab  
BIOS 3600. Evolutionary Biology.  
BIOS 4221. Biological Oceanography  
BIOS 4340. Medical Microbiology  
BIOS 4401. Experimental Design and Statistical Methods in Biological Sciences  
BIOS 4410. Microbial Ecology  
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

*Recent relevant offerings: Conservation Biology, Biology of Terrestrial Vertebrates, Ornithology*

BIOS 4813. Special Topics

*Recent relevant offerings: Biodiversity on a Changing Planet*

EAS 3110. Energy, Environment, and Society  
EAS 3603. Thermodynamics of Earth Systems  
EAS 4205 Geomorphology  
EAS 4220. Environmental Geochemistry  
EAS 4221. Environmental Geochemistry Lab  
EAS 4224. Mineral Surface Geochemistry  
EAS 4300. Oceanography  
EAS 4305. Physical and Chemical Oceanography  
EAS 4350. Paleoclimatology and Paleoceanography

### Electives outside of COS

CEE 4300. Environmental Engineering Systems  
CEE 4330. Air Pollution Engineering  
CEE 4360. Energy and Resource Recovery  
CP 4052. Sustainable Cities Studio  
CP 4105. Land Conservation  
CP 4190. Introduction to Climate Change Planning  
CP 4210. Environmental Planning and Impact Assessment  
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

EAS 4375. Earth and Planetary Materials

EAS 4380. Land Remote Sensing

EAS 4803. Special Topics

*Recent relevant offerings: Glacier and Ice Sheet Dynamics, Basics of  
Geoengineering, Sea-level Rise and Coastal Engineering*

EAS 4813. Special Topics.

*Recent relevant offerings: Extreme Atlanta: Climate Change in Urban Spaces*

EAS 4525. Weather Risk and Catastrophe Modeling

EAS 4602. Biogeochemical Cycles

EAS 4740. Atmospheric Chemistry

EAS 4699. Undergraduate Research

CHEM 3700. The Science of Alternative Energy

CHEM 4740. Atmospheric Chemistry