

# MINOR IN ENVIRONMENTAL ENGINEERING

## Requirements Effective Spring 2024

Students must satisfactorily complete the total credits required for the minor. Minors and interdisciplinary minors require 12 or more upper-division (300- to 400-level) credits.

Additional coursework may be required due to prerequisites.

| Code  | Title   | Credits |
|---|---|---------|
| <b>Required Courses</b>   |   |         |
| Select 9 credits from the following:  |   | 9       |
| CIVE 330  | Ecological Engineering                          |         |
| CIVE 438  | Fundamentals of Environmental Engr <sup>1</sup> |         |
| CIVE 440  | Nonpoint Source Pollution                       |         |
| CIVE 442  | Air Quality Engineering                         |         |
| <b>Elective Courses</b>   |   |         |
| Select 12 credits from the following, of which at least 3 credits must be upper-division: |   | 12      |
| ATS 350   | Introduction to Weather and Climate             |         |
| ATS 351   | Introduction to Weather and Climate Lab         |         |
| BC 351  | Principles of Biochemistry                      |         |
| BZ 471  | Stream Biology and Ecology                      |         |
| BZ 472  | Stream Biology and Ecology Laboratory           |         |
| CHEM 245  | Fundamentals of Organic Chemistry               |         |
| CHEM 246  | Fundamentals of Organic Chemistry Laboratory    |         |
| CHEM 341  | Modern Organic Chemistry I                      |         |
| CHEM 345  | Organic Chemistry I                             |         |
| CIVE 330  | Ecological Engineering <sup>2</sup>             |         |
| CIVE 423  | Groundwater Engineering                         |         |
| CIVE 437  | Wastewater Treatment Facility Design            |         |
| CIVE 440  | Nonpoint Source Pollution <sup>2</sup>          |         |
| CIVE 442  | Air Quality Engineering <sup>2</sup>            |         |
| CIVE 458  | Environmental Geotechnics                       |         |
| CIVE 529  | Environmental Organic Chemistry                 |         |
| CIVE 530  | Environ Engr at the Water-Energy-Health Nexus   |         |
| CIVE 538  | Aqueous Chemistry                               |         |
| CIVE 540/CBE 540  | Advanced Biological Wastewater Processing       |         |
| CIVE 541  | Physical Chemical Water Treatment Processes     |         |
| CIVE 547/<br>STAT 547   | Statistics for Environmental Monitoring         |         |
| ERHS 446  | Environmental Toxicology                        |         |
| LIFE 102  | Attributes of Living Systems (GT-SC1)           |         |
| LIFE 320  | Ecology   |         |
| MECH 463  | Building Energy Systems                         |         |
| MIP 300   | General Microbiology                            |         |

MIP 432/ESS 432 Microbial Ecology

PHIL 345 Environmental Ethics

**Program Total Credits: 21**

<sup>1</sup> Students in the Civil Engineering major cannot use CIVE 438 for credit in the minor.

<sup>2</sup> May be allowed if not taken as a required course.