NDSU CIVIL, CONSTRUCTION AND ENVIRONMENTAL ENGINEERING

NORTH DAKOTA STATE UNIVERSITY ENVIRONMENTAL ENGINEERING TECHNICAL ELECTIVES OFFERED

The BSENVE has nine technical elective credits. A minimum of 6 of the 9 credits must come from courses in Category One of the Technical Elective Course list.

Category One (Students must take at least 6 of the 9 credits from this category)

| Course No. | Title | Credits | Prerequisites |
|------------|---|---------|--------------------------------|
| CE 417 | Slope Stability and Retaining Walls | 3 | CE 316; only offered in Spring |
| CE 421 | Open Channel Flow | 3 | CE 309; only offered in Spring |
| CE 462 | Designing with Geosynthetics | 2 | CE 316; only offered in Spring |
| CE 471 | Environmental Nanotechnology | 3 | ENVE 360 or CE 370 |
| CE 474 | Groundwater Sustainability Design | 3 | CE 309 |
| CE 476 | Watershed Modeling | 3 | CE 408 |
| CE 478 | Water Quality Management | 3 | ENVE 360 or CE 370 |
| CE 491 | Seminar (Small Comm Water Supply and Sanitation) | 3 | |
| CE 494 | Individual Study (Environmental Engineering Design) | 3 | |
| ENVE 468 | Plastics Pollution to Solution | 3 | ENVE 360 or CE 370 |

Category Two (Students may take at most 3 credits from this category)

| Course No. | Title | Credits | Prerequisites |
|------------|--|---------|---|
| BIOL 470 | Freshwater Ecology and Limnology | 3 | BIOL 150 and 151 |
| BIOL 480 | Ecotoxicology | 3 | BIOL 151 and BIOL 151L |
| BIOL 481 | Wetland Science | 3 | BIOL 151 and BIOL 151L |
| CE 486 | Nanotechnology and Nanomaterials | 3 | Only Seniors |
| GEOG 455 | Introduction to Geographic Information Systems | 4 | |
| GEOG 456 | Advanced Geographic Information Systems | 3 | GEOG 455 |
| GEOG 465 | Remote Sensing of the Environment | 3 | |
| NRM 452 | Managing Natural and Rangeland Resources using GIS | 3 | |
| NRM 454 | Wetland Resources Management* | 3 | SOIL 210; only in the Fall semester of even years |

^{*}Denotes courses that require prior approval from NRM Program before registering. Updated: 03/20/2023