

Approved Technical Elective Courses – BS Environmental Engineering Degree

Students are required to select at least 9 credits from the following list to satisfy the Technical Elective (TE) requirement. Either ATMS 411 or NRES 422 are required to satisfy the Restrictive Earth Science Elective (RESE) requirement and a single course cannot be used to satisfy both the RESE and TE requirements.

1. A maximum of 3 credits may be applied from the following list of courses:

- CEE 371 – Numerical Methods in Civil Engineering (3 credits)
- CEE 372 – Strength of Materials (3 credits)
- CEE 377 – Construction Materials (4 credits)
- CEE 411 – Environmental Law (3 credits)
- GEOG 438 – Western Water Resources and Management (3 credits)
- ME 311 – Engineering Thermodynamics I (3 credits)
- NRES 400 – International Issues for Water Development (3 credits)
- NRES 440 – Wetland Ecology and Management (4 credits)
- NRES 467 – Regional & Global Issues in Natural Res. and Environ. Sci. (3 credits)
- PSC 403C – Environmental Policy (3 credits)

2. The remaining credits (at least 6) may be taken from the following list of courses:

- ATMS 411 – Introduction to Atmospheric Physics (3 credits)
- BCH 400 – Introductory Biochemistry (4 credits)
- CHE 410 – Renewable Energy Systems (3 credits)
- CHE 440 – Chemical Reactor Design (3 credits)
- CHE 471 – Process Engineering for Pollution Prevention and Waste Minimization (3 credits)
- CHE 475 – Principles of Bioengineering (3 credits)
- CEE 414 – Water Resources Engineering II (3 credits)
- CEE 428 – Urban Engineering (3 credits)
- CEE 442 – Fundamentals of Geotechnical Engineering (3-4 credits)
- CEE 495 – Special Topics in Environmental Engineering (3 credits, check with advisor)
- GEOG 405 – GIS I: Geographic Information Systems and Science (4 credits)
- GEOG 407 – GIS II: Geographic Information Systems and Science (4 credits)
- GE 484 – Groundwater Hydrology (3 credits)
- GE 485 – Waste Containment: Theory and Practice (3 credits)
- GEOL 416 – Environmental Geochemistry (3 credits)
- NRES 422 – Soil Physics (3 credits)
- NRES 430 – Analysis of Environmental Contaminants (3 credits)
- NRES 432 – Advanced Environmental Toxicology (3 credits)
- NRES 433 – Environmental Chemicals: Exposure, Transport and Fate (3 credits)
- NRES 482 – Small Watershed Hydrology (4 credits)
- NRES 484 – Limnology: Study of Inland Waters (3 credits)
- NRES 485 – Special Topics in NRES (3 credits, check with advisor)