

2015-16 Approved Degree Requirements for the UALR B.S. Degree in Environmental Engineering (128 credit hours)

1. UALR General Education Requirements (35 credit hours)

a. UALR Standard Core (21 hours)

- Communication-Written (6 hours)
- History of Civilization (3 hours)
- U.S. Traditions (3 hours)
- Fine Arts (3 hours)
- Humanities (3 hours)
- Social Sciences (3 hours)

b. EIT College Core (14 hours)

- Mathematics (3 hours)
- Science (8 hours)
- Additional Math and Science (3 hours)

2. Major Requirements (93 credit hours)

a. Humanities and Social Science (0 hours beyond the UALR General Education Requirements)

- ECON 2301 Survey of Economics or ECON 2322 Principles of Microeconomics
- PHIL 2320 Ethics and Society
- POLS 1310 American National Government

b. Mathematics and Science (59 credit hours—45 hours beyond the EIT College Core**)

- BIOL 1400 Evolutionary and Environmental Biology
- **BIOL 2401 Microbiology
- CHEM 1402 General Chemistry I
- **CHEM 1403 General Chemistry II
- **CHEM 2310 Analytical Chemistry I
- **CHEM 3150 General Organic Chemistry I Lab
- **CHEM 3350 General Organic Chemistry I
- **ERSC 1102 Physical Geology Lab
- ERSC 1302 Physical Geology
- **ERSC 4372 Surface Water Hydrology
- **ERSC 4473 Hydrogeology
- MATH 1451 Calculus I (**1 hour exceeds EIT College Core)
- **MATH 1452 Calculus II
- **MATH 2453 Calculus III
- **MATH 3322 Introduction to Differential Equations
- **PHYS 2321 Physics for Scientists and Engineers I
- **PHYS 2121 Physics for Scientists and Engineers I Lab
- **STAT 3352 Applied Statistics I
- **Environmental Science Requirement
 1. **CHEM 4342 Environmental Chemistry
 2. or **ERSC 4322 Environmental Geology

c. **Engineering (48 credit hours)**

- CNMG 1085 Architecture, Engineering, and Construction Seminar (each semester)
- CNMG 1313 Civil Engineering Materials with Lab
- CNMG 1385 Infrastructure, Environment, and Society
- CNMG 2370 Engineering Statics
- CNMG 3302 Engineering Economy
- CNMG 3347 Engineering Soil Mechanics with Lab
- CNMG 3357 Introduction to Environmental Engineering with Lab
- CNMG 3374 Hydraulic Engineering with Lab
- CNMG 3376 Engineering Structural Mechanics
- CNMG 3378 Engineering Thermodynamics
- CNMG 4357 Water and Wastewater Engineering
- CNMG 4362 Water Resources Engineering
- CNMG 4364 Air Pollution Engineering
- CNMG 4366 Solid and Hazardous Waste Management
- CNMG 4368 Environmental Risk Assessment
- CNMG 4369 Soil and Groundwater Remediation
- CNMG 4185 Professional Engineering Seminar
- CNMG 4285 Engineering Design Project

3. Professional Requirements

- a. Pass the National Council of Examiners for Engineering and Surveying (NCEES) Fundamentals of Engineering (FE) Examination.
- b. Document at least 800 hours of practical work experience in approved engineering- or construction-related activities, such as student competitions, part-time or full-time employment, internships, cooperative education, community service learning projects, or prior experience.