2015-16 Approved Degree Requirements for the UALR
B.S. Degree in Civil and Construction 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 (32 credit hours—18 hours beyond the EIT College Core**
      - CHEM 1406 General Chemistry for Engineers or CHEM 1402 General Chemistry I
      - **ERSC 4371 Engineering Geology
      - **ERSC 4372 Surface Water Hydrology
      - MATH 1451 Calculus I (**1 hour exceeds EIT College Core)
      - MATH 1452 Calculus II (**1 hour exceeds EIT College Core)
      - **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

   c. Engineering and Construction (75 credit hours)
      - CNMG 1085 Architecture, Engineering, and Construction Seminar (each semester)
      - CNMG 1305 Drawings and Specifications
      - CNMG 1313 Civil Engineering Materials with Lab
      - CNMG 1385 Infrastructure, Environment, and Society
      - CNMG 2313 Construction Materials and Methods
      - CNMG 2314 Mechanical, Electrical, and Plumbing (MEP) Systems
      - CNMG 2316 Construction Surveying with Lab
• CNMG 2370 Engineering Statics
• CNMG 3302 Engineering Economy
• CNMG 3312 Engineering Structural Analysis
• CNMG 3324 Heavy Civil Construction
• CNMG 3327 Field Engineering and Construction Equipment
• CNMG 3339 Estimating I
• 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 4323 Construction Administration
• CNMG 4329 Construction Planning and Scheduling
• CNMG 4334 Construction Contracts and Law
• CNMG 4342 Construction Safety
• CNMG 4351 Foundation Design
• CNMG 4357 Water and Wastewater Engineering
• CNMG 4371 Structural Steel Design
• Civil Engineering Requirement (3 hours)
  1. CNMG 4321 Reinforced Concrete Design or
  2. CNMG 4354 Highway Engineering or
  3. CNMG 4362 Water Resources Engineering
• CNMG 4185 Professional Engineering Seminar
• CNMG 4285 Engineering Design Project

3. Professional Requirements


b. Pass the American Institute of Construction (AIC) Associate Constructor (AC) Examination.

c. 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.