Civil Engineering Curriculum & Requisites – 2023-2024

Freshman Year, Fall Semester
16 Semester Credit Hours

Pre-Professional Courses:
CE 1105 Introduction to Civil Engineering
CHEM 1465 Chemistry for Engineers – Corequisite: MATH 1421
ENGL 1301 Rhetoric and Composition I
CE 1353 Intro to Computer Aided Design Tools in CE – Corequisite: MATH 1421
UNIV 1131 or ENGR 1101 Entrance to Engineering for Transfer Students
MATH 1426 Calculus I

Freshman Year, Spring Semester
17 Semester Credit Hours

Pre-Professional Courses:
IE 2308 Engineering Economy – Corequisite: MATH 1426
MATH 2425 Calculus II – Prerequisite: MATH 1426
PHYS 1443 General Technical Physics I – Prerequisite: MATH 1426

General Education Courses:
US History Elective
POLS 2311 Government of the US

Sophomore Year, Fall Semester
16 Semester Credit Hours

Pre-Professional Courses:
CE 2311 Statics – Prerequisite: PHYS 1443
CE 2331 Engineering Measurement & Computer Modeling – Prerequisite: CE 1353
MATH 2326 Calculus III – Prerequisite: MATH 2425
PHYS 1444 General Technical Physics II – Prerequisite: PHYS 1443, Corequisite: MATH 2425

General Education Courses:
US History Elective

Sophomore Year, Spring Semester
17 Semester Credit Hours

Pre-Professional Courses:
CE 2221 Dynamics – Prerequisite: CE 2311 & MATH 2425
CE 2313 Mechanics of Materials – Prerequisites: CE 2311 & MATH 2425
COMS 2302 Professional & Technical Communication for Scientists & Engineers – Prerequisites: 30 Semester Credit hours completed & ENGL 1301
MATH 3319 Differential Equations & Linear Algebra – Corequisite: MATH 2326

Professional Courses:
CE 3301 Stochastic Models – Prerequisite: MATH 2425
GEOL 3340 Geology for Engineers – Prerequisites: CHEM 1465 & PHYS 1443
Civil Engineering Curriculum & Requisites – 2023-2024

**Junior Year, Fall Semester**
16 Semester Credit Hours

**Professional Courses:**
- CE 3210 CE Communications – Prerequisite: COMS 2302
- CE 3253 Applications of Computer-Based Design Programs in CE – Prerequisite: CE 1353 & CE 2331
- CE 3361 Properties & Behavior of CE Materials – Prerequisite: CE 2313 & CHEM 1465
- CE 3305 Basic Fluid Mechanics – Prerequisite: CE 2311; Corequisite: MATH 3319; Corequisite: CE 3142
- CE 3142 Applied Fluid Mechanics Lab – Corequisite: CE 3305
- CE 3311 Construction Engineering – Prerequisite: IE 2308

**Junior Year, Spring Semester**
17 Semester Credit Hours

**Professional Courses:**
- CE 3302 Transportation Engineering – Prerequisite: CE 2331 & CE 3301
- CE 3342 Introduction to Water Resources – Prerequisite: CE 3301 & CE 3305
- CE 3334 Principles of Environmental Engineering – Prerequisite: CHEM 1465 & CE 3305; Corequisite: CE 3131
- CE 3131 Environmental Analysis – Corequisite: CE 3334
- CE 3143 Soil Mechanics – Prerequisite: CE 2313; Corequisite: CE 3143
- CE 3143 Properties & Behavior of Soils – Corequisite: CE 3343

**General Education Courses:**
POLS 2312 State and Local Government

**Senior Year, Fall Semester**
15 Semester Credit Hours

**Professional Courses:**
- CE 4347 Reinforced Concrete Design – Prerequisite: CE 3341
- CE 4328 Water System Design – Prerequisite: CE 3342
- CE 4352 Professional Practice – Prerequisite: CE 3311
- CE 43XX Senior Technical Elective (1)

**General Education Courses:**
Language, Philosophy, and Culture Elective

**Senior Year, Spring Semester**
15 Semester Credit Hours

**Professional Courses:**
- CE 4383 Senior Elective – Prerequisites: CE 4352, CE4328 or CE4347 and All CE 3000 level courses
- CE 43XX Senior Technical Elective (2)
- CE 43XX Senior Technical Elective (3)
- CE 43XX Senior Technical Elective (4)

**General Education Courses:**
Creative Arts Elective