# First Year

## Fall Semester – 16 Semester Credit Hours

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

## Spring Semester – 17 Semester Credit Hours

- **IE 2308** Engineering Economy
- **HIST 13XX** U.S. History Elective
- **MATH 2425** Calculus II
- **PHYS 1443** General Technical Physics I
- **POLS 2311** Government of the United States

# Second Year

## Fall Semester – 16 Semester Credit Hours

- **CE 2311** Statics
- **CE 2331** Engineering Measurement & Computer Modeling
- **HIST 13XX** U.S. History Elective
- **MATH 2326** Calculus III
- **PHYS 1444** General Technical Physics II

## Spring Semester – 17 Semester Credit Hours

- **CE 2221** Dynamics
- **CE 2301** Mechanics of Materials
- **CE 3301** Stochastic Models for CE
- **COMS 2302** Professional & Technical Communications for Scientists & Engineers
- **GEOL 3340** Geology for Engineers
- **MATH 3319** Differential Equations & Linear Algebra

# Third Year

## Fall Semester – 17 Semester Credit Hours

- **CE 3210** CE Communications
- **CE 3253** Applications of Computer-Based Design Programs in CE
- **CE 3361** Property & Behavior of CE Materials
- **CE 3305** Basic Fluid Mechanics
- **CE 3341** Structural Analysis
- **CE 3343** Soil Mechanics
- **CE 3143** Properties & Behavior of Soils

## Spring Semester – 17 Semester Credit Hours

- **CE 3302** Transportation Engineering
- **CE 3311** Construction Engineering
- **CE 3334** Principles of Environmental Engineering
- **CE 3131** Environmental Analysis
- **CE 3342** Introduction to Water Resources
- **CE 3142** Applied Fluid Mechanics Lab
- **POLS 2312** State and Local Government

# Fourth Year

## Fall Semester – 15 Semester Credit Hours

- **CE 3347** Reinforced Concrete Design
- **CE 3328** Water Systems Design
- **CE 4352** Professional Practice
- **CE 43XX** Senior Technical Elective (1)

## Spring Semester – 15 Semester Credit Hours

- **CE 4383** Senior Project
- **CE 43XX** Senior Technical Elective (2)
- **CE 43XX** Senior Technical Elective (3)
- **CE 43XX** Senior Technical Elective (4)
- **Creative Arts Elective**

COE Foreign Language Requirement: Two years of same foreign language in high school or six semester credit hours of the same foreign language.
General Core Requirements

- The UTA Civil Engineering Program requires one (three SCH) Creative Arts Elective. This elective can be chosen from the following list of courses offered at UTA.

  - ARCH 1301 Introduction to Architecture & Interior Design
  - ART 1301 Art Appreciation
  - ART 1309 Art of the Western World I
  - ART 1310 Art of the West II
  - MUSI 1300 Music Appreciation
  - THEA 1342 Theatre and Film Appreciation
  - THEA 1343 Introduction to Theatre
  - MUSI 1302 Jazz Appreciation
  - MUSI 2300 Intro to World Music
  - MUSI 2301 Film Music Appreciation

- Students majoring in Civil Engineering must take IE 2308, which is a Social & Behavioral Sciences elective option. If a student has taken a different course from the approved Social & Behavioral Sciences elective list, it will be counted as part of your core curriculum. However, IE 2308 will also need to be completed to satisfy the course requirement for the Architectural Engineering degree plan.

- The UTA Civil Engineering Program requires one (three SCH) Language, Philosophy & Culture Elective. This elective can be chosen from the following list of courses offered at UTA.

  - ANTH 2322 Global Cultures
  - ARAB 2310 Arabic Culture in the World
  - ARAB 2314 Intermediate Arabic II
  - ARCH 2300 Masterworks of Western Architecture
  - ART 1317 The Art of Non-Western Traditions
  - CHIN 2310 Chinese Culture in the World
  - CHIN 2314 Intermediate Chinese II
  - CLAS 1300 Introduction to Classical Mythology
  - ENGL 2303 Topics in Literature
  - ENGL 2309 World Literature
  - ENGL 2319 British Literature
  - ENGL 2329 American Literature
  - FREN 2310 French and Francophone Cultures in the World
  - FREN 2314 Intermediate French II
  - GERM 2310 German Culture in the World
  - GERM 2314 Intermediate German II
  - GLOBAL 2301 Introduction to Global Studies
  - GREK 2314 Greek Level IV
  - HIST 2377 Flight Culture and the Human Experience
  - INTS 1310 Introduction to Popular Culture
  - KORE 2310 Korean Culture in the World
  - KORE 2314 Intermediate Korean II
  - LATN 2314 Latin Level IV
  - LING 2371 Language in a Multicultural USA
  - MAS 2300 Intro to Mexican American Studies
  - PHIL 1304 Contemporary Moral Problems
  - PHIL 2300 Introduction to Philosophy
  - PORT 2314 Intermediate Portuguese II
  - RUSS 2310 Russian Culture in the World
  - RUSS 2314 Intermediate Russian II
  - SOCI 1310 Introduction to Popular Culture (proposed)
  - SPAN 2310 Hispanic Culture in the World
  - SPAN 2314 Intermediate Spanish II
  - WOMS 2310 Intro to Women’s & Gender Studies

Senior Elective

A list of Civil Engineering Senior Technical Electives is available upon request.
Civil Engineering Curriculum & Requisites – 2021

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

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 – 2021

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 3305 Basic Fluid Mechanics – Prerequisite: CE 2311; Corequisite: MATH 3319
CE 3341 Structural Analysis – Prerequisite: CE 2313
CE 3343 Soil Mechanics – Prerequisite: CE 2313; Corequisite: CE 3143
CE 3143 Properties & Behavior of Soils – Corequisite: CE 3343
CE 3361 Properties & Behavior of CE Materials – Prerequisite: CE 2313 & CHEM 1465

Junior Year, Spring Semester
17 Semester Credit Hours

Professional Courses:
CE 3302 Transportation Engineering – Prerequisite: CE 2331 & CE 3301
CE 3311 Construction Engineering – Prerequisite: IE 2308
CE 3334 Principles of Environmental Engineering – Prerequisite: CHEM 1465 & CE 3305; Corequisite: CE 3131
CE 3131 Environmental Analysis – Corequisite: CE 3334
CE 3342 Introduction to Water Resources – Prerequisite: CE 3301 & CE 3305; Corequisite: CE 3142
CE 3142 Applied Fluid Mechanics Lab – Corequisite: CE 3342

General Education Courses:
POLS 2312 State and Local Government

Senior Year, Fall Semester
15 Semester Credit Hours

Professional Courses:
CE 3328 Water System Design – Prerequisite: CE 3342
CE 3347 Reinforced Concrete Design – Prerequisite: CE 3341
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, one design course and All 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