

UTA CIVIL ENGINEERING CURRICULUM

Applies to students entering the UTA CE program from the fall 2017 through the summer 2018

FIRST YEAR

CE 1105 1	CE 1252 2
CHEM 1465 4	HIST 1311 ^C 3
ENGL 1301 ^C 3	MATH 2425 ^C 4
ENGR 1300 ^C 3	PHYS 1443 ^C 4
MATH 1426 ^C 4	POLS 2311 3
<u>15</u>	<u>16</u>

SECOND YEAR

CE 2153 1	CE 2221 2
CE 2311 3	CE 2313 3
CE 2331 3	COMS 2302 ^C 3
HIST 1312 ^C 3	GEOL 3340 3
MATH 2326 ^{C,2} 3	IE 2308 ^C 3
PHYS 1444 ^C 4	MATH 3319 3
<u>17</u>	<u>17</u>

THIRD YEAR

CE 3210 2	CE 3302 3
CE 3261 + CE 3161 3	CE 3311 3
CE 3301 3	CE 3334 + CE 3131 4
CE 3305 3	CE 3342 + CE 3142 4
CE 3341 3	POLS 2312 3
CE 3343 + CE 3143 4	<u>17</u>
<u>18</u>	

FOURTH YEAR

CE 4347 3	CE 4383 3
CE 4352 3	CE Technical Elective ¹ 3
CE Technical Elective ¹ 3	CE Technical Elective ¹ 3
CE Technical Elective ¹ 3	CE Technical Elective ¹ 3
Language, Philosophy, and Culture Elective ^{C,1} 3	Creative Arts Elective ^{C,1} 3
<u>15</u>	<u>15</u>

Six (6) hours of Foreign Language are required for students who have not had 2 units of high school foreign language.

REQUIRED COURSE TITLES

COMMUNICATION

ENGL 1301 ^C	Rhetoric and Composition I
COMS 2302	Professional and Technical Communication for Science and Engineering

U.S. HISTORY

HIST 1311 ^C	History of the United States to 1865
HIST 1312 ^C	History of the United States, 1865 to Present

GOVERNMENT/POLITICAL SCIENCE

POLS 2311 ^C	Government of the United States
POLS 2312 ^C	State and Local Government

MATHEMATICS

MATH 1426 ^C	Calculus I
MATH 2425 ^C	Calculus II
MATH 2326 ^{C,2}	Calculus III
MATH 3319	Differential Equations and Linear Algebra

LIFE AND PHYSICAL SCIENCES

CHEM 1465	Chemistry for Engineers
GEOL 3340	Geology for Engineers
PHYS 1443 ^C	General Technical Physics I
PHYS 1444 ^C	General Technical Physics II

SOCIAL AND BEHAVIORAL SCIENCES

IE 2308	Economics for Engineers
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OTHER ENGINEERING

ENGR 1300	Engineering Problem Solving
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CIVIL ENGINEERING

CE 1105	Introduction to Civil Engineering
CE 1252	Computer Tools - AutoCAD
CE 2153	Computer Tools – Civil 3D
CE 2221	Dynamics
CE 2311	Statics
CE 2313	Mechanics of Materials I
CE 2331	Engineering Measurement and Computer Modeling
CE 3210	Civil Engineering Communications
CE 3261	Properties and Behavior of Civil Engineering Materials
CE 3161	Civil Engineering Materials Lab
CE 3301	Stochastic Models for Civil Engineering
CE 3302	Transportation Engineering
CE 3305	Basic Fluid Mechanics
CE 3311	Construction Engineering
CE 3334	Principles of Environmental Engineering
CE 3131	Environmental Engineering
CE 3341	Structural Analysis
CE 3342	Water Resources Engineering
CE 3142	Applied Fluid Mechanics Lab
CE 3343	Soil Mechanics
CE 3143	Properties and Behavior of Soils
CE 4352	Professional Practice
CE 4383	Senior Project

^C University core curriculum requirement

¹ Approved list on back side

² Foundational Component Area core curriculum requirement

APPROVED ELECTIVES FOR CIVIL ENGINEERING MAJORS CIVIL ENGINEERING TECHNICAL ELECTIVES

Five courses (fifteen hours) of senior technical electives are required. Three of these courses (nine hours) must be from different areas and from one of the following areas: Construction, Environmental, Geotechnical, Transportation or Water Resources. At least one of these three courses must be a design course. The remaining two courses (six hours) may be from any of the six CE areas (free electives). The areas of the technical electives and which are design courses (i.e. **4332**) are shown in the table below.

CONSTRUCTION	4305, 4306, 4332
ENVIRONMENTAL	4350, 4351, 4353, 4354, 4355
GEOTECHNICAL	4320, 4321, 4322, 4323 , 4336(or T), 4337(or T)
STRUCTURES	4324, 4325, 4348 , 4356, 4360, 4361, 4363, 4365, 4366, 4368, 4369
TRANSPORTATION	4310, 4311, 4312, 4313 , 4314
WATER RESOURCES	4326, 4328 , 4330, 4358

CE 4347, CE 4352, and CE 4383 are not technical electives.

CE 4393 and CE 4394 are free electives.

CE 4300 - Advanced Topics in Civil Engineering, when offered, may be used as a technical elective in the related area.

CREATIVE ARTS ELECTIVE

Any course which satisfies the University Core Curriculum requirement for Creative Arts is accepted. A list is available at <http://www.uta.edu/provost/core-curriculum/core-syllabi.php>.

LANGUAGE, PHILOSOPHY & CULTURE ELECTIVE

Any course which satisfies the University Core Curriculum requirement for Language, Philosophy & Culture is accepted. A list is available at <http://www.uta.edu/provost/core-curriculum/core-syllabi.php>.

DISCLAIMER

Information provided here and on the Civil Engineering Advising and Course Selection Guide is to assist students in planning the sequence of courses required for an undergraduate degree in Civil Engineering. However, the authoritative requirements for the degree are contained in the 2016/2017 University of Texas at Arlington Catalog. Students should refer to the current catalog to confirm prerequisite requirements and consult with the Department if additional clarification is required.

CIVIL ENGINEERING PREREQUISITES

Students may not attempt a CE course until they have earned a grade of C or better in the prerequisite course(s) and have satisfied all other requisite requirements.

CIVIL ENGINEERING COURSE SEQUENCE

The sequence of courses shown on the front side of this form will usually satisfy the required course prerequisites and allow a student to graduate in four years. However, it may be necessary to modify this course sequence for a number of reasons. A CE Undergraduate Advisor will help select the sequence of courses suitable for each student.

The CE Department intends to offer CE 1000, CE 2000, CE 3000, CE 4347, CE 4352, and CE 4383 each fall and spring semester. Most Civil Engineering Technical Elective Courses will not be offered every semester. A multi-year schedule of when technical electives will be offered is available in the Department office.

Certain CE courses will also be offered in the summer 11-week semester. The courses selected will depend on anticipated need, faculty availability, and budget. **At this time, students should not plan their long term schedules assuming that particular courses will be offered in summer.**