

UTA CIVIL ENGINEERING CURRICULUM

Applies to students entering the UTA CE program from fall 2019 through the summer 2020

FIRST YEAR

CE 1105 1	CE 1252 2
CHEM 1465 4	HIST 1301 ^C 3
ENGL 1301 ^C 3	MATH 2425 ^C 4
ENGR 1250 ^C 2	PHYS 1443 ^C 4
ENGR 1101 or UNIV 1131 1	POLS 2311 3
MATH 1426 ^C 4	
<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 1302 ^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>18</u>	<u>17</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

<p>COMMUNICATION</p> <p>ENGL 1301^C Rhetoric and Composition I</p> <p>COMS 2302 Professional and Technical Communication for Science and Engineering</p> <p>U.S. HISTORY</p> <p>HIST 1301^C History of the United States to 1865</p> <p>HIST 1302^C History of the United States, 1865 to Present</p> <p>GOVERNMENT/POLITICAL SCIENCE</p> <p>POLS 2311^C Government of the United States</p> <p>POLS 2312^C State and Local Government</p> <p>MATHEMATICS</p> <p>MATH 1426^C Calculus I</p> <p>MATH 2425^C Calculus II</p> <p>MATH 2326^{C,2} Calculus III</p> <p>MATH 3319 Differential Equations and Linear Algebra</p> <p>LIFE AND PHYSICAL SCIENCES</p> <p>CHEM 1465 Chemistry for Engineers</p> <p>GEOL 3340 Geology for Engineers</p> <p>PHYS 1443^C General Technical Physics I</p> <p>PHYS 1444^C General Technical Physics II</p> <p>SOCIAL AND BEHAVIORAL SCIENCES</p> <p>IE 2308 Economics for Engineers</p>	<p>OTHER ENGINEERING</p> <p>ENGR 1250 Engineering Problem Solving</p> <p>ENGR 1101 Entrance to Engineering for Transfer Students</p> <p>UNIV 1131 Student Success</p> <p>CIVIL ENGINEERING</p> <p>CE 1105 Introduction to Civil Engineering</p> <p>CE 1252 Computer Tools - AutoCAD</p> <p>CE 2153 Computer Tools – Civil 3D</p> <p>CE 2221 Dynamics</p> <p>CE 2311 Statics</p> <p>CE 2313 Mechanics of Materials I</p> <p>CE 2331 Engineering Measurement and Computer Modeling</p> <p>CE 3210 Civil Engineering Communications</p> <p>CE 3261 Properties and Behavior of Civil Engineering Materials</p> <p>CE 3161 Civil Engineering Materials Lab</p> <p>CE 3301 Stochastic Models for Civil Engineering</p> <p>CE 3302 Transportation Engineering</p> <p>CE 3305 Basic Fluid Mechanics</p> <p>CE 3311 Construction Engineering</p> <p>CE 3334 Principles of Environmental Engineering</p> <p>CE 3131 Environmental Engineering</p> <p>CE 3341 Structural Analysis</p> <p>CE 3342 Water Resources Engineering</p> <p>CE 3142 Applied Fluid Mechanics Lab</p> <p>CE 3343 Soil Mechanics</p> <p>CE 3143 Properties and Behavior of Soils</p> <p>CE 4352 Professional Practice</p> <p>CE 4383 Senior Project</p>
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^C University core curriculum requirement

¹ Approved list on back side

² Foundational Component Area core curriculum requirement

TECHNICAL ELECTIVES

Beginning with the 2014/2015 catalog, fifteen hours (five courses) of senior technical electives are required in the CE program. Of the fifteen required hours of senior technical electives, twelve (12) hours (four (4) courses) must be selected from four (4) different areas of the following six (6): Construction (C), Environmental (E), Geotechnical (G), Structures (S), Transportation (T), or Water Resources (W). The remaining three (3) hours (one (1) course) may be chosen from the remaining CE technical electives including CE 4393 - Industrial Internship, or CE 4394 - Research Internship. CE 4300, when offered, must be approved by the faculty to be considered as a technical elective in a specified area. CE 4300 may be offered without approval to be used as a technical elective by the CE faculty. The areas of the technical electives and which are design courses (i.e. **4332**) are shown in the table below.

CONSTRUCTION	4303, 4304, 4305, 4306, 4307, 4308, 4332 , 4335
ENVIRONMENTAL	4350, 4351, 4353, 4354, 4355 , 4357
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.**