# UTA CIVIL ENGINEERING CURRICULUM

Applies to students entering the UTA CE program from the fall 2018 through the summer 2019

## FIRST YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 1105</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1465</td>
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<td>4</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Rhetoric and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1250</td>
<td>Geology for Engineers</td>
<td>2</td>
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<tr>
<td>ENGR 1101</td>
<td>Engineering Measurement and Computer Modeling</td>
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</tr>
<tr>
<td>MATH 1426</td>
<td>Calculus I</td>
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**Total Credits:** 15

## SECOND YEAR

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<tr>
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<tr>
<td>CE 2311</td>
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<td>3</td>
</tr>
<tr>
<td>CE 2331</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HIST 1312</td>
<td>History of the United States, 1865 to Present</td>
<td>3</td>
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<tr>
<td>MATH 2326</td>
<td>Calculus II</td>
<td>3</td>
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<tr>
<td>PHYS 1444</td>
<td>Calculus III</td>
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**Total Credits:** 17

## THIRD YEAR

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<td>CE 3261</td>
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<td>3</td>
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<td>CE 3301</td>
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<td>3</td>
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<tr>
<td>CE 3305</td>
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<td>3</td>
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<tr>
<td>CE 3341</td>
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<td>CE 3343</td>
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**Total Credits:** 18

## FOURTH YEAR

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<td>CE 4347</td>
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</tr>
<tr>
<td>CE 4352</td>
<td></td>
<td>3</td>
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<tr>
<td>CE Technical Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Language, Philosophy, and Culture Elective</td>
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**Total Credits:** 15

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

## REQUIRED COURSE TITLES

<table>
<thead>
<tr>
<th>COMMUNICATION</th>
<th>ENGL 1301</th>
<th>Rhetoric and Composition I</th>
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<tbody>
<tr>
<td>COMS 2302</td>
<td>Professional and Technical Communication for Science and Engineering</td>
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<thead>
<tr>
<th>U.S. HISTORY</th>
<th>HIST 1311</th>
<th>History of the United States to 1865</th>
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<tbody>
<tr>
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<td>History of the United States, 1865 to Present</td>
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<tr>
<td>GOVERNMENT/POLITICAL SCIENCE</td>
<td>POLS 2311</td>
<td>Government of the United States</td>
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<tr>
<td>POLS 2312</td>
<td>State and Local Government</td>
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<table>
<thead>
<tr>
<th>MATHEMATICS</th>
<th>MATH 1426</th>
<th>Calculus I</th>
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<tbody>
<tr>
<td>PHYS 2425</td>
<td>Calculus II</td>
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<tr>
<td>PHYS 2326</td>
<td>Calculus III</td>
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<td>MATH 3319</td>
<td>Differential Equations and Linear Algebra</td>
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<thead>
<tr>
<th>LIFE AND PHYSICAL SCIENCES</th>
<th>CHEM 1405</th>
<th>Chemistry for Engineers</th>
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<tbody>
<tr>
<td>GEOL 1340</td>
<td>Geology for Engineers</td>
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<tr>
<td>PHYS 1443</td>
<td>General Technical Physics I</td>
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<td>PHYS 1444</td>
<td>General Technical Physics II</td>
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| SOCIAL AND BEHAVIORAL SCIENCES | IE 2308 | Economics for Engineers |

<table>
<thead>
<tr>
<th>C University core curriculum requirement</th>
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<tbody>
<tr>
<td>1 Approved list on back side</td>
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<tr>
<td>2 Foundational Component Area core curriculum requirement</td>
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<table>
<thead>
<tr>
<th>OTHER ENGINEERING</th>
<th>ENGR 1250</th>
<th>Engineering Problem Solving</th>
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<tr>
<td>ENGR 1101</td>
<td>Entrance to Engineering for Transfer Students</td>
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<table>
<thead>
<tr>
<th>CIVIL ENGINEERING</th>
<th>CE 1105</th>
<th>Introduction to Civil Engineering</th>
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<tbody>
<tr>
<td>CE 1252</td>
<td>Engineering Problem Solving</td>
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<td>ENGR 1101</td>
<td>Entrance to Engineering for Transfer Students</td>
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<td>UNIV 1131</td>
<td>Student Success</td>
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<tr>
<td>C</td>
<td>CE 1252</td>
<td>Computer Tools - AutoCAD</td>
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<tr>
<td>C</td>
<td>CE 2153</td>
<td>Computer Tools – Civil 3D</td>
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<td>C</td>
<td>CE 2221</td>
<td>Dynamics</td>
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<td>CE 2311</td>
<td>Statics</td>
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<td>C</td>
<td>CE 2313</td>
<td>Mechanics of Materials I</td>
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<td>C</td>
<td>CE 2331</td>
<td>Engineering Measurement and Computer Modeling</td>
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<td>C</td>
<td>CE 3210</td>
<td>Civil Engineering Communications</td>
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<td>C</td>
<td>CE 3261</td>
<td>Properties and Behavior of Civil Engineering Materials</td>
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<td>CE 3161</td>
<td>Civil Engineering Materials Lab</td>
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<td>CE 3301</td>
<td>Stochastic Models for Civil Engineering</td>
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<td>C</td>
<td>CE 3302</td>
<td>Transportation Engineering</td>
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<td>C</td>
<td>CE 3305</td>
<td>Basic Fluid Mechanics</td>
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<td>C</td>
<td>CE 3311</td>
<td>Construction Engineering</td>
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<td>C</td>
<td>CE 3334</td>
<td>Principles of Environmental Engineering</td>
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<td>C</td>
<td>CE 3131</td>
<td>Environmental Engineering</td>
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<td>C</td>
<td>CE 3341</td>
<td>Structural Analysis</td>
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<td>CE 3342</td>
<td>Water Resources Engineering</td>
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<td>CE 3142</td>
<td>Applied Fluid Mechanics Lab</td>
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<td>CE 3343</td>
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<td>C</td>
<td>CE 3143</td>
<td>Properties and Behavior of Soils</td>
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<td>C</td>
<td>CE 4352</td>
<td>Professional Practice</td>
</tr>
<tr>
<td>C</td>
<td>CE 4383</td>
<td>Senior Project</td>
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2018/2019 CE Curriculum 09/20/2018
APPROVED ELECTIVES FOR CIVIL ENGINEERING MAJORS  CIVIL ENGINEERING

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, 4332, 4335 |
| ENVIRONMENTAL | 4350, 4351, 4353, 4354, 4355 |
| GEOTECHNICAL | 4320, 4321, 4322, 4323, 4324, 4325, 4326, 4327, 4328, 4329, 4330, 4331, 4332, 4333, 4334, 4335, 4336, 4337, 4338, 4339, 4340, 4341, 4342, 4343, 4344, 4345, 4346, 4347, 4348, 4349, 4350, 4351, 4352, 4353, 4354, 4355, 4356, 4357, 4358, 4359, 4360, 4361, 4362, 4363, 4364, 4365, 4366, 4367, 4368, 4369, 4370, 4371, 4372, 4373, 4374, 4375, 4376, 4377, 4378, 4379, 4380, 4381, 4382, 4383, 4384, 4385, 4386, 4387, 4388, 4389, 4390, 4391, 4392, 4393, 4394, 4395, 4396, 4397, 4398, 4399, 4300 |
| STRUCTURES | 4324, 4325, 4326, 4327, 4328, 4329, 4330, 4331, 4332, 4333, 4334, 4335, 4336, 4337, 4338, 4339, 4340, 4341, 4342, 4343, 4344, 4345, 4346, 4347, 4348, 4349, 4350, 4351, 4352, 4353, 4354, 4355, 4356, 4357, 4358, 4359, 4360, 4361, 4362, 4363, 4364, 4365, 4366, 4367, 4368, 4369, 4370, 4371, 4372, 4373, 4374, 4375, 4376, 4377, 4378, 4379, 4380, 4381, 4382, 4383, 4384, 4385, 4386, 4387, 4388, 4389, 4390, 4391, 4392, 4393, 4394, 4395, 4396, 4397, 4398, 4399, 4300 |
| TRANSPORTATION | 4310, 4311, 4312, 4313, 4314 |
| WATER RESOURCES | 4326, 4328, 4330, 4335 |

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.