

CIVIL ENGINEERING CURRICULUM EFFECTIVE FALL 2014

FIRST YEAR

MATH	1426 ^C	.....	4
HIST	1311 ^C	.....	3
ENGL	1301 ^C	.....	3
CHEM	1465	.....	4
C E	1104	.....	1
C E	1105	.....	1
		16	

MATH	2425 ^C	.....	4
POLS	2311 ^C	.....	3
PHYS	1443 ^C	.....	4
ENGL	1302 ^C	.....	3
C E	1252	.....	2
		16	

SECOND YEAR

MATH	2326 ^C	.....	3
PHYS	1444 ^C	.....	4
HIST	1312 ^C	.....	3
C E	2152	.....	1
C E	2311	.....	3
C E	2331	.....	3
		17	

MATH	3319	.....	3
I E	2308 ^C	.....	3
GEOL	3340	.....	3
COMS	2302	.....	3
C E	2221	.....	2
C E	2313	.....	3
		17	

See "Civil Engineering Course Sequence" on reverse side for frequency of CE course offerings.

THIRD YEAR

C E	3110	.....	1
C E	3261 + C E 3161	.....	3
C E	3301 (or I E 3301)	.....	3
C E	3305	.....	3
C E	3341	.....	3
C E	3343 + C E 3143	.....	4
		17	

C E	3302	.....	3
C E	3309	.....	3
C E	3142	.....	1
C E	3311	.....	3
C E	3334 † C E 3131	.....	4
POLS	2312 ^C	.....	3
		17	

FOURTH YEAR

C E	4347	.....	3
C E	4352	.....	3
C E Technical Elective	¹	.....	3
C E Technical Elective	¹	.....	3
Language/Philosophy/Culture Elective	^{C,1}	.....	3
		15	

C E	4383	.....	3
C E Technical Elective	¹	.....	3
C E Technical Elective	¹	.....	3
C E Technical Elective	¹	.....	3
C E Technical Elective	^{C,1}	.....	3
Creative Arts Elective	^{C,1}	.....	3
		15	

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

REQUIRED COURSE TITLES

COMMUNICATIONS

ENGL	1301 ^C	Rhetoric & Composition I
ENGL	1302 ^C	Rhetoric & Composition II
COMS	2302	Professional & Technical Communication for Science & Engineering

HISTORY

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

GOVERNMENT/POLITICAL SCIENCE

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

MATHEMATICS

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

LIFE AND PHYSICAL SCIENCE

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 & BEHAVIORAL SCIENCES

^C I E	2308 ^C	Engineering Economics
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CIVIL ENGINEERING (ABET Proficiency test)

C E	1104	Introduction to Engineering
C E	1105	Introduction to Civil Engineering
C E	1252	Computer Tools - AutoCAD
C E	2152	Computer Tools - Mathcad
C E	2221	Dynamics
C E	2311	Statics
C E	2313	Mechanics of Materials I
C E	2331	Engineering Measurement & Computer Modeling
C E	3110	Civil Engineering Communications
C E	3261	Properties and Behavior of CE Materials
C E	3301	Stochastic Models for Civil Engineering
C E	3302	Transportation Engineering (<i>Transportation</i>)
C E	3305	Basic Fluid Mechanics (<i>Water Resources</i>)
C E	3309	Introduction to Hydrology
C E	3311	Construction Engineering
C E	3334	Principles of Environmental Engineering
C E	3341	Structural Analysis (<i>Structures</i>)
C E	3343	Soil Mechanics (<i>Geotechnical</i>)
C E	4347	Reinforced Concrete Design
C E	4352	Professional Practice
C E	4383	Senior Project

CIVIL ENGINEERING LABORATORIES

C E	3131	Environmental Analysis
C E	3142	Applied Fluid Mechanics Lab
C E	3143	Properties and Behavior of Soils
C E	3161	CE Materials Laboratory

^C Indicates Core Curriculum Requirement

¹ See reverse side of this sheet for Approved Electives for Civil Engineering Majors

² Required for C E majors as Foundational Component Area core.

APPROVED ELECTIVES FOR CIVIL ENGINEERING MAJORS

CIVIL ENGINEERING TECHNICAL ELECTIVES

Fifteen hours of senior technical electives are required, including one **design course** (shown in **bold** print below). Twelve hours to be selected from *four* of the following six areas: Construction, Environmental, Geotechnical, Structures, Transportation or Water Resources. One of these four courses must be either CE 4328 or CE 4348. The remaining three hours may be from any CE technical elective area.

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

CE 4300 Advanced Topics courses, when offered, may be used for the area to which the topic is pertinent.

CREATIVE ARTS ELECTIVE

Any course which satisfies the University Core Curriculum requirement for Creative Arts is accepted. A list is available in the Department office.

LANGUAGE, PHILOSOPHY & CULTURE ELECTIVE

Any course which satisfies the University Core Curriculum requirement for Language, Philosophy & Culture is accepted. A list is available in the Department office.

PREREQUISITES AND COURSE SEQUENCE

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. Requirements for the degree are listed in the current University of Texas at Arlington Undergraduate Catalog. Students should refer to the 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).

CIVIL ENGINEERING COURSE SEQUENCE

The sequence of courses shown on the front side of this form will satisfy the required 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. 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. **Students should not plan their long term schedules assuming that particular courses will be offered in summer.**