

AS Civil Engineering Field of Study to Bachelor of Science in Civil Engineering Guided Pathway



Effective beginning with the 2020-2021 catalog

First Year - Collin College

(Developmental coursework may be required.)

FIRST SEMESTER	SECOND SEMESTER
^C ENGL 1301 - Composition I	^C ENGL 2311 - Tech. & Bus. Writing
CMATH 2413 - Calculus I (pre-req required)	CMATH 2414 - Calculus II
^C Creative Arts course (see below)	CHIST 1302 - US History II
ENGR 1304 - Engineering Graphics	CPHYS 2425 - University Physics I
CHIST 1301 - US History I	*SPCH 1321 - Business and Professional Communication
GOVT 2305 - Federal Government	
17 credit hours	17 credit hours

Second Year - Collin College

FIRST SEMESTER	SECOND SEMESTER
CPHYS 2426 - University Physics II	^C GOVT 2306 - Texas Government
MATH 2415 - Calculus III	ENGR 2302 - Engineering Mechanics II
ENGR 2301 - Engineering Mechanics I	MATH 2320 - Differential Equations
ENGR 2308 - Engineering Economics	ENGR 2332 - Mechanics of Materials
**MATH 2318 - Linear Algebra	CHEM 1409 - General Chemistry for Engineering Majors
17 credit hours	16 credit hours

AS Civil Engineering Field of Study

Contact your advisor at Collin College for core completion and associate degree options.

Third Year – University of Texas at Arlington

Students must fulfill UTA admissions requirements which can be found on the UTA website.

SUMMER SEMESTER (Prerequisites)		
CE 2331 - Engineering Measurement and Computer Modeling		
CE 3301 - Stochastic Models for Civil Engineering	6 credit hours	
FIRST SEMESTER	SECOND SEMESTER	
ENGR 3210 - Civil Engineering Communication	CE3311 - Construction Engineering	
CE 3341 - Structural Analysis	CE3334- Principals of Environmental Engineering	
CE 3343 - Soil Mechanics	CE 3131 - Environmental Analysis	
CE 3143 - Properties and Behavior of Soils	CE3342 - Introduction to Water Resources	
CE 3361 - Properties and Behavior of CE Materials	CE 3142 - Applied Fluid Mechanics Lab	
CE 3305 - Basic Fluid Mechanics	CE 3302 - Transportation Engineering	
CE 3253 - Appl. Computer-based Design Programs in CE	GEOL 3340 - Geology for Engineers	
17 credit hours	14 credit hours	

Fourth Year – University of Texas at Arlington

FIRST SEMESTER	SECOND SEMESTER
CE 4352 - Professional Practice	CE 4383 - Senior Project
CE 3347 - Reinforced Concrete Design	CE 43XX Senior Technical Elective 2
CE 3328 - Water System Design	CE 43XX Senior Technical Elective 3
CE 43XX Senior Technical Elective 1	CE 43XX Senior Technical Elective 4
^Language, Philosophy, and Culture elective	
16 credit hours	17 credit hours

Bachelor of Science in Civil Engineering

- *Not required for Field of Study, but must be taken along with ENG 2311 to meet UTA requirements for COMS 2302
- **Not required for Field of Study, but must be taken along with MATH 2320 to meet UTA requirements for MATH 3319.

 Creative Arts choose one from: ARTS 1301, 1303, 1304, 1313, DANC 2303, DRAM 1310, 2361, 2362, 2366, MUSI 1306, 1307, 1310
- ^ May be taken at Collin College or UTA (Collin Options below):
 <u>Language, Philosophy, & Culture</u>— one required from: ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343, HIST 2311, 2312, 2321, 2322, HUMA 1301, PHIL 1301, 1304, 2303, 2306, 2307, 2321