

# AS Civil Engineering

to



## **Bachelor of Science in Civil Engineering**

Guided Pathway
Effective for 2021-2022 Catalog

### First Year - Collin College

(Developmental coursework may be required.)

FIRST SEMESTER	SECOND SEMESTER	
<sup>c</sup> ENGL 1301 - Composition I	<sup>C</sup> ENGL 2311 - Tech and Bus Writing	
ENGR 1201 - Intro to Engineering	CHIST 1302 - US History II	
<sup>c</sup> Creative Arts (see list below)	CMATH 2414 - Calculus II	
CHIST 1301 - US History I	CPHYS 2425 - University Physics I	
<sup>C</sup> MATH 2413 - Calculus I	ENGR 1304 - Engineering Graphics	
15 credit hours	17 credit hours	
SUMMER SEMESTER		
CECON 2301 - Principles of Macroeconomics (pre-requisite required by UT Tyler)		

#### **Second Year - Collin College**

FIRST SEMESTER	SECOND SEMESTER
ENGR 2301 Engineering Mechanics I	CHEM 1409 General Chemistry for Engineering Majors
<sup>c</sup> GOVT 2305 Federal Government	ENGR 2302 Engineering Mechanics II
MATH 2415 Calculus III	ENGR 2332 Mechanics of Materials
CPHYS 2426 University Physics II	<sup>c</sup> GOVT 2306 Texas Government
*Science Elective (See list below)	MATH 2320 Differential Equations
17 credit hours	16 credit hours

## Associate of Science in Civil Engineering

### Third Year – UT Tyler

Students must fulfill **UT Tyler** admissions requirements which can be found on the UT Tyler website.

FIRST SEMESTER	SECOND SEMESTER
CENG 3434 - CE Materials, Codes, and Specifications	CENG 3361 - Applied Eng Hydrology and Hydraulic Design
CENG 3310 - Fluid Mechanics and Hydraulics	CENG 3351 - Transportation Engineering Systems
MATH 3351 - Prob. And Stat for Eng. And Scientists	CENG 3371 - Intro to Environmental Engineering
CENG 4339 - CE Construction Management	CENG 3336 - Soil Mechanics and Foundation Design
<sup>c</sup> SPCM 1315 - Fundamentals of Speech Comm	CENG 3325 - Structural Analysis
16 credit hours	15 credit hours

# Fourth Year – UT Tyler

FIRST SEMESTER	SECOND SEMESTER
CENG 4412 - Reinforced Concrete and Steel Design	CENG 4315 - Senior Design II
*CENG 4351 - Traffic Engineering: Operations and Control	CENG 4341 - CE Ldrs, Pub Pol, Bus Pract, and Asset Mgmt
*CENG 4371 - Environmental Engineering Design	PHIL 2306 - Introduction to Ethics
*CENG 4381 - Foundation Design	CENG Approved Tech Elective 1
CENG 4115 - Senior Design I	CENG Approved Tech Elective 2
ENGR 4109 - Senior Seminar	
ENGR 4009 - FE Exam Preparation	
15 credit hours	15 credit hours

<sup>\*</sup>Students may choose all 3 or pick 2 of 3 and substitute a CENG approved elective

# **Collin Options**

<u>Creative Arts</u> - choose one from: **ARTS** 1301, 1303, 1304, 1313, **DANC** 2303, **DRAM** 1310, 2361, 2362, 2366, **MUSI** 1306, 1307, 1310

<sup>\*</sup>Science Elective (required by UT Tyler) – choose one from: PHYS 1403, 1404, GEOL 1403, 1404