



Bachelor of Science in Civil Engineering
 Recommended 4-Year Course Sequence
 2024-2025 Catalog



FRESHMAN YEAR

Fall				Spring			
TJC	UT Tyler	Title	Hours	TJC	UT Tyler	Title	Hours
ENGR 1201		Introduction to Engineering	2	ENGL 2311		Business and Technical Writing	3
ENGL 1301		College Composition I	3	MATH 2414		Calculus II	4
MATH 2413		Calculus I	4	ENGR 1304		Engineering Graphics I (only 2 hours accepted at UT Tyler)	2
CHEM 1411		General Chemistry I	4	PHYS 2425		University Physics I	4
GOVT 2306		Introductory Texas Politics	3	SPCH 1315		Introduction to Public Speaking	3
COSC 1301*		Intro to Computing (TJC Institutional requirement)	0				
			16				16

SOPHOMORE YEAR

Fall				Spring			
TJC	UT Tyler	Title	Hours	TJC	UT Tyler	Title	Hours
GOVT 2305		Introductory American Government	3	ENGR 2302		Engineering Mechanics: Dynamics	3
HIST 1301		United States History I	3	ECON 2301 OR ECON 2302		Principles of Macroeconomics or Principles of Microeconomics	3
ENGR 2301		Engineering Mechanics: Statics	3	MATH 2320		Differential Equations	3
MATH 2415		Calculus III	4	HIST 1302		United States History II	3
PHYS 2426		University Physics II	4	ENGR 2305**		Electrical Circuits (CENG elective)	3
				ENGR 2105**		Electrical Circuits Lab (Not used in UT Tyler degree plan)	0
			17				15

JUNIOR YEAR

Fall				Spring			
TJC	UT Tyler	Title	Hours	TJC	UT Tyler	Title	Hours
	CENG 3434	Civil Engineering Materials, Codes, and Specifications	4		CENG 3361	Applied Engineering Hydrology and Hydraulic Design	3
	CENG 3310	Fluid Mechanics and Hydraulics	3		CENG 3351	Transportation Engineering Systems	3
	MATH 3351	Probability and Statistics for Engineers and Scientists	3		CENG 3371	Introduction to Environmental Engineering	3
	CENG 4339	Civil Engineering Construction Management	3		CENG 3336	Soil Mechanics and Foundation Design	3
	CENG 3306	Mechanics of Materials	3		CENG 3325	Structural Analysis	3
			16				15

SENIOR YEAR

Fall				Spring			
TJC	UT Tyler	Title	Hours	TJC	UT Tyler	Title	Hours
	CENG 4412	Reinforced Concrete and Steel Design	4		CENG 4315	Senior Design II	3
	CENG 4351	Traffic Engineering: Operations and Control	3		CONE 4341	Leadership, Professionalism & Public Policy	3
	CENG 4371	Environmental Engineering Design	3			Creative Arts	3
	CENG 4381	Foundation Design	3		PHIL 2306	Introduction to Ethics	3
	CENG 4115	Senior Design I	1			CENG elective	3
	CMGT 3104	Graphical Tools for Design and Modeling of infrastructure	1				
			15				15

Total Credit Hours at Tyler Junior College 64
Total Credit Hours at UT Tyler 61
Total Credit Hours 125

* COSC 1301 Required for AS completion for TJC, not used in UT Tyler Degree Plan
 ** ENGR 2305 Used as CENG Approved Elective in CENG Degree Plan at UT Tyler limited to 3 hours