

BACHELOR OF SCIENCE (B.S.) MAJOR IN CIVIL ENGINEERING

**Minimum required: 126
semester credit hours**

General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum>) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Majors must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- No minor is required in this Bachelor of Science degree program because of the breadth of the foundation and support coursework.
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
- All students in the Civil Engineering degree programs must complete Civil Engineering (CE) course prerequisites with a grade of "C" or higher.
- For transfer students, 39 semester credit hours in chemistry, engineering, mathematics and physics (or their equivalents) may be transferred from a Texas public institution of higher education for the Civil Engineering Field of Study and be applied to the Bachelor of Science degree with a major in Civil Engineering at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MATH 2471	Calculus I	4
TCCN: MATH 2413		
MATH 2472	Calculus II	4
TCCN: MATH 2414		
MATH 2473	Integral Calculus with Multivariables and Series	4
TCCN: MATH 2415		
MATH 3323	Differential Equations	3
TCCN: MATH 2320		
CHEM 1335	Engineering Chemistry	3
TCCN: CHEM 1309		
CHEM 1141	General Chemistry Laboratory I	1
TCCN: CHEM 1109		
PHYS 1430	Mechanics	4
TCCN: PHYS 2425		
PHYS 2425	Electricity and Magnetism	4

TCCN: PHYS 2426		
ENGR 1313	Engineering Design Graphics	3
TCCN: ENGR 1304		
ENGR 3311	Mechanics of Materials	3
TCCN: ENGR 2332		
ENGR 3375	Mechanics for Engineers	3
TCCN: ENGR 2301		
TCCN: ENGR 2302		
Total Hours		36

Course Requirements

		Freshman	
	First Semester Hours	Second Semester Hours	Hours
US 1100	1	ENG 1310 (Communication Component Code 010)	3
MATH 2471 (Mathematics Component Code 020)	4	MATH 2473 (Component Area Option Code 090/092)	4
PHYS 1430 (Life & Physical Sciences Component Code 030)	4	ENGR 3375	3
ENGR 1313	3	CHEM 1335 (Life & Physical Sciences Component Code 030)	3
CE 1210	2	CHEM 1141	1
		CS 1342	3
		14	17

		Sophomore	
	First Semester Hours	Second Semester Hours	Hours
ENG 1320 (Communication Component Code 010)	3	PHIL 1320 (Language, Philosophy & Culture Component Code 040)	3
MATH 3323	3	MATH 3376	3
PHYS 2425 (Component Area Option Code 090/093)	4	ENGR 3373	3
ENGR 3311	3	CE 2340	3
Basic Science Elective ¹	4	CE 2350	3
		CE 3320	3
		17	18

		Junior	
	First Semester Hours	Second Semester Hours	Hours
HIST 1310 (American History Component Code 060)	3	ECO 2301 (Social & Behavioral Sciences Component Code 080)	3
ENGR 3380	3	HIST 1320 (American History Component Code 060)	3
IE 3320	3	CE 3310	3
CE 3330	3	CE 3331	3
CE 3350	3	CE 3360	3
		15	15

		Senior	
First Semester	Hours	Second Semester	Hours
POSI 2310 (Government/ Political Science Component Code 070)	3	ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3
GEO 4356	3	POSI 2320 (Government/ Political Science Component Code 070)	3
CE 4370	3	CE 4391	3
CE 4390	3	CE Technical Elective I ³	3
CE Infrastructure Design Elective ²	3	CE Technical Elective II ³	3
15		15	

Total Hours: 126

¹ Basic Science Elective - 4 hours may be chosen from the following:
BIO 1330 and BIO 1130, BIO 1331 and BIO 1131, GEOL 1410

² CE Infrastructure Design Elective may be chosen in consultation with
a faculty advisor from the following: CE 4330, CE 4361, CE 4372

³ CE Technical Electives may be chosen in consultation with a faculty
advisor from the following: CE 4310, CE 4311, CE 4320, CE 4321,
CE 4322, CE 4350, CE 4351, CE 4360, CE 4371, CE 4392