

Minimum required: 126 semester credit hours

General Requirements

1. Texas State students interested in pursuing the Bachelor of Science in Civil Engineering are required to meet admissions requirements.
2. Admissions requirements are listed on the Engineering & Computer Science Admissions page (<https://www.cose.txst.edu/cose-majors/admissions-requirements.html>).
3. 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.
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course.
6. No minor is required in this Bachelor of Science degree program because of the breadth of the foundation and support coursework.
7. Students majoring in any Bachelor of Science degrees offered by the Ingram School of Engineering cannot receive a minor in Engineering.
8. Nine semester credit hours must be writing intensive (WI).
9. If two years of the same, non-English 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.
10. All students in the Civil Engineering degree programs must complete Civil Engineering (CE) course prerequisites with a grade of "C" or higher.
11. 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 1135	Engineering Chemistry Laboratory	1
TCCN: CHEM 1109		
PHYS 2325 & PHYS 2125	Mechanics and Mechanics Laboratory	4
TCCN: PHYS 2325 & PHYS 2125		
PHYS 2326 & PHYS 2126	Electricity and Magnetism and Electricity and Magnetism Laboratory	4
TCCN: PHYS 2326 & PHYS 2126		
ENGR 3311	Mechanics of Materials	3
TCCN: ENGR 2332		
Total Hours		30

Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
US 1100		1 ENG 1310, 1320, or 1321 (Communication Component Code 010 [TCCN ENGL 1301])	3
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])		4 ENGR 2301 (TCCN ENGR 2301)	3
ENGR 1304		3 MATH 2473 (Component Area Option Code 090/092 [TCCN MATH 2415])	4
PHYS 2325 & PHYS 2125 (Life and Physical Sciences Component Code 030 [TCCN PHYS 2325 & PHYS 2125])		4 CHEM 1335 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1309 or 1409]) ¹	3
CE 1210		2 CHEM 1135 (TCCN CHEM 1109 [taken with TCCN CHEM 1309]) ²	1
		CS 1342	3
		14	17

		Sophomore	
		First Semester Hours	Second Semester Hours
MATH 3323		3 PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
ENGR 3311		3 MATH 3376	3
PHYS 2326 & PHYS 2126 (Component Area Option Code 090/093 [TCCN PHYS 2326 & PHYS 2126])		4 ENGR 3373	3
Basic Science Elective		4 CE 2340	3
ENG 3303 (Communication Component Code 010)		3 CE 2350	3
		CE 3320	3
		17	18

First Semester Hours		Second Semester Hours	Junior
American History Component Code 060	3 American History Component Code 060		3
ENGR 3380	3 CE 3310		3
IE 3320	3 CE 3331		3
CE 3330	3 CE 3360		3
CE 3350	3 CE 4370		3
15			15

First Semester Hours		Second Semester Hours	Senior
CE 4390	3 Creative Arts Component Code 050 [HUMA 1315]		3
ECO 2301 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 1301])	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])		3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 CE 4391		3
CE Technical Elective I	3 CE Technical Elective III		3
CE Technical Elective II	3 CE Technical Elective IV		3
15			15

Total Hours: 126

¹ While CHEM 1335 is strongly preferred, the department will accept CHEM 1341 to satisfy this requirement.

² While CHEM 1135 is strongly preferred, the department will accept CHEM 1141 to satisfy this requirement.

Code	Title	Hours
Basic Science Electives		
BIO 1330 & BIO 1130	Functional Biology and Functional Biology Laboratory	4
BIO 1331 & BIO 1131	Organismal Biology and Organismal Biology Laboratory	4
GEOL 1410	Introduction to Geology	4
CE Technical Electives		
CE 4320	Biological Wastewater Treatment	3
CE 4321	Hazardous Waste Management	3
CE 4323	Physical and Chemical Treatment of Water	3
CE 4330	Design of Retaining Structures	3
CE 4350	Design of Prestressed Concrete Infrastructure	3
CE 4351	Design of Steel Infrastructure	3
CE 4361	Highway Engineering	3
CE 4362	Traffic Engineering	3
CE 4371	Hydrology	3
CE 4392	Sustainable Infrastructure	3
ENGR 3315	Engineering Economic Analysis	3
GEO 4356	Urban Infrastructure Management	3
Choose a maximum of 3 hours from the following:		
CE 4100	Civil Engineering Undergraduate Research	
CE 4200	Civil Engineering Undergraduate Research	

CE 4300	Civil Engineering Undergraduate Research
ENGR 3190	Cooperative Education
ENGR 3290	Advanced Cooperative Education