

# Bachelor of Science in Civil Engineering

## Student Planning Guide: Starting 2020-21

	Fall	Winter	Spring
<b>FIRST YEAR</b>	MATH 11 Calculus I	MATH 12 Calculus II	MATH 13 Calculus III
	CHEM 11/11L (5)	PHYS 31/31L Physics for Engineers I (5)	PHYS 32/32L Physics for Engineers II (5)
	ENGR 1 and/or 1L Intro to Eng. (1 unit)*	ENGR 1 and/or 1L Intro to Eng. (1 unit)*	ENGR 1 and/or 1L Intro to Eng. (1 unit)*
	Critical Thinking and Writing I	Critical Thinking and Writing II	CENG 10/10L Surveying (3/1)
	CENG 7/7L Graphical Comm (3/1)	Cultures and Ideas I	Cultures and Ideas II
	Fall	Winter	Spring
<b>SOPHOMORE</b>	MATH 14 Calculus IV	AMTH 106 Differential Equations	CENG 44B Strength of Matls II (2)
	PHYS 33/33L Physics for Engineers III (5)	CENG 20/20L Geology (3/1)	CENG 115/115L Materials (4/1) OR CENG 143/143L Environ Engr (3/1)**
	CENG 15 Comp. Appl. in CE (3)	CENG 44A/44AL Strength of Matls (3/1)	CENG 132 Structural Analysis
	CENG 41 Statics	ENGL 181 Eng. Comm.	ELEN 49 Fundamentals of Elec CE
	Fall	Winter	Spring
<b>JUNIOR</b>	CENG 121A/121AL Geotech Engr (3/1)	AMTH 112 Risk in Civil Engr	CENG 128 Engr. Econ & Business (3)
	CENG 145 Transport Engr Des	CENG 121B Geotech Engr II (2)	CENG 140/140L Water Resources (4/1)
	CENG 148/148L Structural Syst (4/1)	CENG 125/125L Municipal Engr (3/1)	CENG 115/115L Materials (4/1) OR CENG 143/143L Environ Engr (3/1)**
	University Core	CENG 141/141L Fluids/Hydraulics (4/1)	CENG 192A Civil Engr Prof Practice (2)
		CENG Tech Elective	CENG Tech Elective
	Fall	Winter	Spring
<b>SENIOR</b>	CENG 192B Civil Engr Prof Practice (2)	CENG 193 Civil Engr Project Design	CENG 194 Civil Design Commun. (1)
	CENG 192C Civil Engr Prof Devel (1)	Free Elective	CENG Tech Elective
	CENG Tech Elective	CENG Tech Elective	University Core
	University Core	University Core	University Core
	University Core		

Humanities & Social Science	Math & Science	Major	Technical Electives
-----------------------------	----------------	-------	---------------------

\*ENGR 1 and 1L may be taken in any order and in any quarter in the first year. ENGR 1L is recommended Winter quarter to limit lab classes to two per quarter. If taken in later years, ENGR 110 is substituted for ENGR 1/1L.

\*\*CENG 115/115L and 143/143L are both required but may be taken either 2<sup>nd</sup> or 3<sup>rd</sup> year per student's preferred area of emphasis.