

# Bachelor of Science in Civil Engineering

## Student Planning Guide: First-Year Students Starting 2023-24 with MATH 9

	Fall	Winter	Spring
<b>FIRST YEAR</b>	MATH 9/9L PreCalculus	MATH 11 Calculus I	MATH 12 Calculus II
	University Core***	CHEM 11/11L (5)	PHYS 31/31L Physics for Engineers I (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
<b>SOPHOMORE</b>	Fall	Winter	Spring
	MATH 13 Calculus III	MATH 14 Calculus IV	CENG 44B Strength of Matls II (2)
	PHYS 32/32L Physics for Engineers II (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	PHYS 33/33L Physics for Engineers III (5)	University Core****	
<b>JUNIOR</b>	Fall	Winter	Spring
	AMTH 106 Differential Equations	AMTH 112 Risk in Civil Engr (or AMTH 108)	CENG 128 Engr. Econ & Business (3)
	CENG 121A/121AL Geotech Engr (3/1)	CENG 121B Geotech Engr II (2)	CENG 140/140L Water Resources (4/1)
	CENG 145 Transport Engr Des	CENG 125/125L Municipal Engr (3/1)	CENG 115/115L Materials (4/1) OR CENG 143/143L Environ Engr (3/1)**
	CENG 148/148L Structural Syst (4/1)	CENG 141/141L Fluids/Hydraulics (4/1)	CENG 192A Civil Engr Prof Practice (2)
	CENG Tech Elective	CENG Tech Elective	
<b>SENIOR</b>	Fall	Winter	Spring
	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)	CENG Tech Elective	CENG Tech Elective
	CENG Tech Elective	University Core	University Core
	ELEN 49 Fundamentals of Elec CE	University Core	University Core
ENGL 181 Eng. Comm.			

Humanities & Social Science	Math & Science	Major	Technical Electives
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\*ENGR 1 and 1L may be taken in any order and in any quarter in the first year. ENGR 1L is recommended Fall or Winter quarter if taking Math 9/9L. If taken in later years, ENGR 110 is substituted for ENGR 1/1L.

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

\*\*\*Students may consider the ENGR 16 (RTC-1) core class here.

\*\*\*\* Students may consider the ENGR 19 (Ethics) core class here.