

## Academic Plan of Study (APS) for BS in Civil Engineering

120 hours required to complete degree

Courses in **BOLD** require a grade of "C" or better - Effective Fall 2025

Course	Pre/Corequisites	Cr. Hrs	Course	Pre/Corequisites	Cr. Hrs
<b>MATH 1241: Calculus I</b>	MATH 1103 or math placement	3	<b>MATH 1242: Calculus II</b>	MATH 1241	3
<b>ENGR 1300: Exploring Engineering &amp; Technology w/Success</b>		2	<b>PHYS 2101: Physics I</b>	Pre/Coreq: MATH 1241	3
<b>ENGR 1301: Foundations of Math &amp; Science for Engineering</b>		3	<b>PHYS 2101L: Physics I Lab</b>	Pre/Coreq: PHYS 2101	1
Theme Course 1		3	<b>WRDS 1103: Writing &amp; Inquiry</b>		3
Theme Course 2		3	<b>ENGR 1302 Logic and Computational Problem Solving</b>		3
		14	<b>ENGR 1303 Engr Visual &amp; Graphical Communication</b>		3
					16

Course	Pre/Corequisites	Cr. Hrs	Course	Pre/Corequisites	Cr. Hrs
<b>MATH 2241: Calculus III</b>	MATH 1242	3	<b>MATH 2171: Diff. Eq.</b>	MATH 1242	3
<b>CHEM 1352: General Chemistry for Engineers</b>	ENGR 1301 or CHEM 1251 with a grade of C or above	4	<b>CEGR 2101: Civil Engineering Drawing</b>	ENGR 1303 with a grade of C or above	2
<b>CEGR 2102: Eng. Econ.</b>	ENGR 1302 with a grade of C or above	3	<b>CEGR 2154: Design Project Lab (O)</b>	ENGR 1300 and CEGR 2102 both with a grade of C or above	2
<b>MEGR 2141: Eng Mechanics I (Statics)</b>	PHYS 2101 & MATH 1242 with a grade of C or above	3	PHYS 2102: Physics II	PHYS 2101	3
CTCM 2530		3	<b>MEGR 2144: Solid Mechanics</b>	MEGR 2141 with a grade of C or above	3
		16	<b>CEGR 3256: Structural Materials Lab</b>	MEGR 2141, pre/coreq MEGR 2144	1
					14

Course	Pre/Corequisites	Cr. Hrs	Course	Pre/Corequisites	Cr. Hrs
<b>CEGR 3143: Hydraulics &amp; Hydrology</b>	MATH 2171 & MEGR 2141 all with a C or above	3	<b>CEGR 3161: Transportation Engineering</b>	MATH 2241, CEGR 2102, CEGR 2101, and MEGR 2141 all with a C or above	3
<b>CEGR 3141: Environmental Eng</b>	MATH 2171, CHEM 1352, & MEGR 2141 all with a C or above	3	CEGR 3153: Transportation Lab	Pre/Coreq: CEGR 3161	2
CEGR 3155: Environmental Lab	Pre/Coreq: CEGR 3141	2	MEGR/ECGR Elective	All require grade of "C" or better <b>CEGR 2161</b> (PHYS 2102); <b>MEGR 3111</b> (MATH 1242 & PHYS 2101); <b>MEGR 3121</b> (MEGR 2141 & MATH 1242)	3
<b>CEGR 3278: Geotechnical Eng</b>	MATH 2171 & MEGR 2144 both with a C or above	3	<b>CEGR 3111: Construction Engineering</b>	CEGR 3122, CEGR 3278, & CEGR 3255 all with a C or above	3
CEGR 3259: Geotech Lab	Pre/Coreq: CEGR 3278	1	Theme Course 3		3
<b>CEGR 3122: Structural Analysis</b>	MATH 2171 & MEGR 2144 both with a C or above	3	<b>CEGR Design Elective</b>	Check Course Catalog for prerequisites	3
		15			17

Course	Pre/Corequisites	Cr. Hrs	Course	Pre/Corequisites	Cr. Hrs
STAT 3128: Prob & Stat	MATH 2241	3	CEGR 3201: Senior Design	Senior Standing in CE, CEGR 2154, 3122, 3141, 3143, 3161, 3278, & 3111 and one Design Elective	3
CEGR 3221/3225	CEGR 3122 & CEGR 3255	3	CEGR Elective	Check Course Catalog for prerequisites	3
CEGR/Technical Elective	Check Course Catalog for prerequisites	3	CEGR Elective	Check Course Catalog for prerequisites	3
<b>CEGR Design Elective</b>	Check Course Catalog for prerequisites	3	ENGR 3295: Prof. Dev.		1
Science Elective - Biology/Geology/Earth Science		3	Theme Course 4		3
		15			13

Total Hours = 120