

Updated 12/20/2023

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR				
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring		
Computer Aided Drafting in Civil Engineering CE 113 (2)			Introductory Experiments in Transportation Engineering CE 222 (1)			Programming Applications in Engineering CE 251 (2) (CE 113; CE 204 or 208†; MATH 244)			Civil Engineering Professional Practice CE 465 (1) (Sr Standing and Instr. Consent)			Senior Design Project I and II CE 466 (3) <sup>3</sup> (CE 321, 322, 336, 337, 355, 381, 382, 465) CE 467 (3) <sup>3</sup> (CE 466)	
Introduction to Civil Engineering CE 111 (1)	Design Principles in CE CE 112 (2)			Mechanics of Materials I CE 204 (3) <sup>1</sup> (ME 211)	Mechanics of Materials II CE 207 (2) <sup>1</sup> (CE 204)	Structural Engineering CE 352 (4) (CE 207 or CE 208; CE 251†)							
	General Chemistry for Physical Science & Engineering I CHEM 124 (4) * [B1 & B3]	General Chemistry for Physical Science & Engineering II CHEM 125 (4) (CHEM 124)	Engineering Statics ME 211 (3) (MATH 241†; PHYS 131 or 141)	Engineering Dynamics ME 212 (3) (MATH 241; ME 211 or ARCE 211)	Civil Engineering Materials CE 259 (2) (CE 204 or 208†; CE 113†)		Reinforced Concrete Design CE 355 (4) (CE 259 & 352)			Approved Technical Elective  (4) <sup>3,4</sup> ***	Approved Technical Elective  (4) <sup>3,4</sup> ***	Approved Technical Elective  (4) <sup>3,4</sup> ***	
Calculus I MATH 141 (4) * [B4]	Calculus II MATH 142 (4) (MATH 141 w/min C-) [B4]	Calculus III MATH 143 (4) (MATH 142 w/min C-) [Area B Elective]	Calculus IV MATH 241 (4) (MATH 143)	Linear Analysis I MATH 244 (4) (MATH 143)	Fundamentals of Transportation Engineering and Lab CE 321 (3) & CE 322 (1) (PHYS 141; CE 259 or CM 113; CE 222; or graduate standing)			Water Resources Engineering and Hydraulics Lab CE 336 (4) & CE 337 (1) (ME 341 or ENVE 264)		Approved Technical Elective  (4) <sup>3,4</sup> ***	Approved Technical Elective  (4) <sup>3,4</sup> ***	Approved Technical Elective  (4) <sup>3,4</sup> ***	
Engineering Surveying BRAE 239 (4) (MATH 119)	General Physics IA PHYS 141 (4) * [Area B Elective]	General Physics II PHYS 132 (4) (PHYS 131, HNRS 131, or PHYS 141)	General Physics III PHYS 133 (4) (PHYS 131, 141, or HNRS 131; MATH 142. Recom: MATH 241)	Materials Engineering MATE 210 (3) (CHEM 111, 124, or 127. Recom: MATE 215 concur.)	Fluid Mechanics I ME 341 (3) (MATH 242 or 244; ME 212)		Geotechnical Engineering and Lab CE 381 (4) & CE 382 (1) (CE 207 or CE 208; ME 341 or ENVE 264. Concur: CE 382)		Construction Management and Project Planning CE/CM 371 (4) (ARCE 106, CE 259, or CM 113)				
Expository Writing ENGL 133/134 (4)** [A2]							Fundamentals of Environmental Engineering ENVE 331 (4) (CHEM 125 or 128; MATH 242 or 244†)		Statistical Methods for Engineers STAT 312 (4) (MATH 142) [Upper-Division B]				
Oral Communication COMS 101/102 (4)** [A1]			Physical Geology GEOL 201 (3) (MATH 119)	Materials Laboratory I MATE 215 (1) (MATE 210†)	Take concurrently: BIO 213 (2) & BMED/BRAE 213 (2) (MATH 142. Recom: CHEM 124) [B2]		Approved Engineering Science Elective (2-4) <sup>2,4</sup> ***				GE (4) **		
GE (4) **	Technical Writing for Engineers ENGL 149 (4) [A3] (Completion of GE A2 with a C- or better, Recommended: Completion of GE A1) Can be taken anytime between Winter of Freshman and Winter of Sophomore Years				GE (4) **		GE (4) **		GE (4) **	GE (4) **	GE (4) **	GE (4) **	
						Graduation Writing Requirement GWR* (Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)							
17	18	18	15	14	15	18	15-17	13	17	15	15		
											TOTAL:		190-192

**Notes:**

**MOST GENERAL EDUCATION COURSES CAN BE TAKEN IN ANY ORDER AS LONG AS PREREQUISITES ARE MET**

\* Refer to current catalog for prerequisites.

\*\* One course from each of the following GE areas must be completed: A1, A2, C1, C2, Lower-Division C Elective, Upper-Division C, D1, D2, Area D Elective, E. Upper-Division C should be taken only after Junior standing is reached (90 units).

Refer to online catalog for GE course selection, United States Cultural Pluralism (USCP) and Graduation Writing Requirement (GWR).

USCP requirement can be satisfied by some (but not all) courses within GE categories: C1, Upper-Division C, D1, D2, Upper-Division D, or E.

\*\*\* Refer to current catalog for course selection and guidelines for technical electives.

† Course can be taken previously or concurrently.

<sup>1</sup> CE 208 (5) may be taken in place of both CE 204 (3) and CE 207 (2)

<sup>2</sup> 2-4 units Approved Engineering Science Elective. See catalog. No double-counting of coursework with other requirements. Consultation with advisor recommended.

<sup>3</sup> 24 units Technical Electives. See catalog for course options and additional guidelines.

<sup>4</sup> Degree credit will only be given to one of the following courses: IME 314 or IME 315.

**Legend:**

Course Title Course # (Units) (Prerequisite)	Major (72)
[GE Area]	Support (78-80)
	General Ed. (40)