

Updated 2/18/20

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR			
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	
Introduction to Engineering ENGR 110 (2)		Fundamentals of Computer Science CSC/CPE 101 (4)² *	Engineering Statics ME 211 (3) (MATH 241†, PHYS 131 or 141)	Engineering Dynamics ME 212 (3) (MATH 241; ME 211 or ARCE 211)	Choose one: Engin. Economics IME 314 (3) (MATH 241) OR Financial Decision... IME 315 (3) (MATH 142)	Thermodynamics □ ME 302 (3) (ME 212; PHYS 132)	Fluid Mechanics I ME 341 (3) (MATH 242 or 244; ME 212)	Heat Transfer ME 350 (4)⁴ (CPE/CSC 101 or CSC 231 or 234; MATE 360 & 380, or ME 236 and 302 & ME 341)	Interdisciplinary Senior Design Project I ENGR 459 (2)⁶ (Sr Standing)	Interdisciplinary Senior Design Project II ENGR 460 (2)⁶ (ENGR 459)	Interdisciplinary Senior Design Project III ENGR 461 (2)⁶ (ENGR 460)	
Introduction to Design & Manufacturing IME 144 (4) Recom: IME 140 or ME 125	General Physics IA PHYS 141 (4)¹ (MATH 141 w/min C-, MATH 142† or 182†) [Area B Elective]	General Physics II PHYS 132 (4) (PHYS 131 or HNRS 131 or PHYS 141)	General Physics III PHYS 133 (4) (PHYS 131, 141, or HNRS 131; MATH 142. Recom: MATH 241)	Physical Science Elective (4)³ *	Electric Circuit Theory & Lab EE 201 (3) & EE 251 (1) (MATH 244; PHYS 133)	Materials Engineering & Lab I MATE 210 (3) & MATE 215 (1) (CHEM 111, 124, or 127)	General Curriculum ⁵ : Data Structures CPE/CSC 202 (4) (CSC/CPE 101 w/min C-; MATH 141 or 221 w/min C-; or Instr. consent)	General Curriculum ⁵ : Digital Design CPE 133 (4) (ENGR 110; CPE/CSC 101)	General Curriculum ⁵ : Mechanics of Materials II CE 207 (2) (CE 204)	General Curriculum ⁵ : Approved Elective 300-lvl or higher (4)	General Curriculum ⁵ : Approved Elective 300-lvl or higher (4)	
Calculus I MATH 141 (4) * [B4]	Calculus II MATH 142 (4)¹ (MATH 141 w/min C-) [B4]	Calculus III MATH 143 (4)¹ (MATH 142 w/min C-) [Area B Elective]	Calculus IV MATH 241 (4) (MATH 143)	Linear Analysis I MATH 244 (4) (MATH 143)	Mechanics of Materials I CE 204 (3) (ME 211)		General Curriculum ⁵ : Approved Elective 300-lvl or higher (4)	General Curriculum ⁵ : Electronics & Lab EE 321 (3) (EE 201) & EE 361 (1)	General Curriculum ⁵ : Choose one: CPE/EE 329 or IME 356 or ME 305 (4)*		General Curriculum ⁵ : Approved Elective 300-lvl or higher (4)	
Choose one path: General Chemistry I CHEM 124 (4)¹ OR General Chemistry I CHEM 127 (4)¹		General Chemistry II CHEM 125 (4)¹ [B1 & B3] OR General Chemistry II CHEM 128 (4)¹ [B1 & B3]		Take concurrently: BIO 213 (2) & BMED/BRAE 213 (2)¹ (MATH 142. Recom: CHEM 124) [B2]		Math or Stat Elective MATH 344, STAT 312, or STAT 350 (4)^{1,3*} [Upper-Division B]		GE (4) **		General Curriculum ⁵ : Product-Process Design IME 418 (4) Sr Standing. Recom: IME 450		General Curriculum ⁵ : Approved Elective 300-lvl or higher (2)
Expository Writing ENGL 133/134 (4)** [A2]		Oral Communication COMS 101/102 (4)** [A1]		Technical Writing ENGL 149 (4)¹ [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) **		
						Graduation Writing Requirement GWR* (Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)						
14	16	16	15	15	18	15	15	16	16	14	16	
										TOTAL: 186		

Notes:

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

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 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).

† Course can be taken previously or concurrently.

¹ Required in Support; also satisfies GE.

² Students with an approved individualized course of study may substitute CSC 231, a 2-unit course, with 2 units of other advisor approved coursework.

³ Students in the general curriculum in General Engineering should choose a minimum of 3 units of 300-400 level physical science electives in order to meet 60 units of upper division required for the degree.

⁴ ME 350 or MATE 325, 326, 327, and 1 additional unit of an upper-division Technical Elective.

⁵ This is the default curriculum for students who do not select the ICS (Individualized Course of Study) concentration.

⁶ ENGR 459, 460, 461 (6 units) or 6 units of Senior Project in appropriate engineering discipline.

Legend:

Course Title	
Course # (Units)	Major (86)
(Prerequisite)	Support (60)
[GE Area]	General Ed. (40)