

Updated 7/19/21

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
Introduction to Engineering <b>ENGR 110 (2)</b>	Introduction to Design & Manufacturing <b>IME 144 (4)</b> (Recommended: IME 140 or ME 129)		Engineering Statics <b>ME 211 (3)</b> (MATH 241†, PHYS 131 or 141)	Engineering Dynamics <b>ME 212 (3)</b> (MATH 241; ME 211 or ARCE 211)	Electric Circuit Theory & Lab <b>EE 201 (3) &amp; EE 251 (1)</b> (MATH 244; PHYS 133)	Thermodynamics I <b>ME 302 (3)</b> (ME 212; PHYS 132)	Fluid Mechanics I <b>ME 341 (3)</b> (MATH 242 or 244; ME 212)	Heat Transfer <b>ME 343 (4)<sup>4</sup></b> (CPE/CSC 101 or CSC 231 or 234; MATE 360 & 380, or ME 236 and 302 & ME 341)	Interdisciplinary Senior Design Project I <b>ENGR 459 (2)<sup>6</sup></b> (Sr Standing)	Interdisciplinary Senior Design Project II <b>ENGR 460 (2)<sup>6</sup></b> (ENGR 459)	Interdisciplinary Senior Design Project III <b>ENGR 461 (2)<sup>6</sup></b> (ENGR 460)
	Fundamentals of Computer Science <b>CSC/CPE 101 (4)<sup>1</sup></b> *										
	General Physics IA <b>PHYS 141 (4)<sup>1</sup></b> (MATH 141 w/min C-, MATH 142† or 182†) [Area B Elective]	General Physics II <b>PHYS 132 (4)</b> (PHYS 131 or HNRS 131 or PHYS 141)	General Physics III <b>PHYS 133 (4)</b> (PHYS 131, 141, or HNRS 131; MATH 142, Recom: MATH 241)	Mechanics of Materials I <b>CE 204 (3)</b> (ME 211)	General Curriculum <sup>5</sup> Mechanics of Materials II <b>CE 207 (2)</b> (CE 204)	General Curriculum <sup>5</sup> Digital Design <b>CPE 133 (4)</b> (ENGR 110; CPE/CSC 101)	General Curriculum <sup>5</sup> Data Structures <b>CPE/CSC 202 (4)</b> (CSC/CPE 101 w/min C-; MATH 141 or 221 w/min C-; or Instr. consent)	General Curriculum <sup>5</sup> Electronics & Lab <b>EE 321 (3)</b> (EE 201) & <b>EE 361 (1)</b> (EE 251)	General Curriculum <sup>5</sup> Choose one: <b>CPE/EE 329</b> or <b>IME 356</b> or <b>ME 305 (4)<sup>5</sup></b> *	General Curriculum <sup>5</sup> Approved Elective 300-lvl or higher <b>(4)</b>	General Curriculum <sup>5</sup> Approved Elective 300-lvl or higher <b>(4)</b>
Calculus I <b>MATH 141 (4)</b> * [B4]	Calculus II <b>MATH 142 (4)<sup>1</sup></b> (MATH 141 w/min C-) [B4]	Calculus III <b>MATH 143 (4)<sup>1</sup></b> (MATH 142 w/min C-) [Area B Elective]	Calculus IV <b>MATH 241 (4)</b> (MATH 143)	Linear Analysis I <b>MATH 244 (4)</b> (MATH 143)	Math or Stat Elective <b>MATH 344, STAT 312, or STAT 350 (4)<sup>1,3,*</sup></b> [Upper-Division B]	Materials Engineering & Lab I <b>MATE 210 (3) &amp; MATE 215 (1)</b> (CHEM 111, 124, or 127)	Choose one: Engin. Economics <b>IME 314 (3)</b> (MATH 241) OR Financial Decisions... <b>IME 315 (3)</b> (MATH 142)		General Curriculum <sup>5</sup> Product-Process Design <b>IME 418 (4)</b> (Sr Standing, Recom: IME 450)	General Curriculum <sup>5</sup> Approved Elective 300-lvl or higher <b>(4)</b>	General Curriculum <sup>5</sup> Approved Elective 300-lvl or higher <b>(4)</b>
Choose one path: General Chemistry I <b>CHEM 124 (4)<sup>1</sup></b> [B1 & B3] OR General Chemistry I <b>CHEM 127 (4)<sup>1</sup></b> [B1 & B3]	General Chemistry II <b>CHEM 125 (4)<sup>1</sup></b>			Take concurrently: <b>BIO 213 (2), BMED/BRAE 213 (2)<sup>1</sup></b> (MATH 142, Recom: CHEM 124) [B2]			Physical Science Elective <b>(4)</b> *	Physical Science Elective <b>(4)</b> *	General Curriculum <sup>5</sup> Approved Elective 300-lvl or higher <b>(4)</b>	General Curriculum <sup>5</sup> Approved Elective 300-lvl or higher <b>(2)</b>	
Expository Writing <b>ENGL 133/134 (4)<sup>**</sup></b> [A2]				<b>GE (4)<sup>**</sup></b>	<b>GE (4)<sup>**</sup></b>	<b>GE (4)<sup>**</sup></b>	<b>GE (4)<sup>**</sup></b>	<b>GE (4)<sup>**</sup></b>	<b>GE (4)<sup>**</sup></b>	<b>GE (4)<sup>**</sup></b>	<b>GE (4)<sup>**</sup></b>
Oral Communication <b>COMS 101/102 (4)<sup>**</sup></b> [A1]											
Writing Arrauments About STEM <b>ENGL 147 (4)<sup>3</sup></b> [A3] (Completion of GE A2 with a C- or better) Can be taken anytime between Winter of Freshman and Winter of Sophomore Years						Graduation Writing Requirement <b>GWR*</b> (Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)					
14	16	16	15	18	14	15	18	16	14	16	14
										<b>TOTAL:</b>	<b>186</b>

**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, Area D Elective, E, F. Upper -Division C should be taken only after Junior standing is reached (90 units).

† Course can be taken previously or concurrently.

<sup>1</sup> Required in Support; also satisfies GE.

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

<sup>3</sup> 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.

<sup>4</sup> ME 343 or MATE 325, 326, 327, and 1 additional unit of an upper-division Technical Elective.

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

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

**Legend:**

Course Title		
Course # (Units)	<span style="background-color: #ffff00; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	<b>Major (86)</b>
(Prerequisite)	<span style="background-color: #ffcc99; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	<b>Support (60)</b>
[GE Area]	<span style="background-color: #ccffcc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	<b>General Ed. (40)</b>