

Updated 4/22/2020

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
Computer Engineering Orientation <b>CPE 100 (1)</b>	Fundamentals of Computer Science <b>CPE 101 (4)</b> * CSC	Data Structures <b>CPE 202 (4)</b> (CPE 101 w/min C-; MATH 141 or 221 w/min C-) CSC	Project-Based Object-Oriented Programming & Design <b>CPE 203 (4)</b> (CPE 202 w/min C- or Instr. consent) CSC	Electric Circuit Analysis & Lab II <b>EE 211 (3)</b> AND <b>EE 241 (1)</b> * CSC	Electric Circuit Analysis & Lab III <b>EE 212 (3)</b> AND <b>EE 242 (1)</b> * CSC	Choose One: Signals and Systems <b>CPE 327 (3) &amp; CPE 367 (1)</b> OR <b>EE 228 (4)</b> * CSC	Digital Electronics & Integrated Circuits <b>EE 307 (3)</b> AND <b>EE 347 (1)</b> (CPE 133; EE 306; EE 346; CPE 233†) CSC	Introduction to Operating Systems <b>CPE 453 (4)</b> (CPE 357; CPE 225, 229, or 233) CSC	Introduction to Computer Networks <b>CPE 464 (4)</b> (CPE 357. Recommended: STAT 312, 321, or 350) CSC		
Introduction to Computing <b>CPE 123 (4)<sup>1</sup></b> (Basic computer literacy) CSC		Electric Circuit Analysis and Lab <b>EE 113 &amp; EE 143<sup>7</sup> (4)</b> (MATH 142; Recom: EE 111 & 151) EE	Digital Design <b>CPE 133 (4)<sup>3</sup></b> (CPE 100; 101) EE	Computer Design and Assembly Language Programming <b>CPE 233 (4)</b> (CPE 133) EE	Systems Programming <b>CPE 357 (4)</b> * CSC			Microcontrollers & Embedded Applications <b>CPE 316 (4)<sup>9</sup></b> (CPE 357; Coreq: EE 211) CSC	Capstone II <b>CPE 450 (3)<sup>5</sup></b> (CPE 350) CPE	Approved Technical Elective <b>(4)<sup>4,6</sup></b> *** CPE	
General Chemistry for Physical Science & Engineering I <b>CHEM 124 (4)<sup>2</sup></b> (MATH 118; Recom: HS Chemistry) [B1 & B3]	General Physics IA <b>PHYS 141 (4)<sup>2</sup></b> [MATH 141 w/min C-; MATH 142 or 182†] [Area B Elective]		General Physics III <b>PHYS 133 (4)</b> (PHYS 131, HNRS 131, or PHYS 141; MATH 142. Recom: MATH 241) EE	General Physics II <b>PHYS 132 (4)</b> (PHYS 131, HNRS 131, or PHYS 141) EE	Modern Physics I <b>PHYS 211 (4)</b> (PHYS 132 & 133; MATH 241. Recom: MATH 242 or 244) EE	Semiconductor Device Electronics & Lab <b>EE 306 (3)*</b> AND <b>EE 346 (1)*</b> (CHEM 124; EE 212 & 242; EE 143 or IME 156 or IME 458; PHYS 211) EE		Computer Hardware Architecture & Design <b>CPE 333 (4)<sup>8</sup></b> (CPE 101, 233) CSC	Capstone I <b>CPE 350 (4)<sup>5</sup></b> (CPE 316† or 329† or 336†) CSC	Choose One Series: Senior Project I & II <b>CPE 461 (3)</b> (CPE 350) OR <b>CPE 462 (2)</b> (CPE 450) Research Senior Project I & II <b>CSC 497 (2)</b> (CSC 307 or 309) OR <b>CSC 498 (2)</b> (CSC 497) CSC	
Calculus I <b>MATH 141 (4)<sup>2</sup></b> * [B4]	Calculus II <b>MATH 142 (4)<sup>2</sup></b> (MATH 141 w/min C-) [B4]	Calculus III <b>MATH 143 (4)<sup>2</sup></b> (MATH 142 w/min C-) [Area B Elective]	Calculus IV <b>MATH 241 (4)</b> (MATH 143) EE	Linear Analysis I <b>MATH 244 (4)</b> (MATH 143) EE				Approved Elective (CSC, EE, Math or Science) <b>(3-4)<sup>4</sup></b> *** CSC	Probability and Random Processes for Engineers <b>STAT 350 (4)<sup>2</sup></b> (MATH 241; EE 228) [Upper-Division B]	Approved Technical Elective <b>(4)<sup>4,6</sup></b> *** CPE	Approved Technical Elective <b>(4)<sup>4,6</sup></b> *** CPE
Expository Writing <b>ENGL 133 or 134 (4)**</b> [A2] Can be taken anytime during Freshman Year					GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **
Oral Communication <b>COMS 101 or 102 (4)**</b> [A1] Can be taken anytime during Freshman Year											
	Technical Writing for Engineers <b>ENGL 149 (4)<sup>7</sup></b> (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 [A3]							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)		GE (4) **	
17	16	16-18	16	16	16	16	16	15-16	16	17-18	14
										TOTAL:	191-195

**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, B2, 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 restrictions.

Course subject is also Home Department designation, unless noted in red.

† Course can be taken previously or concurrently.

<sup>1</sup> An additional 4 units of approved technical electives may be substituted, although new students are strongly encouraged to take CSC 123/CPE 123.

<sup>2</sup> Required in Major/Support; also satisfies GE.

<sup>3</sup> CPE 133 and EE 112 are often offered as 100% online courses during the summer.

<sup>4</sup> Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals. No double-counting with other

<sup>5</sup> ENGR 459, 460, 461, & CPE 400, or ENGR 463, 464, 465, & CPE 400 may substitute for CPE 350 and CPE 450

<sup>6</sup> The following courses may not be used to satisfy this requirement: COOP units; BUS 499; CSC 302, CSC 303, CSC 310, CSC 400, CSC 500; EE 321, EE 322, EE 361, EE 400, EE 460, EE 500, EE 563.

<sup>7</sup> Take EE 113 (3) and EE 143 (1); or EE 112 (2) and IME 156 (2); or EE 112 and IME 458.

<sup>8</sup> Take CPE 333 (4) or CPE 315 (4).

<sup>9</sup> Take CPE 316 (4); or CPE/EE 329 (4); or EE 336 (4)

**Legend:**

Course Title	
Course # (Units)	Major (97-99)
(Prerequisite)	
[GE Area]	Support (51-52)
Home Dept	General Ed. (44)