

Updated 3/10/2020

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
<div>Introduction to Computing</div> <div>CPE/CSC 123 (4)</div> <div>(Basic computer literacy)</div>	<div>Fundamentals of Computer Science</div> <div>CSC/CPE 101 (4)</div> <div>*</div>	<div>Data Structures</div> <div>CSC/CPE 202 (4)¹</div> <div>(CPE/CSC 101 ; MATH 141 or 221. Min C-, or Instr. consent)</div>	<div>Proj-Based Object-Oriented Programming & Design</div> <div>CSC/CPE 203 (4)</div> <div>(CSC/CPE 202 w/min C-, or Instr. consent)</div>	<div>Systems Programming</div> <div>CSC/CPE 357 (4)</div> <div>(CSC/CPE 102 & 103 or 202 and CSC/CPE 203 w/ min C- or Instr. consent; & CSC 225 or CPE/EE 229 or 233)</div>		<div>CHOOSE ONE</div> <div>Professional Responsibilities CSC 300 (4) (CSC/CPE 357; Jr Standing)</div> <div>OR</div> <div>Ethics, Science & Tech PHIL 323 *</div>					
		<div>General Psychology</div> <div>PSY 201/202 (4)</div> <div>[E]</div>	<div>Introduction to Computer Organization</div> <div>CSC 225 (4)</div> <div>(CSC/CPE 202)</div>	<div>Discrete Structures</div> <div>CSC 348 (4)</div> <div>(CSC/CPE 102 & 103 or CSC/CPE 202 & CSC/CPE 203. Min C-, or Instr. consent)</div>	<div>Choose one:</div> <div>IME 314 (3) OR IME 315 (3)</div> <div>*</div>	<div>Software Engineering I</div> <div>CSC 308 (4)</div> <div>(CSC 141 or CSC 348)</div>	<div>Software Engineering II</div> <div>CSC 309 (4)</div> <div>(CSC 308; CSC/CPE 357)</div>	<div>Programming Languages</div> <div>CSC 430 (4)</div> <div>CSC 349; CSC/CPE 357</div>	<div>Software Requirements Engineering</div> <div>CSC/CPE 402 (4)</div> <div>(CSC 307 or 309)</div>	<div>Software Construction</div> <div>CSC/CPE 405 (4)</div> <div>(CSC 305 & 402)</div>	<div>Senior Project: Software Deployment</div> <div>CSC/CPE 406 (4)</div> <div>(CSC 405)</div>
<div>Calculus I</div> <div>MATH 141 (4)</div> <div>*</div> <div>[B4]</div>	<div>Calculus II</div> <div>MATH 142 (4)</div> <div>(MATH 141 w/min C-)</div> <div>[B4]</div>	<div>Calculus III</div> <div>MATH 143 (4)</div> <div>(MATH 142 w/min C-)</div> <div>[Area B Elective]</div>	<div>Calculus IV</div> <div>MATH 241 (4)</div> <div>(MATH 143)</div>	<div>Linear Analysis I</div> <div>MATH 244 (4)</div> <div>(MATH 143)</div>	<div>Statistical Methods For Engineers</div> <div>STAT 312 (4)</div> <div>(MATH 142) [Upper-Division B]</div>	<div>Design & Analysis of Algorithms</div> <div>CSC 349 (4)</div> <div>(CSC 141 or 348 & MATH 142; or CPE/CSC 102 & 103 or 202 & 203 w/ MATH 248)</div>	<div>User-Centered Interface Design & Development</div> <div>CSC 484 (4)</div> <div>(CSC 307 or 308; Jr Standing)</div>	<div>Approved Technical Elective</div> <div>(4)²</div> <div>***</div>	<div>Approved Technical Elective</div> <div>(4)²</div> <div>***</div>		
<div>Expository Writing</div> <div>ENGL 133/134 (4)**</div> <div>[A2]</div>			<div>Physical Science Support Electives (12 units)</div> <div>Physics IA, II, & III</div> <div>PHYS 141 (4)*</div> <div>PHYS 132 (4)*</div> <div>PHYS 133 (4)*</div> <div>[B1 & B3]</div> <div>OR</div> <div>Chemistry I, II, & III</div> <div>CHEM 124 (4)*</div> <div>CHEM 125 (4)*</div> <div>CHEM 126 (4)*</div> <div>[B1 & B3]</div>			<div>Introduction to Database Systems</div> <div>CSC 365 (4)</div> <div>(CSC 141; or CSC 348; or CSC/CPE 102 & 103 & MATH 248; or CSC/CPE 202 & 203 & MATH 248)</div>	<div>Individual Software Design & Development</div> <div>CSC 305 (4)</div> <div>(CSC/CPE 357)</div>	<div>Approved Technical Elective</div> <div>(4)²</div> <div>***</div>	<div>Approved Technical Elective</div> <div>(4)²</div> <div>***</div>		
<div>Oral Communication</div> <div>COMS 101/102 (4)**</div> <div>[A1]</div>			<div>Technical Writing for Engineers</div> <div>ENGL 149 (4) [A3]</div> <div>(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</div>			<div>Choose one:</div> <div>Teamwork PSY 350 (4) (GE D4) OR Small Grp Comm COMS 217 (4) (COMS 101 or 102)</div>			<div>Math Elective (Choose one):</div> <div>MATH 248, 304, 335, 336, or 451 (4) *</div>		<div>Life Science Support Elective</div> <div>(4-5)³</div> <div>[B2]</div>
<div>GE (4)</div> <div>**</div>	<div>GE (4)</div> <div>**</div>			<div>GE (4)</div> <div>**</div>			<div>GE (4)</div> <div>**</div>	<div>GE (4)</div> <div>**</div>		<div>GE (4)</div> <div>**</div>	<div>GE (4)</div> <div>**</div>
						<div>Graduation Writing Requirement GWR*</div> <div>(Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)</div>					
16	16	16	16	16	15	16	16	16	16	12	12-13
										TOTAL:	183-184

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. 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, or Upper-Division D.

*** Refer to current catalog for course selection.

[†] Course can be taken previously or concurrently.

¹ May substitute CSC/CPE 108.

² 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. A total of 20 technical elective units selected from upper-division and graduate CSC and CPE courses open to those in the major and not otherwise required by the major. An additional 4 units of CPE/CSC technical electives may substitute for CSC 123 in major requirements

³ Select one Life Science Support Elective from the following: BIO 111, BIO 161, BIO 213 & BMED 213, BOT 121, MCRO 221, or MCRO 224.

Legend:

Course Title	
Course # (Units)	Major (88)
(Prerequisite)	Support (59-60)
[GE Area]	General Ed. (36)