

Updated 7/14/2022

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
Introduction to Computing CPE/CSC 123 (4)⁹ (Basic computer literacy)	Fundamentals of Computer Science CSC/CPE 101 (4) *	Data Structures CSC/CPE 202 (4) (CPE/CSC 101 w/min C- or Instr. Consent)	Proj-Based Object-Oriented Programming & Design CSC/CPE 203 (4) (CSC/CPE 202 w/min C- or Instr. Consent)	Discrete Structures CSC 248 (4) (CSC/CPE 202 & 203 w/min C- or Instr. Consent)	Design & Analysis of Algorithms CSC 349 (4) (CPE/CSC 102 & 103 or 202 & 203; MATH 142; & CSC 248, 348, or MATH 248)	Intro to Database Systems CSC 365 (4) (CSC 248 or 348; or CPE/CSC 102 & 103 & MATH 248; or CPE/CSC 202 & 203 & MATH 248)	Programming Languages CSC 430 (4) (CSC 349)		Introduction to Operating Systems CSC/CPE 453 (4) (CSC/CPE 357; 225 or CPE/EE 229 or 233)		
			Introduction to Computer Organization CSC 225 (4) (CSC/CPE 202)			Professional Responsibilities CSC 300 (4) (Area A3; CSC/CPE 357; Jr Standing)	CHOOSE ONE OR Ethics, Science & Tech PHIL 323 (4) *		Choose One Series: Senior Project Lab I & II CSC 491 (2) (CSC 307 or 309; Instr. Consent) OR CSC 492 (2) (CSC 491; Instr. Consent)		
		Life Science Support Elective (4)^{1,9} [B2]	Additional Science Support Elective (4)^{1,9} [Area B Elective]	Systems Programming CSC/CPE 357 (4) (C- or better in CSC/CPE 102 & 103, or 202 & 203, or Instr. Consent; CSC 225 or CPE/EE 229 or 233)			Choose one:⁷ CSC 321(4) CSC 323 (4) CSC 325 (4) *	General Curriculum Technical Elective (4)⁴ *	General Curriculum MATH/STAT Support Elective (4)³ *	Research Senior Project I & II CSC 497 (2) (CSC 307 or 309; Instr. Consent) OR CPE 498 (2) (CSC 497; Instr. Consent)	
Calculus I MATH 141 (4) * [B4]	Calculus II MATH 142 (4) (MATH 141 w/min C- or Instr. Consent) [B4]	Calculus III MATH 143 (4) (MATH 142 w/min C- or Instr. Consent) [Area B Elective]	Choose one: Linear Math MATH 206 (4) (MATH 143) OR MATH 244 (4) (MATH 143)			Choose One Series: Intro Software Engineering & Elective CSC 307 (4) (CSC 248 or 348; CPE/CSC 357) OR General Curriculum Technical Elective (4)⁴ * Software Engineering I & II CSC 308 (4) (CSC 248 or CSC 348)	General Curriculum Technical Elective CPE 309 (4)⁶ (CSC 308; CSC/CPE 357)	Statistical Methods for Engineers STAT 312 (4) * [Upper-Division B]	General Curriculum Technical Elective (4)⁴ *	Choose One Series: Intro Computing & Elective CSC 364 (4) (CPE/CSC 203) OR General Curriculum Technical Elective (4)⁴ * Intro Comp Networks & Distributed Systems CPE 464 (4) (CSC/CPE 357; Recom: STAT 312/321/350) OR General Curriculum Technical Elective CPE 469 (4)⁸ (CSC/CPE 357)	
Oral Communication COMS 101/102 (4)** [A1]			Physical Science Support Electives (12 units)¹⁰ General Physics I, II, & III PHYS 141 (4)* PHYS 142 (4)* PHYS 143 (4)* (MATH 143) [B1 & B3]			Choose one: Ethnic Studies/Women, Gender & Queer Studies ES/WGQS 350 or 351 (4) *			General Curriculum Technical Elective (4)⁴ *		
Expository Writing ENGL 133/134 (4)** [A2]			Chemistry I, II, & III CHEM 124 (4)* CHEM 125 (4)* CHEM 126 (4)* [B1 & B3]			Choose one: Philosophical Classics PHIL 230 or PHIL 231 (4) [C2] (Completion of GE Area A w/ min C-)	GE (4) **	GE (4) **		GE (4) **	GE (4) **
	Reasoning, Argumentation, & Writing [A3] COMS 126, 145, ENGL 145, 147, ES 145, PHIL 126, or WGQS 145 (4)** (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 GWR* (Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)					GE (4) **
GE (4) **	GE (4) **										
16	16	16	16	12	16	16	12	16	16	14	14
										TOTAL: 180	

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, A3, C1, Lower-Division C Elective, Upper-Division C, D1, Area D Elective, Lower-Division E, and F. 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.

^ Cannot double count units.

† Course can be taken previously or concurrently.

¹ Select 4 units from the following "Life Science" Support Electives: BIO 111, 161, 213 & BMED 213; BOT 121; MCRO 221.

² Select 4 units from the following "Additional Science" Support Electives: BIO 111, 161; BOT 121; CHEM 124; MCRO 221; PHYS 141.

³ Select 4 units from the following "MATH/STAT Support Electives": MATH 241, 248, 306, 334, 335, 437, 470; STAT 323, 324, 330, 331, 334, 416, 418, 419, 434.

⁴ Select 20 units from the Technical Electives Guidelines in the online catalog.

⁵ Although new students are strongly encouraged to take CSC/CPE 123, an additional 4 units of CPE/CSC Technical Electives within your selected concentration or, if not selected, the General Curriculum may substitute for CSC/CPE 123.

⁶ CSC 309 counts as a Technical Elective. Students in the Artificial Intelligence and Machine Learning concentration or the Privacy and Security concentration are advised to take CSC 307 instead of CSC 308 and CSC 309.

⁷ Students in the Privacy and Security Concentration must take CSC 321.

⁸ CPE 469 counts as a Technical Elective for the General Curriculum, and the following concentrations: Graphics, Privacy and Security, and Data Engineering.

⁹ No double-counting is allowed between Additional Science Support Elective and Life Science Support Elective or Physical Science Support Elective.

¹⁰ If a General Education (GE) course is used to satisfy a Major or Support requirement, additional units of Free Electives may be needed to complete the total units required for the degree.

Legend:

Course Title	
Course # (Units)	
(Prerequisite)	
[GE Area]	

Major (92)

Support (48)

General Ed. (40)¹⁰