

B.S. Computer Science, Application Concentration

Fall 2024

	Fall		Spring		
Freshman	CMSC 110 Computer Science I	4	CMSC 111 Computer Science II	4	
	MATH 211 Calculus 1 ^a	4	MATH 225 Discrete Math	4	
	ENGL114 WIFYS	3	COST 100 Intro to Human Communications	3	
	UNIV 101	3	HIST 105 Historical Foundations of Global Cultures	3	
		14		14	28
Sophomore	SWEN 200 Design Patterns	4	CMSC 310 Design & Analysis of Algorithms	4	
	CMPE 220 Computer Organization	4	CMPE 320 Operating Systems	4	
	Gen Ed 1	3	Gen Ed 2	3	
	Lab Science I ****	4	Lab Science II ****	3/4	
		15		14/15	57/58
Junior	MATH 217 Statistics***	4	Interdisciplinary Elective	3	
	MATH 318 Elementary Linear Algebra	3	CMSC/SWEN/CMPE/ELEN 300+ Elective	4/3	
	CMSC 410 Theory of Computing	3	CMSC 498 Sr. Research I	3	
	PHIL 105 - Ethical Theories and Problems	3	Gen Ed 4	3	
	Gen Ed 3	3	Free Elective 1	3	
		16		16/15	90
Senior	CMSC 300+ Elective	4	Free Elective 2	3	
	CMSC 499 Sr. Research II	3	CMSC 471 Database Management	3	
	CMSC 300+ Elective	4	Free Elective 3	3	
	Gen Ed 5	3	Free Elective 4*****	4	
			Gen Ed 6	3	
		14		16	120

*** You also have the option to take MATH 375 which is taught only in the spring.

****Options: BIOL 161, BIOL 162, CHEM 121/125, CHEM 122/126, ESSC 110, PHYS 205/124, or PHYS 206/126.

*****Number of Free Electives dependent on major requirements that also count under General Education.

^a Students starting with MATH 140 or MATH 175 take MATH 225 in their second or third semester before CMSC 310. These math classes replace Free Electives.