

B.S. Computer Science, Related Discipline Concentration

Starting as CS&E General with MAT 050

Fall 2018

	Fall		Spring		
Freshman	CSC 120 Intro. to Computer Science & Metacognition	3	CSC 110/107 Computer Science I	4	
	MAT 050 [does count towards graduation]	3	MAT 140B	3	
	ENG114 WIFYS	3	HCS 100 Intro to Human Communications	3	
	Gen Ed 1	3	Gen Ed 2	3	
	UNIV 101	3	HIS 105 Historical Foundations of Global Cultures	3	
		15		16	28 (+3)
Sophomore	CSC 111 Computer Science II ¹	4	MAT 225 Discrete Math	4	
	MAT 175 Precalculus	4	Gen Ed 4	3	
	Gen Ed 3	3	MAT 211 Calculus 1	4	
	Science I (BIO 161, CHM 121/123, or PHY 205/123)**	4	Science II (BIO 162, CHM 122/124, or PHY 206/125)**	4	
		15		15	58
Junior	SWE 200 Design Patterns	4	CSC 310 Design & Analysis of Algorithms	4	
	CMPE 220 Computer Organization	4	CMPE 320 Operating Systems	4	
	Gen Ed 5	3	CSC 371 Database Management	4	
	Gen Ed 6	3	Gen Ed 8	3	
	Gen Ed 7	3			
		17		15	90
Senior	CSC/SWE/CE/EE 300+ Elective 1***	4	MAT 217 Statistics	4	
	CSC/SWE/CE/EE 300+ Elective 2***	4	CSC 498 Sr. Research I	2	
	MAT 318 Elementary Linear Algebra	3	CSC/SWE/CE/EE 300+ Elective 3***	4	
	Gen Ed 9	3	Min/Maj 2	3	
	Min/Maj 1 *	3	Min/Maj 3	3	
		17		10	123
Senior++	CSC 499 Sr. Research II	2			
	Min/Maj 4	3			
	Min/Maj 5	3			
	Min/Maj 6	3			
	Min/Maj 7	3			
	Min/Maj 8	3			
		17			140

¹ Recommendation: take CSC 111 in the summer between freshmen & sophomore year to get back on track for graduation. CSC 111 is typically **not** offered at Shippensburg.

* **Assumptions:** minors will require 124 total credits, double majors will require 140 total credits. These are estimates. Your choice of major or

minor will determine the number and timing of additional classes you will need to take. Please talk to your advisor.

** Science I and II must be in the same discipline (So if you take BIO for Science I, you must take BIO for Science II)

*** One of the Electives must be a group project based course selected from the following: CSC 403, CSC 434, or CSC 451