## **Computer Science Major**

## B.S. in Computer Science - Curriculum Map 2019-2020 Catalog

Course	Cr.Co		Cr.Comp.
F-11	FR	ESHMAN	
Fall CS 100 Foundations of Computer Science and	3	Spring  CS 140 Programming and Computing	4
Information Assurance	3	CS 140 Programming and Computing	4
CS 111 Personal & Professional Cyber Safety	1	EN 102 Composition and Literature II	3
EN 101 Composition and Literature I	3	MA 121 Calculus I (General Education Math)	4
General Education History	3	General Education Arts & Humanities	3
(http://catalog.norwich.edu/ residentialprogramscatalog/		(http://catalog.norwich.edu/	
generaleducationgoals)		residentialprogramscatalog/ generaleducationgoals)	
General Education Leadership	1-3	Free Elective	3
(http://catalog.norwich.edu/			
residentialprogramscatalog/ generaleducationgoals)			
MA 107 Precalculus Mathematics <sup>1</sup>	4		
Fall Semester Total Cr.:	15-17	Spring Semester Total Cr.:	17
	SOF	PHOMORE	
Fall		Spring	-
CS 228 Introduction to Data Structures	3	CS 212 Assembly Language & Reverse Engineering	3
EE 215 Fundamentals of Digital Design	4	CS 260 Data Communications and Networks	3
General Education Lab Science	4	General Education Lab Science	4
(http://catalog.norwich.edu/		(http://catalog.norwich.edu/	
residentialprogramscatalog/ generaleducationgoals)		(http://catalog.norwich.edu/ residentialprogramscatalog/ generaleducationgoals)	
MA 122 Calculus II (General Education Math)	4	QM 213 Business and Economic Statistics I	3
Free Elective	3	Free Elective	3
Fall Semester Total Cr.:	18	Spring Semester Total Cr.:	16
Fall	J	JUNIOR	
Fall CS 301 Software Engineering	3	Spring   CS 240 Database Management	3
EE 321 Embedded Systems	4	CS 270 Operating Systems & Parallelism	3
MA 306 Discrete Mathematics	3	MA 380 Theory of Computation	3
Technical Elective <sup>2</sup>	3	Technical Elective <sup>2</sup>	3
Free Elective	3	Free Elective	3
Tree Elective		THE LIGHT	
Fall Semester Total Cr.:	16	Spring Semester Total Cr.:	15
		BENIOR	
Fall		Spring	
CS 420 Computer Science capstone I	3	CS 421 Computer Science capstone II	3
or 430 Computer Science Undergraduate Thesis I		or 431 Computer Science Undergraduate Thesis II	
PH 303 Survey of Ethics (General Education	3	General Education Social Science	3
Ethics)		(http://catalog.norwich.edu/	
or 322 Money, Meaning and Morality		residentialprogramscatalog/ generaleducationgoals)	
General Education Literature	3	Mathematics Elective <sup>3</sup>	3
10.00 11.00 1.00 1.00 1.00	1 1		
(http://catalog.norwich.edu/			
(http://catalog.norwich.edu/ residentialprogramscatalog/ generaleducationgoals)			
residentialprogramscatalog/ generaleducationgoals)	3	Technical Elective <sup>2</sup>	3
residentialprogramscatalog/ generaleducationgoals)  Technical Elective <sup>2</sup>		Technical Elective <sup>2</sup> Free Elective	
residentialprogramscatalog/ generaleducationgoals)	3	Technical Elective <sup>2</sup> Free Elective	3
residentialprogramscatalog/ generaleducationgoals)  Technical Elective <sup>2</sup>		Technical Elective <sup>2</sup> Free Elective  Spring Semester Total Cr.:	

- Requires a math placement score of 2. Students scoring below 2 must successfully complete the appropriate necessary prerequisite math courses first. With a math placement score of 3, the MA107 requirement may be waived and the credit hours replaced with a free elective.
- Any non-duplicate course from CS (higher than CS 300), from DF (DF 242 or higher), from EE (EE 200 or higher), or from IA (IA 241 or higher)
- 3 MA 223, MA 224, MA 240, MA 241, MA 309, MA 318, or MA 421