Bachelor of Science in Computer Science

Computer Science with a Major in Secondary Computer Science Education (6-12) (BSCS)

Degree Program Guide

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Select one of the following:		4
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	
Human Creativity		3
Literature		3
STEM 101	Step 1 – Inquiry Approaches to Teaching STEM	1
	Credit Hours	**14**
Spring		
ENGL 211C or ENGL 231C (Grade of C or better required)		3
CS 251	Programming with Java	4
CS 252	Introduction to Unix for Programmers	1
Interpreting the Past		3
Human Behavior		3
STEM 102	Step 2 - Inquiry Based STEM Lesson Design	1
	Credit Hours	**15**
Sophomore		
Fall		
MATH 211	Calculus I	4
CS 170	Introduction to Computer Architecture I	3
Nature of Science I (Must be in sequence)		4
Oral Communication: COMM 101R		3
STEM 201	Knowing and Learning in STEM Education	3
	Credit Hours	**17**
Spring		
MATH 212	Calculus II	4
CS 260	C++ for Programmers	1
Nature of Science II (Must be in sequence)		4
Information Literacy and Research: CS 121G or CS 202G		3
STEM 202	Classroom Interactions in STEM Education	3
	Credit Hours	**15**

Course	Title	Credit Hours
Junior		
Fall		
MATH 316	Introductory Linear Algebra	3
CS 300T	Computers in Society	3
CS 350	Introduction to Software Engineering	3
STEM 401	Project Based Instruction in STEM Education	3
Philosophy and Ethics		3
	Credit Hours	**15**
Spring		
CS 330	Object-Oriented Design and Programming	3
CS 361	Data Structures and Algorithms	3
CS 381	Introduction to Discrete Structures	3
STAT 330	An Introduction to Probability and Statistics	3
STEM 402	Perspectives on STEM	3
	Credit Hours	**15**
Senior		
Fall		
CS 355	Principles of Programming Languages	3
CS 432	Web Science	3
CS 462	Cybersecurity Fundamentals	3
CS 468W	Research Methods in Mathematics and Sciences	3
CS 471	Operating Systems	3
	Credit Hours	**15**
Spring		
STEM 485	Apprentice Teaching	9
CS Upper-Level Elective *		3
Elective		2
	Credit Hours	**14**
	Total Credit Hours	**120**

*   Excluding CS 315

Language and Culture I & II may be met in high school and is not included in this four-year plan. Please see requirement details.