

# 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
<b>Freshman</b>		
<b>Fall</b>		
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 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
<b>Credit Hours</b>		<b>15</b>
<b>Spring</b>		
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
<b>Credit Hours</b>		<b>14</b>
<b>Sophomore</b>		
<b>Fall</b>		
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 or PHIL 160R		3
STEM 201	Knowing and Learning in STEM Education	3
<b>Credit Hours</b>		<b>17</b>
<b>Spring</b>		
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
<b>Credit Hours</b>		<b>15</b>

## 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
<b>Credit Hours</b>		<b>15</b>

### 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

<b>Credit Hours</b>		<b>15</b>
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## 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

<b>Credit Hours</b>		<b>15</b>
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### Spring

STEM 485	Apprentice Teaching	9
CS Upper-Level Elective *		3
Elective		2

<b>Credit Hours</b>		<b>14</b>
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<b>Total Credit Hours</b>		<b>120</b>
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\* 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.