Bachelor of Science in Computer Science

Computer Science (BSCS)

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 211	Calculus I	4
Select one of the following:		4
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	
Human Behavior		3
Language & Culture I (May be waived; See requirement details)		0-3
	Credit Hours	**14-17**
Spring		
ENGL 211C or ENGL 231C (Grade of C or better required)		3
MATH 212	Calculus II	4
CS 170	Introduction to Computer Architecture I	3
CS 251	Programming with Java	4
CS 252	Introduction to Unix for Programmers	1
Language & Culture II (May be waived; See requirement details)		0-3
	Credit Hours	**15-18**
Sophomore		
Fall		
MATH 316	Introductory Linear Algebra	3
CS 270	Introduction to Computer Architecture II	3
CS 330	Object-Oriented Design and Programming	3
Oral Communication: COMM 101R or PHIL 160R		3
Nature of Science I (Must be in sequence)		4
	Credit Hours	**16**
Spring		
STAT 330	An Introduction to Probability and Statistics	3
CS 260	C++ for Programmers	1
CS 361	Data Structures and Algorithms	3
Information Literacy and Research: CS 121G or CS 202G		3
Nature of Science II (Must be in sequence)		4
	Credit Hours	**14**
Junior		
Fall		
CS 315	Computer Science Undergraduate Colloquium **	1
CS 355	Principles of Programming Languages	3
CS 381	Introduction to Discrete Structures	3
CS 422 or CS 480	Introduction to Machine Learning (or) or Introduction to Artificial Intelligence	3
Human Creativity		3
Upper-Division General Education Course (Option D)		3
	Credit Hours	**16**
Spring		
CS 350 or CS 351 ***and*** CS 352	Introduction to Software Engineering or Software Engineering ***and*** Software Engineering Lab	3
CS 390	Introduction to Theoretical Computer Science	3
CS 450 or CS 418	Database Concepts or Web Programming	3
Literature		3
Interpreting the Past		3
	Credit Hours	**15**
Senior		
Fall		
CS 410	Professional Workforce Development I	3
CS 417	Computational Methods and Software	3
Technical Elective		3-4
Elective CS course		3
Philosophy & Ethics		3
	Credit Hours	**15-16**
Spring		
CS 411W	Professional Workforce Development II	3
CS 471	Operating Systems	3
Elective CS course		3
Elective CS course		3
Upper-Division General Education Course (Option D)		3
	Credit Hours	**15**
	Total Credit Hours	**120-127**

** Students who have completed CS 115 are not required to take CS 315.