

COMPUTER SCIENCE, BS

Code	Title	Credits
Computer Science		44
CS-101	Beauty & Joy of Computer Science ¹	
CS-131 & CSL-131	OBJECT ORIENTED PROGRAMMING and OBJECT ORIENTED PROGRAMMING LAB	
CS-132 & CSL-132	ALGORITHMS & DATA STRUCTURES and ALGORITHMS & DATA STRUCTURES LAB	
CS-133 & CSL-133	INTRODUCTION TO PYTHON and INTRODUCTION TO PYTHON	
CS-241	COMPUTERS, SOCIETY & ETHICS	
CS-243 & CSL-243	DATABASE AND BIG DATA and DATABASE AND BIG DATA LAB	
CS-334 & CSL-334	COMPUTER ORGANIZATION and COMPUTER ORGANIZATION LAB	
CS-401	RESEARCH METHODS	
CS-402	RESEARCH PRESENTATION	
CS-491 or CS-492 or CS-495	INTERNSHIP IN COMPUTER SCI. IND.STUDY IN COMP.SCIENCE Technical Consulting in the Community	
Select three Computer Science electives ²		
CS Track select one of the below:		12
<i>Software Design and Development</i>		
CS-244 & CSL-244	APP DEVELOPMENT and APP DEVELOPMENT LAB	
CS-257 & CSL-257	USER EXPERIENCE DESIGN and USER EXPERIENCE DESIGN LAB	
CS-390 & CSL-390	SOFTWARE ENGINEERING and SOFTWARE ENGINEERING LAB	
<i>Network and Systems Administration</i>		
CS-254 & CSL-254	COMPUTER NETWORKS and COMPUTER NETWORKS LAB	
CS-255 & CSL-255	SERVER MANAGEMENT and SERVER MANAGEMENT LAB	
CS-346 & CSL-346	OPERATING SYSTEMS and OPERATING SYSTEMS LAB	
<i>Artificial Intelligence</i>		
CS-258 & CSL-258	MACHINE LEARNING and MACHINE LEARNING LAB	
CS-341 & CSL-341	AI AND ROBOTICS and AI AND ROBOTICS LAB	
DS-351	DATA SCIENCE CASE STUDIES	
Mathematics		9
MATH-107	INTRODUCTION TO STATISTICS	
MATH-207	DISCRETE MATHEMATICS I	
MATH-208	DISCRETE MATHEMATICS II	
General Education Requirements (https://catalog.sbu.edu/undergraduate/degree-requirements/)		37
Foreign Language ³		
General Electives (enough to reach 120 credits)		18
Total Credits		120

² All three electives must be computer science courses between 240 and 380. It is strongly recommended that majors complete five electives. With the permission of the student's adviser and the department chair, one of the electives may be fulfilled by a course offered by a department other than Computer Science.

³ The foreign language must be at the level of 202 or higher. Students not prepared to begin at this level will need to take additional courses in language.

First Year			
Fall	Credits	Spring	Credits
CS-101		3 CS-132 & CSL-132	4
CS-131 & CSL-131	4	MATH-107	3
ENG-101		3 ENG-102	3
BONA-101		3 Foreign Language	3
Foreign Language/General Elective		3 General Education Requirement	3
		16	16

Second Year			
Fall	Credits	Spring	Credits
CS-133 & CSL-133		4 MATH-208	3
MATH-207		3 CS-334 & CSL-334	4
General Education Requirements		6 CS-241	3
General Elective		3 General Education Requirement	3
		General Elective	3
		16	16

Third Year			
Fall	Credits	Spring	Credits
CS-243 & CSL-243		4 CS Track Course	4
Computer Science Elective		3-4 Computer Science Elective	4
CS Track Course		4 General Education Requirement	3
General Education Requirement		4 General Electives	3
		15-16	14

Fourth Year			
Fall	Credits	Spring	Credits
CS-401		2 CS-402	1
CS-491, 492, or 495		3 CS Elective Course	4
CS Track Course		4 General Education Requirement	3
Computer Science Elective		4 General Electives	6
		13	14

Total Credits 120-121

Changes in the sequence of the program listed above may be desirable. These must be made in consultation with the student's academic adviser.

¹ CSL-101 must be taken if student has no prior programming experience.