

COMPUTING, BACHELOR OF SCIENCE (BS) - CONCENTRATION IN COMPUTER SCIENCE

Recommended Four-Year Plan

Course	Title	Hours
First Year		
Fall		
CPSC 130	Introduction to Computing and Programming	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
MATH 120 or SCI 101	Intermediate Algebra or Science of Life	3
SUBJ 139	Foundations of Academic Discovery ¹	3
Creative & Aesthetic Inquiry (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
Hours		16
Spring		
CPSC 146	Programming Principles	3
Select one of the following:		3-4
MATH 125	Precalculus	
MATH 225	Calculus I	
MATH 230	Calculus II	
MATH 231	Calculus III	
STAT 152	Elementary Statistics I	
ENGL 104	Critical Reading	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Social Science Inquiry (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
Hours		15-16
Second Year		
Fall		
CPSC 207	Shell Commands and Scripting	3
CPSC 246	Advanced Programming Principles	3
STAT 152	Elementary Statistics I	3
SCI 101	Science of Life (or CS Elective)	3
Computer Science Elective or Free Elective ³		3
Declare a Thematic Thread ²		
Hours		15
Spring		
CPSC 323	Fundamentals of Database Systems	3
CPSC 370	Computer Organization and Architecture (S)	3
Humanities Inquiry (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3

SCI 102	Understanding the Physical World	3
Computer Science Elective or Free Elective ³		3
Hours		15
Third Year		
Fall		
CPSC 311	Discrete Computational Structures	3
CPSC 300	Challenges of Computer Technology	3
CPSC 376	Programming Language and Theory (F)	3
Thematic Thread Requirement (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
Computer Science Elective or Free Elective ³		3
Hours		15
Spring		
CPSC 327	Administration and Security (S)	3
CPSC 374	Algorithms and Data Structures (S)	3
Thematic Thread Requirement (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
Computer Science Elective or Free Elective ³		3
Computer Science Elective or Free Elective ³		3
Hours		15
Fourth Year		
Fall		
CPSC 423	Computer Networks (F)	3
CPSC 474	Advanced Architecture & Parallel Computing (F)	3
Thematic Thread Requirement (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
Computer Science Elective or Free Elective ³		3
Computer Science Elective or Free Elective ³		3
Hours		15
Spring		
CPSC 488	Software Engineering (S)	3
CPSC 476	Artificial Intelligence	3
Thematic Thread Requirement (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
Computer Science Elective or Free Elective ³		4
Hours		13
Total Hours**		119-120

¹ Course offered in multiple subjects; cannot take course in first major subject

² Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

³ Computer Science Electives - 9 Credits required:
 Select one of the following: CPSC 217, CPSC 236, CPSC 237, CPSC 315
 Select one of the following: CPSC 405, CPSC 476
 Select one of the following: CPSC 406, CPSC 450, CPSC 456, CPSC 478, CPSC 480, CPSC 485

* Students are encouraged to take ESAP 101 as a Free Elective.

** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to

registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6420

Concentration: 642C

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