

COMPUTING, BACHELOR OF SCIENCE (BS) - CONCENTRATION IN INFORMATION TECHNOLOGY

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 217	Advanced Web Programming	3
STAT 152	Elementary Statistics I	3
SCI 101	Science of Life (or IT Elective)	3
IT Elective or Free Elective (p. 1)		3
Declare a Thematic Thread ²		
Hours		15
Spring		
CPSC 323	Fundamentals of Database Systems	3
IT Elective or Free Elective (p. 1)		3
CPSC 300	Challenges of Computer Technology	3
SCI 102	Understanding the Physical World	3

Humanities Inquiry (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
Hours		15
Third Year		
Fall		
CPSC 237	Mobile App Development for Smart Devices	3
CPSC 311	Discrete Computational Structures	3
CPSC 317	Server-Side Scripting	3
Select one of the following:		3
CYBR 101	Cybersecurity in the Era of Evolving Technology	
MGMT3xx/4xx	Management Elective	
Thematic Thread Requirement (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
Hours		15
Spring		
CPSC 315	Internet of Things (IoT)	3
CPSC 327	Administration and Security	3
Select one of the following:		3
CPSC 301	Practical Computer Security	
MGMT 351	Organizational Behavior	
Thematic Thread Requirement (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
IT Elective or Free Elective (p. 1)		3
Hours		15
Fourth Year		
Fall		
CPSC 423	Computer Networks	3
IT Elective or Free Elective (p. 1)		3
IT Elective or Free Elective (p. 1)		3
IT Elective or Free Elective (p. 1)		3
Thematic Thread Requirement (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
Hours		15
Spring		
CPSC 427	IT Capstone Project	3
Thematic Thread Requirement (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
IT Elective or Free Elective (p. 1)		3
IT Elective or Free Elective (p. 1)		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.

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

** Jr. or Sr. Computing major with 3.0 GPA. Application required

IT Elective Courses

Code	Title	Hours
CPSC 125	3D Modeling for Computing	3
CPSC 236	Selected Computer Languages	3

CPSC 246	Advanced Programming Principles	3
CPSC 301	Practical Computer Security	3
CPSC 333	Introduction to Computer Forensics	3
CPSC 405	Data Mining and Data Analysis	3
CPSC 406	Data Visualization	3
CPSC 417	Advanced Web Technologies	3
CPSC 450	Internship	3
CSS 354	Risk Assessment and Fraud Prevention	3

*** 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 Code: 643C

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