## **COMPUTING, MINOR**

The Computing Minor is designed to offer students the opportunity to learn the fundamentals of computers as well as the critical issues related to the computerization of society, learn the basics of programming languages for developing different types of applications, master shell programming in prevalent operating systems, as well as the ability to manage data repositories.

To access Minor Requirements, please view the Curriculum Guide tab.

### **Related Links**

Computing, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/computing-computer-science/)

Computer Science Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/computer-science/)

Professional Licensure/Certification Page (https://www.sru.edu/students/student-consumer-information/professional-licensures/)

# Curriculum Guide GPA Requirement

Minor GPA: 2.0 or higher

#### **Minor Requirements**

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- · A minor shall be no fewer than 18 credits.
- The Computing minor must submit this self-maintained curriculum guide to the Computer Science Department for verification.

Code	Title	Hours	
Core Requirements			
CPSC 130	Introduction to Computing and Programming	3	
CPSC 146	Programming Principles	3	
CPSC 207	Shell Commands and Scripting	3	
CPSC 300	Challenges of Computer Technology	3	
or MIS 300	Challenges of Computer Technology		
CPSC 323	Fundamentals of Database Systems	3	
or MIS 323	Data Base Systems		
Computer Science Electives			

Select two of the following courses:		6
CPSC 217	Advanced Web Programming	
CPSC 237	Mobile App Development for Smart Devices	
CPSC 246	Advanced Programming Principles	
CPSC 315	Internet of Things (IoT)	
Additional Electiv	re	
Select three credits from the electives below		3
Additional Electives (p. 1)		

#### Total Hours 24

#### **Additional Electives**

Code	Title	Hours
CPSC 317	Server-Side Scripting	3
CPSC 327	Administration and Security	3
CPSC 333	Introduction to Computer Forensics	3
or MIS 333	Introduction to Computer Forensics	
CPSC 337	Introduction to Web Graphics	3
CPSC 370	Computer Organization and Architecture	3
CPSC 374	Algorithms and Data Structures	3
CPSC 376	Programming Language and Theory	3
CPSC 405	Data Mining and Data Analysis	3
or CPSC 605	Data Mining and Data Analysis	
CPSC 406	Data Visualization	3
or CPSC 606	Data Visualization	
CPSC 417	Advanced Web Technologies	3
CPSC 423	Computer Networks	3
CPSC 427	IT Capstone Project	3
CPSC 450	Internship	3
CPSC 456	Introduction to Computer Graphics	3
CPSC 464	Principles of Concurrent Programming and Operating Systems	3
CPSC 476	Artificial Intelligence	3
CPSC 480	Topics in Computer Science: Machine Learning	3
CPSC 488	Software Engineering	3
ART 214	Intermediate Studio Digital Media	3
COMM 201	Digital Imaging	3
COMM 248	Interactive Multimedia 1	3
COMM 254	Video Production	3
COMM 258	Interactive Multimedia 2	3
COMM 350	Editing for Video	3
COMM 359	Interactive Multimedia 3	3
ECON 219	Business Analytics I	3
or MGMT 219	Business Analytics I	
MGMT 351	Organizational Behavior	3
MIS 265	Management Information Systems	3
MIS 413	Systems Analysis	3
MRKT 230	Principles of Marketing	3
STAT 152	Elementary Statistics I	3

<sup>\*</sup> Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

#### **Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information* 

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on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Computing (14D)
This program is effective as of Fall 2019.
Revised 07.27.2021
UCC 3.26.2019