

**DEGREE REQUIREMENTS FOR B.S. IN COMPUTER SCIENCE (as of FALL 2019)**

Updated April 2019

Name \_\_\_\_\_

Class of \_\_\_\_\_

CPSC GPA \_\_\_\_\_ (from Transcript)

**Required Math courses**

Sem	Grade	Course
_____	_____	MATH 131 Calculus I
_____	_____	MATH 132 Calculus II

**Required Foundation course:**

Sem	Grade	Course	Sem	Grade	Course
_____	_____	CPSC 115L Intro to Computing	_____	_____	CPSC 203 Math Found. of Computing
_____	_____	CPSC 215L Data Structures and Algorithms	_____	_____	CPSC 275L Introduction to Computer Systems

**Required Theory courses - 1 needed**

Sem	Grade	Course
_____	_____	CPSC 219 Theory of Computation
_____	_____	CPSC 320 Analysis of Algorithms

**Required Systems courses - 1 needed**

Sem	Grade	Course
_____	_____	CPSC 315 Systems Software
_____	_____	CPSC 333 Computer Networks
_____	_____	CPSC 375 High-Performance Computing
_____	_____	CPSC 385 Computer Security

**Required Software courses - 1 needed**

Sem	Grade	Course
_____	_____	CPSC 304 Computer Graphics
_____	_____	CPSC 310 Software Design
_____	_____	CPSC 316 Found. of Programming Languages
_____	_____	CPSC 340 Principles of Software Engineering
_____	_____	CPSC 352 Artificial Intelligence

**Elective courses - 3 needed (only 1 can be CPSC 110)**

Sem	Grade	Course	Sem	Grade	Course
_____	_____	CPSC 110 Computers, Information, and Society	_____	_____	.....
_____	_____	CPSC 110 Visual Computing	_____	_____	.....
_____	_____	CPSC 110 Computing with Mobile Phones	_____	_____	.....
_____	_____	CPSC 219 Theory of Computation			
_____	_____	CPSC 225 Topics in Application Programming			
_____	_____	CPSC 304 Computer Graphics			
_____	_____	CPSC 310 Software Design			
_____	_____	CPSC 315 Systems Software			
_____	_____	CPSC 316 Foundations of Programming Languages	_____	_____	ENGR 221L Digital Circuits and Systems
_____	_____	CPSC 320 Analysis of Algorithms	_____	_____	ENGR 323L Microprocessor Systems
_____	_____	CPSC 333 Computer Networks	_____	_____	MATH 228 Linear Algebra
_____	_____	CPSC 340 Principles of Software Engineering	_____	_____	MATH 252 Introduction to Mathematical Modeling I
_____	_____	CPSC 352 Artificial Intelligence	_____	_____	MATH 254 Introduction to Mathematical Modeling II
_____	_____	CPSC 372 Database Fundamentals	_____	_____	MATH 305 Probability
_____	_____	CPSC 375 High-Performance Computing	_____	_____	MATH 309 Numerical Analysis
_____	_____	CPSC 385 Computer Security	_____	_____	MATH 314 Combinatorics and Computing
_____	_____	CPSC 415 Special Topics in Computing	_____	_____	.....

*can only do 1 (at most) of the following electives*

**Senior Exercise (Seminar + Project)**

Sem	Grade	Course	Sem	Grade	Course
_____	_____	CPSC 403	_____	_____	CPSC 498
_____	_____	CPSC 404	_____	_____	CPSC 499

Students must register for all four separately. They also receive separate grades.

# B.S. IN COMPUTER SCIENCE

## Recommended Course Load

	<b>FALL</b>	<b>SPRING</b>
1st year	Freshman Seminar CPSC 115L    Intro to Computing MATH 131    Calculus I _____ _____	CPSC 215L    Data Structures and Algorithms CPSC 203    Math Found. of Computing MATH 132    Calculus II _____ _____
2nd year	Theory Course CPSC 275L    Intro. To Computer Systems _____ _____ _____	Systems Course _____ _____ _____
3rd year	Software Course Elective 1 _____ _____ _____	Elective 2 _____ _____ _____
4th year	CPSC 403    Senior Seminar CPSC 498    Senior Project Elective 3 _____ _____ _____	CPSC 404    Senior Seminar CPSC 499    Senior Project Elective 4 _____ _____ _____