DEGREE REQUIREMENTS FOR B.S. IN COMPUTER SCIENCE (as of FALL 2025)

Updated September 2025

Name _____ Class of _____ CPSC GPA _____ (from Transcript)

Required Math courses

Sem	Grade	Course	
		MATH 131	Calculus I
		MATH 132	Calculus II

Required Foundation courses

Sem	Grade	Course		Sem	Grade	Course	
		CPSC 115L	Introduction to Computer Science			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
		CPSC 372	Database Fundamentals

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

Sem	Grade	Course	
		CPSC 110	Essentials of Computing with Python
		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
		CPSC 320	Analysis of Algorithms
		CPSC 333	Computer Networks
		CPSC 340	Principles of Software Engineering
		CPSC 352	Artificial Intelligence
		CPSC 372	Database Fundamentals
		CPSC 375	High-Performance Computing
		CPSC 360	Deep Learning
		CPSC 385	Computer Security

Sem	Grade	Course	
		CPSC 395	Sensitive Information in a Connected World
		CPSC 415	Special Topics in Computing

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

Sem	Grade	Course	
		ENGR 221L	Digital Circuits and Systems
		ENGR 323L	Microprocessor Systems
		MATH 228	Linear Algebra
		MATH 229	Applied Linear Algebra
		MATH 252	Introduction to Mathematical Modeling I
		MATH 254	Introduction to Mathematical Modeling II
		MATH 305	Probability
		MATH 309	Numerical Analysis
		MATH 314	Combinatorics and Computing
		MATH 326	Graph Theory with Applications
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Senior Exercise (Seminar + Project)

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

Students must register for all four seperately. They also receive seperate grades.

B.S. IN COMPUTER SCIENCE

Recommended Course Load

	FALL	SPRING
1st year	Freshman Seminar CPSC 115L Introduction to Computer Science 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