

Tentative: Course offerings are subject to change.

Course #	Course Name	Credits	2019				2020				Pre&Co-Requisites OR Notes	
			Summer 19	Fall 19	Winter 20	Spring 20	Summer 20	Fall 20	Winter 21	Spring 21		
CPSC 1000	Introduction to Computer Science	2		X	X	X			X	X	X	
CPSC 1100	Intro to Computers and Applications	5		X		X			X		X	
CPSC 1220	Data-driven Problem Solving and Prog.	5		X	X	X			X	X	X	UCOR 1200 (min. grade B), MATH 1010 (min. grade B), or a higher-level math course (min. grade C-)
CPSC 1230	Programming and Data Types	5			X	X			X		X	CPSC 1220 or ECEGR 1000; students may not receive credit for both CPSC 1230 and CPSC 1430
CPSC 1420	Programming and Problem Solving I	5		X	X				X	X		MATH 1021 or higher (C- or better)
CPSC 1430	Programming and Problem Solving II	5		X	X	X			X	X	X	CPSC 1420
CPSC 2430	Data Structures	5		X	X	X			X	X	X	CPSC 1230, CPSC 1430, or ECEGR 2020
CPSC 2500	Computer Organization	5		X	X				X	X		CPSC 1230 or CPSC 1430
CPSC 2600	Foundations of Computer Science	5		X	X	X			X	X	X	MATH 1335 (C- or better) and either CPSC 1230 or CPSC 1430
CPSC 3200	Object-Oriented Development	5		X	X	X			X	X	X	CPSC 2430
CPSC 3300	Fundamentals of Databases	5		X	X	X			X	X	X	CPSC 2430
CPSC 3400	Languages and Computation	5			X	X			X	X		CPSC 2430 and either CPSC 2600 or MATH 3000
CPSC 3500	Computing Systems	5			X	X			X	X		CPSC 2430 and either CPSC 2500 or ECEGR 2220
CPSC 3700	The Art of Web Design	5				X				X		CPSC 1220, CPSC 1420, or ECEGR 1000
CPSC 4100	Design and Analysis of Algorithms	5		X	X				X	X		CPSC 2430 and either CPSC 2600 or MATH 3000
CPSC 4210	Software Testing and Debugging	5							X			a 3000-level CPSC course and either CPSC 2600 or MATH 3000
CPSC 4220	User Experience Design	5				X					X	CPSC 3200
CPSC 4230	Design Patterns and Refactoring	5										CPSC 3200
CPSC 4240	Software as a Service	5			X	X				X		CPSC 3200
CPSC 4250	Mobile Software Development	5			X				X			CPSC 3200
CPSC 4260	Refactoring and Software Design	5				X						CPSC 3200 or CPSC 3400
CPSC 4300	Physical Database Design & Optimization	5				X					X	CPSC 3300
CPSC 4310	Machine Learning	5				X					X	CPSC 2430, MATH 2310 (C- or better), and MATH 2320 (C- or better)
CPSC 4330	Big Data Analytics	5			X					X		CPSC 3300
CPSC 4400	Compiler Principles & Techniques	5								X		CPSC 2500 and CPSC 3400
CPSC 4510	Computer Networks	5				X				X		CPSC 3500
CPSC 4520	Distributed Systems	5		X					X			CPSC 3500
CPSC 4530	Embedded Systems	5				X						CPSC 3500
CPSC 4600	Parallel Computing	5			X				X			CPSC 3500
CPSC 4610	Artificial Intelligence	5			X				X			CPSC 3200 and either CPSC 2600 or MATH 3000
CPSC 4700	Computer Graphics	5		X					X			CPSC 2430 and either CPSC 2600 or MATH 3000
CPSC 4710	Security in Computing	5			X				X			a 3000-level CPSC course and either CPSC 2600 or MATH 3000
CPSC 4800	Technical Comm. and Project Mgmt.	3		X					X			UCOR 1100, CPSC 2430, and permission of chair
CPSC 4870	Software Engr. and Project Development I	5		X					X			Completion of all 3000-level CPSC courses, major GPA of 2.5, and permission of chair; Co-req: CPSC 4800
CPSC 4880	Software Engr. and Project Development II	3			X					X		CPSC 4870 and permission of chair
CPSC 4890	Software Engr. and Project Development III	3				X				X		CPSC 4880 and permission of chair
CPSC 4910	Special Topics: Cloud Computing	5			X				X			CPSC 3500
CPSC 4910	Special Topics: Computer Architecture	5		X								CPSC 3500

All prerequisite courses require a C or better unless specified otherwise. See Catalog for more details.