

Tentative: Course offerings are subject to change.

Course #	Course Name	Credits	Term								Notes		
			Summer 22	Fall 22	Winter 23	Spring 23	Summer 23	Fall 23	Winter 24	Spring 24			
CPSC 5001	Programming Boot Camp I	3	X		X			X		X			
CPSC 5002	Programming Boot Camp II	3	X		X			X		X			
CPSC 5005	Data Structures	3		X	X				X		X		
CPSC 5011	Object-Oriented Concepts	3		X	X				X	X			
CPSC 5021	Database Systems	3		X		X			X		X		
CPSC 5031	Algorithms	3			X	X				X	X		
CPSC 5041	Computing Systems Principles I	3		X	X				X	X			
CPSC 5042	Computing Systems Principles II	3			X	X				X	X		
CPSC 5070	Programming for Data Science	3		X					X				not for MSCS students
CPSC 5071	Data Management for Data Science	3			X					X			not for MSCS students
CPSC 5075	Data Architectures for Analytics	3				X					X		not for MSCS students
CPSC 5080	AI for Buiness & Analytics	3											
CPSC 5110	Fundamentals of Software Engineering	5		X		X			X	X	X		
CPSC 5120	Software Project Management	3			X					X			Only open to students in MSCS-software engineering spec.
CPSC 5200	Software Architecture and Design	5			X	X				X	X		
CPSC 5210	Software Testing and Debugging	5		X		X			X		X		
CPSC 5220	User Experience Design	5				X						X	
CPSC 5240	Software as a Service	5				X						X	
CPSC 5250	Mobile Software Development	5				X				X			
CPSC 5270	Graphics / Game Project	5				X						X	
CPSC 5300	Physical Database Design & Optimization	5			X					X			
CPSC 5305	Introduction to Data Science	3		X					X				Only open to students in MSCS-data science specialization
CPSC 5310	Machine Learning	5			X					X			
CPSC 5320	Visual Analytics	3				X						X	
CPSC 5330	Big Data Analytics	3				X						X	
CPSC 5340	Text Processing and Search	5								X			In Winter 2024, one of these data science electives will be offered (or similar special topics)
CPSC 5350	Social Media Analytics	5			X								
CPSC 5400	Compiler Principles & Techniques	5								X			
CPSC 5510	Computer Networks	5				X						X	
CPSC 5520	Distributed Systems	5		X	X				X	X			
CPSC 5530	Embedded Systems	5											
CPSC 5600	Parallel Computing	5			X				X	X			
CPSC 5610	Artificial Intelligence	5		X		X			X		X		
CPSC 5700	Computer Graphics	5		X					X				
CPSC 5710	Security in Computing	5			X					X			
CPSC 5800	Ethics & Professional Issues in Computing	2		X	X				X	X	X		
CPSC 5810	Software Engineering Project I	4		X		X			X				Spring / Fall 23 project only open to second-year MSCS students (started in Spring 2022 or earlier); the department is not running spring / fall projects after 2023
CPSC 5820	Software Engineering Project II	4			X				X	X			
CPSC 5830	Data Science Capstone Project	5			X					X			
CPSC 5890	Seminar	3		X		X			X		X		
CPSC 5910	Special Topics: SW Refactoining & Design	5			X					X			
CPSC 5910	Special Topics: Cloud Computing	5				X					X		Might be offered in 23-24
CPSC 5910	Special Topics: Robotics	5				X					X		Might be offered in 23-24
CPSC 5910	Special Topics: Web Development	5							X				
CPSC 5910	Special Topics: Blockchain Security	5		X					X				
CPSC 5990	Graduate Research Project	4		arranged					arranged				

Courses numbered CPSC 5001-5042 are part of the Computer Science Fundamentals Certificate. Individual courses may be restricted to students in that program.

Courses numbered CPSC 5070-5080 are for students in other graduate programs.

Courses numbered CPSC 5110-5990 are part of the MS-Computer Science program. Individual courses are restricted to students in that program.

Please see catalog for course prerequisites.



Science and Engineering Advising Center
 206.296.2500, Engineering 300
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