

MSCS with Specialization in Data Science

Sample Plans

Courses are 5 credits unless specified otherwise

MSCS DS (full-time) – start in fall (Minimum completion time: five quarters)

	Fall	Winter	Spring
Year 1	Math 5315 (3 cr) CPSC 5305 (3 cr) CPSC 5610 or CPSC 5520	CPSC 5310 SE (5200) / SW dev	CPSC 5320 (3 cr) CPSC 5330 (3 cr) SE (5110 or 5200) / SW dev
Year 2	CPSC 5610 or CPSC 5520 CPSC 5800 (2 cr)	CPSC 5830 Data Science Elective	

MSCS DS (full-time) – start in winter (Minimum completion time: seven quarters, extra credits may be needed to remain full-time)

	Fall	Winter	Spring
Year 1		SW dev	CPSC 5610 SE (5110 or 5200)
Year 2	Math 5315 (3 cr) CPSC 5305 (3 cr)	CPSC 5310	CPSC 5320 (3 cr) CPSC 5330 (3 cr)
Year 3	CPSC 5520 CPSC 5800 (2 cr)	CPSC 5830 Data Science Elective	

MSCS DS (full-time) – start in spring (Minimum completion time: six quarters)

	Fall	Winter	Spring
Year 1			CPSC 5610 SE (5110 or 5200)
Year 2	Math 5315 (3 cr) CPSC 5305 (3 cr)	CPSC 5310 SW dev	CPSC 5320 (3 cr) CPSC 5330 (3 cr)
Year 3	CPSC 5520 CPSC 5800 (2 cr)	CPSC 5830 Data Science Elective	

MSCS-DS students have to take either CPSC 5110 or CPSC 5200 (labelled SE course) depending on experience.

Course Frequencies

		Cr	Fall	Winter	Spring
MATH 5315	Math. Foundations of Data Science	3	x		
CPSC 5305	Introduction to Data Science	3	x		
CPSC 5310	Machine Learning	5		x	
CPSC 5320	Visual Analytics	3			x
CPSC 5330	Big Data Analytics	3			x
CPSC 5520	Distributed Systems	5	x	x	
CPSC 5610	Artificial Intelligence	5	x		x
CPSC 5800	Ethics & Professional Issues in Computing	2	x	x	
CPSC 5830	Data Science Capstone Project	5		x	
	Software Engr. Course (CPSC 5110 / 5200)	5	5110	5200	both
	Software Dev. Course (five options)	5	x	x	x
	Data Science Elective (three options)	5		x	

