

# Master of Science in Computer Science

Catalog Year: 2024

Total Degree Credit hours: 30 at the 6000 level or above

For students who are interested in this program but do not have the required prerequisite knowledge, completion of the Graduate Certificate in Computer Science Foundations is required prior to admission to the MSCS program.

## Computer Science Foundation Courses (12 Credit Hours)

Prerequisites

CS 5000

CS 7075 Artificial Intelligence and Robotics	CS 5020	3	
CS 7253 Graph Algorithms	CS 6041 and CS 6045	3	
CS 7263 Information Retrieval	CS 6041 and CS 6045	3	
CS 7357 Neural Networks and Deep Learning	CS 6045	3	
CS 7367 Machine Vision	CS 6045	3	
CS 7990 Special Topics in Computer Science	Varies	3	
CS 7992 Directed Studies (may only take once)	Permission	1-3	
CSE 7983 Graduate Internship or DS 7990 Applied Analytics Project (may only take once)	Permission		

**Data Science Required Classes**

**Prerequisites**

CS 7265 Big Data Analytics	CS 6045	3	
CS 7267 Machine Learning	CS 6045	3	
STAT 8240 Data Mining I	See Director of PhD in Analytics	3	

**Elective Options**

CS 6025 Operating Systems	<b>Pre:</b> CS 5020 <b>Concurrent:</b> CS 5040	3	
CS 6070 Database Systems	CS 5000	3	
CS 7050 Data Warehousing and Mining	<b>Pre:</b> CS 6070 <b>Concurrent:</b> CS 6045	3	
CS 7125 Cloud Computing	CS 5020	3	
CS 7253 Graph Algorithms	CS 6041 and CS 6045	3	
CS 7260 Advanced Database Systems	CS 6070 or BSCS degree	3	
CS 7263 Information Retrieval	CS 6041 and CS 6045	3	
CS 7347 Natural Language Processing	CS 6041	3	
CS 7357 Neural Networks and Deep Learning	CS 6045	3	