Computer Science, MS

Master of Science in Computer Science Degree Program Requirements

Computer Science Core Requirements		
COMP 5300	Research Methods and Graduate Seminar	3
COMP 5311	Fundamentals and Concepts of Programming Languages	3
COMP 5312	Advanced Computer Architecture	3
COMP 5313	Advanced Operating Systems	3
COMP 5314	Advanced Database Management System	3
COMP 5315	Design and Analysis of Algorithms	3
COMP 5342	Software Engineering Processes	3
Concentration (Select one from below):		**15**
Thesis Concentration:		
COMP 5690	Masters Thesis	
Three Electives (Select 9 hours from the approved Computer Science Electives)		
Non-Thesis Concentration:		
COMP 5391	Masters Project	
Four Electives (Select 12 hours from the approved Computer Science Electives)		
Total Hours		**36**

General Computer Science Electives

COMP 5316	Artificial Intelligence	3
COMP 5317	Computer Vision	3
COMP 5324	Distributed Computing and Parallel Processing	3
COMP 5326	Machine Learning (Newly approved new course (Machine Learning))	3
COMP 5327	Data Mining	3
COMP 5328	Natural Language Processing	3
COMP 5329	Text Mining	3
COMP 5332	Computer and Network Security	3
COMP 5389	Applied Research	3

Master of Science in Computer Science Degree Sequence

First Year

Fall - Semester 1	Hours	Spring - Semester 2	Hours
COMP 5311	3	COMP 5300	3
COMP 5312	3	COMP 5313	3
COMP 5314	3	COMP 5315	3
Total	**9**	**Total**	**9**

Total Hours: 18

Second Year

Fall - Semester 1	Hours	Spring - Semester 2	Hours
COMP 5342	3	Three CS Electives (Thesis Track) or COMP 5391 and Two CS Electives (Non- Thesis Track)	9
COMP 5690	6		
or Two CS Electives (Non- Theseis Track)			
Total	**9**	**Total**	**9**

Total Hours: 18

Name	Unit
Total Semester Credit Hours: 36	

Marketable Skills

Marketable skills, as defined by the Texas Higher Education Coordinating Board's 60x30TX Plan (http://www.60x30tx.com/), include interpersonal, cognitive, and applied skill areas, are valued by employers, and can be either primary or complementary to a major. Marketable skills are acquired by students through education, including curricular, co-curricular, and extracurricular activities.

MS Computer Science

Degree Skills

1. Understand the subjects of given computing practice and identify current techniques and skills needed. Be skillful to apply the current computing tools to solve the problem through design and implementation
2. Ability to identify new techniques and skills needed for solving the problem. Are also able to earn and apply the latest computing tools to get solutions through design and implementation
3. Ability to resent methodologies and write technical reports following professional templates by citing the data sources