COMPUTER SCIENCE (MS)

The MS degree requires at least 30 units beyond the undergraduate degree. Courses must be chosen according to the following requirements:

Code	Title	Units
REQUIRED COURSES		
CSC 5590	Thesis Preparation	3
CSC 5591	Research in Computer Science [1]	2
CSC 5599	Thesis	4
Research Methodologies		
Select from the following: [1]		6-10
CSC 5201	Computer Security and Privacy	
CSC 5210	Software Security	
CSC 5220	Advanced Network Security and Privacy	
CSC 5281	System Security	
CSC 5550	Research in Operating Systems	
CSC 5710	Computer Graphics	
CSC 5880	Artificial Intelligence	
CSC 5887	Advanced Deep Learning	
CPE 5300	Computer Microarchitecture	
CPE 5420	Advanced High-Performance Embedded Systems	
CPE 5564	Research Topics in Computer Networks	
CPE 5660	Computer Systems	
Graduate Electives		
Select from the following: [2]		4-6
CPE 5300	Computer Microarchitecture	
CPE 5350	Digital Systems Design	
CPE 5420	Advanced High-Performance Embedded Systems	
CPE 5564	Research Topics in Computer Networks	
CPE 5660	Computer Systems	
CPE 5669	Distributed Computing	
CSC 5100	Modern Software Engineering	
CSC 5113	Computing Education Research and Practice	
CSC 5170	Special Advanced Topics in Software Engineering	
CSC 5201	Computer Security and Privacy	
CSC 5210	Software Security	
CSC 5220	Advanced Network Security and Privacy	
CSC 5270	Special Advanced Topics in Computer Security	
CSC 5281	System Security	
CSC 5370	Special Advanced Topics in Programming Languages	
CSC 5445	Advanced Theory of Decidability and Reducibility	
CSC 5447	Advanced Algorithmic Graph Theory	
CSC 5449	Advanced Algorithm Design and Analysis	
CSC 5500	Directed Study	
CSC 5550	Research in Operating Systems	
CSC 5570	Special Advanced Topics	
CSC 5571	Special Advanced Laboratory	
CSC 5572	Special Advanced Activity	
CSC 5595	Cooperative Education Experience	
CSC 5660	Advanced Database Management Systems	
CSC 5666	Advanced Machine Learning	
CSC 5669	Distributed Computing	

CSC 5670	Special Advanced Topics in Computer Systems	
CSC 5710	Computer Graphics	
CSC 5740	Advanced Compute Shaders in Computer Graphics	
CSC 5770	Special Advanced Topics in Computer Graphics	
CSC 5820	Computational Linguistics	
CSC 5870	Special Advanced Topics in Artificial Intelligence	
CSC 5880	Artificial Intelligence	
CSC 5887	Advanced Deep Learning	
Electives		
Select any 4000-5000 level CSC or CPE courses [2, 3, 4]		9
Total Units		**30**

1 Students with credit in CSC 4461 may substitute an additional 2 units of a course from Research Methodologies in place of CSC 5591.

2 A combined maximum of 6 units may be taken from CPE 4400, CPE 4491, CPE 4492, CPE 4493, CPE 4495, CSC 4091, CSC 4092, CSC 4093, CSC 4191, CSC 4192, CSC 4193, CSC 4291, CSC 4292, CSC 4293, CSC 4400, CSC 4495, CSC 4691, CSC 4692, CSC 4693, CSC 4791, CSC 4792, CSC 4793, CSC 4891, CSC 4892, CSC 4893, CSC 4991, CSC 4992, CSC 4993, CSC 5500 and CSC 5595; of which up to a combined 4 units may be taken from CPE 4400, CPE 4491, CPE 4495, CSC 4091, CSC 4191, CSC 4291, CSC 4400, CSC 4495, CSC 4691, CSC 4791, CSC 4891, CSC 4991, CSC 5500, and CSC 5595.

3 The following courses may not be used to satisfy this requirement: CSC 4460, CSC 4461, CSC 4260, CSC 4261, CPE 4260, and CPE 4261.

4 Non-CSC and non-CPE courses can be substituted with approval of the Graduate Committee.