

# MS COMPUTER SCIENCE

Selected with Graduate Coordinator approval <sup>2</sup>	16
<b>Total units</b>	<b>45</b>

## Program Learning Objectives

1. Prepared for successful careers in a computing-related field, including careers that involve positions of technical leadership and advanced responsibility
2. Exposed to a broad range of computer-science subjects in coursework that emphasizes technical subject matter.
3. Able to perform, analyze, evaluate and synthesize computer science research, in particular, know how to present research findings in oral and written form.
4. Prepared for life-long learning in the discipline of computer science, including continued formal graduate education.
5. Aware of the impacts of computing technology on society and understand ethics and responsible professional conduct.

<sup>1</sup> CSC 596 and CSC 597 must be taken before CSC 599.

<sup>2</sup> No more than 4-units total of CSC 500 allowed.

For further information or advisement students should communicate with the Graduate Coordinator of the Computer Science and Software Engineering Department.

The MS degree requires at least 45 units beyond the undergraduate degree. Courses must be chosen according to the following requirements:

Select from the following: 20

CSC 508	Software Engineering I	
CSC 509	Software Engineering II	
CSC 513	Computing Education Research and Practice	
CSC 515	Computer Architecture	
CSC 521	Computer Security	
CSC 522	Advanced Network Security	
CSC 524	System Security	
CSC 530	Languages and Translators	
CSC 540	Theory of Computation II	
CSC 549	Advanced Algorithm Design and Analysis	
CSC 550	Operating Systems	
CSC 560	Database Systems	
CSC 564	Computer Networks: Research Topics	
CSC 566	Topics in Advanced Data Mining	
CSC 569	Distributed Computing	
CSC 570	Current Topics in Computer Science	
CSC 572	Computer Graphics	
CSC 580	Artificial Intelligence	
CSC 581	Computer Support for Knowledge Management	
CSC 582	Computational Linguistics	
CSC 587	Advanced Deep Learning	

### Thesis/Project and Seminar

CSC 590	Thesis Seminar	1
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Select from the following:<sup>1</sup> 4

CSC 596 & CSC 597	Research in Computer Science I and Research in Computer Science II (2, 2)	
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or

	an additional 500-level course (4) <sup>2</sup>	
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CSC 599	Thesis	4
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### Electives