

AMA Computer University MSCS Curriculum Effective Issued:

MASTER OF SCIENCE IN COMPUTER SCIENCE (MSCS)

NO.	SUBJ. AREA	CAT#	COURSE	LEC	LAB	TOTAL	PRE-REQUISITE
PRE-MIT for non-CS/IT graduates (must have knowledge on all)							
	ITE	7101	Computer Programming	2	1	(3)	
	ITE	7107	Data Structures and Algorithms	3	0	(3)	
	ITE	7104	Data Communication and Networking	2	1	(3)	
	ITE	7108	Applications Development and Engineering Technologies	2	1	(3)	
1ST YEAR - 1ST TRIMESTER							
1	MSCS	7101	Advanced Data Structures	2	1	3	
2	MSCS	7102	Theory of Automata and Formal Languages	3	0	3	
3	MSCS	7103	Theory of Programming Languages	2	1	3	
1ST YEAR - 2ND TRIMESTER							
4	MSCS	7104	Advanced Computer Organization and Advanced OS	2	1	3	
5	MSCS	7105	Design and Analysis of Algorithms	2	1	3	
6	MSCS	7201	Specialization Course 1 - Intelligent System	2	1	3	
7	MSCS	7202	Specialization Course 2 - Natural Language Processing	2	1	3	
1ST YEAR - 3RD TRIMESTER							
7	MSCS	7106	Methods of Research	3	0	3	
8	MSCS	7203	Specialization Course 3 - Parallel Computing	2	1	3	
9	MSCS	7204	Specialization Course 4 - Modeling and Simulation	2	1	3	
<p>Note: After completing the required 30 academic units and obtaining a GWA of 1.75 or better, students must take and pass the Comprehensive Examination prior to enrolment of Thesis Writing</p>							
2ND YEAR - 1ST TRIMESTER							
10	MSCS	7299	Thesis Writing 1	3	0	3	
2ND YEAR - 2ND TRIMESTER							
11	MSCS	7300	Thesis Writing 2	3	0	3	

SPECIALIZATION IN COMPUTER SCIENCE THEORY							
	MSCS	7201	Intelligent System	2	1	3	
	MSCS	7202	Natural Language Processing	2	1	3	
	MSCS	7203	Parallel Computing	2	1	3	
	MSCS	7204	Modeling and Simulation	2	1	3	
	MSCS	7205	Image Processing	2	1	3	
SPECIALIZATION IN CYBERSECURITY							
	MSCS	7206	Design and Analysis of Computer Communication Networks	2	1	3	
	MSCS	7211	Data and Software Security	2	1	3	
	MSCS	7208	Network and System Security	2	1	3	
	MSCS	7212	Organizational and Social Security	2	1	3	