

MASTER OF SCIENCE IN COMPUTER SCIENCE

(Curriculum applicable to students who entered as freshmen beginning school year 2015-2016)

COURSE CODE	COURSE TITLE	CREDIT UNITS	REMARK
BRIDGING COURSES (18 units)			
CS126	PROGRAMMING 1	2	
CS126L	PROGRAMMING LABORATORY 1	1	
CS127	PROGRAMMING 2	2	
CS127L	PROGRAMMING LABORATORY 3	1	
IT131	DATABASE MANAGEMENT SYSTEMS	2	
IT131L	DATABASE MANAGEMENT SYSTEMS LABORATORY	1	
IT154	PRINCIPLES OF OPERATING SYSTEMS	2	
IT154L	PRINCIPLES OF OPERATING SYSTEMS LABORATORY	1	
IT155	SOFTWARE ENGINEERING	2	
IT155L	SOFTWARE ENGINEERING LABORATORY	1	
CS137	DISCRETE MATHEMATICS	3	
CS141	DESIGN AND ANALYSIS OF ALGORITHMS	3	
CS145	STRUCTURE OF PROGRAMMING LANGUAGES	2	
CS145L	STRUCTURE OF PROGRAMMING LANGUAGES LABORATORY	1	
CORE COURSES (12 units)			
CS213	ADVANCED DATA STRUCTURES AND ALGORITHMS	3	
CS221	THEORY OF PROGRAMMING LANGUAGES	3	w/ Lab
CS214	ADVANCED COMPUTER ORGANIZATION AND OPERATING SYSTEMS	3	w/ Lab
CS215	THEORY OF COMPUTATIONS	3	
SPECIALIZATION COURSES (12 units)			
	Intelligent Systems		
CS261	ARTIFICIAL INTELLIGENCE	3	w/ Lab
CS262	DATA MINING	3	w/ Lab
CS263	PATTERN RECOGNITION	3	w/ Lab
CS264	NEURAL NETWORK	3	w/ Lab
CS260	ADVANCE TOPICS IN COMPUTER SCIENCE	3	w/ Lab
	Theory of Computer Science		
CS225	COMPLEXITY THEORY	3	
CS226	COMPUTER MODELING AND SIMULATION	3	w/ Lab
CS227	COMPILER DESIGN AND THEORY	3	w/ Lab
CS222	ADVANCE ALGORITHM ANALYSIS	3	
CS260	ADVANCE TOPICS IN COMPUTER SCIENCE	3	w/ Lab
	Software Engineering		
CS256	ADVANCED DATABASE SYSTEMS	3	w/ Lab
CS254	ADVANCED SOFTWARE ENGINEERING	3	w/ Lab
CS242	ADVANCED DISTRIBUTED SYSTEMS	3	w/ Lab
CS258	SOFTWARE TESTING AND QUALITY ASSURANCE	3	w/ Lab
CS255	SPECIAL TOPICS IN SOFTWARE ENGINEERING	3	w/ Lab; Prerequisite: CS254
ELECTIVE COURSES (6 units)			
RES290-3	RESEARCH METHODS FOR COMPUTER SCIENCE	3	Prerequisite: 2nd Year Equivalent
	Take 1 courses in any of the other specializations.		
MASTER'S THESIS			
CS290	GRADUATE RESEARCH AND SEMINAR	1	Co-requisite CS299-1
CS299	MASTER'S THESIS 1	3	Prerequisite: All Core Courses
CS299-1	MASTER'S THESIS 2	3	Prerequisite: CS299

TOTAL ACADEMIC UNITS : 37