COLLEGE OF ARTS AND SCIENCES

Department of Mathematical and Physical Sciences

Degree Plan for B.Sc. in Computer Science

Course Code	Course Name	Credit Hours	Contact Hours		Pre-requisites/ Co-requisites
			Theory	Practical	
Minimum No. of Credits for the Degree Plan = 135					
University Requirements = 24 Credits					
ARAB100	Arabic Language I	3	3	0	
ARAB101	Arabic Language II	3	3	0	ARAB100
HIST150	Islamic Civilization	3	3	0	
ENGL150	English Language I	3	3	0	
ENGL152	English Language II	3	3	0	ENGL150
ENGL155	Communication Skills	3	3	0	ENGL152
COMP101/L	Computer Skills	3	2	2	COMP-A,COMP-B, Digital Literacy II
MNGT100	Entrepreneurship: Creativity and Innovation	3	3	0	
University Electives = 3 Credits **Student shall choose from available courses offered by all Colleges of the University**					
College Requirements = 27 Credits					
BIOL101/L	General Biology	4	3	2	
MATH116	Pre-calculus	4	3	2	
MATH145	Linear Algebra I	3	2	2	MATH116
MATH211	Calculus I	4	3	2	MATH116
COMP151/L	Introduction to Algorithms and Programming	4	3	2	COMP101/L
PHYS101/L	General Physics I	4	3	2	MATH116
STAT101	Introduction to Statistics	4	3	2	
College Electives = 6 Credits **Student shall choose from available courses offered by college Departments**					
Department Requirements = 60 Credits					
COMP111/L	Digital Logic Design	3	2	2	COMP101/L
STAT210	Principles of Probability	3	3	0	STAT101, MATH116
COMP221/L	Discrete Structures	3	2	2	COMP151/L, MATH116
COMP222/L	Object Oriented Programming	3	2	2	COMP151/L
COMP233/L	Computer Architecture and Assembly Language	3	2	2	COMP111/L
COMP244/L	Database Concepts and Application	3	2	2	COMP222/L
COMP255/L	Data Structures	3	2	2	COMP 222/L
COMP270/L	Web Development	3	2	2	COMP151/L

Course Code	Course Name	Credit Hours	Contact Hours		Pre-requisites/ Co-requisites
			Theory	Practical	
COMP277/L	Networks and Communications	3	2	2	COMP 111/L
COMP300/L	Visual Programming	3	2	2	COMP222/L
COMP301/L	Introduction to Java	3	2	2	COMP222/L
COMP340/L	Design and Analysis of Algorithms	3	2	2	COMP255/L., COMP221/L
COMP344/L	Software Engineering	3	2	2	COMP151/L
COMP355/L	Fundamentals of Operating System	3	2	2	COMP255/L
COMP366/L	Software System Development	3	2	2	COMP344/L
COMp388/L	Computer Graphics	3	2	2	COMP255/L, MATH145
COMP422/L	Introduction to Artificial Intelligence	3	2	2	COMP255/L
COMP433/L	System Programming	3	2	2	COMP355/L
COMP498	Project in Computer Sciences – Part I	3	0	0	Completing 100 CRs +section approval
COMP499	Project in Computer Sciences – Part II	3	0	0	COMP498
Department Electives = 15 Credits Students Shall choose from the following courses:					
COMP230/L	Internet Technology	3	2	2	COMP151/L
COMP240/L	Multimedia System Design	3	2	2	COMP222/L
COMP266/L	Computer Organization	3	2	2	COMP233/L
COMP290/L	System Analysis & Design	3	2	2	COMP244/L
COMP322/L	Concepts of Programming Languages	3	2	2	COMP233/L, COMP255/L
COMP333/L	Formal Languages, Finite Automata and Computation Theory	3	2	2	COMP221/L
COMP350/L	Numerical Methods for Computing	3	2	2	COMP255/L, MATH145
COMP360/L	Computer Modeling and Simulation	3	2	2	COMP340/L
COMP370/L	Advanced Database Design	3	2	2	COMP244/L
COMP380/L	Distributed Computing	3	2	2	COMP355/L

Course Code	Course Name	Credit Hours	Contact Hours		Pre-requisites/ Co-requisites
			Theory	Practical	
COMP400	External Training	3	0	0	Section Approval
COMP405/L	Advanced Visual Programming	3	2	2	COMP300/L
COMP406/L	Advanced Java Programming	3	2	2	COMP301/L
COMP410/L	Computer System Security	3	2	2	COMP233/L, COMP277/L
COMP444/L	Human-Computer Interaction	3	2	2	COMP366/L
COMP450/L	Image Processing	3	2	2	COMP422/L, MATH145
COMP455/L	Compiler and Language Design	3	2	2	COMP333/L
COMP466/L	Societal Issues in Computing	2	1	2	COMP255/L
COMP470/L	Advanced Network Topics	3	2	2	COMP277/L
COMP475/L	Mobile Programming	3	2	2	COMP277/L, COMP301/L
COMP497/L	Special Topics in Computer Sciences	3	2	2	Section Approval