

University of Nizwa
College of Arts and Sciences
Department of Mathematical and Physical Sciences
Degree Plan for B.Sc. in Computer Sciences

Total No. of Credits for B.Sc. degree in computer science = 135			
University Requirements = 24 Credits			
Course Code	Course Title	No. of Credits	Prerequisites and Co-requisites
ARAB100	Arabic Language I	3	
ARAB101	Arabic Language II	3	ARAB100
COMP101	Computer Skills	3	COMP-B - DIGITAL LITERACY II
ENGL150	English Language I	3	
ENGL152	English Language II	3	ENGL150
ENGL155	Communication Skills	3	
HIST150	Islamic Civilization	3	
MNGT100	Entrepreneurship: Creativity and Innovation	3	
University Electives = 3 Credits Student shall choose from available courses offered by all Colleges of the University			
College Requirements = 27 Credits			
BIOL101	General Biology	4	
MATH116	Pre-calculus	4	
MATH145	Linear Algebra I	3	MATH116
MATH211	Calculus I	4	MATH116
COMP151	Introduction to Algorithms and Programming	4	COMP101
PHYS101	General Physics I	4	MATH116
STAT101	Introduction to Statistics	4	
College Electives = 6 Credits Students choose from courses offered by college Departments			
Department Requirements = 60 credits			
COMP111	Digital Logic Design	3	COMP101
STAT210	Principles of Probability	3	STAT101, MATH116
COMP221	Discrete Structures	3	COMP101 and MATH116
COMP222	Object Oriented Programming	3	COMP151
COMP233	Computer Architecture and Assembly Language	3	COMP111
COMP244	Database Concepts and	3	COMP222

	Application		
COMP255	Data Structures	3	COMP222
COMP270	Web Development	3	COMP151
COMP277	Networks and Communications	3	COMP111
COMP300	Visual Programming	3	COMP222
COMP301	Introduction to Java	3	COMP222
COMP340	Design and Analysis of Algorithms	3	COMP255, COMP221
COMP344	Software Engineering	3	COMP151
COMP355	Fundamentals of Operating Systems	3	COMP255
COMP366	Software System Development	3	COMP344
COMP388	Computer Graphics	3	COMP255, MATH145
COMP422	Introduction to Artificial Intelligence	3	COMP255
COMP433	System Programming	3	COMP355
COMP498	Project in Computer Sciences - Part I	3	Completing 100 CRs + Section approval
COMP499	Project in Computer Sciences - Part II	3	COMP498
Department Electives = 15 Credits Students Shall choose from the following courses:			
COMP230	Internet Technology	3	COMP151
COMP240	Multimedia System Design	3	COMP222
COMP266	Computer Organization	3	COMP233
COMP290	System Analysis & Design	3	COMP244
COMP322	Concepts of programming Languages	3	COMP233, COMP255
COMP333	Formal Languages, Finite Automata and Computation Theory	3	COMP221
COMP350	Numerical Methods for Computing	3	COMP255, MATH145
COMP360	Computer Modeling and Simulation	3	COMP340
COMP370	Advanced Database Design	3	COMP244
COMP380	Distributed Computing	3	COMP355
COMP400	External Training	3	Section approval
COMP405	Advanced Visual Programming	3	COMP300
COMP406	Advanced Java Programming	3	COMP301
COMP410	Computer System Security	3	COMP233, COMP277
COMP444	Human-Computer Interface	3	COMP366

COMP450	Image Processing	3	COMP422, MATH145
COMP455	Compiler and Language Design	3	COMP333
COMP466	Societal Issues in Computing	2	COMP255
COMP470	Advanced Network Topics	3	COMP277
COMP475	Mobile Programming	3	COMP277, COMP301
COMP497	Special Topics in Computer Sciences	3	Section Approval