



Department of Computer Science

Study Plan for Bachelor Degree in Computer Science (Curriculum 2019)



Acad. Year	First Trimester						Second Trimester						Third Trimester					
	Course Code	Course Name	Pre-req	Hours			Course Code	Course Name	Pre-req	Hours			Course Code	Course Name	Pre-req	Hours		
				Cr	Th	Pr				Cr	Th	Pr				Cr	Th	Pr
1	0827111	Calculus	----	3	4.5	0	0826152	Biology	----	3	4.5	0	1900101	Creed and Doctrines	----	2	3	0
	0921110	Introduction to Computing	----	4	4.5	4.5	0827121	Probability and Statistics	0827111	3	4.5	0	0603103	Business and Accounting	1722111	3	4.5	0
	1722111	Academic English	----	3	4.5	0	0921120	Fundamentals of Programming	0921110	4	4.5	4.5	0814132	Physics	----	4	4.5	3
													0827122	Discrete Mathematics	0827111	3	4.5	0
	Total			10	13.5	4.5	Total			10	13.5	4.5	Total			12	16.5	3
2	First Trimester						Second Trimester						Third Trimester					
	Course Code	Course Name	Pre-req	Hours			Course Code	Course Name	Pre-req	Hours			Course Code	Course Name	Pre-req	Hours		
				Cr	Th	Pr				Cr	Th	Pr				Cr	Th	Pr
	0921212	Linear Algebra	0827122	3	4.5	0	0922222	Database Concepts and Design	0921211	4	4.5	4.5	1900102	Islamic Culture	----	2	3	0
0921211	Data Structure and Algorithms	0921120 0827122	4	4.5	4.5	0923223	Digital Logic and Design	0814132	4	4.5	4.5	0921224	Mathematics for CS	0921212	3	4.5	0	
0924214	Fundamentals of Computer Networks	0921110	4	4.5	4.5	0921210	Object Oriented Programming(1)	0921120	4	4.5	4.5	0921221	Language Theory and Finite Automata	0921212	3	4.5	0	
												0921310	Object Oriented Programming (2)	0921210	4	4.5	4.5	
	Total			11	13.5	9	Total			12	13.5	13.5	Total			12	16.5	4.5
3	First Trimester						Second Trimester						Third Trimester					
	Course Code	Course Name	Pre-req	Hours			Course Code	Course Name	Pre-req	Hours			Course Code	Course Name	Pre-req	Hours		
				Cr	Th	Pr				Cr	Th	Pr				Cr	Th	Pr
	0922312	Technical Reports	1722111	3	4.5	0	0921314	Fundamentals of Web Programming	0921210 0922222	4	4.5	4.5	0922322	Professional Responsibility	0922312 0826152	3	4.5	0
0923313	Computer Organization and Architecture	0923223	4	4.5	4.5	0921311	Design & Analysis of Algorithms	0921211	3	4.5	0	0921323	Digital Image Processing	0921224 0921310	4	4.5	4.5	
0921220	Fund. of Software Engineering	0921120	4	4.5	4.5	0921320	Computer Security	0924214	3	4.5	0	0921324	Artificial Intelligence	0921311	4	4.5	4.5	
						0921321	Operating Systems	0923313	4	4.5	4.5	1900???	University Elective (1)	----	2	3		
	Total			11	13.5	9	Total			14	18	9	Total			13	16.5	9
Summer Semester																		
	Course Code	Course Name				Credit Hours	Pre-Requisite											
	0921330	Practical (Co-op) Training				3	"Department Approval and Finish 95 Credit Hours "											
4	First Trimester						Second Trimester						Third Trimester					
	Course Code	Course Name	Pre-req	Hours			Course Code	Course Name	Pre-req	Hours			Course Code	Course Name	Pre-req	Hours		
				Cr	Th	Pr				Cr	Th	Pr				Cr	Th	Pr
	0921410	Project Proposal	Dept. Approval	2	---	---	0921411	Advanced Software Engineering	0921220 0921310	3	4.5	0	0921421	Selected Topics in CS	0921320 0921321	3	4.5	0
1900???	University Elective (2)	----	2	3	0	0921412	Data Science	0921224 0922222	4	4.5	4.5	092?4??	Program Elective (2)	?	3	4.5	0	
						092?4??	Program Elective (1)	?	3	4.5	0	092?4??	Program Elective (3)	?	3	4.5	0	
												0921420	Project Implementation	0921410	3	---	---	
	Total			4	3	0	Total			10	13.5	4.5	Total			12	13.5	0

Elective Courses	Program Elective Courses (3 Courses of 9 Credit Hours Total)					University Elective Courses (2 Courses of 4 Credit Hours Total)			
	Course Code	Course Name	Pre-req.	Hours		Course Code	Course Name	Hours	
				Cr	Th			Cr	Th
	0921413	Advanced Web Programming	0921314	3	4.5	1900103	Islamic Morals and Occupational Ethics	2	3
	0921414	Ubiquitous Computing	0921321 0924214	3	4.5	1900104	Studies in the Prophet's Biography	2	3
	0922414	Mining of Massive Datasets	0922222	3	4.5	1900105	Medical Jurisprudence	2	3
	0921415	Machine Learning	0921324	3	4.5	1900106	Economy and Politics in Islam	2	3
	0922416	Web application Penetration Testing	0921320	3	4.5	1900107	Social System and Family Behavior	2	3
	0921422	Mobile Application Development	0921210	3	4.5	0602233	Fundamentals of Entrepreneurship	2	3
	0921423	Software Project Management	0921411	3	4.5	1900109	Health and Fitness	2	3
	0921424	Formal Methods in Software Engineering	0921411	3	4.5	1900110	Research Skills	2	3
	0921425	Parallel Computing	0921321	3	4.5	1900111	Voluntary Work	2	3
	0921426	Computer Vision	0921323	3	4.5	1900112	Medicine: Type and Usage	2	3
	0923426	Computer Graphics	0827122	3	4.5	1900113	Human Rights in Islam	2	3
	0921427	Software Security	0921320	3	4.5	1900114	Food and Nutrition	2	3