

**Faculty of Computer Science
Software Engineering department
Bachelor Curriculum**

First year							
First semester							
Course Code	Course Name	Credits	Credits / Hours			Pre-Requisites	Category
			Lectures	Lab	Total		
CS.SE.0101	Islamic studies-I	3	3		3	Nil	Inclusive
CS.SE.0106	Physics	2	2		2	Nil	Core
CS.SE.0107	Introduction to Information technology	4	3	2	5	Nil	Professional
CS.SE.0108	Linear Algebra	3	3		3	Nil	Core
CS.SE.0104	English Comprehension	3	3		3	Nil	Inclusive
CS.SE.0109	Introduction to Programming	4	3	2	5	Nil	Professional
Total		19	17	4	21		
Total number of Credits							19

First year							
Second Semester							
Course Code	Course Name	Credits	Credits / Hours			Pre-Requisites	Category
			Lectures	Lab	Total		
CS.SE.0210	Object Oriented Programming	4	3	2	5	Introduction to Programming	Professional
CS.SE.0203	Afghan History	2	2		2	Nil	Inclusive
CS.SE.0211	Calculus	3	3		3	Linear Algebra	Core
CS.SE.0212	Business Study I	2	2		2	Nil	Core
CS.SE.0213	Data Communication	4	3	2	5	Nil	Professional
CS.SE.0214	Islamic Studies-II	4	4		4	Islamic studies I	Inclusive
CS.SE.0215	Environment of Conservation	1	1		1	Nil	Inclusive
Total		20	18	4	22		
Total number of Credits							20
Second year							

Third semester							
Course Code	Course Name	Credits	Credits / Hours			Pre-Requisites	Category
			Lectures	Lab	Total		
CS.SE.0320	Islamic Studies-III	4	4		4	Islamic Studies II	Inclusive
CS.SE.0315	Web Engineering I	4	3	2	5	Nil	Professional
CS.SE.0316	Discrete Mathematics	3	3		3	Nil	Core
CS.SE.0317	Operating System	3	3		3	Introduction to IT	Professional
CS.SE.0314	Business Study II	2	2		2	Business Study	Core
CS.SE.0318	Digital Logic Design	2	2		2	Linear algebra/ Physics	Professional
CS.SE.0319	Database-I	3	3		3	Introduction to IT	Professional
Total		21	20	2	22		
Total number of Credits							21

Second year							
Fourth semester							
Course Code	Course Name	Credits	Credits / Hours			Pre-Requisites	Category
			Lectures	Lab	Total		
CS.SE.0424	Islamic Studies-IV	3	3		3	Islamic Studies III	Inclusive
CS.SE.0420	Software Engineering-I	3	3		3	OOP programming	Professional
CS.SE.0419	Database- II	4	3	2	5	Database-I	Professional
CS.SE.0421	Differential Equations	3	3		3	Linear Algebra	Core
CS.SE.0422	Computer Architecture and Organization	2	2		2	Introduction to IT	Professional
CS.SE.0415	Web Engineering-II	4	3	2	5	Web Engineering-I	Professional
CS.SE.0423	Financial Management	2	2		2	Nil	Core
Total		21	19	4	23		
Total number of Credits							21

Third year							
Fifth semester							
	Course Name	Credits	Credits / Hours				Category

Course Code			Lectures	Lab	Total	Pre-Requisites	
CS.SE.0524	Statistics and Probability	3	3		3	Linear algebra	Core
CS.SE.0525	Advance Programming Techniques	3	2	2	4	Object Oriented Programming	Professional
CS.SE.0526	System Networking	4	3	2	5	Data communication	Professional
CS.SE.0527	Electronic Commerce	2	2		2	Nil	Professional
CS.SE.0528	Research Methodology	3	3		3	Statistics	Thesis
CS.SE.0520	Software Engineering-II	2	2		2	Software Engineering-I	Professional
CS.SE.0529	Islamic Studies V	4	4		4	Islamic Studies IV	Inclusive
Total		21	19	4	23		
Total number of Credits							21

Third year

Sixth semester

Course Code	Course Name	Credits	Credits / Hours			Pre-Requisites	Category
			Lectures	Lab	Total		
CS.SE.0629	Data Structure	4	3	2	5	OOP programming	Professional
CS.SE.0630	Compiler Construction	3	3		3		Professional
CS.SE.0631	Management Information System	2	2		2	Database-1	Professional
CS.SE.0632	Advance Networking	4	3	2	5	System Networking	Professional
CS.SE.0633	Java Programming	3	2	2	4	OOP Programming	Professional
CS.SE.0634	Artificial Intelligence	3	3		3	Web-1	Professional
CS.SE.0635	Islamic Studies VI	2	2		2	Islamic Studies V	Inclusive
Total		21	18	6	24		

Total number of Credits

21

Fourth year

Seventh semester

Course Code	Course Name	Credits	Credits / Hours			Pre-Requisites	Category
			Lectures	Lab	Total		

CS.SE.0734	Advance Java	4	3	2	5	Java Programming/ Object oriented programming	Professional
CS.SE.0735	Business Communication and Technical Writing	2	2		2	Nil	Core
CS.SE.0736	Computer Graphics	3	3		3	OOP programming	Professional
CS.SE.0737	Software requirements engineering	3	3		3	Software Engineering-I,II	Elective
CS.SE.0738	Analysis of Algorithms	4	3	2	5	Data structure	Professional
CS.SE.0739	Islamic Studies VII	2	2		2	Islamic Studies VI	Inclusive
		18	16	4	20		
Total number of Credits							18

7th Semester Departmental Elective							
Course Code	Course Name	Credits	Credits / Hours			Pre-Requisites	Category
			Lectures	Lab	Total		
CS.SE.0737	Software requirements engineering	3	3		3	Software Engineering-I,II	Elective
CS.SE.0739	Software Quality and Testing	3	3		3	Software Engineering-I,II	Elective

Fourth year

Eighth semester

Course Code	Course Name	Credits	Credits / Hours			Pre-Requisites	Category
			Lectures	Lab	Total		

CS.SE.0839	Database Administration	4	3	2	5	Database I,II	Professional
CS.SE.0840	Software Project Management	3	3		3	Software Engineering I,II	Professional
CS.SE.0841	Mobile Application	4	3	2	5	Java programming	Elective
CS.SE.0842	Thesis	6	6		6		Thesis/Project
CS.SE.0839	Islamic Studies VIII	2	2		2	Islamic Studies VII	Inclusive
Total		19	17	4	21		
Total number of Credits							19

8th Semester Departmental Elective							
Course Code	Course Name	Credits	Credits / Hours			Pre-Requisites	Category
			Lectures	Lab	Total		
CS.SE.0841	Mobile Application	4	3	2	5	Java programming	Elective
CS.SE.0845	Distributed Database	4	3	2	5	Database I,II	Elective