Software Engineering

First Year

Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
Fall Semester					**Spring Semester**				
CT-153	Programming Languages.	3	1	4	SE-201	Object Oriented Concepts & Programming.	3	1	4
CT-174	Fundamentals of Information Tech.	2	1	3	PH-122	Applied Physics	3	1	4
CT-162	Discrete Structures.	3	0	3	SE-207	Software Engineering	3	0	3
HS-104	Functional English.	3	0	3	HS-115	Academic Reading and Writing	3	0	3
MT-173	Calculus	3	0	3	HS-205	Islamic Studies. OR	2	0	2
HS-105	Pakistan Studies. OR	2	0	2	HS-209	Ethical Behaviour (For Non-Muslims)			
HS-127	Pakistan Studies. (For Foreigners)				HSK-I	Chinese Language			NC

Second Year

Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
Fall Semester					**Spring Semester**				
MT-273	Differential Equations & Linear Algebra	3	0	3	SE-204	Database Management Systems.	3	1	4
HS-218	Business Communication	2	1	3	SE-206	Web Engineering	3	1	4
CT-157	Data Structure Algorithms and Applications	3	1	4	SE-308	Software Design and Architecture	2	1	3
SE-208	Software Requirements Engineering	3	0	3	MT-331	Probability & Statistics	3	0	3
CT-258	Financial & Cost Accounting.	3	0	3	HS-219	Professional Ethics	2	0	2
HSK-II	Chinese Language			NC					

Third Year

Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
Fall Semester					**Spring Semester**				
IF-301	Applied Economics for Engineers	3	0	3	CS-351	Computer Communication Networks.	3	1	4
SE-302	Human Computer Interaction	3	0	3	SE-309	Software Quality Engineering	2	1	3
SE-303	Operating Systems.	3	1	4	SE-310	Software Project Management	3	0	3
SE-312	Software Construction & Development	2	1	3	SE-311	E-Commerce	3	0	3
SE-313	Formal Method in Software Engineering	3	0	3	SE-###	Elective I	3	1	4

Final Year

Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
Fall Semester					**Spring Semester**				
CT-460	Network & Information Security.	3	1	4	HS-403	Entrepreneurship.	3	0	3
SE-405	Modeling & Simulation	3	0	3	SE-408	Design Patterns	3	0	3
SE-409	Software Re-Engineering	3	0	3	SE-410	Stochastic Processes	3	0	3
SE-###	Elective II,	3	1	4	SE-###	Elective III	3	0	3
SE-499	Software Based Project.	-	3	3	SE-499	Software Based Project.	0	6	6

Elective-I & Elective-II Courses		**Elective-II & Elective-III Courses**	
SE-202	Computer Graphics	SE-484	Software Testing Strategies and Techniques
CT-361	Artificial Intelligrnce & Expert Systems	SE-485	Software Reliability Engineering
SE-406	Distributed Computing	SE-486	Information Systems Engineering
SE-407	Data Warehouse & Mining	SE-487	Cloud Computing
SE-487	Mobile Application Development		
SE-488	Computer Vision Fundamentals		