Scheme of Studies BS Computer Science

First Year

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CT-175	Programming Fundamentals	3	1	4	CS-251	Logic Design & Switching Theory.	3	1	4
CT-174	Fundamentals of Information Technology	2	1	3	CT-162	Discrete Structures.	3	0	3
MT-171	Differential & Integral Calculus	3	0	3	CT-251	Object Oriented Programming.	3	1	4
PH-122	Applied Physics.	3	1	4	HS-104	Functional English.	3	0	3
HS-205	Islamic Studies. OR	2	0	2	HS-105	Pakistan Studies. OR	2	0	2
HS-209	Ethical Behaviour.				HS-127	Pakistan Studies. (For Foreigners)			
					HSK-1	Chinese Language	-	-	NC
					HS-200	Community Service	-	-	NC

Second Year

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CT-159	Data Structure Algorithms & Applications.	3	1	4	CS-252	Computer Architecture & Organization.	3	1	4
CT-259	System Analysis Design.	3	0	3	CT-261	Database Management Systems.	3	1	4
MT-227	Differential Equations.	3	0	3	HS-218	Business Communication	2	1	3
HS-219	Professional Ethics	2	0	2	MT-272	Linear Algebra & Geometry..	3	0	3
HS-115	Academic Reading & Writing	3	0	3	CT-258	Financial & Cost Accounting.	3	0	3
HSK-2	Chinese Language.	-	-	NC					

Third Year

Fall Semester					Spring Semester				
Course Code	Course Title	Th	Pr	Total	Course Code	Course Title	Th	Pr	Total
CT-365	Software Engineering	3	0	3	CT-376	Computer Communication Networks.	3	1	4
CT-363	Design & Analysis of Algorithms.	3	0	3	CT-362	Web Engineering.	3	1	4
CT-353	Operating Systems.	3	1	4	CT-367	Theory of Programming Languages.	3	0	3
MT-331	Probability & Statistics	3	0	3	CT-361	Artificial Intelligence & Expert Systems.	3	1	4
CT-364	Theory of Automata and Formal Languages.	3	0	3	MT-442	Numerical Methods.	3	0	3

Final Year											
Fall Semester						**Spring Semester**					
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
MG-482	Organisational Behaviour.	3	0	3	CS-428	Parallel & Distributed Computing	3	1	4
CT-486	Network & Information Security.	3	1	4	MG-481	Entrepreneurship.	3	0	3
CT-###	Elective-I.	3	0	3	CT-465	Compiler Design.	3	0	3
CT-###	Elective-II.	3	1	4	CT-##	Elective-III.	3	1	4
CT-499	Software Based Project.	-	3	3	CT-499	Software Based Project.	0	3	3

Elective-I Courses	
CT-366	E-Commerce
CT-485	Natural Language Processing
CT-464	Modelling & Simulation

Elective-II & Elective-III Courses	
CT-.352	Computer Graphics
CT-487	Visual Programming
CT-488	Distributed Computing.
CT-463	Data Warehousing & Mining.
CT-481	Wireless Network & Mobile Computing
CT-484	Introduction to Cyber Security