BS Information Technology				
Scheme of Studies 2023				
BS Information Technology degree will be awarded with 130 credit hours				
SEMESTER-I				
Course Code	**Course Category**	**Course Title**	**Credit Hours**	**Pre-requisite**
GER-100	General	Application of Information and Communication Technologies	3(2-3)	None
CMP-103	Core	Programming Fundamentals	4 (3-3)	None
GER-105	GER	Functional English	3(3-0)	None
GER-103	GER	Calculus and Analytical Geometry	3(3-0)	None
GER-104	GER	Discrete Structures	3(3-0)	None
Total Cr Hrs			**16 (14-6)**	
SEMESTER-II				
Course Code	**Course Category**	**Course Title**	**Credit Hours**	**Pre-requisite**
CMP-101	Core	Digital Logic Design	3(2-3)	
CMP-112	Core	Object Oriented Programming	4(3-3)	Programming Fundamentals
GER-102	GER	Natural Science (Applied Physics)	3 (3-0)	
MT-111	Math	Linear Algebra	3(3-0)	

Course Code	Course Category	Course Title	Credit Hours	Pre-requisite
CMP-104	Core	Software Engineering	3 (3-0)	
	Total Cr Hrs		15 (13-6)	

SEMESTER-III

Course Code	Course Category	Course Title	Credit Hours	Pre-requisite
CMP-214	Core	Data Structures	4 (3-3)	Object Oriented Programming
CMP-206	Core	Information Security	3 (2-3)	
CMP-201	Core	Artificial Intelligence	3 (2-3)	
CMP-202	Core	Computer Networks	3 (2-3)	
GER-202	GEN	Ideology and Constitution of Pakistan	2(2-0)	
MT-202	Maths	Probability & Statistics	3 (3-0)	
	Total Cr Hrs		19 (15-12)	

SEMESTER-IV

Course Code	Course Category	Course Title	Credit Hours	Pre-requisite
CMP-213	Core	Computer Organization & Assembly Language	3 (2-3)	Digital Logic Design
CMP-302	Core	Operating Systems	3 (2-3)	

Course Code	Course Category	Course Title	Credit Hours	Pre-requisite
CMP-205	Core	Database Systems	4 (3-3)	
MT-211	Math	Multivariable Calculus	3(3-0)	
GER-211	GER	Expository Writing	3 (3-0)	
GER-203	GER	Islamic Studies	2 (2-0)	
		Total Cr Hrs	**18 (14- 12)**	

		SEMESTER-V		
Course Code	**Course Category**	**Course Title**	**Credit Hours**	**Pre-requisite**
ITC-311	Domain Core	Domain Core 1 (Web Technologies)	3 (2-3)	
ITC-302	Domain Core	Domain Core 3 (Database Administration and management)	3 (2-3)	
ITC-304	Domain Core	Domain Core 4 (System and Network Administration)	3 (2-3)	
	Domain Elective	Domain Elective 1	3 (2-3)	
CMP-311	Core	Analysis of Algorithms	3 (3-0)	Data Structures
GER-305	General	Social Science (Example: Introduction to Management)	2 (2-0)	
		Total Cr Hrs	**17 (13-12)**	

Commented [P1]: Shifted to 5th semester

		SEMESTER-VI		
Course Code	**Course Category**	**Course Title**	**Credit Hours**	**Pre-requisite**
ITC-303	Domain Core	Domain Core 5 (IT Infrastructures)	3 (2-3)	
ITC-411	Domain Core	Domain Core 6 (Parallel & Distributed Computing)	3 (2-3)	Operating Systems

Course Code	Course Category	Course Title	Credit Hours	Pre-requisite
IT-354	Domain Elective	Domain Elective 3 (Example: Mobile Application Development 1)	3 (2-3)	
	Domain Elective	Domain Elective 4	3 (2-3)	
GER-403	GER	Arts & Humanities (Professional Practices)	2 (2-0)	GER-403
EW-411	EN	Technical & Business Writing	3 (3-0)	
		Total Cr Hrs	**18 (14-12)**	

SEMESTER-VII

Course Code	Course Category	Course Title	Credit Hours	Pre-requisite
CMP-401	Core	Final Year Project - I	2 (0-6)	
	Domain Elective	Domain Elective 5	3 (2-3)	
	Domain Elective	Domain Elective 6 (Example: Software Testing & Quality Assurance)	3 (2-3)	
SS-303	SS	Elective Supporting Course (Example: Introduction to Psychology)	3 (3-0)	
	Domain Elective	Domain Elective 7	3 (2-3)	
GER-402	GER	Entrepreneurship	2 (2-0)	
		Total Cr Hrs	**16 (11-15)**	

SEMESTER-VIII

Course Code	Course Category	Course Title	Credit Hours	Pre-requisite
CMP-412	Core	Final Year Project - II	4 (0-12)	

ITC-311	Domain Core	Domain Core 2 (Cyber Security)	3 (2-3)	
GER-401	GER	Civics and Community Engagement	2 (2-0)	
	Domain Elective	Domain Elective 2	3 (2-3)	
		Total Cr Hrs	**11 (6-15)**	

Commented [FY3]: Shifted from 5th Semester

Commented [P4]: Shifted to 8th semester