

Semester Wise 4-Year Plan BCS					
Codes	Semester 1	CH	Codes	Semester 2	CH
CV-301	Islamic Studies	2-0	QR-321	Calculus and Analytical Geometry	3-0
SS-306	GE-Social Sciences-I (Introduction to Management)	3-0	CV-302	Pak Studies	2-0
CS-311	Information and Communication Technologies	3-0	CS-321	Programming fundamentals	3-0
NS-303	GE-Natural Science-I (Applied Physics)	3-0	AH-321	GE-Arts and Humanities-I (Professional Practices)	3-0
EW-301	GE-Expository Writing-I	3-0	EW-302	GE-Expository Writing-II	3-0
MATH-311	Linear Algebra	3-0	CS-321L	Programming fundamental Lab	1-0
Total Credit Hours		17	Total Credit Hours		15
Codes	Semester 3	CH	Codes	Semester 4	CH
CS-411	Object Oriented Programming	3-0	CS-421	Research Methods	3-0
SS-303	GE-Social Sciences-II (Psychology)	3-0	CS-422	Operating Systems	2-0
AH-305	GE-Arts and Humanities-II (Islamic History)	3-0	CS-423	Data Structure	3-0
CS-412	Computer Networks	2-0	NS-421	GE-Natural Science-II	3-0
EW-303	GE-Expository Writing-III	3-0	CS-424	Database System	2-0
CS-411L	Object Oriented Programming Lab	1-0	CS-424L	Database Systems Lab	1-0
CS-412L	Computer Networks Lab	1-0	CS-422L	Operating Systems Lab	1-0
MATH-411	Probability and Statistics	3			
Total Credit Hours		19	Total Credit Hours		15
Codes	Semester 5	CH	Codes	Semester 6	CH
CS-513	Introduction to Software Engineering	3-0	CS-526	Theory of Automata	3-0
CS-512	Digital Logic Design	3-0	CS-523	Artificial Intelligence	3-0
CS-511	Advanced Computer Programming (Java)	3-0	CS-522	Computer Organization and Assembly Language	2-0
CS-514	Design and Analysis of Algorithms	3-0	CS-524	Software Engineering-II	3-0
CS-515	Discrete Structures	3-0	CS-521	Minor (Web Application Development)	2-0
EC-511L	Advanced Computer Programming Lab	1-0	CS-521L	Minor (Web Application Development) Lab	1-0
Math-511	Multivariable Calculus	3-0	CC-522L	Computer Organization and Assembly Language Lab	1-0
Total Credit Hours		19	Total Credit Hours		15
Codes	Semester 7	CH	Codes	Semester 8	CH
CS-611	Compiler Construction	3-0	CS-624	Information Security	3-0
CS-612	Human Computer Interaction	3-0	CS-623	Minor 3 (Fuzzy Logic and Control)	3-0
CS-613	Database-II	3-0	CS-622	Minor 4 (Data Mining and Warehouse)	3-0
CS-614	Minor 2 (Web Engineering)	2-0	CS-625	Parallel and Distributed System	3-0
CS-614L	Minor 2 (Web Engineering) Lab	1-0	CS-626	Final Year Project (Part-II)	3-0
CS-615	Internet of Things	3-0			
CS-616	Final Year Project (Part-I)	3-0			
Total Credit Hours		18	Total Credit Hours		15
Grand Total Credit Hours: 17+15+19+15+19+15+18+15=133					