

Semester Wise 4-Year Plan for BCS(Cyber Security)					
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
CC-311	Information and Communication Technologies	3-0	CC-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	CC-321L	Programming fundamental Lab	1-0
Total Credit Hours		17	Total Credit Hours		15
Codes	Semester 3	CH	Codes	Semester 4	CH
CC-411	Object Oriented Programming	3-0	CC-421	Research Methods	3-0
SS-303	GE-Social Sciences-II (Psychology)	3-0	CC-422	Operating Systems	2-0
AH-305	GE-Arts and Humanities-II (Islamic History)	3-0	CC-423	Data Structure	3-0
CC-412	Computer Networks	2-0	NS-421	GE-Natural Science-II	3-0
EW-303	GE-Expository Writing-III	3-0	CC-424	Database System	2-0
CC-411L	Object Oriented Programming Lab	1-0	CC-424L	Database Systems Lab	1-0
CC-412L	Computer Networks Lab	1-0	CC-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
CC-511	Information Security	3-0	CC-521	Cyber Security	2-0
CC-512	Digital Logic Design	3-0	CC-526	CySec Elective – 1	3-0
CC-513	Software Engineering	3-0	CC-522	Computer Organization and Assembly Language	2-0
CC-514	Analysis of Algorithms	3-0	CC-524	Secure Software Design and Dev.	3-0
QR-306	GE-Quantitative Reasoning-II (Discrete Structures)	3-0	CC-523	Artificial Intelligence	3-0
MATH-511	Multivariable Calculus	3-0	CC-525	Information Assurance	3-0
			CC-522L	Computer Organization and Assembly Language Lab	1-0
			CC-521L	Cyber Security Lab	1-0
Total Credit Hours		18	Total Credit Hours		18
Codes	Semester 7	CH	Codes	Semester 8	CH
CC-611	CySec Elective- 2(Vulnerability Assessment & Reverse Engg)	3-0	CC-621	CySec Elective-4	3-0
CC-612	Digital Forensics	2-0	CC-625	Parallel & Distributed Computing	2-0
CC-613	Network Security	2-0	CSE-622	CySec Elective-5	3-0
CC-614	CySec Elective-3	3-0	CSE-623	CySec Elective-6	3-0
CC- 601	Entrepreneurship	2-0	CSE-624	CySec Elective-7	3-0
CC-616	Final Year Project (Part-I)	3-0	CC-625L	Parallel & Distributed Computing Lab	1-0
CC-613L	Network Security Lab	1-0	CC-626	Final Year Project (Part-II)	3-0
CC-612L	Digital Forensics Lab	1-0			
Total Credit Hours		17	Total Credit Hours		18
Grand Total Credit Hours: 17+15+19+15+18+18+17+18=137					