	Semester Wise 4-Year Plan BCS(AI)				
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
CAI-311	Information and Communication Technologies	3-0	CAI-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	CAI-321L	Programming fundamental Lab	1-0
	Total Credit Hours	**17**		**Total Credit Hours**	**15**
Codes	**Semester 3**	**CH**	**Codes**	**Semester4**	**CH**
CAI-411	Object Oriented Programming	3-0	CAI-421	Research Methods	3-0
SS-303	GE-Social Sciences-II (Psychology)	3-0	CAI-422	Operating Systems	2-0
AH-305	GE-Arts and Humanities-II (Islamic History)	3-0	CAI-423	Data Structure	3-0
CAI-412	Computer Networks	2-0	NS-421	GE-Natural Science-II	3-0
EW-303	GE-Expository Writing-III	3-0	CAI-424	Database System	2-0
CAI-411L	Object Oriented Programming Lab	1-0	CAI-424L	Database Systems Lab	1-0
CAI-412L	Computer Networks Lab	1-0	CAI-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**
CAI-513	Introduction to Software Engineering	3-0	CAI-526	Theory of Automata	3-0
CAI-512	Digital Logic Design	2-0	CAI-527	Knowledge Representation and Reasoning	3
CAI-523	Artificial Intelligence	3-0	CAI-527	Programming for Artificial Intelligence	2
CAI-514	Design and Analysis of Algorithms	3-0	CAI-525	Artificial Neural Network (ANN)	3
CAI-515	Discrete Structures	3-0	CAI-521	Minor (Web Application Development)	2-0
CAI-522	Computer Organization and Assembly Language	2-0	CAI-521L	Minor (Web Application Development) Lab	1-0
CAI-522L	Computer Organization and Assembly Language Lab	1-0	CAI-527L	Programming for Artificial Intelligence Lab	1-0
CAI-512L	Digital Logic Design Lab	1-0			
	Total Credit Hours	**18**		**Total Credit Hours**	**15**
Codes	**Semester 7**	**CH**	**Codes**	**Semester 8**	**CH**
CAI-612	Digital Image Processing	3-0	CAI-623	Natural Language Processing	3-0
CAI-613	Computer Vision	2-0	CAI-622	Minor IV (Mobile Application Development)	2-0
CAI-614	Machine Learning	2-0	CAI-624	Information Security	3-0
CAI-617	Minor III (Advanced Statistics)	3-0	CAI-625	Parallel and Distributed System	3-0
CAI-613L	Computer Vision Lab	1-0	CAI-622L	Minor III (Mobile Application Development Lab)	1-0
CAI-614L	Machine Learning Lab	1-0	CAI-626	Final Year Project (Part-II)	3-0
Math-611	Multivariable Calculus	3-0			
CAI-616	Final Year Project (Part-I)	3-0			
	Total Credit Hours	**18**		**Total Credit Hours**	**15**
	Grand Total Credit Hours: **17+15+19+15+18+15+18+15=132**				