



COURSES OF BS COMPUTER SCIENCE

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First Year, Semester-I

S. No.	Course Title	Credit Hours	Code
1.	Programming Fundamentals	3+1	CS-301
2.	Pakistan Studies	2	PS-351
3.	Calculus and Analytical Geometry	3	MTH-301
4.	Introduction to ICT	3	CS-303
5.	English Composition & Comprehension	3	ENG-301
6.	Islamic Studies (UE)/ Ethics (UE)	2	ISL-301/ ETH-301
Total C.H		17	

First Year, Semester-II

S. No.	Course Title	Credit Hours	Code
1.	Object Oriented Programming	3+1	CS-351
2.	Technical and Business Writing	2	ENG-351
3.	Linear Algebra	3	MTH-351
4.	Basic Electronics	3+1	CS-352
5.	Applied Physics	3	CS-353
Total C.H		16	

Second Year, Semester-III

S. No.	Course Title	Credit Hours	Code
1.	Data Structures & Algorithms	3+1	CS-401
2.	Discrete Structures	3	MTH-401
3.	Comp Organization & Assembly Lang.	3+1	CS-402
4.	Digital logic and Design	3+1	CS-403
5.	Professional Ethics	2	CS-404
Total C.H		17	

Second Year, Semester-IV

S. No.	Course Title	Credit Hours	Code
1.	Operating Systems	3+1	CS-451
2.	Database System	3+1	CS-452
3.	Computer Networks	3+1	CS-453
4.	Computer Graphics & Animation	2+1	CS-455
5.	Differential Equation	3	MTH-402
Total C.H		18	

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Third Year, Semester-V

S. No.	Course Title	Credit Hours	Code
1.	Theory of Automata	3	CS-501
2.	Software Engineering	3	CS-502
3.	Microprocessor & Interfacing Technique	3+1	CS-503
4.	Probability & Statistics	3	MTH-501
5.	Human Computer Interaction	3	CS-504
Total C.H		16	

Third Year, Semester-VI

S. No.	Course Title	Credit Hours	Code
1.	Artificial Intelligence	3+1	CS-551
2.	Modeling and Simulation	3	CS-553
3.	Operation Research	3	CS-554
4.	Web Technologies	3+1	CS-555
5.	Project Management	2	C-556
Total C.H		16	

Fourth Year, Semester-VII

S. No.	Course Title	Credit Hours	Code
1.	Final Year Project – I	3	CSP-651
2.	Parallel & Distributed Computing	3	CS-601
3.	Wireless Networks	3	CS-603
4.	Data Sciences	3+1	CS-604
5.	Mobile Application Development	3+1	CS-605
Total C.H		17	

Fourth Year, Semester-VIII

S. No.	Course Title	Credit Hours	Code
1.	Final Year Project – II	3	CSP-651
2.	Computer Vision	3	CS-652
3.	Information Security	3	CS-653
4.	Entrepreneurship & Leadership Skills	3	CS-654
5.	Internet of Things	3	CS-655
Total C.H		15	

Note: After the end of VI Semester, it is mandatory for computer science undergraduate students to register for a summer internship. The university shall award a certificate of internship when the student graduates.