

BS Computer Sciences

Proposed Study Plan for BS (Computer Science) Fall 2023 onward

4-Year Program (8 Regular Semesters)

BS(CS)-1 st Semester			
S. No	Code	Course Title	Cr. Hr.
1	GE-301	Application of ICT	3 (2-3)
2	CC-301	Programming Fundamentals	4 (3-3)
3	GE-302	Applied Physics	3 (2-3)
4	GE-303	Functional English	3 (3-0)
5	GE-304	Calculus & Analytical Geometry	3 (3-0)
6	GE-305	Islamic Studies/ Ethics	3 (3-0)
	Total		19 (16-9)
Semester-2			
S. No	Code	Course Title	Cr. Hr.
1	CC-312	Digital Logic Design	3 (2-3)
2	CC-311	Object Oriented Programming-I	4 (3-3)
3	GE-311	Expository Writing	3 (3-0)
4	GE-312	Discrete Structures	3 (3-0)
5	MT-411	Linear Algebra	3 (3-0)
6	GE-313	Ideology and Constitution of Pakistan	2 (2-0)
	Total		18 (16-6)
Semester-3			
S. No	Code	Course Title	Cr. Hr.
1	CC-403	Operating Systems	3 (2-3)
2	CC-401	Data Structures & Algorithms	4 (3-3)
3	CC-404	Comp Organization & Assembly Lang.	3 (2-3)
4	MT-401	Multivariate Calculus	3 (3-0)
5	CC-405	Artificial Intelligence	3 (2-3)
6	CC-402	Software Engineering-I	3 (3-0)
	Total		19 (15-12)
Semster-4			
S. No	Code	Course Title	Cr. Hr.
1	CC-413	Computer Networks	3 (2-3)
2	CC-412	Information Security	3 (2-3)
3	CC-411	Database Systems	4 (3-3)
4	CS-411	Computer Architecture	3 (2-3)
5	MT-411	Probability & Statistics	3 (3-0)
6	GE-411	Introduction to Management	2 (2-0)
	Total		18 (14-12)
Semster-5			
S. No	Code	Course Title	Cr. Hr.
1	CS-501	Advanced Programming	3 (2-3)
2	CS-502	Theory of Automata	3 (3-0)
3	CS-503	Advance Database Management Systems	3 (2-3)
4	CS-504	Web Technologies	3 (2-3)
5	EW-501	Technical & Business Writing	3 (3-0)
6	CC-501	Analysis of Algorithms	3 (3-0)

	Total		18 (15-12)
		Semester-6	
S. No	Code	Course Title	Cr. Hr.
1	CS-511	Parallel & Distributed Computing	3 (2-3)
2	CS-512	Compiler Construction	3 (2-3)
3	CS-513	Web Engineering	3 (2-3)
4	CS-514	Cyber Security	3 (2-3)
5	CS-515	Mobile Application Development	3 (2-3)
6	SS-511	Financial Accounting	3 (3-0)
	Total		18 (13-15)
		Semester-7	
S. No	Code	Course Title	Cr. Hr.
1	CS-602	Cloud Computing	3 (3-0)
2	CS-601	HCI & Computer Graphics	3 (2-3)
3	CC-601	Final Year Project – I	2 (0-6)
4	GE-601	Professional Practices	2 (2-0)
	Total		10 (7-9)
		Semester-8	
S. No	Code	Course Title	Cr. Hr.
1	CS-611	Numerical Analysis	3 (2-3)
2	GE-611	Civics and Community Engagement	2 (2-0)
3	CC-611	Final Year Project – II	4 (0-12)
4	GE-612	Entrepreneurship	2 (2-0)
	Total		11 (6-15)