

Course Offering
Semester: Fall 2025
Program: BS (CS)

S.#	Code	Course Title	Status	No. of Section	Pre-Req.	Co-Req.	Semester	Batch
1.	CS1133	Introduction to Programming	Major Course	4	Nil	CS1131	1	BCS-253
2.	CS1131	Introduction to Programming Lab	Major Course	5	Nil	CS1133	1	BCS-253
3.	CSG1513	Calculus and Analytical Geometry	General Education	4	Nil	Nil	1	BCS-253
4.	CSG1022	Ideology and Constitution of Pakistan	General Education	4	Nil	Nil	1	BCS-253
5.	CSG1612	Applications of Information and Communication Technologies	General Education	4	Nil	Nil	1	BCS-253
6.	CSG1113	Functional English	General Education	4	Nil	CSG1611	1	BCS-253
7.	CSG1611	Applications of Information and Communication Technologies Lab	General Education	5	Nil	CSG1612	1	BCS-253
8.	CS1143	Object Oriented Programming	Major Course	2	CS1133	CS1141	2	BCS-251
9.	CS1141	Object Oriented Programming Lab	Major Course	3	CS1131	CS1143	2	BCS-251
10.	CSG1123	Expository Writing	General Education	2	CSG1113	Nil	2	BCS-251
11.	CSG1412	Sociology	General Education	2	Nil	Nil	2	BCS-251

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12.	CSG1573	Discrete Structures	General Education	2	CS1133	Nil	2	BCS-251
13.	MTCS1033	Linear Algebra	Allied Courses	2	CSG1513	Nil	2	BCS-251
14.	CSG1012	Islamic Studies/Ethics	General Education	2	Nil	Nil	2	BCS-251
15.	CS2143	Data Structures	Major Course	4	CS1143	CS2141	3	BCS-243
16.	CS2141	Data Structures Lab	Major Course	5	CS1141	CS1143	3	BCS-243
17.	MTCS2063	Probability and Statistics	Allied Courses	4	Nil	Nil	3	BCS-243
18.	CSG2212	Personal Grooming	General Education	4	Nil	Nil	3	BCS-243
19.	CS2313	Introduction to Database Systems	Major Course	4	CS1143	CS2311	3	BCS-243
20.	CS2311	Introduction to Database Systems Lab	Major Course	5	CS1141	CS2313	3	BCS-243
21.	CS2512	Digital Logic Design	Major Course	4	CSG1573	CS2511	3	BCS-243
22.	CS2511	Digital Logic Design Lab	Major Course	4	CSG1573	CS2512	3	BCS-243
23.	CSG2712	Entrepreneurship	General Education	4	Nil	Nil	3	BCS-243
24.	CS2223	Software Engineering	Major Course	2	CS2313	Nil	4	BCS-241
25.	CS2322	Database Management Systems	Major Course	2	CS2313	CS2321	4	BCS-241
26.	CS2321	Database Management Systems Lab	Major Course	3	CS2311	CS2322	4	BCS-241
27.	CS2522	Computer Organization and Assembly Language	Major Course	2	Nil	CS2521	4	BCS-241

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28.	CS2521	Computer Organization and Assembly Language Lab	Major Course	3	Nil	CS2522	4	BCS-241
29.	CS2772	Computer Networks	Major Course	2	CS2143	CS2771	4	BCS-241
30.	CS2771	Computer Networks Lab	Major Course	3	CS2141	CS2772	4	BCS-241
31.	CSG2812	Civics and Professional Ethics	General Education	2	Nil	Nil	4	BCS-241
32.	MTCS2053	Multi-variate Calculus	Allied Course	2	MTCS2063	Nil	4	BCS-241
33.	CS3163	Design and Analysis of Algorithms	Major Course	3	CS2143	Nil	5	BCS-233
34.	CS3613	Theory of Automata and Formal Languages	Major Course	3	CSG1573	Nil	5	BCS-233
35.	CS3283	Graph Algorithms	Major Course	3	CSG1573	Nil	5	BCS-233
36.	CS3412	Operating Systems	Major Course	3	CS2143	CS3411	5	BCS-233
37.	CS3411	Operating Systems Lab	Major Course	4	CS2141	CS3412	5	BCS-233
38.	CS3712	Introduction to information security and forensics	Major Course	3	CS3772	CS3711	5	BCS-233
39.	CS3711	Introduction to information security and forensics Lab	Major Course	4	CS3772	CS3712	5	BCS-233
40.	CS3512	Computer Architecture	Major Course	3	Nil	Nil	5	BCS-233
41.	CS3511	Computer Architecture Lab	Major Course	4	Nil	Nil	5	BCS-233
42.	CS3433	Parallel and Distributed Computing	Core	2	CS2523	Nil	6	BCS-231

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43.	CS4813	Artificial Intelligence	Core	2	CS3163	CS4811	6	BCS-231
44.	CS4811	Artificial Intelligence Lab	Core	2	CS3163	CS4813	6	BCS-231
45.	CS3833	Theory of Programming Languages	CS Supporting	2	CS3163	Nil	6	BCS-231
46.	CS3193	Web Application Development	Elective I	2	CS2313	Nil	6	BCS-231
47.	CS4743	Internet of the Things	Elective_II	2	Nil	Nil	6	BCS-231
48.	ACCS3003	Financial Accounting	Uni. Elective	2	MTCS1013	Nil	6	BCS-231
49.	CS4623	Compiler Construction	Core	3	CS3613	Nil	7	BCS-223
50.	CS4912	Design Project (Part-I)	Core	1	CS2223 & 90cr.	Nil	7	BCS-223
51.	CS4573	Blockchain Technology	Elective_III	3	CS1133	Nil	7	BCS-223
52.	CS4843	Computer Forensics	Elective_IV	3	Nil	Nil	7	BCS-223
53.	HMCS2013	Professional Ethics and Legal Issues	G. Edu	3	Nil	Nil	7	BCS-223
54.	MGCS4003	Entrepreneurship and Innovation	Uni Elective	3	Nil	Nil	7	BCS-223
55.	CS4333	Introduction to Data Warehousing	Elective_V	2	CS2313	Nil	8	BCS-221
56.	CS4924	Design Project (Part-II)	Core	1	CS4912	Nil	8	BCS-221
57.	HMCS1033	Personal Management and Grooming	G. Edu	2	Nil	Nil	8	BCS-221