

Faculty of Information Technology

Semester: Spring 2022

BS Computer Science:

<u>S #</u>	<u>Course Code</u>	<u>Course Title</u>	<u>Sections</u>	<u>Semester</u>
1	CSCS1513	Introduction to Computing	4	1
2	CSCS1511	Introduction to Computing Lab	4	1
3	CSHU2833	Logic Thinking (UCP Elective I)	4	1
4	CSHU1823	English Composition & Comprehension	4	1
5	CSSS1723	Basic Electronics	4	1
6	CSHU1863	Islamic and Religious Studies	4	1
7	CSSS1813	Pre-calculus (Only for Medical Background)	4	1
8	CSCP1013	Programming Fundamentals	20	2
9	CSCP1011	Programming Fundamentals Lab	20	2
10	CSCS2523	Digital Logic Design	20	2
11	CSCS2521	Digital Logic Design Lab	20	2
12	CSSS1713	Calculus and Analytical Geometry	20	2
13	CSHU1873	Communication & Presentation Skills	20	2
14	CSHU1893	Pakistan Studies	20	2
15	CSSS1853	Elementary Algebra	20	2
16	CSCP2023	Object Oriented Programming	5	3
17	CSCP2021	Object Oriented Programming Lab	5	3

18	CSCS3543	Computer Org. & Assembly Lang.	5	3
19	CSCS3541	Computer Org. & Assembly Lang. Lab	5	3
20	CSSS2733	Multivariate Calculus	5	3
21	CSAL1213	Discrete Structures	5	3
Uni-Elective Courses, Select any 1 course from the following:				
22	CSMG1923	Financial Accounting	1	3
23	CSHU1843	Introduction to Psychology	3	3
24	CSMG1933	Introduction to Business	1	3
25	CSCP2033	Data Structure & Algorithms (DSA-T) – Theory	13	4
26	CSCP2031	Data Structure & Algorithms (DSLAB) – Lab	13	4
27	CSDB2313	Introduction to Database Systems (DB-T) – Theory	13	4
28	CSDB2311	Introduction to Database Systems (DB-LAB) – Lab	13	4
29	CSSS2743	Probability and Statistics (PROB)	13	4
30	CSSS2753	Linear Algebra (LA)	13	4
CS- Elective, Select any 1 course from the following:				
31	CSST3663	Microcontroller Programming and Interfacing (MPI)	3	4
32	CSSE4153	Human Computer Interaction	3	4
33	CSIP3113	Digital Signal Processing	3	4
34	CSAL4323	3D Computer Graphics (3DCG)	1	4
35	CSDS4423	Programming for Big Data (PBD)	3	4

36	CSCS3553	Operating Systems (OS-T) – Theory	4	5
37	CSCS3551	Operating Systems (OS- Lab) – Lab	4	5
38	CSSE3113	Introduction to Software Engineering - I (ISD)	4	5
39	CSAL3233	Design and Analysis of Algorithm (AA)	4	5
40	CSSS2763	Differential Equation (DE)	4	5
CS- Elective, Select any 1 course from the following:				
41	CSSE3143	Web Application Development (WAD)	1	5
42	CSCP3063	Mobile Application Development (MAD)	1	5
43	CSAL3203	Introduction to Image Processing (IIP)	1	5
44	CSST3633	Game Development (GD) – CSST3633	1	5
45	CSAL3243	Artificial Intelligence (AI- T)	7	6
46	CSAL3241	Artificial Intelligence (AI- Lab)	7	6
47	CSNC2413	Computer Communications and Networks (CCN-T)	7	6
48	CSNC2411	Computer Communications and Networks (CCN-Lab)	7	6
49	CSAL3253	Theory of Automata (TOA)	7	6
50	CSHU2813	Technical and Business Writing (ENG-3)	7	6
CS- Elective, Select any 1 course from the following:				
51	CSDB3363	Data Analysis Techniques (DAT)	2	6
52	CSAL3213	Advanced 3D Modeling for Games (ADMG)	2	6
53	CSDB4363	Schemaless Database System	1	6
54	CSAL3273	Mathematics For Machine Learning	1	6

55	CSAC3613	Computational Geometry for Designing and Animation (CGDA)	1	6
56	CSNC3413	Information Security (ISEC)	3	7
57	CSCS4573	Compiler Construction (CC)	3	7
58	CSAL4263	Numerical Computing (NM)	3	7
59	CSSE4173	Final Year Project 1 (FYP-I)	1	7
Uni- Elective Select any 1 course from the following:				
60	CSMG3943	Organizational Behavior and Culture (OBC)	2	7
61	CSMG2913	Technology Entrepreneurship (TENT)	1	7
CS- Elective Select any 1 courses from the following:				
62	CSDB3263	Introduction to Computer Vision	1	7
63	CSDS4473	Big Data Analytics	1	7
64	CSDB4313	Introduction to Data Science (IDS)	1	7
65	CSGE4963	Professional Practices(PP)	5	8
66	CSCS2543	Parallel and Distributed Computing	5	8
67	CSSE4183	Final Year Project 2 (FYP-II)	1	8
CS- Elective Select any 1 courses from the following:				
68	CSAL4253	Introduction to Natural Language Processing (I-NLP)	1	8
69	CSNC3443	Blockchain Essentials	1	8
70	CSAL4333	Intoduction to Deep Learning	1	8
71	CSAL4243	Introduction to Machine Learning (IML)	1	8

72	CSSE4193	Software Testing	1	8
Uni- Elective Select any 1 course from the following:				
73	CSHU3873	Speak Well - English Conversation	1	8
74	CSMG4913	Fundamentals of Enterprise Resource Planning	2	8
75	CSMG2943	The Aesthetic Approach	2	8