

BS Computer Science

Sections: 25, A1 to A25		
Course Code	Course Title	No. of Sections
CSCS1513	Introduction to Computing	25
CSCS1511	Introduction to Computing Lab	25
CSHU2833	Logic Thinking (UCP Elective I)	25
CSHU1823	English Composition & Comprehension	25
CSSS1723	Basic Electronics	25
CSHU1863	Islamic and Religious Studies	25
CSSS1813	Pre-calculus (Only for Medical Background)	4
Sections: 10, B1 to B10		
Course Code	Course Title	No. of Sections
CSCP1013	Programming Fundamentals	10
CSCP1011	Programming Fundamentals Lab	10
CSCS2523	Digital Logic Design	10
CSCS2521	Digital Logic Design Lab	10
CSSS1713	Calculus and Analytical Geometry	10
CSHU1873	Communication & Presentation Skills	10
CSHU1893	Pakistan Studies	10
CSSS1853	Elementary Algebra	2
Sections: 20, C1 to C20		
Course Code	Course Title	No. of Sections
CSCP2023	Object Oriented Programming	20
CSCP2021	Object Oriented Programming Lab	20
CSCS3543	Computer Org. & Assembly Lang.	20

Semester 3	CSCS3541	Computer Org. & Assembly Lang. Lab	20
	CSSS2733	Multivariate Calculus	20
	CSAL1213	Discrete Structures	20
	Uni-Elective Courses, Select any 1 course from the following:		
	CSMG1923	Financial Accounting	7
	CSHU1843	Introduction to Psychology	3
CSMG1933	Introduction to Business	9	
Semester 4	Sections: 5, D1 to D5		
	Course Code	Course Title	No. of Sections
	CSCP2033	Data Structure & Algorithms (DSA-T) – Theory	5
	CSCP2031	Data Structure & Algorithms (DSLAB) – Lab	5
	CSDB2313	Introduction to Database Systems (DB-T) – Theory	5
	CSDB2311	Introduction to Database Systems (DB-LAB) – Lab	5
	CSSS2743	Probability and Statistics (PROB)	5
	CSSS2753	Linear Algebra (LA)	5
	CS- Elective, Select any 1 course from the following:		
	CSST3663	Microcontroller Programming and Interfacing (MPI)	1
	CSSE4153	Human Computer Interaction	1
	CSIP3113	Digital Signal Processing	1
	CSAL4323	3D Computer Graphics (3DCG)	1
CSDS4423	Programming for Big Data (PBD)	1	
Sections: 13, E1 to E13			
Course Code	Course Title	No. of Sections	
CSCS3553	Operating Systems (OS-T) – Theory	13	
CSCS3551	Operating Systems (OS-Lab) – Lab	13	

Semester 5	CSSE3113	Introduction to Software Engineering - I (ISD)	13
	CSAL3233	Design and Analysis of Algorithm (AA)	13
	CSSS2763	Differential Equation (DE)	13
	CS- Elective, Select any 1 course from the following:		
	CSSE3143	Web Application Development (WAD)	3
	CSCP3063	Mobile Application Development (MAD)	3
	CSAL3203	Introduction to Image Processing (IIP)	2
	CSST3633	Game Development (GD) – CSST3633	3
	CSDB3363	Data Analysis Techniques	2
	Semester 6	Sections: 4, F1 to F4	
Course Code		Course Title	No. of Sections
CSAL3243		Artificial Intelligence (AI-T)	4
CSAL3241		Artificial Intelligence (AI-Lab)	4
CSNC2413		Computer Communications and Networks (CCN-T)	4
CSNC2411		Computer Communications and Networks (CCN-Lab)	4
CSAL3253		Theory of Automata (TOA)	4
CSHU2813		Technical and Business Writing (ENG-3)	4
CS- Elective, Select any 1 course from the following:			
CSAL3213		Advanced 3D Modeling for Games (ADMG)	2
CSAL3273		Mathematics For Machine Learning	1
CSAC3613		Computational Geometry for Designing and Animation (CGDA)	1
		Sections: 7, G1 to G7	
	Course Code	Course Title	No. of Sections
	CSNC3413	Information Security (ISEC)	7
	CSCS4573	Compiler Construction (CC)	7

Semester 7

CSAL4263	Numerical Computing (NM)	7
CSSE4173	Final Year Project 1 (FYP-I)	1
Uni- Elective Select any 1 course from the following:		
CSMG3943	Organizational Behavior and Culture (OBC)	4
CSMG2913	Technology Entrepreneurship (TENT)	3
CS- Elective Select any 1 courses from the following:		
CSSE4193	Software Testing	1
CSDS4473	Big Data Analytics	2
CSAL4253	Introduction to Natural Language Processing	1
CSCS4583	Digital Forensics	1
CSDB4313	Introduction to Data Science (IDS)	2

Semester 8

Sections: H1, H2, H3		
Course Code	Course Title	No. of Sections
CSGE4963	Professional Practices(PP)	3
CSCS2543	Parallel and Distributed Computing	3
CSSE4183	Final Year Project 2 (FYP-II)	1
CS- Elective Select any 1 courses from the following:		
CSAL4253	Introduction to Natural Language Processing (I-NLP)	1
CSNC3443	Blockchain Essentials	1
CSAL4333	Intoduction to Deep Learning	1
CSAL4243	Introduction to Machine Learning	2
CSSE4193	Software Testing	1
Uni- Elective Select any 1 course from the following:		
CSHU3873	Speak Well - English Conversation	1
CSMG4913	Fundamentals of Enterprise Resource Planning	1

CSMG2943	The Aesthetic Approach	1
----------	------------------------	---