

**BS Computer Science****Fall 2023****Semester 1**

<b>Course Code</b>	<b>Course Title</b>	<b>Sections</b>
CSCS1513	Introduction to Computing	24
CSCS1511	Introduction to Computing-LAB	24
CSSS1723	Basic Electronics	24
ENG101	English I	24
PAK101	Pakistan Studies	24
ENT101	Fundamentals of Entrepreneurship	24
PSY101	Introduction to Psychology	6
PLS101	Introduction to Political Science	6
ANT101	Anthropology	6
INR101	Introduction to International Relations	6
CSSS1813	Pre-Calculus	3

**Fall 2023****Semester 2**

<b>Course Code</b>	<b>Course Title</b>	<b>Sections</b>
CSCP1013	Programming Fundamentals	9
CSCP1011	Programming Fundamentals-LAB	9
CSCS2523	Digital Logic and Design	9
CSCS2521	Digital Logic and Design-LAB	9
ENG102	English – II	9

	CSSS1713	Calculus and Analytical Geometry	9
	CSMG1923	Financial Accounting	3
	PSY101	Introduction to Psychology	3
	CSMG1933	Introduction to Business	3
	CSSS1853	Elementary Algebra	2
<b>Semester 3</b>	<b>Fall 2023</b>		
	<b>Course Code</b>	<b>Course Title</b>	<b>Sections</b>
	CSCP2023	Object Oriented Programming	19
	CSCP2021	Object Oriented Programming Lab	19
	CSCS3543	Computer Org. & Assembly Lang.	19
	CSCS3541	Computer Org. & Assembly Lang. Lab	19
	CSSS2733	Multivariate Calculus	19
	CSAL1213	Discrete Structures	19
	ISL201	Islamic Studies	19
<b>Semester 4</b>	<b>Fall 2023</b>		
	<b>Course Code</b>	<b>Course Title</b>	<b>Sections</b>
	CSCP2033	Data Structure & Algorithms (DSA-T) – Theory	8
	CSCP2031	Data Structure & Algorithms (DSLAB) – Lab	8
	CSDB2313	Introduction to Database Systems (DB-T) – Theory	8
	CSDB2311	Introduction to Database Systems (DB-LAB) – Lab	8
CSSS2743	Probability and Statistics (PROB)	8	

	CSSS2753	Linear Algebra (LA)	8
	CSST3663	Microcontroller Programming and Interfacing (MPI)	2
	CSSE4153	Human Computer Interaction	2
	CSIP3113	Digital Signal Processing	1
	CSAL4323	3D Computer Graphics (3DCG)	2
	CSDS4423	Programming for Big Data (PBD)	2
<b>Semester 5</b>	<b>Fall 2023</b>		
	<b>Course Code</b>	<b>Course Title</b>	<b>Sections</b>
	CSCS3553	Operating Systems (OS-T) – Theory	16
	CSCS3551	Operating Systems (OS-Lab) – Lab	16
	CSSE3113	Introduction to Software Engineering - I (ISD)	16
	CSAL3233	Design and Analysis of Algorithm (AA)	16
	CSSS2763	Differential Equation (DE)	16
	CSSE3143	Web Application Development (WAD)	4
	CSCP3063	Mobile Application Development (MAD)	4
	CSAL3203	Introduction to Image Processing (IIP)	3
	CSST3633	Game Development (GD)	3
	CSDB3363	Data Analysis Techniques	2
		<b>Fall 2023</b>	
<b>Course Code</b>		<b>Course Title</b>	<b>Sections</b>
CSAL3243		Artificial Intelligence (AI-T)	4

<b>Semester 6</b>	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
	CSAL3213	Advanced 3D Modeling for Games (ADMG)	2
	CSAL3273	Mathematics For Machine Learning	2
<b>Semester 7</b>	<b>Fall 2023</b>		
	<b>Course Code</b>	<b>Course Title</b>	<b>Sections</b>
	CSNC3413	Information Security (ISEC)	12
	CSCS4573	Compiler Construction (CC)	12
	CSAL4263	Numerical Computing (NM)	12
	CSSE4173	Final Year Project 1 (FYP-I)	1
	CSMG3943	Organizational Behavior and Culture (OBC)	6
	CSMG2913	Technology Entrepreneurship (TENT)	6
	CSSE4193	Software Testing	2
	CSDS4473	Big Data Analytics	3
	CSAL4253	Introduction to Natural Language Processing	3
	CSCS4583	Digital Forensics	1
	CSDB4313	Introduction to Data Science (IDS)	3
<b>Fall 2023</b>			

**Semester 8**

<b>Course Code</b>	<b>Course Title</b>	<b>Sections</b>
CSGE4963	Professional Practices(PP)	3
CSCS2543	Parallel and Distributed Computing	3
CSSE4183	Final Year Project 2 (FYP-II)	3
CSAL4333	Intoduction to Deep Learning	1
CSAL4243	Introduction to Machine Learning	1
CSHU4213	Business Law	1
CSHU3873	Speak Well - English Conversation	1
CSMG4913	Fundamentals of Enterprise Resource Planning	1