



Bachelor of Science in Data Science
2025
School of Engineering and Technology

Program Structure for Bachelor of Science in Data Science (Batch Year: 2025)

CORE (MANDATORY SUBJECTS) CREDITS	132	
UNIVERSITY ELECTIVE CREDITS	26	
UNIVERSITY FOUNDATION PROG. CREDITS	15	(Effective only from 2024)
KHOJ CREDITS	3	
TOTAL PROGRAM CREDITS	176	

PROGRAM STRUCTURE 2025 BATCH

Sr. No.	Sem.	Course Code	Course Name	L	T	P	C
			SEM 1				
1	I		Fundamentals of Mathematics	3	1	0	4
2	I		Discrete Mathematics for Data Science	3	1	0	4
3	I		Programming for Problem Solving	2	1	4	5
			SEM 1 CORE (MANDATORY SUB) CREDITS				13
			SEM 1 UNIELECTIVE CREDITS				4
			SEM 1 UNI. FOUNDATION PROGRAM CREDITS				5
			SEM 1 CREDITS				22
			SEM 2				
4	II		Computer Networks	2	1	2	4
5	II		Database Management System	2	1	4	5
6	II		Fundamentals of Statistics	3	0	2	4
			SEM 2 CORE (MANDATORY SUB) CREDITS				13
			SEM 2 UNIELECTIVE CREDITS				4
			SEM 2 UNI. FOUNDATION PROGRAM CREDITS				5
			SEM 2 CREDITS				22
			SEM 3				
7	III		Object Oriented Programming	2	0	6	5
8	III		Data Structures and Algorithms	2	0	4	4
9	III		Introduction to Web Development	2	1	4	5
			SEM 3 CORE (MANDATORY SUB) CREDITS				14
			SEM 3 UNIELECTIVE CREDITS				5
			SEM 3 UNI. FOUNDATION PROGRAM CREDITS				3
			SEM 3 CREDITS				22
			SEM 4				
10	IV		Software Engineering	2	0	2	3
11	IV		Fundamentals of Cloud Computing	1	0	4	3

12	IV		Fundamentals of Cyber Security	2	0	2	3
13	IV		Essential Mathematics for Data Science	3	1	0	4
14	IV		Essential Statistics for Data Science	3	1	0	4
			SEM 4 CORE (MANDATORY SUB) CREDITS				17
			SEM 4 UNIELECTIVE CREDITS				2
			SEM 4 UNI. FOUNDATION PROGRAM CREDITS				2
			SEM 4 CREDITS				21
			SEM 5				
15	V		Entrepreneurship	3	0	0	3
16	V		Optimization techniques	2	0	2	3
17	V		Cyber Law and Ethics	3	0	0	3
18	V		Mathematical Modelling and Simulation	3	0	0	3
19	V		Artificial Intelligence	2	0	4	4
20	V		Statistical Methods for Predictive Modeling	2	0	2	3
			SEM 5 CORE (MANDATORY SUB) CREDITS				19
			SEM 5 UNIELECTIVE CREDITS				3
			SEM 5 UNI. FOUNDATION PROGRAM CREDITS				0
			SEM 5 CREDITS				22
			SEM 6				
21	VI		Machine Learning	2	0	4	4
22	VI		Data Visualization	2	0	4	4
23	VI		Big Data Analytics	2	0	4	4
24	VI		Forecasting with Time Series Data	2	0	2	3
25	VI		Statistical Computing	2	0	4	4
			SEM 6 CORE (MANDATORY SUB) CREDITS				19
			SEM 6 UNIELECTIVE CREDITS				4
			SEM 6 UNI. FOUNDATION PROGRAM CREDITS				0
			SEM 6 CREDITS				23
			SEM 7				
21	VII		Research Methodologies	3	0	0	3
22	VII		Deep Learning	2	0	4	4
23	VII		Computer Vision	2	0	4	4
24	VII		Natural Language Processing	2	0	4	4
25	VII		Project	0	0	0	4
			SEM 7 CORE (MANDATORY SUB) CREDITS				19
			SEM 7 UNIELECTIVE CREDITS				4
			SEM 7 UNI. FOUNDATION PROGRAM CREDITS				0
			SEM 7 CREDITS				23
			SEM 8				
26	VIII		Industrial Internship	0	0	0	18
			SEM 8 CORE (MANDATORY SUB) CREDITS				18
			SEM 8 UNIELECTIVE CREDITS				0
			SEM 8 UNI. FOUNDATION PROGRAM CREDITS				0
			SEM 8 CREDITS				18