

UNIVERSITY OF ENGINEERING & MANAGEMENT JAIPUR



B. Sc. Data Science

(B.Sc. DS)

Curriculum

(AY 2026-2027 Admitted Students)

Semester-I

S. No.	Subject Code	Subject Name	L	T	P	Total Contact Hrs	Credit Points
Theory							
1	BSCDS101	Programming Fundamentals	3	1	0	4	4
2	BSCDS102	Computer System Architecture	3	1	0	4	4
3	BSCDS103	General Studies & Current Affairs - I	3	1	0	4	4
4	BSCDS104	Indian Knowledge System	0	2	0	2	2
Practical							
5	BSCDS191	Programming Fundamentals Lab	0	0	2	2	2
6	BSCDS192	Computer System Architecture Lab	0	0	2	2	2
Sessional							
7	BSCDS193	Soft Skills	0	2	0	2	2
		Total	9	7	4	20	20

Semester-II

S. No.	Subject Code	Subject Name	L	T	P	Total Contact Hrs	Credit Points
Theory							
1	BSCDS201	Introduction to Data Science	3	1	0	4	4
2	BSCDS202	Mathematics for Data Science	3	1	0	4	4
3	BSCDS203	General Studies & Current Affairs - II	3	1	0	4	4
4	BSCDS204	Universal Human Values	0	2	0	2	2
Practical							
5	BSCDS291	Introduction to Data Science Lab	0	0	2	2	2
6	BSCDS292	Mathematics for Data Science Lab	0	0	2	2	2
Sessional							
7	BSCDS293	Python Programming for Data Science	0	2	0	2	2
		Total	9	7	4	20	20

Semester-III

S. No.	Subject Code	Subject Name	L	T	P	Total Contact Hrs	Credit Points
Theory							
1	BSCDS301	Data Structures	3	1	0	4	4
2	BSCDS302	Database Management Systems	3	1	0	4	4
3	BSCDS303	Statistics for Data Science	3	1	0	4	4
4	BSCDS304	General Studies & Current Affairs -III	3	1	0	4	4
Practical							
5	BSCDS391	Data Structures Lab	0	0	2	2	2
6	BSCDS392	Database Management Systems Lab	0	0	2	2	2
7	BSCDS393	Statistics for Data Science Lab	0	0	2	2	2
Sessional							
8	BSCDS394	Introduction to R Programming	0	2	0	2	2
		Total	12	6	6	24	24

Semester-IV

S. No.	Subject Code	Subject Name	L	T	P	Total Contact Hrs	Credit Points
Theory							
1	BSCDS401	Design and Analysis of Algorithms	3	1	0	4	4
2	BSCDS402	Software Engineering	3	1	0	4	4
3	BSCDS403	Data Warehousing	3	1	0	4	4
4	BSCDS404	General Studies & Current Affairs -IV	3	1	0	4	4
Practical							
5	BSCDS491	Design and Analysis of Algorithms Lab	0	0	2	2	2
6	BSCDS492	Software Engineering Lab	0	0	2	2	2
7	BSCDS493	Data Warehousing Lab	0	0	2	2	2
Sessional							
8	BSCDS494	Data Analysis and Visualization	0	2	0	2	2
		Total	12	6	6	24	24

Semester-V

S. No.	Subject Code	Subject Name	L	T	P	Total Contact Hrs	Credit Points
Theory							
1	BSCDS501	Data Mining	3	1	0	4	4
2	BSCDS502	Machine Learning	3	1	0	4	4
3	BSCDS503	Big Data Analytics	3	1	0	4	4
4	BSCDS504	General Studies & Current Affairs -V	3	1	0	4	4
Practical							
5	BSCDS591	Data Mining Lab	0	0	2	2	2
6	BSCDS592	Machine Learning Lab	0	0	2	2	2
7	BSCDS593	Big Data Analytics Lab	0	0	2	2	2
Sessional							
8	BSCDS594	Natural Language Processing	0	2	0	2	2
		Total	12	6	6	24	24

Semester-VI

S. No.	Subject Code	Subject Name	L	T	P	Total Contact Hrs	Credit Points
Theory							
1	BSCDS601	Artificial Intelligence	3	1	0	4	4
2	BSCDS602	Computer Vision	3	1	0	4	4
3	BSCDS603	Deep Learning & Generative AI	3	1	0	4	4
4	BSCDS604	General Studies & Current Affairs -VI	3	1	0	4	4
Practical							
5	BSCDS691	Artificial Intelligence Lab	0	0	2	2	2
6	BSCDS692	Computer Vision Lab	0	0	2	2	2
7	BSCDS693	Deep Learning & Generative AI Lab	0	0	2	2	2
Sessional							
8	BSCDS694	Cloud Computing for Data Science	0	2	0	2	2
		Total	12	6	6	24	24