



BSc (Data Science) Curriculum

Course Structure

Semester	I	II	III	IV	V	VI	Total
Credits	22	22	22	27	25	12	130

Curriculum and Teaching Scheme

Semester - I						
Sr. No.	Course Code	Course Name	Teaching Scheme			
			L	T	P	C
1	DS106	Python Programming	3	0	1	4
2	DS107	Databases and MySQL	2	0	2	4
3	DS108	Statistics-I	3	1	0	4
4	DS115	Multivariable Calculus	3	0	0	3
5	DS116	Linear Algebra	3	0	0	3
6	MG120	HR/Management	2	0	0	2
7	LC138	Communication I	2	0	0	2
Total Credits			18	1	3	22

Semester - II						
Sr. No.	Course Code	Course Name	Teaching Scheme			
			L	T	P	C
1	DS109	Data Structures	2	0	2	4
2	DS110	Statistics-II	3	1	0	4
3	DS111	Object Oriented Programming	3	0	1	4
4	DS117	Differential Equations	2	1	0	3
5	DS118	Vector Calculus	2	1	0	3
6	DS113	Statistical Modeling Tool	1	0	1	2
7	LC135	Communications-II	2	0	0	2
Total Credits			15	3	4	22

Semester - III						
Sr. No.	Course Code	Course Name	Teaching Scheme			
			L	T	P	C
1	DS201	R Programming for Data Science	2	0	1	3
2	DS202	Regression Analysis and Bayesian Statistics	3	1	0	4
3	DS203	Data Visualization using Tableau	3	0	2	5
4	(DS204)	Discrete Mathematics	3	0	0	3
5	DS207	General Elective-I (Econometrics)	3	0	0	3
6	DS206	Operation Research	2	0	0	2
7		ID Course	2	0	0	2
Total Credits			18	1	3	22

Semester - IV						
Sr. No.	Course Code	Course Name	Teaching Scheme			
			L	T	P	C
1	DS208	Data Mining and Warehousing (Using R or python)	2	0	1	3
2	DS209	Data Analytics Using Hadoop	2	0	1	3
3	DS210	Machine Learning	3	0	1	4
4	DS211	Cloud Computing	2	0	1	3
5	DS212	Optimization Techniques	2	0	0	2
6	DS213	General Elective II (Image Processing)	3	0	0	3
7	DS214	Environment Science	4	0	0	4
8	PS415	KHOJ	3	0	0	3
9		ID Course	2	0	0	2
Total Credits			23	0	4	27

Semester - V						
Sr. No.	Course Code	Course Name	Teaching Scheme			
			L	T	P	C
1		Internet of Things for Data Analytics	2	0	1	3
2		Artificial Neural Networks	2	0	1	3
3		Soft Computing	2	0	1	3
4		Big Data	2	0	1	3
5		Numerical Methods and Simulation	4	0	1	5
6		Entrepreneurship	3	0	0	3
7		Research Methodology	3	0	0	3
8		Capstone Project	0	0	0	2
Total Credits			18	0	5	25

Semester - VI						
Sr. No.	Course Code	Course Name	Teaching Scheme			
			L	T	P	C
		Internship				12