

St. Xavier's College (Autonomous), Kolkata
Department of Statistics
MSc in Data Science
Proposed Course Structure - July 2022 onwards

SEM NO	PAPER NO	PAPER TYPE CORE/DS E	PAPER CODE	PAPER	TYPE	MARKS	CREDITS	CLASSES PER WEEK(13 WEEKS)	
								THEORY	PRAC
1	1	CORE	MDSC 4111	Introduction to Data Science and Data Structures	COMPOSITE	100	6	4	4
	2	CORE	MDSC 4112	Probability	COMPOSITE	100	6	4	4
	3	CORE	MDSC 4113	Linear Algebra and Elements of Statistical Inference	COMPOSITE	100	6	4	4
	4	CORE	MDSC 4114	Data Base Management System and Data warehousing	COMPOSITE	100	6	4	4
2	1	CORE	MDSC 4211	Statistical Inference	COMPOSITE	100	6	4	4
	2	CORE	MDSC 4212	Multivariate Analysis	COMPOSITE	100	6	4	4
	3	CORE	MDSC 4213	Big Data Analytics	COMPOSITE	100	6	4	4
	4	CORE	MDSC 4214	Predictive Analytics	COMPOSITE	100	6	4	4
	1	CORE	MDSC 4311	Discrete Mathematics and Optimization Techniques	COMPOSITE	100	6	4	4

3	2	CORE	MDSC 4312	Introduction to Machine Learning	COMPOSITE	100	6	4	4
	3	DSE	MDSC 4313	Discipline Specific Elective	COMPOSITE	100	6	4	4
	4	DSE	MDSC 4314	Discipline Specific Elective	COMPOSITE	100	6	4	4
4	1	CORE	MDSC 4411	Time Series Analysis	COMPOSITE	100	6	4	4
	2	DSE	MDSC 4412	Discipline Specific Elective	COMPOSITE	100	6	4	4
	3	DSE	MDSC 4413	Discipline Specific Elective	COMPOSITE	100	6	4	4
	4	PROJECT		Project	PROJECT	100	6		

Total Marks: 1600

Total Credits: 96

Number of Core Papers: 11

Number of Discipline Specific Electives: 4

PAPER NO	PAPER TYPE CORE/DSE	PAPER
1	DSE	Advanced Machine Learning
2	DSE	Artificial Intelligence & Internet Technology
3	DSE	Advanced Bayesian Inference
4	DSE	Cloud Computing
5	DSE	Financial Statistics
6	DSE	Cryptography