

Center for Data Science
Syllabus for 2 Year M.Sc in Data Science and Machine Learning

First Semester					
Theory					
Course Code	Course Name	L	T	P	Credit
PGDSML101	Probability and Statistics	3	0	0	3
PGDSML102	Programming Languages (Python, R and Java)	3	0	0	3
PGDSML103	Mathematical Techniques in Data Science	3	0	0	3
PGDSML104	Database Management System	3	0	0	3
PGDSML105	Algorithms and Data Structure	3	0	0	3
Laboratory					
PGDSML191	Programming Lab (Python, R and Java)	0	0	6	4
PGDSML192	DBMS Lab (MySQL)	0	0	3	2
PGDSML193	Seminar				2
Total		15	0	9	23

Second Semester					
Theory					
Course Code	Course Name	L	T	P	Credit
PGDSML201	Communication Skills	3	0	0	3
PGDSML202	Cyber Security	3	0	0	3
PGDSML203	Software Engineering	3	0	0	3
PGDSML204	Introduction to Artificial Intelligence	3	0	0	3
PGDSML205	Optimization Techniques	3	0	0	3
Laboratory					
PGDSML291	AI Lab	0	0	3	2
PGDSML292	Information System Design Lab	0	0	3	2
PGDSML293	Programming Lab (C++)	0	0	3	2
PGDSML294	Seminar				2
Total		15	0	9	23

Third Semester					
Theory					
Course Code	Course Name	L	T	P	Credit
PGDSML301	Pattern Recognition and Machine Learning	3	0	0	3
PGDSML302	Mobile Computing and IOT	3	0	0	3
PGDSML303	Image Processing	3	0	0	3
PGDSML304	Career Development and Entrepreneurship	2	0	0	2
PGDSML305	Thesis Part I				10
Laboratory					
PGDSML391	Machine Learning Lab	0	0	3	2
PGDSML392	Mobile and Cloud Computing Lab	0	0	3	2
PGDSML393	Image Processing Lab	0	0	3	2
Total		11	0	9	27

Fourth Semester

Theory

Course Code	Course Name	L	T	P	Credit
PGDSML401	Advanced Machine Learning	3	0	0	3
PGDSML402	Elective 1	3	0	0	3
PGDSML403	Elective 2	3	0	0	3
Laboratory					
PGDSML491	Advanced Machine Learning Lab	0	0	3	2
PGDSML492	Thesis Part II				15
Total		9	0	3	26