

JIS Institute of Advanced Studies and Research Kolkata, JIS University
Centre for Data Science
M. Tech in Computer Science and Engineering (with specialization in Data Science)

1st Semester

Sl. No.		Subject Code	Subject Name	Class Load/Week			Credit
				L	T	P	
1	Core Courses	PDS1001	Probability and Statistics	3	0	0	3
2		PDS1002	Pattern Recognition and Machine Learning	3	0	0	3
3		PDS1003	Database Management System	3	0	0	3
4		PDS1004	Data Warehouse	3	0	0	2
5	CBCS	PBB1007	Offered by other centres / departments / MOOC Courses	3	1	0	4
6	Labs	PDS1101	Programming and Data Structure Lab	0	1	3	3
7		PDS1102	Machine Learning Lab	0	0	3	2
Total Credits							20

2nd Semester

Sl. No.		Subject Code	Subject Name	Class Load/Week			Credit
				L	T	P	
1	Core Courses	PDS2001	Big Data Analytics	3	0	0	3
2		PDS2002	Advanced Machine Learning	3	0	0	3
3		PDS2003	IoT and Cloud Computing	3	0	0	3
4		PDS2004	Elective 1	3	0	0	3
6	CBCS	PBB2007	Offered by other centres / departments / MOOC Courses	3	1	0	4
7	Labs	PDS2101	Big Data Analytics Lab	0	0	3	2
8		PDS2102	Advanced Machine Learning Lab	0	0	3	2
9		PDS2103	IoT and Cloud Computing Lab	0	0	3	2
Total Credits							22

Internship (during Semester Break) in Industry / Academic Institutions.

3rd Semester

Sl. No.		Subject Code	Subject Name	Class Load/Week			Credit
				L	T	P	
1	Core Courses	PDS3101	Data Visualization	3	0	0	2
2		PDS3102	Elective-2	3	0	0	3
3	Sessional	PDS3201	Thesis Part-I with Seminar	-	-	-	14
4		PDS3202	Internship Project with Seminar	-	-	-	4
Total Credits							23

4th Semester

Sl. No.	Subject Code	Subject Name	Class Load/Week			Credit	
			L	T	P		
1.	PDS4201	Thesis Part-II with Seminar and Viva-Voce	-	-	-	24	
Total Credits							24

Elective 1	Elective 2
Business Analytics	Information & System Security
Data Security	Social and Web Media Analytics
Mobile Computing	Natural Language Processing
Advanced Web Technology	Blockchain Technologies
Optimization Techniques	Speech and Signal Processing
Selected Topics on Data Science	Applied Statistics

Total Credits = [20+22+23+24] = 89