

JIS Institute of Advanced Studies and Research Kolkata, JIS University
Centre for Data Science
1-year Advanced PG Diploma in Data Science and Applications

1st Semester

Sl. No.		Subject Code	Subject Name	Class Load/Week			Credit
				L	T	P	
1	Core Courses	ADS1001	Mathematical Foundations of Computer Science	2	0	0	2
2		ADS1002	Machine Learning	3	1	0	4
3		ADS1003	Data Warehouse & Visualization	3	1	0	4
4		ADS1004	Elective-I	3	0	0	3
5	Labs	ADS1101	Programming and Data Structure	0	1	3	3
6		ADS1102	Machine Learning Lab	0	0	3	2
7	Sessional	ADS1103	Project Part-I with Seminar	-	-	-	2
Total Credits							20

2nd Semester

Sl. No.		Subject Code	Subject Name	Class Load/Week			Credit
				L	T	P	
1	Core Courses	ADS2001	Advanced Machine Learning	3	0	0	3
2		ADS2002	Cyber Security	3	1	0	4
3		ADS2003	Big Data Analytics	3	1	0	4
4		ADS2004	Elective-II	3	0	0	3
5	Labs	ADS2101	Advanced Machine Learning Lab	0	0	3	2
6		ADS2102	Big Data Analytics and Cloud Practice Lab	0	0	3	2
7	Sessional	ADS2103	Project Part-II with Seminar	-	-	-	4
Total Credits							22

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
Image Processing	Video Analytics

Total Credits = [20+22] = 42