

**DEPARTMENT OF
COMPUTER SCIENCE AND ENGINEERING**

M. TECH.: ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

FIRST SEMESTER						
S. No.	Course Code	Course Name	Category Code	I	P	C
1.	AD501	Mathematical Foundations of Data Science	PEC	3	0	3
2.	AD502	Advanced Data Structures and Algorithms	PEC	3	3	5
3.	AD503	Machine Learning	PEC	3	3	5
4.	AD504	Decision Sciences	PEC	3	3	5
5.	XXxxx	Elective I	PEC	3	0	3
6.	AD594	Seminar	PCD	0	3	2
Total No. of Credits						23

SECOND SEMESTER						
S. No.	Course Code	Course Name	Category Code	I	P	C
1.	AD511	Marketing Science and Predictive Analytics	PEC	3	3	5
2.	AD512	Natural Language Processing	PEC	3	3	5
3.	AD513	Big Data Analytics	PEC	3	3	5
4.	XXxxx	Elective II	PEC	3	0	3
5.	XXxxx	Elective III	PEC	3	0	3
6.	AD595	Technical Writing	PCD	0	3	2
Total No. of Credits						23

THIRD SEMESTER						
S. No.	Course Code	Course Name	Category Code	I	P	C
1.	AD598	Dissertation Phase I	PCD	-	-	12
Total No. of Credits						12

FOURTH SEMESTER						
S. No.	Course Code	Course Name	Category Code	I	P	C
1.	AD599	Dissertation Phase II	PCD	-	-	12
Total No. of Credits						12

Elective Courses

List of Electives						
S. No.	Course Code	Course Name	Category Code	I	P	C
1	AD521	Game Theory	PEC	3	0	3
2	AD522	Natural Language Processing	PEC	3	0	3
3	AD523	Information Retrieval	PEC	3	0	3
4	AD524	Recommender Systems	PEC	3	0	3
5	AD525	Systems Engineering	PEC	3	0	3
6	AD526	Health Analytics	PEC	3	0	3
7	AD527	Social Network Analysis	PEC	3	0	3
8	AD528	Scalable Systems for Data Science	PEC	3	0	3
9	AD529	Data Exploration and Visualization	PEC	3	0	3
10	AD530	Time Series Analysis	PEC	3	0	3
11	AD531	Human Computer Interaction	PEC	3	0	3
12	AD532	Modern Computational Algebra	PEC	3	0	3
13	AD533	Affective Computing	PEC	3	0	3
14	AD534	Simulation and Modelling	PEC	3	0	3
15	AD535	Decision Science	PEC	3	0	3
16	AD536	Cloud Computing	PEC	3	0	3
17	AD537	Data Science	PEC	3	0	3
18	AD538	Parallel and Distributed Systems	PEC	3	0	3
19	AD539	Real-time Systems	PEC	3	0	3
20	AD540	HPC and GPU Computing	PEC	3	0	3
21	AD541	Data Privacy	PEC	3	0	3
22	AD542	Advanced Decision Modelling Techniques	PEC	3	0	3
23	AD543	Cyber Forensics	PEC	3	0	3
24	AD544	Intelligent Systems	PEC	3	0	3
25	AD545	Decision Support Systems	PEC	3	0	3
26	AD546	Immersive Technologies	PEC	3	0	3
27	AD547	Bioinformatics	PEC	3	0	3
28	AD548	Data Mining	PEC	3	0	3
29	AD549	Computational Learning Theory	PEC	3	0	3
30	AD550	Wireless Networked Systems	PEC	3	0	3
31	AD551	Deep Learning	PEC	3	0	3
32	AD552	Reinforcement Learning	PEC	3	0	3
33	AD553	Artificial Intelligence in Agile Development	PEC	3	0	3
34	AD554	Artificial Intelligence in Additive Manufacturing	PEC	3	0	3
35	AD555	Artificial Intelligence in Agriculture	PEC	3	0	3
36	AD556	Artificial Intelligence in Health Care	PEC	3	0	3
37	AD557	Artificial Intelligence in Fabrication	PEC	3	0	3
38	AD558	Artificial Intelligence in Manufacturing	PEC	3	0	3