

M. Tech. DATA SCIENCE
Department of Data Science and Computer Applications, MIT Manipal

PROGRAM STRUCTURE

Year	FIRST SEMESTER						SECOND SEMESTER						
	Sub Code	Subject Name	L	T	P	C	Sub Code	Subject Name	L	T	P	C	
I	MAT 5114	Mathematical Foundation for DS	4	0	0	4	DSE 5251	Deep Learning	4	0	0	4	
	DSE 5151	Data Analytics & Visualization	4	0	0	4	DSE 5252	Artificial Intelligence	4	0	0	4	
	DSE 5152	Machine Learning	4	0	0	4	DSE ****	Program Elective I	3	0	2	4	
	DSE 5153	Data Structures	3	0	2	4	DSE ****	Program Elective II	3	0	2	4	
	DSE 5154	Database Technologies	3	0	2	4	DSE ****	Program Elective III	4	0	0	4	
	HUM 5151	Research Methodology and Technical Communication	1	0	3	2	*** ****	Open Elective	3	0	0	3	
	DSE 5161	Data Analytics & Visualization Lab	0	1	3	2	DSE 5261	Deep Learning Lab	0	0	3	1	
	DSE 5162	Machine Learning Lab	0	0	3	1	DSE 5262	Advanced Technologies Lab	0	0	3	1	
	Total			19	1	13	25	Total			21	0	10
THIRD AND FOURTH SEMESTERS													
II	DSE 6098	Project Work							0	0	0	25	
	Total									0	0	0	25

LIST OF PROGRAM ELECTIVES:

Sub. Code	Subject Name	Sub. Code	Subject Name
DSE 5001	Design & Analysis of Algorithms	DSE 5013	Enterprise Data Architecture
DSE 5002	Data Communications and Networks	DSE 5014	Quantum Computing
DSE 5003	Cloud Computing	DSE 5015	Internet of Things
DSE 5004	Parallel Programming	DSE 5016	Algorithmic Trading
DSE 5005	Big Data Analytics	DSE 5017	Digital Marketing
DSE 5006	Data Privacy & Security	DSE 5018	Bioinformatics
DSE 5007	Pattern Recognition & Applications		
DSE 5008	Computer Vision		
DSE 5009	Natural Language Processing		
DSE 5010	Business Analytics		
DSE 5011	Finance & Econometrics		
DSE 5012	Health Informatics		