

Department of Computer Science and Engineering
Tezpur university

Curriculum of M. Tech in Data Sciences

Semester I

Course Number	Subject	Total Credits	L-T-P
CS539	Program Core I Mathematical Foundations of Data Science	4	4-0-0
CS542	Program Core II Advanced Algorithms & Data Structures	4	3-1-0
CS540	Research Methodology	2	2-0-0
CS618	IPR	2	2-0-0
CS500	Laboratory 1 (Data Structures and Algorithms Lab)	2	0-0-2
	Audit Course	0	1-0-0
Program Elective I			
CS620	Data Science	4	3-0-1
CS612	Data Storage Technologies and Networks	4	3-0-1
CS613	Social Network Analysis	4	3-0-1
Program Elective II			
CS614	Recommender System	4	3-0-1
CS615	Advanced Topics in Artificial Intelligence	4	3-0-1
CS607	Optimization Techniques	4	4-0-0
Total Credits		22	

Semester II

Course Number	Subject	Total Credits	L-T-P
IT610	Program Core III – Advanced Database Systems	4	3-0-1
CS622	Program Core IV – Machine Learning	3	3-0-0
CS600	Laboratory 2 (Data Analytics & Visualization)	2	0-0-2
CS617	Mini Project with Seminar	4	1-0-3
	Audit Course	0	1-0-0
Program Elective III			
CS619	Computational Biology & Bioinformatics	4	3-0-1
CO527	Big Data Analytics	4	3-0-1
CS623	Soft Computing	4	3-0-1
CS626	Econometrics	4	3-0-1
CS731	Data Mining in Security	4	3-0-1
Program Elective IV			
CS628	Deep Learning	3	3-0-0
CS629	Information Retrieval	3	3-0-0
CO504	Natural Language Processing	3	3-0-0
Total Credits		20	

Semester III

Course Number	Subject	Total Credits	L-T-P
CS630	Term Project I	14	0-0-14
Program Elective V			
CS631	GPU Computing	4	3-0-1
CO518	Cloud Computing	4	3-0-1
CS633	Data Analytics for IoT	4	3-0-1
CS636	Computer Vision	4	3-0-1
CS637	Blockchain Technology	4	3-0-1
Open Elective			
	Open Elective	3	3-0-0
Total Credits		21	

Semester IV

Course Number	Subject	Total Credits	L-T-P
CS639	Term Project II / Industrial Project	18	0-0-18
Total Credits		18	

Total Credits: 81