



KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE, WARANGAL
MINOR DOMAIN: FOUNDATIONS OF COMPUTING IN COMPUTER SCIENCE AND ENGINEERING (IOT) (MDCSO) - MINOR DOMAIN: FOUNDATIONS OF COMPUTING CURRICULUM

S.No	Course Type	Course Code	Course Name (NPTEL Course Id)	Course Duration (weeks)	Credits
-		Core Courses (any 4 courses)			
1	Core Courses	U18MDIN1001A	Discrete Mathematics (111106086)	12	8-12
		U18MDIN1001B	OR Discrete Mathematics (106106183)	12	
		U18MDIN1001C	OR Discrete Mathematics for CS (106104573)	12	
2		U18MDIN1002	Design and Analysis of Algorithms (106106131)	8	
3		U18MDIN1003	Programming, Data Structures and Algorithms using Python (106106145)	8	
4		U18MDIN1004	Theory of Computation (106104148)	8	
5		U18MDIN1005	Introduction to Graph Algorithms (106108468)	8	
-		Elective Courses (any 2 courses)			
6	Elective Courses	U18MDIN1006	Randomized Algorithms (106103187)	12	4-6
7		U18MDIN1007	Parallel Algorithms (106103188)	12	
8		U18MDIN1008	Secure Computation 106108229	12	
9		U18MDIN1009	Foundations of Cryptography (106106221)	12	
10		U18MDIN1010	Approximation Algorithm (106105471)	12	
11		U18MDIN1011	Mathematical Foundations for Machine Learning (106108702)	12	
12		U18MDIN1012	Second Level Algorithms (106105704)	12	
		U18MDIN1013	Computer Graphics (106103224)	12	
-		Laboratory Courses (any 2 courses)			
16	Laboratory Courses	U18MDIN1014	Fundamentals of IoT Lab	12	2
17		U18MDIN1015	Industrial IoT Lab		
18		U18MDIN1016	Python Programming for IoT Lab		

19		U18MDIN1017	Web Programming		
20	Mini-project (Optional)	U18MDIN1018	Mini-project (Optional)	12	2
Total Credits					18