



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	U24MDIN1001A	Discrete Mathematics (111106086)	12	8-12
		U24MDIN1001B	OR Discrete Mathematics (106106243)	12	
		U24MDIN1001C	OR Discrete Mathematics for CS (106104573)	12	
2		U24MDIN1002	Design and Analysis of Algorithms (106106131)	8	
3		U24MDIN1003	Programming, Data Structures and Algorithms using Python (106106145)	8	
4		U24MDIN1004	Theory of Computation (106104148)	8	
5		U24MDIN1005	Introduction to Graph Algorithms (106108468)	8	
-		Elective Courses (any 2 courses)			
6	Elective Courses	U24MDIN1006	Randomized Algorithms (106103247)	12	4-6
7		U24MDIN1007	Parallel Algorithms (106103188)	12	
8		U24MDIN1008	Secure Computation 106108229	12	
9		U24MDIN1009	Foundations of Cryptography (106106221)	12	
10		U24MDIN1010	Approximation Algorithm (106105471)	12	
11		U24MDIN1011	Mathematical Foundations for Machine Learning (106108702)	12	
12		U24MDIN1012	Second Level Algorithms (106105704)	12	
		U24MDIN1013	Computer Graphics (106103224)	12	
-	Laboratory Courses	Laboratory Courses (any 2 courses)			
16		U24MDIN1014	Fundamentals of IoT Lab	12	2
17		U24MDIN1015	Industrial IoT Lab		
24		U24MDIN1016	Python Programming for IoT Lab		
19		U24MDIN1017	Web Programming		

20	Mini-project (Optional)	U24MDIN1018	Mini-project (Optional)	12	2
Total Credits					18