



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

S.No	Course Type	Course Code	Course Name (NPTEL Course Id)	Course Duration (weeks)	Credits
-	Core Courses	Core Courses (any 4 courses)			
1		U18MDCN1001A	Discrete Mathematics (111106086)	12	8-12
		U18MDCN1001B	OR Discrete Mathematics (106106183)	12	
		U18MDCN1001C	OR Discrete Mathematics for CS (106104573)	12	
2		U18MDCN1002	Design and Analysis of Algorithms (106106131)	8	
3		U18MDEE1003	Programming, Data Structures and Algorithms using Python (106106145)	8	
4		U18MDCN1004	Theory of Computation (106104148)	8	
5		U18MDCN1005	Introduction to Graph Algorithms (106108468)	8	
-	Elective Courses	Elective Courses (any 2 courses)			
6		U18MDCN1006	Randomized Algorithms (106103187)	12	4-6
7		U18MDCN1007	Parallel Algorithms (106103188)	12	
8		U18MDCN1008	Secure Computation 106108229	12	
9		U18MDCN1009	Foundations of Cryptography (106106221)	12	
10		U18MDCN1010	Approximation Algorithm (106105471)	12	
11		U18MDCN1011	Mathematical Foundations for Machine Learning (106108702)	12	
12		U18MDCN1012	Second Level Algorithms (106105704)	12	
-	Laboratory Courses	Laboratory Courses (any 2 courses)			

16		U18MDCN1013	Computer Networks Lab		2
17		U18MD CN 1014	Cryptography & Network Security Lab		
18		U18MD CN 1015	Python Programming Lab		
19		U18MD CN 1016	Web Programming		
20	Mini-project (Optional)	U18MD CN 1017	Mini-project (Optional)		2
Total Credits					18

Head of the Department