KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE, WARANGAL
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
MINOR DOMAIN IN PROGRAMMING (MDCS)
MINOR DOMAIN CURRICULUM

S.No	Course Type	Course Code	Course Name	Credits
-	**Core Courses**	*Core Courses (any 4 courses)*		
1		U24MDCS1001	Programming, Data Structures and Algorithms using Python	8-12
			Data Structure and Algorithms using Java	
2		U24MDCS1002	Programming in C++	
			Programming in Modern C++	
			An Introduction to Programming Through C++	
3		U24MDCS1003	Programming in Java	
			Object Oriented System Development Using UML, Java and Patterns	
			Fundamentals of Object-Oriented Programming	
4		U24MDCS1004	Data Base Management System	
			Introduction to Database Systems	
-	**Elective Courses**	*Elective Courses (any 2 courses)*		
5		U24MDCS1005	Data Science for Engineers	4-6
6		U24MDCS1006	Cloud Computing	
7		U24MDCS1007	Introduction to Internet of Things	
8		U24MDCS1008	Introduction to Machine Learning - IITKGP	
9		U24MDCS1009	Introduction to Machine Learning	
			Modern Application Development	
101		U24MDCS1010	Human Computer Interaction (In English)	
11		U24MDCS1011	Large Applications Practicum	
12		U24MDCS1012	Data Structures and Algorithms Design	
13		U24MDCS1013	Programming with Generative AI	
-	**Laboratory Courses**	*Laboratory Courses (any 2 courses)*		
14		U24MDCS1014	Full Stack Web Development Lab	2
15		U24MDCS1015	Advanced Programming Lab with Competitive Coding	
16		U24MDCS1016	Applied Machine Learning & Generative AI Lab	
17		U24MDCS1017	Secure Programming & DevSecOps Lab	
18	**Mini-project** (optional)	U24MDCS1018	Mini-project (optional)	2
			Total Credits	**18**