



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 | | U18MDCS1001 | Programming, Data Structures and Algorithms using Python | 8-12 |
| | | | Data Structure and Algorithms using Java | |
| 2 | | U18MDCS1002 | Programming in C++ | |
| | | | Programming in Modern C++ | |
| | | | An Introduction to Programming Through C++ | |
| 3 | | U18MDCS1003 | Programming in Java | |
| | | | Object Oriented System Development Using UML, Java and Patterns | |
| | | | Fundamentals of Object-Oriented Programming | |
| 4 | | U18MDCS1004 | Data Base Management System | |
| | Introduction to Database Systems | | | |
| - | Elective Courses | Elective Courses (any 2 courses) | | |
| 5 | | U18MDCS1005 | Data Science for Engineers | 4-6 |
| 6 | | U18MDCS1006 | Cloud Computing | |
| 7 | | U18MDCS1007 | Introduction to Internet of Things | |
| 8 | | U18MDCS1008 | Introduction to Machine Learning - IITKGP | |
| 9 | | U18MDCS1009 | Introduction to Machine Learning | |
| | | | Modern Application Development | |
| 101 | | U18MDCS1010 | Human Computer Interaction (In English) | |
| 11 | | U18MDCS1011 | Large Applications Practicum | |
| 12 | | U18MDCS1012 | Data Structures and Algorithms Design | |
| 13 | | U18MDCS1013 | Programming with Generative AI | |
| - | Laboratory Courses | Laboratory Courses (any 2 courses) | | |
| 14 | | U18MDCS1014 | Full Stack Web Development Lab | 2 |
| 15 | | U18MDCS1015 | Advanced Programming Lab with Competitive Coding | |
| 16 | | U18MDCS1016 | Applied Machine Learning & Generative AI Lab | |
| 17 | | U18MDCS1017 | Secure Programming & DevSecOps Lab | |
| 18 | Mini-project (optional) | U18MDCS1018 | Mini-project (optional) | 2 |
| Total Credits | | | | 18 |