



**KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE, WARANGAL**  
DEPARTMENT OF MATHEMATICS & HUMANITIES

**MINOR IN MATHEMATICS (MMA)-URR-24**  
- MINOR DEGREE CURRICULUM

S.No	Course Type	Course Code	Course Name	Credits
1	Minor Compulsory Courses	U24MMA1001	Linear Algebra	14-16
2		U24MMA1002	Probability and Statistics	
3		U24MMA1003	Numerical Methods	
	Elective courses (any 1 to 3 courses)			
4	Minor Elective Courses	U24MMA1004	Numerical Linear Algebra	
5		U24MMA1005	Essential Mathematics for Machine Learning	
6		U24MMA1006	Descriptive Statistics with R Software	
7		U24MMA1007	Introduction to Fuzzy set theory Arithmetic and logic	
8		U24MMA1008	Operations Research	
9		U24MMA1009	Computational Commutative Algebra	
10		U24MMA1010	Ordinary and Partial Differential Equations and Applications	
11		U24MMA1011	Advanced Engineering Mathematics	
12		U24MMA1012	Introduction to Methods of Applied Mathematics	
13		U24MMA1013	Real Analysis	
14		U24MMA1014	Matrix Analysis with Applications	
15		U24MMA1015	Integral Transforms and their Applications	
<p>I. In exigency situations such as the student already completed the listed compulsory courses(s) on his/her own interest during previous semesters through valid MOOCs etc, the HoD in consultation with Dean-AA shall offer an alternative course(s) for the specific scenario, after verification of relevant documents.</p> <p>II. By the end of April of every academic year, the department in consultation with Dean-AA, shall</p> <p>A. notify the list of equivalent courses in SWAYAM-NPTEL MOOCs / other standard MOOCs against the list of courses notified under Minor curriculum</p> <p>B. propose a new course(s) in the place of any listed course(s) in the Minor degree curriculum, in case no equivalent course is found in MOOCs</p>				
-	Minor Laboratory Courses	Laboratory Courses (any 2 courses)		
16		U24MMA1016	Solution to Boundary Value Problems through MATLAB	2
17		U24MMA1017	Numerical Techniques through MATLAB	
18		U24MMA1018	Optimization Techniques through MATLAB	
19		U24MMA1019	Statistical Methods through MATLAB	
20	Minor Mini-project (Optional)	U24MMA1020	Mini-project (Optional)	2
Total Credits				18