



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

MINOR IN MATHEMATICS (MMA) URR-18
- MINOR DEGREE CURRICULUM

S.No	Course Type	Course Code	Course Name	Credits
1	Minor	U18MMA1001	Linear Algebra	14-16
2	Compulsory	U18MMA1002	Probability and Statistics	
3	Courses	U18MMA1003	Numerical Methods	
	Elective courses (any 5 to 6 courses)			
4	Minor Elective Courses	U18MMA1004	Numerical Linear Algebra	
5		U18MMA1005	Essential Mathematics for Machine Learning	
6		U18MMA1006	Descriptive Statistics with R Software	
7		U18MMA1007	Transform Calculus and its applications in Differential Equations	
8		U18MMA1008	Integral Transforms and their Applications	
9		U18MMA1009	Integral and Vector calculus	
10		U18MMA1010	Introduction to Fuzzy set theory Arithmetic and logic	
11		U18MMA1011	Operations Research	
12		U18MMA1012	Computational Commutative Algebra	
13		U18MMA1013	Ordinary and Partial Differential Equations and Applications	
14		U18MMA1014	Advanced Engineering Mathematics	
15		U18MMA1015	Introduction to Methods of Applied Mathematics	
16		U18MMA1016	Real Analysis	
17		U18MMA1017	Matrix Analysis with Applications	
18		U18MMA1018	Multivariable calculus	
<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)		
19		U18MMA1019	Solution to Boundary Value Problems through MATLAB	2
20		U18MMA1020	Numerical Techniques through MATLAB	
21		U18MMA1021	Optimization Techniques through MATLAB	
22		U18MMA1022	Statistical Methods through MATLAB	
23	Minor Mini-project (Optional)	U18MMA1023	Mini-project (Optional)	2
Total Credits				18