



KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE, WARANGAL
MINOR IN MATHEMATICS (MMA) - MINOR CURRICULUM
EQUIVALENT MOOCs - ODD SEMESTER, July-Dec 2025, AY 2025-26

URR-18

S. No.	Course Code	Course Name	EQUIVALENT COURSES OFFERED BY			
MINOR COMPULSORY COURSES			SWAYAM-NPTEL			
			Course Name	C	Course Dates*	
1	U18MMA1001	Linear Algebra	Linear Algebra	3	CCD: 21.07.2025	https://onlinecourses.nptel.ac.in/noc25_ma114/prev iew
					LDR: 15.08.2025	
2	U18MMA1002	Probability and Statistics	- Not Available	-	CCD:	Not Available
					LDR:	
3	U18MMA1003	Numerical Methods	Numerical Methods	2	CCD: 21.07.2025	https://onlinecourses.nptel.ac.in/noc25_ma83/preview
					LDR: 15.08.2025	
MINOR ELECTIVE COURSES						
4	U18MMA1004	Numerical Linear Algebra	- Not Available	-	CCD:	Not Available --
					LDR:	
5	U18MMA1005	Essential Mathematics for Machine Learning	Essential Mathematics for Machine Learning	3	CCD: 21.07.2025	https://onlinecourses.nptel.ac.in/noc25_ma82/preview
					LDR: 15.08.2025	
6	U18MMA1006	Descriptive Statistics with R Software	Descriptive Statistics with R Software	2	CCD: 18.08.2025	https://onlinecourses.nptel.ac.in/noc25_mg158/preview
					LDR: 29.08.2025	
7	U18MMA1007	Transform Calculus and its applications in Differential Equations	Not Available -	-	CCD:	Not Available --
					LDR:	
8	U18MMA1008	Integral Transforms and their Applications	- Not Available	-	CCD:	-- Not Available
					LDR:	

9	U18MMA1009	Integral and Vector calculus	- Not Available	-	CCD:	Not Available --
					LDR:	
10	U18MMA1010	Introduction to Fuzzy set theory Arithmetic and logic	<i>Introduction to Fuzzy set theory Arithmetic and logic</i>	3	CCD: 21.07.2025	https://onlinecourses.nptel.ac.in/noc25_ma88/preview
					LDR: 15.08.2025	
11	U18MMA1011	Operations Research	<i>Operations Research</i>	2	CCD: 21.07.2025	https://onlinecourses.nptel.ac.in/noc25_ag15/preview
					LDR: 15.08.2025	
12	U18MMA1012	Computational Commutative Algebra	<i>Computational Commutative Algebra</i>	3	CCD: 21.07.2025	https://onlinecourses.nptel.ac.in/noc25_ma94/preview
					LDR: 15.08.2025	
13	U18MMA1013	Ordinary and Partial Differential Equations and Applications	Not Available -	-	CCD:	Not Available --
					LDR:	
14	U18MMA1014	Advanced Engineering Mathematics	<i>Advanced Engineering Mathematics</i>	3	CCD: 21.07.2025	https://onlinecourses.nptel.ac.in/noc25_ma85/preview
					LDR: 15.08.2025	
15	U18MMA1015	Introduction to Methods of Applied Mathematics	<i>Introduction to Methods of Applied Mathematics</i>	3	CCD: 21.07.2025	https://onlinecourses.nptel.ac.in/noc25_ma91/preview
					LDR: 15.08.2025	
16	U18MMA1016	Real Analysis	<i>Introductory Course In Real Analysis</i>	3	CCD: 21.07.2025	https://onlinecourses.nptel.ac.in/noc25_ma118/preview
					LDR: 15.08.2025	
17	U18MMA1017	Matrix Analysis with Applications	<i>Matrix computation and its Applications</i>	3	CCD: 21.07.2025	https://onlinecourses.nptel.ac.in/noc25_ma92/preview
					LDR: 15.08.2025	
18	U18MMA1018	Multivariable calculus	<i>Calculus of Several Real Variables</i>	2	CCD: 21.07.2025	https://onlinecourses.nptel.ac.in/noc25_ma98/preview
					LDR: 15.08.2025	
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 propose an alternative course(s) for the specific scenario, after verification of relevant documents. II. By the end of April of every academic year, the department in consultation with Dean-AA, shall A. notify the list of equivalent courses in SWAYAM-NPTEL MOOCs / other standard MOOCs against the list of courses notified under Honours curriculum B. propose a new course(s) in the place of any listed course(s) in the Honours curriculum, in case no equivalent course is found in MOOCs						

*C: Credits ; CCD: Course Commencement Date; LDR: Last Date of Registration

-	Minor Laboratory Courses	Laboratory Courses (any 2 courses) - TO BE TAKEN IN THE MINOR DEPARTMENT		
19		U18MMA1019	Solution to Boundary Value Problems through MATLAB	2 credits
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
<i>Total Credits to be earned</i>				18

Date: 04-07-2025 MOOCs Coordinator
Dr. E. Ranjith Kumar

Head of the Department
Mathematics & Humanities
Dr. K. Shivashankar

Dean, Academic Affairs