



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL
HONOURS IN MECHANICAL ENGINEERING (HME)
HONOURS CURRICULUM-1
EQUIVALENT MOOCs - ODD SEMESTER, JULY-DEC 2026, AY 2026-27

The following are the list of Honours in Mechanical Engineering and their equivalent courses for ODD semester (July-Dec) academic year 2026-27.

HONOURS ELECTIVE COURSES (any 4 to 5 courses to earn 16 credits)			EQUIVALENT COURSES OFFERED BY SWAYAM-NPTEL			
S.No	Course Code	Course Name	Course Name, Duration & Course code	C	Course Dates*	Course enrollment link
1.	U24HME1001	Artificial Intelligence and Machine Learning in Materials Engineering	Fundamentals of Artificial Intelligence (12 weeks) noc26-mm76	4	CCD: July 20, 2026 to Oct 09, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_mm76
2.	U24HME1002	Energy Conservation and Waste Heat Recovery	Energy Conservation and Waste Heat Recovery (12 weeks) noc26-me171	4	CCD: July 20, 2026 to Oct 09, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me171
3.	U24HME1003	Advanced Fluid Mechanics	Advanced Fluid Mechanics (12 weeks) noc26-me138	4	CCD: July 20, 2026 to Oct 09, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me138
4.	U24HME1004	Computational Fluid Dynamics	Computational Fluid Dynamics (12 weeks) noc26-me169	4	CCD: July 20, 2026 to Oct 09, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me169
5.	U24HME1005	Design of Heat Exchangers	Heat Exchangers: Fundamental and Design Analysis (12 weeks) noc26-me172	4	CCD: July 20, 2026 to Oct 09, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me172
6.	U24HME1006	Robotics	Robotics (8 weeks) noc26-me127	3	CCD: July 20, 2026 to Sep 11, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me127
7.	U24HME1007	Stress Analysis	Mechanics of Solids - IITG (12 weeks) noc26-ce155	4	CCD: July 20, 2026 to Oct 09, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_ce155

HONOURS ELECTIVE COURSES (any 4 to 5 courses to earn 16 credits)			EQUIVALENT COURSES OFFERED BY SWAYAM-NPTEL			
S.No	Course Code	Course Name	Course Name, Duration & Course code	C	Course Dates*	Course enrollment link
8.	U24HME1008	MEMS and Nanotechnology	Nanotechnology, Science and Applications (8 weeks) noc26-mm64	3	CCD: July 20, 2026 to Sep 11, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_mm64
9.	U24HME1009	Mechanical Vibrations and Condition Monitoring	Introduction to Mechanical Vibration (8 weeks) noc26-me125	3	CCD: July 20, 2026 to Sep 11, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me125
10.	U24HME1010	Advanced Composite Materials	Mechanical Behavior of Polymers and Composites (12 weeks) noc26-me174	4	CCD: July 20, 2026 to Oct 09, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me174
11.	U24HME1011	Mechatronics	Design of Mechatronic systems (12 weeks) noc26-me133	4	CCD: July 20, 2026 to Oct 09, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me133
12.	U24HME1012	Advanced Manufacturing Systems	Rapid Manufacturing (12 weeks) noc26-me154	4	CCD: July 20, 2026 to Oct 09, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me154
13.	U24HME1013	Work System Design	Work System Design (12 weeks) noc26-me149	4	CCD: July 20, 2026 to Oct 09, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me149
14.	U24HME1014	Automation in Manufacturing	Automation in Manufacturing (12 weeks) noc26-me189	4	CCD: July 20, 2026 to Oct 09, 2026 LDR: July 27, 2026	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_me189
15.	U24HME1015	Measurement Systems	NOT AVAILABLE THIS SEMESTER	-	CCD: - LDR: -	-

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

Laboratory Courses and Mini Project- Honours Curriculum (any 2 courses) – TO BE TAKEN IN THE MECHANICAL ENGINEERING DEPARTMENT				
16	Laboratory Courses- Honours Curriculum	U24HME1016	Computational Fluid Dynamics Laboratory	2 Credits
17		U24HME1017	Simulation Laboratory	
18		U24HME1018	Advanced Manufacturing Laboratory	
19	Honours Mini-project (Optional)	U24HME1019	Mini-project (Optional)	2 Credits
<i>Total Credits to be earned</i>				16+2

Sri S. Anil Kumar
MOOCs Coordinator, MED

Dr. P. Srikanth
Professor of ME & Head

Dr. S. Narasimha Reddy
Dean, Academic Affairs