



**KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL**  
**HONOURS IN MECHANICAL ENGINEERING (HME)**  
**HONOURS CURRICULUM-1**  
**EQUIVALENT MOOCs - ODD SEMESTER, JULY-DEC 2025, AY 2025-26**

The following are the list of Honours in Mechanical Engineering and their equivalent courses for ODD semester (July-Dec) academic year 2025-26.

<b>HONOURS ELECTIVE COURSES</b> <i>(any 5 to 6 courses to earn 16 credits)</i>			<b>EQUIVALENT COURSES OFFERED BY SWAYAM-NPTEL</b>			
S.No	Course Code	Course Name	Course Name, Duration & Course code	C	Course Dates*	Course enrollment link
1.	U18HME1001	Artificial Intelligence	Fundamentals of Artificial Intelligence (12 weeks) noc25-ge55	3	CCD: July 21, 2025 to Oct 10, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_ge55/preview">https://onlinecourses.nptel.ac.in/noc25_ge55/preview</a>
2.	U18HME1002	Energy Conservation and Waste Heat Recovery	Energy Conservation and Waste Heat Recovery (12 weeks) noc25-me167	3	CCD: July 21, 2025 to Oct 10, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_me167/preview">https://onlinecourses.nptel.ac.in/noc25_me167/preview</a>
3.	U18HME1003	Advanced Fluid Mechanics	Fluid Mechanics (12 weeks) noc25-ce107	3	CCD: July 21, 2025 to Oct 10, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_ce107/preview">https://onlinecourses.nptel.ac.in/noc25_ce107/preview</a>
4.	U18HME1004	Computational Fluid Dynamics	Computational Fluid Dynamics (12 weeks) noc25-me165	3	CCD: July 21, 2025 to Oct 10, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_me165/preview">https://onlinecourses.nptel.ac.in/noc25_me165/preview</a>
5.	U18HME1005	Design of Heat Exchangers	Heat Exchangers: Fundamental and Design Analysis (12 weeks) noc25-me170	3	CCD: July 21, 2025 to Oct 10, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_me170/preview">https://onlinecourses.nptel.ac.in/noc25_me170/preview</a>
6.	U18HME1006	Robotics	Robotics (8 weeks) noc25-me166	2	CCD: July 21, 2025 to Sep 12, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_me166/preview">https://onlinecourses.nptel.ac.in/noc25_me166/preview</a>
7.	U18HME1007	Stress Analysis	Solid Mechanics (12 weeks) noc25-me123	3	CCD: July 21, 2025 to Oct 10, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_me123/preview">https://onlinecourses.nptel.ac.in/noc25_me123/preview</a>

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8.	U18HME1008	MEMS and Nanotechnology	Nanotechnology, Science and Applications (8 weeks) noc25-mm44	2	CCD: July 21, 2025 to Sep 12, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_mm44/preview">https://onlinecourses.nptel.ac.in/noc25_mm44/preview</a>
9.	U18HME1009	Mechanical Vibrations and Condition Monitoring	Introduction to Mechanical Vibration (8 weeks) noc25-me112	2	CCD: July 21, 2025 to Sep 12, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_mm112/preview">https://onlinecourses.nptel.ac.in/noc25_mm112/preview</a>
10.	U18HME1010	Advanced Composite Materials	Mechanical Behavior of Polymers And Composites (12 weeks) noc25-me185	3	CCD: July 21, 2025 to Oct 10, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_me185/preview">https://onlinecourses.nptel.ac.in/noc25_me185/preview</a>
11.	U18HME1011	Mechatronics	Design of Mechatronic systems (12 weeks) noc25-me179	3	CCD: July 21, 2025 to Oct 10, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_me179/preview">https://onlinecourses.nptel.ac.in/noc25_me179/preview</a>
12.	U18HME1012	Advanced Manufacturing Systems	Rapid Manufacturing (12 weeks) noc25-me125	3	CCD: July 21, 2025 to Oct 10, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_me125/preview">https://onlinecourses.nptel.ac.in/noc25_me125/preview</a>
13.	U18HME1013	Work System Design	Work System Design (12 weeks) noc25-me122	3	CCD: July 21, 2025 to Oct 10, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_me122/preview">https://onlinecourses.nptel.ac.in/noc25_me122/preview</a>
14.	U18HME1014	Automation in Manufacturing	Automation in Manufacturing (12 weeks) noc25-me154	3	CCD: July 21, 2025 to Oct 10, 2025 LDR: July 28, 2025	<a href="https://onlinecourses.nptel.ac.in/noc25_me154/preview">https://onlinecourses.nptel.ac.in/noc25_me154/preview</a>
15.	U18HME1015	Measurement Systems	<b>NOT AVAILABLE THIS SEMESTER</b>	-	CCD: - LDR: -	-

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

<b>Laboratory Courses and Mini Project- Honours Curriculum (any 2 courses) – TO BE TAKEN IN THE MECHANICAL ENGINEERING DEPARTMENT</b>				
16	<b>Laboratory Courses- Honours Curriculum</b>	U18HME1016	<b>Computational Fluid Dynamics Laboratory</b>	<b>2 Credits</b>
17		U18HME1017	<b>Simulation Laboratory</b>	
18		U18HME1018	<b>Advanced Manufacturing Laboratory</b>	
19	<b>Honours Mini-project (Optional)</b>	U18HME1019	<b>Mini-project (Optional)</b>	<b>2 Credits</b>
<i>Total Credits to be earned</i>				16+2

**Date: 07-07-2025**

**Sri S. Anil Kumar**  
MOOCs Coordinator, MED

**Dr. P. Srikanth**  
Professor of ME & Head

**Dr. K. Venumadhav**  
Dean, Academic Affairs