



KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE, WARANGAL

HONOURS IN MECHANICAL ENGINEERING (HME) HONOURS CURRICULUM

S.No	Course Type	Course Code	Course Name	Credits
-	Honours Elective Courses	Elective courses (any 4 to 5 courses)		
1		U24HME1001	Artificial Intelligence and Machine Learning in Materials Engineering	15-16
2		U24HME1002	Energy Conservation and Waste Heat Recovery	
3		U24HME1003	Advanced Fluid Mechanics	
4		U24HME1004	Computational Fluid Dynamics	
5		U24HME1005	Design of Heat Exchangers	
6		U24HME1006	Robotics	
7		U24HME1007	Stress Analysis	
8		U24HME1008	MEMS and Nanotechnology	
9		U24HME1009	Mechanical Vibrations and Condition Monitoring	
10		U24HME1010	Composite Materials	
11		U24HME1011	Mechatronics	
12		U24HME1012	Advanced Manufacturing Systems	
13		U24HME1013	Work System Design	
14		U24HME1014	Automation in Manufacturing	
15	U24HME1015	Measurement Systems		
<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 Honours curriculum</p> <p>B. propose a new course(s) in the place of any listed course(s) in the Honour curriculum, in case no equivalent course is found in MOOCs</p>				
-	Honours Laboratory Courses	Laboratory Courses (any 2 courses)		
16		U24HME1016	Computational Fluid Dynamics Laboratory	2
17		U24HME1017	Simulation Laboratory	
18		U24HME1018	Advanced Manufacturing Laboratory	
19	Honours Mini-Project (Optional)	U24HME1019	Mini-Project (Optional)	2
Total Credits				18