



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL
HONOURS IN MECHANICAL ENGINEERING (HME)- HONOURS CURRICULUM
EQUIVALENT MOOCs - EVEN SEMESTER, JULY-DEC 2023, AY 2023-24

The following are the list of Honours in Mechanical Engineering and their equivalent courses for ODD semester (July-Dec) academic year 2023-24.

| S. No | HONOURS ELECTIVE COURSES (any 6 to 9 courses to earn 18 credits) | | EQUIVALENT COURSES OFFERED BY | | | | | | | | |
|-------|---|--|---|---|------------------------------------|------------------|---|---------------|------------------------|---|---------------|
| | Course Code | Course Name | SWAYAM-NPTEL | | | COURSERA / UDEMY | | | SPOKEN TUTORIAL - IITB | | |
| | | | Course Name | C | Course Dates* | Course Name | C | Course Dates* | Course Name | C | Course Dates* |
| 1 | U18HME1001 | Artificial Intelligence | <i>Fundamentals of Artificial Intelligence</i> | | CCD: 24/07/2023 LDR: 31/07/2023 | - | - | CCD: LDR: | - | - | CCD: LDR: |
| 2 | U18HME1002 | Energy Conservation and Waste Heat Recovery | <i>Energy Conservation and Waste Heat Recovery</i> | 3 | CCD: 24/07/2023 LDR: 31/07/2023 | - | - | CCD: LDR: | - | - | CCD: LDR: |
| 3 | U18HME1003 | Advanced Fluid Mechanics | <i>Fluid Mechanics</i> | 3 | CCD: 24/07/2023 LDR: 31/07/2023 | - | | CCD: LDR: | - | - | CCD: LDR: |
| 4 | U18HME1004 | Computational Fluid Dynamics | <i>Computational fluid dynamics</i> | 3 | CCD: 24/07/2023 LDR: 31/07/2023 | - | - | CCD: LDR: | - | - | CCD: LDR: |
| 5 | U18HME1005 | Design of Heat Exchangers | <i>Heat Exchangers: Fundamental and design analysis</i> | 3 | CCD: 24/07/2023 LDR: 31/07/2023 | - | - | CCD: LDR: | - | - | CCD: LDR: |
| 6 | U18HME1006 | Robotics | <i>Robotics</i> | 2 | CCD: 24/07/2023 LDR: 31/07/2023 | - | - | CCD: LDR: | - | - | CCD: LDR: |
| 7 | U18HME1007 | Stress Analysis | <i>Solid Mechanics</i> | 3 | CCD: 24/07/2023 LDR: 31/07/2023 | - | - | CCD: LDR: | - | - | CCD: LDR: |

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| | Course Code | Course Name | SWAYAM-NPTEL | | | COURSERA / UDEMY | | | SPOKEN TUTORIAL - IITB | | |
| | | | Course Name | C | Course Dates* | Course Name | C | Course Dates* | Course Name | C | Course Dates* |
| 8 | U18HME1008 | MEMS and Nanotechnology | - | - | - | - | - | CCD: | - | - | CCD: |
| | | | | | - | | | LDR: | | | LDR: |
| 9 | U18HME1009 | Mechanical Vibrations and Condition Monitoring | - | - | - | - | - | CCD: | - | - | CCD: |
| | | | | | - | | | LDR: | | | LDR: |
| 10 | U18HME1010 | Advanced Composite Materials | <i>Mechanical Behavior of Polymers And Composites</i> | 3 | CCD: 24/07/2023 | - | - | CCD: | - | - | CCD: |
| | | | | | LDR: 31/07/2023 | | | LDR: | | | LDR: |
| 11 | U18HME1011 | Mechatronics | <i>Design of Mechatronic systems</i> | 3 | CCD: 24/07/2023 | - | - | CCD: | - | - | CCD: |
| | | | | | LDR: 31/07/2023 | | | LDR: | | | LDR: |
| 12 | U18HME1012 | Advanced Manufacturing Systems | <i>Rapid Manufacturing</i> | 3 | CCD: 24/07/2023 | - | - | CCD: | - | - | CCD: |
| | | | | | LDR: 31/07/2023 | | | LDR: | | | LDR: |
| 13 | U18HME1013 | Work System Design | <i>Work system design</i> | 3 | CCD: 24/07/2023 | - | - | CCD: | - | - | CCD: |
| | | | | | LDR: 31/07/2023 | | | LDR: | | | LDR: |
| 14 | U18HME1014 | Automation in Manufacturing | <i>Automation in manufacturing</i> | 3 | CCD: 24/07/2023 | - | - | CCD: | - | - | CCD: |
| | | | | | LDR: 31/07/2023 | | | LDR: | | | LDR: |
| 15 | U18HME1015 | Measurement Systems | - | - | - | - | - | CCD: | - | - | CCD: |
| | | | | | - | | | LDR: | | | LDR: |
| <ul style="list-style-type: none"> 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. | | | | | | | | | | | |

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

| Laboratory Courses- Honours curriculum (any 2 courses) - TO BE TAKEN IN THE MECHANICAL DEPARTMENT | | | | |
|---|--|------------|---|-----------|
| 16 | Laboratory Courses- Honours curriculum | U18HME1016 | Computational Fluid Dynamics Laboratory | 2 credits |
| 17 | | U18HME1017 | Simulation Laboratory | |
| 18 | | U18HME1018 | Advanced Manufacturing Laboratory | |
| Total Credits to be earned | | | | 18+2 |

Date: 19-06-2023

Sri S. Anil Kumar & Ms. P. Divya
MOOCs Coordinators, MED

Dr. K. Raja Narender Reddy
Professor of ME & Head

Dr. V. Rajagopal
Dean, Academic Affairs