



## MECHANICAL ENGINEERING

### ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	<b>Dr. CH SANDEEP</b>	Department:	<b>Mechanical Engineering</b>
Regulation:	<b>IARE - UG20</b>	Batch:	<b>2022-2026</b>
Course Name:	<b>Heat Transfer</b>	Course Code:	<b>AMEC29</b>
Semester:	<b>VI</b>	Target Value:	<b>60% (1.8)</b>

**Attainment of COs:**

	<b>Course Outcome</b>	<b>Direct Attainment</b>	<b>Indirect Attainment</b>	<b>Overall Attainment</b>	<b>Observation</b>
CO1	Recall the basic concepts of heat transfer mechanisms and general heat conduction equation in Cartesian, Cylindrical and Spherical Coordinate System for various measures of heat transfer rate.	0.90	2.40	1.2	Not Attained
CO2	Solve problems involving steady state heat conduction with and without heat generation in simple geometries.	0.90	2.40	1.2	Not Attained
CO3	Make use of the concept of Boundary layer theory for the derivation of empirical relations related to the characteristics of Boundary layer.	0.90	2.40	1.2	Not Attained
CO4	Utilize the principles associated with convective heat transfer to formulate and solve the heat transfer coefficients for various cross section areas	1.60	2.40	1.8	Attained
CO5	Explain the physical mechanisms involved in radiation heat transfer, boiling and condensation to give various correlations applied to heat exchangers, boilers, heat engines, etc.	0.90	2.40	1.2	Not Attained
CO6	Analyze LMTD and NTU techniques for tackling real time problems with thermal analysis, simulation (mathematical model) and cost optimization of heat exchangers	0.90	2.40	1.2	Not Attained

**Action Taken Report: (To be filled by the concerned faculty / course coordinator)**

CO1: Assignments to be given on the basic concepts of heat transfer mechanisms.

CO2: Tutorials to be conducted on problems involving steady state heat conduction with and without heat generation in simple geometries.

CO3: Assignemnts to be given on the derivation of empirical relations related to the characteristics of Boundary layer.

CO5: Tutorials to be conducted on problems involving radiation heat transfer, boiling and condensation.

CO6: Tutorials to be conducted on problems using LMTD and NTU techniques.

  
Course Coordinator

  
Mentor

  
Head of the Department