INSTITUTEOFAERONAUTICALENGINEERING
(Autonomous)
Dundigal, Hyderabad-500043

MECHANICAL ENGINEERING
ATTAINMENT OF COURSE OUTCOME–ACTION TAKEN REPORT

Name of the faculty:	**Dr. Ch. Sandeep**	Department:	**ME**
Regulation:	**IARE-R16**	Batch:	**2016 -2020**
Course Name:	**Heat Transfer**	Course Code:	**AME016**
Semester:	**VI**	Target Value:	**60% (1.8)**

Attainment of COs:

	Course Outcome	Direct attainment	Indirect attainment	Overall attainment	Observation
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	2.20	1.2	Attainment target not reached
CO2	Solve problems involving steady state heat conduction with and without heat generation in simple geometries.	0.90	2.20	1.2	Attainment target not reached
CO3	Make use of the concept of Boundary layer theory for the derivation of empirical relations related to the characteristics of Boundary layer.	1.60	2.20	1.7	Attainment target not reached
CO4	Utilize the principles associated with convective heat transfer to formulate and solve the heat transfer coefficients for various cross section areas	0.90	2.20	1.2	Attainment target not reached
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	1.80	1.1	Attainment target not reached
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	2.20	1.2	Attainment target not reached

1.26

Action taken report:

CO1: More practice required to solve the general three-dimensional heat conduction equation problems.
CO2: Extra tutorial hours essential to solve an involving steady state heat conduction with and without heat generation.
CO3: More practice required to solve the boundary layer concept.
CO4: More practice required to solve the general three-dimensional heat convective equation problems.
CO5: Extra tutorial hours essential to solve an involving radiation and condensation.
CO6: More practice required to solve the LMTD and NTU techniques.

Course Coordinator   **Mentor**

Head of the Department
Mechanical Engineering
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