



INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)

Dundigal, Hyderabad - 500043, Telangana

MECHANICAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	Dr.CH SANDEEP	Department:	Mechanical Engineering
Regulation:	IARE - R18	Batch:	2019-2023
Course Name:	Heat Transfer	Course Code:	AMEB21
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	2.40	1.2	Not Attained
CO2	Solve problems involving steady state heat conduction with and without heat generation in simple geometries.	0.60	2.40	1	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	0.60	2.40	1	Not 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:

- CO1: More assignments may be given on heat transfer mechanisms and general heat conduction equations.
- CO2: More exercise has to be given for Steady state heat transfer analysis problems.
- CO3: More assignments may be given on the application of the concept of Boundary layer theory in convection.
- CO4: More Problems may be solved on heat transfer coefficients for various cross-section areas with forced convection.
- CO5: The additional exercise required for heat exchangers, boilers, and heat engines.
- CO6: Additional tutorial hours required for analysis of heat exchangers.


Course Coordinator


Mentor


Head of the Department

Head of the Department
Mechanical Engineering
INSTITUTE OF AERONAUTICAL ENGINEERING
Dundigal, Hyderabad - 500 043