

INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous) Dundigal, Hyderabad - 500043, Telangana

CIVIL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	Mr. R SURESH KUMAR	Department:	Civil Engineering	
Regulation:	IARE - UG20	Batch:	2022-2026	
Course Name:	Hydraulics and Hydraulic Machinery	Course Code:	ACEC08	
Semester:	IV	Target Value:	60% (1.8)	

Attainment of COs:

Course Outcome		Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Explain the differences between lined, unlined canals, and uniform, non – uniform flows for the designing of open channels	0.90	2.40	1.2	Not Attained
CO2	Summarize the geometrical properties of the open channels and establish the relationships among them for the designing of the most economical sections.	2.30	2.40	2.3	Attained
CO3	Apply the concept of boundary layer and viscosity theorem to avoid flow separation problems.	3.00	2.40	2.9	Attained
CO4	Analyse the lift and drag forces on different shapes of the objects using various methods applicable for the separation of the boundary layer	0.90	2.50	1.2 912 (3.4.6	Not Attained
CO5	Utilize the Principal of angular momentum for determining effect of hydrodynamic force of jets.	2.30	2.40	2.3	Attained
CO6	Explain working principle of different types of turbines for designing a hydro power plant.	0.90	2.40	1.2	Not Attained

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

CO1: Conducting technical workshop on comparative analysis of lined and unlined canals for efficient channel design.

CO4: A wind tunnel experimentation session will be organized to analyze lift and drag forces on various object shapes, utilizing CFD simulations and boundary layer separation techniques.

CO6: Giving assignments on turbine classifications and working principles emphasizing efficiency analysis and selection criteria for different turbine types.

Course Coordinator

Mentor

Civil Engineering
INSTITUTE OF AERONAUTICAL ENGINEERIN Dundigal, Hyderabad - 500 043.