INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
Dundigal, Hyderabad - 500043, Telangana

AERONAUTICAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	**Ms. D ANITHA**	Department:	**Aeronautical Engineering**
Regulation:	**IARE - UG20**	Batch:	**2022-2026**
Course Name:	**Computational Aerodynamics**	Course Code:	**AAEC25**
Semester:	**VI**	Target Value:	**60% (1.8)**

Attainment of COs:

Course Outcome		Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Summarize the concepts of computational fluid dynamics and its applications in industries as a tool for fluid analysis	0.30	2.20	0.7	Not Attained
CO2	Choose the type of flow from the finite control volume and infinitesimal small fluid element for the fluid flow analysis.	0.30	2.10	0.7	Not Attained
CO3	Select the quasi linear partial differential equation for estimating the behavior in computational fluid dynamics.	0.90	2.10	1.1	Not Attained
CO4	Identify CFD techniques for relevant partial differential equations for getting analytical solutions for fluid flow problems.	0.90	2.10	1.1	Not Attained
CO5	Make use of finite difference approach for numerical formulations based on fluid mechanics and heat transfer concepts for getting the solutions of fluid flow problems.	0.60	2.10	0.9	Not Attained
CO6	Utilize the grid generation and transformation techniques in implementation of finite difference and finite volume methods in solving complex fluid and aerodynamic problems.	0.30	2.20	0.7	Not Attained

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

CO1: Additional lectures were conducted to explain fundamental CFD concepts with emphasis on real-time industrial applications such as aerospace, automotive, thermal systems, and process industries.

CO2: Worked examples were discussed to help students choose the appropriate flow analysis method based on problem requirements.

CO3: Step-by-step derivation and interpretation of quasi-linear governing equations were explained using flow behavior examples.

CO4: Students were encouraged to relate mathematical formulations with physical flow phenomena. Extra lectures were delivered on CFD solution techniques applicable to different governing equations.

CO5:

- Numerical solution procedures were explained using step-by-step discretization examples. Additional assignments were provided to enhance numerical computation and formulation skills.

CO6: Additional instructional sessions were conducted on grid generation and coordinate transformation techniques.

Course Coordinator

Mentor

Head of the Department

Head of the Department
Aeronautical Engineering
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