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

MECHANICAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	**Dr. PRAVAT RANJAN PATI**	Department:	**Mechanical Engineering**
Regulation:	**IARE - R18**	Batch:	**2019-2023**
Course Name:	**Computational Fluid Dynamics**	Course Code:	**AMEB35**
Semester:	**VI**	Target Value:	**60% (1.8)**

Attainment of COs:

	Course Outcome	Direct attaiment	Indirect attaiment	Overall attaiment	Observation
CO1	Summarize the concepts of computational fluid dynamics and its applications in various industries as a tool for fluid and heat flow analysis	2.10	2.20	2.1	Attained
CO2	Select the appropriate fundamental physical principles and a suitable flow model to derive the governing equations for CFD analysis.	2.10	2.20	2.1	Attained
CO3	Apply shock fitting and shock capturing methods for CFD analysis of time marching and space marching problems.	0.00	2.20	0.4	Not Attained
CO4	Classify the partial differential equations into hyperbolic, parabolic and elliptical forms with the understanding of their mathematical behaviour.	1.00	2.30	1.3	Not Attained
CO5	Distinguish various grid generation and transformation techniques in the implementation of finite difference useful in solving complex fluid flow problems	0.70	2.30	1	Not Attained
CO6	Outline the concepts of finite volume method and its difference from finite difference method to solve basic fluid flow modelin the real world applications.	0.70	2.30	1	Not Attained

Action Taken:

CO3: More assignments may be given on the application of shock fitting and shock capturing methods in CFD problems.
CO4: More assignments may be given on the mathematical behavior of different types of partial differential equations.i
CO5: More FDM applications of various grid generation and transformation techniques may be given.
CO6: More real-world applications of the finite volume method and finite difference method may be given.

Course Coordinator **Mentor** **Head of the Department**

Head of the Department
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