



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 - BT23	Batch:	2023-2027
Course Name:	Gas Dynamics	Course Code:	AAED17
Semester:	V	Target Value:	60% (1.8)

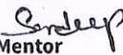
Attainment of COs:

Course Outcome	Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1 Utilize the basic concepts of gas dynamics for determining how compressibility affects the global and local nature of flow.	0.00	1.90	0.4	Not Attained
CO2 Construct the equations of change in pressure, density and temperature for determining the nature of compression and expansion waves.	0.00	2.00	0.4	Not Attained
CO3 Develop the fundamental equation for one-dimensional and quasi one-dimensional flow of compressible ideal gas.	0.80	2.00	1	Not Attained
CO4 Examine the steady isentropic flow, flow with friction and flow with heat transfer for solving problems in flow through one-dimensional passage.	0.80	2.10	1.1	Not Attained
CO5 Analyze the airfoils at subsonic, transonic and supersonic flight conditions using the perturbed flow theory assumption for solving compressible flow over finite wing.	0.80	2.00	1	Not Attained
CO6 Apply the various optical flow visualization techniques used for capturing compressible flow fields	1.20	2.10	1.4	Not Attained

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

- CO1: Conducted concept-revision sessions on compressible flow fundamentals
CO2: Reinforced derivation of governing equations for compression and expansion waves
CO3: Revised continuity, momentum, and energy equations for compressible flow
CO4: Conducted focused lectures on isentropic flow, Fanno flow, and Rayleigh flow
CO5: Introduced compressible flow effects on airfoils using perturbed flow theory
CO6: Explained principles of schlieren, shadowgraph, and interferometry techniques


Course Coordinator


Mentor


Head of the Department

Head of the Department
Aeronautical Engineering
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