



# INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500043, Telangana

## AERONAUTICAL ENGINEERING

### ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	Dr. MARUTHUPANDIYAN K	Department:	Aeronautical Engineering
Regulation:	IARE - R20	Batch:	2021-2025
Course Name:	High Speed Aerodynamics	Course Code:	AAEC16
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.	0.60	2.00	0.9	Not Attained
CO2 Construct the equations of change in pressure, density and temperature for determining the nature of compression and expansion waves.	0.30	2.00	0.6	Not Attained
CO3 Develop the fundamental equation for one-dimensional and quasi one-dimensional flow of compressible ideal gas.	0.90	2.00	1.1	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.	0.00	2.00	0.4	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.	0.30	2.00	0.6	Not Attained
CO6 Apply the various optical flow visualization techniques used for capturing compressible flow fields.	0.30	2.00	0.6	Not Attained

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

CO1: Digital content on compressibility effects is to be provided.

CO2: Additional reading material on the nature of compression and expansion waves is to be provided.

CO3: Additional reading material on the fundamental equation of compressible ideal gas is to be provided.


CO4: Additional problems on steady isentropic flow are to be provided.

CO5: Digital content on the perturbed flow theory of airfoils is to be provided.

CO6: Digital content on optical flow visualization techniques for compressible flow fields is to be provided.

  
Course Coordinator

  
Mentor

  
Head of the Department  
Aeronautical Engineering  
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