



# 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:	2020-2024
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.	2.70	2.30	2.6	Attained
CO2 Construct the equations of change in pressure, density and temperature for determining the nature of compression and expansion waves.	2.00	2.30	2.1	Attained
CO3 Develop the fundamental equation for one-dimensional and quasi one-dimensional flow of compressible ideal gas.	1.60	2.30	1.7	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.	1.60	2.30	1.7	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.	0.90	2.30	1.2	Not Attained
CO6 Apply the various optical flow visualization techniques used for capturing compressible flow fields.	1.30	2.30	1.5	Not Attained

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

- CO3: Additional reading materials is to be provided on fundamental equations.  
CO4: Digital contents are to be given.  
CO5: Additional assignments were given on perturbation theory for compressible flow  
CO6: Additional Material on flow visualization techniques need to be provided.

  
Course Coordinator

  
Mentor

  
Head of the Department,  
Aeronautical Engineering  
INSTITUTE OF AERONAUTICAL ENGINEERING  
Dundigal, Hyderabad - 500043