## INSTITUTE OF AERONAUTICAL ENGINEERING



(Autonomous)

Dundigal, Hyderabad - 500 043

## **AERONAUTICAL ENGINEERING**

## ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of Faculty:	Dr. Aravind Rajan Ayagara	Department:	Aerospace Engineering
Regulation:	R-18	Batch:	2020-2022
Course Name:	Advanced Computational Aerodynamics	Course Code:	BAEB05
Semester:	Ist Semester	Target Value:	1.8

Course Outcome		Direct attainment	Indirect attainment	Overall attainment	Observation
CO 1	Apply the flux approach, flux vector splitting, upwind reconstruction- evolution methods for solving the compressible flow problems using Euler's equations.	0.90	2.40	1.2	Not Attained
CO 2	Make use of the explicit, implicit, time split methods and approximate factorization schemes for obtaining the stabilized numerical solution of subsonic and supersonic nozzle flows	0.30	2.40	0.7	Not Attained
CO 3	Develop the boundary layer transformation equations for steady external flows on airfoil, wings and aircraft using finite difference method.	3.00	2.70	2.9	Attained
CO 4	Analyze the structured, unstructured grids and dummy cells using physical boundary conditions for attaining the accurate results of fluid flow problems.	3.00	2.10	2.8	Attained
CO 5	Identify the characteristic lines and compatibility equations for designing the supersonic nozzle having shock free and isentropic flow	1.60	1.80	1.6	Not Attained
CO 6	Utilize the effects of compressibility and viscosity on thin airfoil for establishing the numerical solution in aerodynamic problems	0.00	2.40	0.5	Not Attained

## Action taken report (To be filled by the concerned faculty/ course coordinator):

CO 1: Digital content and assignments have increased

CO 2: Real-time application may be better for attainment.

CO 5: Digital content and videos are given in classes for a better understanding of concept.

CO 6: Application-oriented problems given for better attainment

Course Coordinator

Mentor

HOD

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