



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500043, Telangana

AERONAUTICAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	Dr. YAGYA DUTTA DWIVEDI	Department:	Aeronautical Engineering
Regulation:	IARE - BT23	Batch:	2023-2027
Course Name:	Aircraft Stability and Control	Course Code:	AAED21
Semester:	V	Target Value:	60% (1.8)

Attainment of COs:

	Course Outcome	Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Identify the concept of static stability in longitudinal, lateral and directional modes by using mathematical expression for different aircraft stability conditions	1.20	2.20	1.4	Not Attained
CO2	Solve the design problems of the airframe components considering the aircraft static stability by using stability criteria equations and plots.	1.20	2.10	1.4	Not Attained
CO3	Make use of the aircraft equations of motion in 6- degree of freedom and transform one axis to another axis system by using mathematical formulations for understanding the behavior in different flight manoeuvres.	1.20	2.20	1.4	Not Attained
CO4	Develop the procedure to linearization of equations of motion by using perturbation theory for determining aerodynamic derivatives of the airplane.	2.40	2.20	2.4	Attained
CO5	Examine the different types of dynamic modes in longitudinal, lateral and directional motion for the aircraft and their influence on dynamic stability and safety	1.80	2.20	1.9	Attained
CO6	Apply the advance theories of flight dynamics in design of modern control airplane control systems for enhancing aircraft performance, modern control systems and autopilot system.	1.80	2.20	1.9	Attained

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

CO1:

- Conducted revision lectures on aircraft static stability fundamentals.

CO2: Explained stability criteria equations applied to airframe component design

CO3: Delivered focused lectures on six-degree-of-freedom aircraft equations of motion


Course Coordinator


Mentor


Head of the Department
Head of the Department
Aeronautical Engineering
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