



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500043, Telangana

AERONAUTICAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	Mr. V PHANINDER REDDY	Department:	Aeronautical Engineering
Regulation:	IARE - UG20	Batch:	2021-2025
Course Name:	Automatic Control of Aircraft	Course Code:	AAEC52
Semester:	VIII	Target Value:	60% (1.8)

Attainment of COs:

Course Outcome		Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Explain the principles of guidance, navigation, and governing laws for the control of aircraft for getting the desired aircraft attitude	0.60	2.20	0.9	Not Attained
CO2	Demonstrate the automatic flight control system under different types of flight conditions for assessing the stability and control of an airplane	0.60	2.20	0.9	Not Attained
CO3	Summarize the automatic gain schedule concept for airplane control by plotting the required curve for obtaining desired automatic control of the flight vehicle	0.90	2.20	1.2	Not Attained
CO4	Apply the concept of displacement autopilots and orientation control in longitudinal motion with its elements for optimal flight automated control of the airplane	0.90	2.20	1.2	Not Attained
CO5	Make use of the aircraft longitudinal flight control laws by using simple stepping algorithm for optimizing the required control of the flight vehicles.	0.60	2.20	0.9	Not Attained
CO6	Outline the fly-by-wire flight control by using flight control laws and modern computational tools system for the assessment of redundancy and failure of the aircraft operation	0.60	2.10	0.9	Not Attained

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

CO1: Taught the basic principles to help students understand how to change and maintain the aircraft's direction and position to get the desired attitude.

CO2: Demonstrated the working of an automatic flight control system under various flight conditions to assess the airplane's stability and control performance.

CO3: Summarized the concept of automatic gain scheduling for airplane control to achieve the desired automatic response of the flight vehicle under varying flight conditions.

CO4: Used the concept of displacement autopilots and orientation control in forward and pitch motion to help students understand how to achieve smooth and automatic control of the airplane.

CO5: Used simple stepping algorithms to apply aircraft longitudinal flight control laws for improving and optimizing the control of flight vehicles.

CO6: Outlined computational tools to assess system redundancy and detect possible failures in aircraft operations.


Course Coordinator


Mentor


Head of the Department

Head of the Department
Aeronautical Engineering
INSTITUTE OF AERONAUTICAL ENGINEERING
Dundigal, Hyderabad - 500 043