



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500043, Telangana

AERONAUTICAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

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|----------------------|--------------------------------|---------------|--------------------------|
| Name of the faculty: | Dr. YAGYA DUTTA DWIVEDI | Department: | Aeronautical Engineering |
| Regulation: | IARE - R18 | Batch: | 2018-2022 |
| Course Name: | Aircraft Stability and Control | Course Code: | AAEB13 |
| Semester: | V | Target Value: | 60% (1.8) |

Attainment of COs:

| Course Outcome | Direct attainment | Indirect attainment | Overall attainment | Observation |
|---|-------------------|---------------------|--------------------|-------------|
| C01 Identify the concept of static stability in longitudinal, lateral and directional modes by using mathematical expression for different aircrafts stability conditions | 3.00 | 2.40 | 2.9 | Attained |
| C02 Solve the design problems of the airframe components considering the aircraft static stability by using stability criteria equations and plots. | 3.00 | 2.40 | 2.9 | Attained |
| C03 Apply 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 behaviour in different flight maneuvers. | 3.00 | 2.30 | 2.9 | Attained |
| C04 Develop the procedure to linearization of equations of motion by using perturbation theory for determining aerodynamic derivatives of the airplane. | 3.00 | 2.40 | 2.9 | Attained |
| C05 Examine the different types of dynamic modes in longitudinal, lateral and directional motion for the aircraft and their influence on dynamic stability and safety. | 2.30 | 2.40 | 2.3 | Attained |
| C06 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. | 3.00 | 2.30 | 2.9 | Attained |

Action taken report:

Course Coordinator

Mentor

Head of the Department

Head of the Department
Aeronautical Engineering
INSTITUTE OF AERONAUTICAL ENGINEERING
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