# INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

## AERONAUTICAL ENGINEERING

## ATTAINMENT OF COURSE OUTCOME – ACTION TAKEN REPORT

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|---|---|---|---|
| Name of Faculty: | Dr.Aravind Rajan Ayagara | Department: | Aerospace Engineering |
| Regulation: | R-18 | Batch: | 2020-2022 |
| Course Name: | Engineering Analysis Of Flight Vechicles | Course Code: | BAEB12 |
| Semester: | IInd Semester | Target Value: | **1.8** |

| Course Outcome | | Direct attainment | Indirect attainment | Overall attainment | Observation |
|---|---|---|---|---|---|
| **CO 1** | Identify the factors affecting vehicles configuration for determining its effect on flight characteristics | 3.00 | 3.00 | 3 | Attained |
| **CO 2** | Develop the equation of motion for operation of vehicle relative to the ground and flight for rigid flight vehicles using Newton's laws. | 0.30 | 2.10 | 0.7 | Not Attained |
| **CO 3** | Construct the equation of motion of launch vehicle and spacecraft for static performance, impact of stability and control for the rotating planet. | 0.90 | 2.40 | 1.2 | Not Attained |
| **CO 4** | Demonstrate the perturbed longitudinal equation of motion for static and dynamic stability of rigid flight vehicles. | 0.90 | 0.90 | 0.9 | Not Attained |
| **CO 5** | Inspect the impact of stability and design of longitudinal control of flight vehicles using numerical integration method. | 0.90 | 2.70 | 1.3 | Not Attained |
| **CO 6** | Examine the gliding re-entry vehicle with respect to a rotating planet using equations of motion of launch vehicles for dynamic performance | 1.60 | 2.40 | 1.8 | Attained |

**Action taken report (To be filled by the concerned faculty/ course coordinator):**
**CO 2:** Digital content and videos are given in classes to understand concepts better.
**CO 3:** Application-oriented problems may be given
**CO 4:** Additional inputs are given related to static and dynamic stability
**CO 5:** Extra materials are provided stability and design of longitudinal control

**Course Coordinator** **Mentor** **HOD**

Head of the Department
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