INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

AERONAUTICAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME – ACTION TAKEN REPORT

Name of the faculty:	**Dr. Prasanta Kumar Mohanta**	Department:	**AE**
Regulation:	**IARE - R16**	Batch:	**2017 - 2021**
Course Name:	**Space Mechanics**	Course Code:	**AAE016**
Semester:	**VII**	Target Value:	**65% (1.8)**

Attainment of COs:

Course Outcome		Direct attainment	Indirect attainment	Overall attainment	Observation
CO1	Relate the concepts in Solar system, Lagrange-Jacobi identity and N-body problem for describing the reference frames, coordinate systems and Earth's atmosphere.	1.6	2.4	1.8	Attainment target reached
CO2	Demonstrate the dependence of orbital parameters of orbit deviations using Orbital elements for Launch vehicle ascent trajectories.	1.6	2.3	1.7	Attainment target not reached
CO3	Identify the Equations of motion and characteristics of orbits using the relation between orbital elements and position for different orbits.	2.3	2.4	2.3	Attainment target reached
CO4	Classify the 2D, 3D interplanetary trajectories and general perturbations in Cowell's Method for launching interplanetary spacecraft and identifying trajectory of the target planet.	1.6	2.4	1.8	Attainment target reached
CO5	Outline the boost phase, ballistic phase and trajectory geometry using the techniques of Re-entry for Ballistic Missile Trajectories.	0.9	2.4	1.2	Attainment target not reached
CO6	Demonstrate the mission performance parameters with help of constant radial thrust acceleration, constant tangential thrust for Low thrust trajectories.	3.0	2.4	2.9	Attainment target reached

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

CO 2: Remedial classes have been conducted.

CO 5: Application oriented problems may be given.

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

Head of the Department
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