



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

AERONAUTICAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME – ACTION TAKEN REPORT


Name of the faculty:	G RAM VISHAL	Department:	Aeronautical Engineering
Regulation:	IARE - R16	Batch:	2016 - 2020
Course Name:	Aerospace Structures Laboratory	Course Code:	AAE104
Semester:	IV	Target Value:	75% (1.8)

Attainment of COs:

Course Outcome		Direct attainment	Indirect attainment	Overall attainment	Observation
CO 1	Examine the deflection produce due to various end conditions of beams, verify maxwells reciprocal theorem, Stress-Strain curve for various materials for obtaining the minimum stress.	2.7	0	2.7	Attainment target reached
CO 2	Compare the buckling strength for short and long columns with various end conditions and verify it with Euler's formula for designing of beams used in aerospace structures.	2.7	0	2.7	Attainment target reached
CO 3	Assess the deflection of beams in out of plane (unsymmetrical bending), and obtain the location of shear center for a given beam section for designing of beams with minimum stresses and location of loading point to decouple torsion and deflection.	2.7	0	2.7	Attainment target reached
CO 4	Utilize the Wagner theorem to determine the buckling stresses under shear, and determine the young's modulus of a fabricated sandwich structure for designing of beams to avoid failures and to optimize the weight and strength of a sandwich structure.	2.7	0	2.7	Attainment target reached
CO 5	Utilize Dye penetration test, magnetic particle test, and ultrasonic technique to inspect the cracks on a material for characterizing a crack to avoid failures under static and dynamic loading conditions.	2.7	0	2.7	Attainment target reached
CO 6	Inspect the natural frequencies of beams under free and force vibration for designing of a structure to avoid failure due to resonance.	2.7	0	2.7	Attainment target reached


Course Coordinator


Mentor


Head of the Department
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