



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500043, Telangana

MECHANICAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	Mr. A SOMAIAH	Department:	Mechanical Engineering
Regulation:	IARE - R20	Batch:	2020-2024
Course Name:	Solid Mechanics	Course Code:	AMEC05
Semester:	III	Target Value:	60% (1.8)

Attainment of COs:

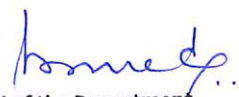
Course Outcome	Direct attainment	Indirect attainment	Overall attainment	Observation
CO1 Relate the concepts of stress and strain at a point as well as the stress-strain relationships for linear, elastic, homogeneous and isotropic materials.	0.60	2.40	1	Not Attained
CO2 Summarize the equilibrium equations for constructing the shear force and bending moment diagrams for different types of loads on cantilever, simply supported and over hanging beams.	0.00	2.40	0.5	Not Attained
CO3 Identify the principal stresses, maximum shearing stresses and angles acting on any arbitrary plane within a structural element using Mohr's circle method.	0.90	2.40	1.2	Not Attained
CO4 Apply the knowledge of theories of failure, shear force and bending moment relations for analyzing the flexural stress, shear stress distributions and failure of beam sections.	0.30	2.30	0.7	Not Attained
CO5 Utilize Maxwell's reciprocal theorem, double integration method and moment area method to determine the maximum and minimum slope and deflections of beams.	0.00	2.40	0.5	Not Attained
CO6 Make use of the concept of torsion and buckling of thin shells, spheres, etc. to determine the stresses at various points of geometry.	0.00	2.30	0.5	Not Attained

Action Taken:

- CO1: More tutorials to be conducted on finding the stress-strain relationships for different materials.
- CO2: More assignments to be given on construction of the shear force and bending moment diagrams for different types of loads on cantilever, simply supported and over hanging beams.
- CO3: More tutorials to be conducted on using Mohr's circle method for finding the principal stresses, maximum shearing stresses
- CO4: More problems are to be solved on shear force and bending moment diagrams for different types of loads and beams.
- CO5: More problems are to be solved on the design of beams using Clerk-Maxwell's reciprocal theorem.
- CO6: More assignments to be given on application of concept of torsion and buckling of thin shells, spheres, etc. to determine the stresses at various points of geometry.


Course Coordinator


Mentor


Head of the Department
Head of the Department
Mechanical Engineering
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