



**INSTITUTE OF AERONAUTICAL ENGINEERING**  
(Autonomous)

Dundigal, Hyderabad - 500043, Telangana

**MECHANICAL ENGINEERING**

**ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT**

Name of the faculty:	<b>Dr. K VISWANATH ALLAMRAJU</b>	Department:	<b>Mechanical Engineering</b>
Regulation:	<b>IARE - R20</b>	Batch:	<b>2021-2025</b>
Course Name:	<b>Solid Mechanics</b>	Course Code:	<b>AMEC05</b>
Semester:	<b>III</b>	Target Value:	<b>60% (1.8)</b>

**Attainment of COs:**

	<b>Course Outcome</b>	<b>Direct Attainment</b>	<b>Indirect Attainment</b>	<b>Overall Attainment</b>	<b>Observation</b>
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.	0.90	2.60	1.2	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.	0.90	2.60	1.2	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.	2.30	2.60	2.4	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.	1.60	2.60	1.8	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.	0.60	2.50	1	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.	0.30	2.60	0.8	Not Attained

**Action Taken Report: (To be filled by the concerned faculty / course coordinator)**

- 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.
- 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  
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