



# 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 CHINA APPARAO</b>	Department:	<b>Mechanical Engineering</b>
Regulation:	<b>IARE - BT23</b>	Batch:	<b>2023-2027</b>
Course Name:	<b>Solid Mechanics and Materials</b>	Course Code:	<b>AMED06</b>
Semester:	<b>III</b>	Target Value:	<b>60% (1.8)</b>

#### Attainment of COs:

Course Outcome	Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1 Recall the concepts of basic crystallography and imperfections of various crystals	1.20	2.20	1.4	Not Attained
CO2 Identify the atomic packing factor of unit cells of various crystal structures to study the properties of materials.	0.80	2.20	1.1	Not Attained
CO3 Relate the concepts of stress and strain at a point as well as the stress-strain relationships for linear, elastic, homogeneous and isotropic materials.	1.20	2.20	1.4	Not Attained
CO4 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.	1.20	2.20	1.4	Not Attained
CO5 Identify the principal stresses, maximum shearing stresses and angles acting on any arbitrary plane within a structural element using Mohr's circle method.	1.20	2.20	1.4	Not Attained
CO6 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.	1.80	2.20	1.9	Attained

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

CO1: To recall the concepts of basic crystallography and imperfections of various crystals

CO2: To identify the atomic packing factor of unit cells of various crystal structures to study the properties of materials.

CO3: To relate the concepts of stress and strain at a point as well as the stress-strain relationships for linear, elastic, homogeneous and isotropic materials.

CO4: To 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.

CO5: To identify the principal stresses, maximum shearing stresses and angles acting on any arbitrary plane within a structural element using Mohr's circle method.

  
Course Coordinator

  
Mentor

  
Head of the Department  
Head of the Department  
INSTITUTE OF AERONAUTICAL ENGINEERING  
Dundigal, Hyderabad - 500 043