INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
Dundigal, Hyderabad - 500043, Telangana

STRUCTURAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	**Dr. JSR PRASAD**	Department:	**Structural Engineering**
Regulation:	**IARE - PG21**	Batch:	**2022-2024**
Course Name:	**Advanced Solid Mechanics**	Course Code:	**BSTC02**
Semester:	**I**	Target Value:	**60% (1.8)**

Attainment of COs:

	Course Outcome	Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Explain theory of elasticity including strain/displacement and Hooke's law relationships for analysing the structures with in elastic range.	2.70	2.20	2.6	Attained
CO2	Develop constitutive relationships between stress and strain in linearly elastic solid for analysing the stresses in the field.	0.70	1.90	0.9	Not Attained
CO3	Analyze the Stresses and Strains, Strain Displacement and Compatibility Relations for Boundary Value Problems in the Principal Directions.	0.90	2.20	1.2	Not Attained
CO4	Explain the Plane Stress and Plane Strain Problems using Airy's stress Function and Two-Dimensional Problems in Polar Coordinates.	0.90	2.00	1.1	Not Attained
CO5	Analyze boundary value problems using Modified Galerkin Method.	0.90	1.70	1.1	Not Attained
CO6	Examine the properties of ideally plastic solids using different yield criterion.	0.90	2.20	1.2	Not Attained

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

CO2: A guest lecture on *Statistical Regression Analysis in Civil Engineering* was conducted to help students develop constitutive stress–strain relationships using data-driven approaches.

CO3: Organized tutorial classes on compatibility conditions to ensure physically realistic strain fields.

CO4: Conducted tutorials to clarify assumptions, boundary conditions, and solution procedures.

CO5: Assigned numerical exercises to compute approximate solutions using the Galerkin approach.

CO6: Assessed learning through quizzes focusing on conceptual and numerical aspects.

Course Coordinator **Mentor** **Head of the Department**

Head of the Department
Civil Engineering
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