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

STRUCTURAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	**Mr. GUDE RAMA KRISHNA**	Department:	**Structural Engineering**
Regulation:	**IARE - R18**	Batch:	**2020-2022**
Course Name:	**FEM IN STRUCTURAL ENGINEERING**	Course Code:	**BSTB11**
Semester:	**II**	Target Value:	**60% (1.8)**

Attainment of COs:

	Course Outcome	Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Explain the concepts of matrix analysis of structures for understanding the FEM.	2.70	2.40	2.6	Attained
CO2	Outline the concepts of elasticity, plane stress and plane strain conditions for the design purpose.	1.30	2.40	1.5	Not Attained
CO3	Analyze the one- and two-dimensional structures using beam and bar elements.	1.00	2.30	1.3	Not Attained
CO4	Explain the concepts of iso-parametric elements for the analysis of Structures.	0.90	2.50	1.2	Not Attained
CO5	Analyze the plates like slabs using plate elements.	0.90	2.40	1.2	Not Attained
CO6	Summarize the concepts of non-linear analysis for analyzing the real world situations	0.90	2.30	1.2	Not Attained

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

CO2: Introduced and clarified the concepts of plane stress and plane strain conditions with practical examples.
CO3: Conducted classroom lectures explaining modeling of one- and two-dimensional structures using beam and bar elements.
CO4: Compared iso-parametric and standard finite elements to highlight advantages in complex geometry modeling.
CO5: Organized problem-solving sessions to compute bending moments, shear forces, and deflections in plate structures.
CO6: Explained iterative solution techniques, such as Newton-Raphson and incremental methods, for non-linear analysis.

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

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