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

STRUCTURAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	**Dr. VENU MALAGAVELLI**	Department:	**Structural Engineering**
Regulation:	**IARE - PG21**	Batch:	**2022-2024**
Course Name:	**Advanced Structural Analysis**	Course Code:	**BSTC01**
Semester:	**I**	Target Value:	**60% (1.8)**

Attainment of COs:

	Course Outcome	Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Explain the concepts of the static and kinematic indeterminacy of structures for analyzing the structures subjected to different loads.	3.00	2.80	3	Attained
CO2	Analyze continuous beams, portal frames for the given loading conditions using the stiffness, flexibility, approximate methods for ensuring structural efficiency.	3.00	1.90	2.8	Attained
CO3	Analyze member forces due to applied loads, lack of fit and temperature changes for the indeterminate trusses.	3.00	1.60	2.7	Attained
CO4	Apply the concept of stiffness matrix equations in global coordinate system with boundary condition for analyzing member forces in beams and frame structures.	0.90	2.30	1.2	Not Attained
CO5	Explain the shape function concepts of one and two-dimensional elements for enriching knowledge on stiffness matrix.	2.30	1.90	2.2	Attained
CO6	Make use of modified galerkin method for computing approximate solution of one-dimensional boundary value problems.	0.90	2.00	1.1	Not Attained

Action Taken Report: (To be filled by the concerned faculty / course coordinator)
CO4: A hands-on workshop on "*Dynamic Analysis and Design of Seismic-Resistant Buildings for Safety*" was conducted to demonstrate the application of stiffness matrix formulation in global coordinates with appropriate boundary conditions.
CO6: Demonstrated step-by-step formulation of approximate solutions using trial and weighting functions.

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

Head of the Department
Civil Engineering
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