



## INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500043, Telangana

## STRUCTURAL ENGINEERING

### ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	Dr. VENU MLAGAVELLI	Department:	Structural Engineering
Regulation:	IARE - R18	Batch:	2019-2021
Course Name:	ADVANCED STRUCTURAL ANALYSIS	Course Code:	BSTB01
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	2.30	2.80	2.4	Attained
CO2	Analyze continuous beams, portal frames for the given loading conditions using the stiffness, flexibility, approximate methods for ensuring structural efficiency	3.00	2.40	2.9	Attained
CO3	Analyze member forces due to applied loads, lack of fit and temperature changes for the indeterminate trusses	3.00	2.50	2.9	Attained
CO4	Apply the concept of stiffness matrix equations in global coordinate system with boundary condition for analysing member forces in beams and frame structures.	2.10	0.00	1.7	Not Attained
CO5	Explain the shape function concepts of one and two-dimensional elements for enriching knowledge on stiffness matrix.	2.10	0.00	1.7	Not Attained
CO6	Make use of modified galerkin method for computing approximate solution of one-dimensional boundary value problems	2.10	0.00	1.7	Not Attained

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

CO4: Organized guided problem-solving sessions where students applied boundary constraints and computed member forces step-by-step using stiffness method formulations.

CO5: Provided numerical assignments focused on interpolation functions and their role in stiffness matrix development.

CO6: Arranged hands-on tutorials using MATLAB to compare analytical and Modified Galerkin solutions for one-dimensional problems.

Course Coordinator

Mentor

Head of the Department

Head of the Department

Civil Engineering

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