



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500043, Telangana

CIVIL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	Dr. U VAMSI MOHAN	Department:	Civil Engineering
Regulation:	IARE - UG20	Batch:	2022-2026
Course Name:	Analysis of Structures	Course Code:	ACEC14
Semester:	V	Target Value:	60% (1.8)

Attainment of COs:

	Course Outcome	Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Outline about various types of arches for selecting appropriate arch in field applications.	2.70	2.40	2.6	Attained
CO2	Make use of energy principles in the analysis of two hinged arches for computing resultant thrust and evaluating secondary stresses due to thermal and rib shortening effects.	0.60	2.50	1	Not Attained
CO3	Apply the concepts of Castiglano's theorem for analysing indeterminate trusses.	0.60	2.50	1	Not Attained
CO4	Analyse the continuous beams using the concepts of slope-deflection, moment distribution and Kani's methods for design of rigid frames with and without side sway.	0.60	2.40	1	Not Attained
CO5	Summarize the effects of rolling loads for thorough understanding of the variations in internal forces on bridge girders due to moving vehicular loads	0.90	2.40	1.2	Not Attained
CO6	Apply the concept of influence line diagrams for analyzing beams, bridge girders and trusses in real time problems.	0.60	2.40	1	Not Attained

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

CO2: Provided case studies of historical and modern arch structures illustrating practical implications of thermal stresses and rib shortening.

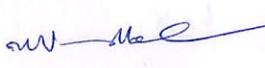
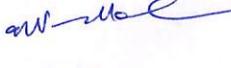
CO3: Arranged software-based labs using STAAD.Pro/MATLAB to validate analytical results obtained through Castiglano's theorem.

CO4:

- Delivered detailed lectures illustrating the step-by-step procedure of slope-deflection, moment distribution, and Kani's methods for continuous beam analysis.

CO5: Assigned problem sets involving single concentrated loads, UDLs, and train loads to strengthen concepts of maximum internal forces.

CO6: Conducted a hands-on mini-project requiring students to analyze a bridge girder under moving vehicular loads using ILD concepts.


Course Coordinator
Mentor


Head of the Department
Civil Engineering
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