



# 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 - R18	Batch:	2020-2022
Course Name:	STRUCTURAL DYNAMICS	Course Code:	BSTB12
Semester:	II	Target Value:	60% (1.8)

#### Attainment of COs:

Course Outcome	Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1 Explain the concepts of equation of motion of a dynamic system and different loads acting on the structures for understanding the behavior of structures.	2.30	2.50	2.3	Attained
CO2 Outline the concept of damped vibrations of single degree freedom systems for the analysis of structures subjected to dynamic loads.	1.60	2.40	1.8	Attained
CO3 Develop the expressions for response of single degree freedom systems based on loading function for the response of structure used in design.	1.60	2.40	1.8	Attained
CO4 Develop the equations of structural response to dynamic loads using Duhamel's integral and fourier analysis.	1.60	2.30	1.7	Not Attained
CO5 Analyse the two-degree freedom systems subjected to free and forced vibrations for the design purpose.	0.90	2.50	1.2	Not Attained
CO6 Analyse the multiple degree of freedom systems to know the natural frequencies, modes and mode shapes using orthogonality and normality principles and superposition method.	0.90	2.20	1.2	Not Attained

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


CO4: Conducted tutorials to clarify assumptions, integration steps, and convergence criteria in Duhamel's and Fourier methods.

CO5: Organized problem-solving sessions to compute natural frequencies and mode shapes for coupled systems.

CO6: Assigned numerical exercises to practice superposition methods for analyzing dynamic response of MDOF systems.

  
Course Coordinator

  
Mentor

  
Head of the Department  
Head of the Department  
Civil Engineering  
INSTITUTE OF AERONAUTICAL ENGINEERING  
Dundigal, Hyderabad - 500043, Telangana