



# 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 - R20            | Batch:        | 2020-2024         |
| Course Name:         | Strength of Materials | Course Code:  | ACEC02            |
| Semester:            | III                   | Target Value: | 60% (1.8)         |

#### Attainment of COs:

|     | Course Outcome  | Direct attainment | Indirect attainment | Overall attainment | Observation  |
|-----|---|-------------------|---------------------|--------------------|--------------|
| CO1 | Summarize the concepts of stress, strain and strain energy in conjunction with elastic properties of materials for understanding the behaviour of simple and composite bars subjected to uniaxial and biaxial stresses. | 2.70              | 2.20                | 2.6                | Attained     |
| CO2 | Explain the relationship between bending moment, shear force and rate of loading for understanding response of the member under external loads  | 2.00              | 2.30                | 2.1                | Attained     |
| CO3 | Apply the theory of simple bending to beams for computing the flexural strength and distribution of bending and shear stress across the section.  | 1.70              | 2.20                | 1.8                | Attained     |
| CO4 | Apply the torsion equation to springs, solid and hollow circular shafts for computing torsional stiffness of springs and power transmitted by shafts.   | 0.30              | 2.30                | 0.7                | Not Attained |
| CO5 | Illustrate the concepts of principal stresses and principal strains with the help of Mohr's circle of stresses for solving two-dimensional stress problems.   | 0.30              | 2.20                | 0.7                | Not Attained |
| CO6 | Apply the concepts various theories of failure for finding the cause of failure and to take care of it in the design.   | 0.30              | 2.30                | 0.7                | Not Attained |

#### Action Taken:

CO4: Giving assignments and conducting tutorials on applying the torsion equation to springs, solid and hollow circular shafts for computing torsional stiffness of springs and power transmitted by shafts.

CO5: Additional information will be provided on the concepts of principal stresses and principal strains with the help of Mohr's circle of stresses for solving two-dimensional stress problems.

CO6: Need to provide more problems and assignments on applying the concepts of various theories of failure for finding the cause of failure and to take care of it in the design.

  
Course Coordinator

  
Mentor

  
Head of the Department

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