# MECHANICAL ENGINEERING

## ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

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| Name of the faculty: | **Dr. VVS HARNADH PRASAD** | Department: | **Mechanical Engineering** |
| Regulation: | **IARE - R18** | Batch: | **2019-2023** |
| Course Name: | **Dynamics of Machinery** | Course Code: | **AMEB17** |
| Semester: | **V** | Target Value: | **60% (1.8)** |

**Attainment of COs:**

| | Course Outcome | Direct attaiment | Indirect attaiment | Overall attaiment | Observation |
|---|---|---|---|---|---|
| CO1 | Discuss the effect of precession motion on the stability , the static and dynamic force analysis of dynamic and static members. | 0.90 | 2.50 | 1.2 | Not Attained |
| CO2 | Apply the laws of friction on clutches, brakes and dynamometers to reduce the power losses for the effective torque transmission. | 0.60 | 2.60 | 1 | Not Attained |
| CO3 | Justify the importance of torque and fluctuation of speeds for single and multi cylindered engines to increase the mechanical efficiency. | 0.90 | 2.50 | 1.2 | Not Attained |
| CO4 | Estimate the height of a governor to regulate the speed of a prime mover at various load conditions. | 0.90 | 2.60 | 1.2 | Not Attained |
| CO5 | Determine the balanced mass for unbalanced rotary and reciprocating engines by analytical and graphical methods. | 0.90 | 2.50 | 1.2 | Not Attained |
| CO6 | Develop a mathematical modelling of free and forced vibration systems under damped and un-damped conditions to avoid the vibratory damages of aero-mechanical-civil structures and electrical and electronic components at various operated frequencies. | 0.90 | 2.50 | 1.2 | Not Attained |

**Action Taken:**

CO1: More tutorials to be conducted on the static and dynamic force analysis of dynamic and static members.

CO2: More problems to be solved on the application of the laws of friction on clutches, brakes and dynamometers.

CO3: More tutorials to be conducted on finding the mechanical efficiency of single and multi cylindered engines.

CO4: More problems to be solved on estimation of the height of a governor.

CO5: More tutorials to be conducted on balancing of rotary and reciprocating engines by analytical and graphical methods.

CO6: More problems to be solved on mathematical modelling of free and forced vibration systems under damped and un-damped conditions.

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

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