



Department of Mechatronics Engineering

Course Name: Vibration Analysis & Control

Class: BE Mechatronics Engineering

Course Code: 417549 (2019 Course)

Course Outcomes:

On completion of the course, the students will be able to

1. APPLY balancing technique for static and dynamic balancing of multi cylinder inline and radial engines.
2. ANALYZE the gyroscopic couple or effect for stabilization of Ship, Airplane and Four wheeler vehicles.
3. ESTIMATE natural frequency for single DOF un-damped & damped free vibratory systems.
4. DETERMINE response to forced vibrations due to harmonic excitation, base excitation and excitation due to unbalance forces.
5. ESTIMATE natural frequencies, mode shapes for 2 DOF un-damped free longitudinal and torsional vibratory systems.
6. DESCRIBE noise and vibration measuring instruments for industrial / real life applications along with suitable method for noise and vibration control.