

**RO8711 MODELING AND SIMULATION LABORATORY**

DETAILED SYLLABUS

**OBJECTIVE:**

- To expose the students is the usage of CAD/CAE softwares for modeling and analysis purposes.

**LIST OF EXPERIMENTS:**

1. Solid modeling of engineering components and assembly.
2. Determination of stresses and factor of safety in critical machine components by FEM and experimental validation of the results by strain measurement.
3. Dynamic analysis of chassis frame of an automobile.
4. Crash analysis of an automobile using FEA software.
5. Kinematic and dynamic analysis of mechanisms using mechanism analysis software.