

### "Techno – Social Excellence" MarathwadaMitraMandal's INSTITUTE OF TECHNOLOGY (MMIT)

Lohgaon, Pune-411047.

## "Mechanized Design Application"

# **Department of Mechanical Engineering**

Course Name: Design of Machine Elements – II Class: TE Mechanical Engineering

**Course Code: 302048** (2015Pattern)

## **Course Objectives:**

- 1. Enable students to attain the basic knowledge required to understand, analyze, design and select machine elements required in transmission systems.
- 2. Reinforce the philosophy that real engineering design problems are open-ended and challenging
- 3. Impart design skills to the students to apply these skills for the problems in real life industrial applications
- 4. Inculcate an attitude of team work, critical thinking, communication, planning and scheduling through design projects
- 5. Create awareness amongst students about safety, ethical, legal, and other societal constraints in execution of their design projects.
- 6. Develop an holistic design approach to find out pragmatic solutions to realistic domestic and industrial problems

#### **Course Outcomes:**

- CO1 To understand and apply principles of gear design to spur gears and industrial spur gear boxes.
- CO2 To become proficient in Design of Helical and Bevel Gear
- CO3 To develop capability to analyze Rolling contact bearing and its selection from manufacturer's Catalogue.
- CO4 To learn a skill to design worm gear box for various industrial applications.
- CO5 To inculcate an ability to design belt drives and selection of belt, rope and chain drives.
- CO6 To achieve an expertise in design of Sliding contact bearing in industrial applications.