

## Techno-Social Excellence Marathwada Mitra Mandal's INSTITUTE OF TECHNOLOGY (MMIT)

Lohgaon, Pune-411047.

## "Mechanized Design Application" **Department of Mechanical Engineering**

**Course Name: Geometric Dimensioning and Tolerancing Lab** 

Class: SE Mechanical Engineering Course Code: 202045 (2019 Pattern)

## **Course Objectives:**

- 1. To understand requirements of industrial drawings
- 2. To read, understand and explain basic Geometric Dimensioning & Tolerancing concepts
- 3. To apply various geometric and dimension tolerances based on type of fit
- 4. To include surface roughness symbols based on manufacturing process
- 5. To measure and verify position tolerances with applied material conditions
- 6. To understand requirements for manufacturing and assembly

## **Course Outcomes:**

On completion of the course, learner will be able to

- CO1. SELECT appropriate IS and ASME standards for drawing
- CO2. READ & ANALYSE variety of industrial drawings
- CO3. APPLY geometric and dimensional tolerance, surface finish symbols in drawing
- CO4. EVALUATE dimensional tolerance based on type of fit, etc.
- CO5. SELECT an appropriate manufacturing process using DFM, DFA, etc.