

## INTRODUCTION

Geometric Dimensioning and Tolerancing (GD&T) system eliminates ambiguities in engineering drawings and brings out the designer's intent very clearly. It ensures seamless communication between design, engineering, manufacturing and quality teams across the entire organization enabling them to work in a concurrent engineering environment. Application of GD&T system helps to reduce the manufacturing and inspection costs drastically.

This programme will focus on understanding the system of GD & T and the methods of applying it in real time designs and will be supported by examples, practical demonstrations on CMM and exercises.

## FOCUS AREAS

- Introduction to GD & T
- Terminology of GD & T features
- Maximum Material control (MMC) & Least Material Control (LMC) principles;5 Groups of GD&T
- Form and orientation tolerances in detail with application examples
- Interpretation of drawings with GD & T and exercises
- Demo of Measurements of form and orientation tolerances in CMM
- Bonus tolerance and its implications; Examples and exercises
- Position Tolerancing principles; its advantages over conventional methods of Tolerancing
- Concentricity and Symmetry
- Runout and profile tolerancing principles; Exercises
- Demonstration of GD & T measurements in open set up using conventional instruments
- Demonstration of GD & T measurements using CMM

## KEY TAKE AWAYS

After undergoing the programme, the participants will be able to -

1. Understand the concepts of GD&T features and correctly interpret GD&T symbols in Engineering Drawings
2. Learn about using tolerances at RFS, MMC and LMC conditions and Calculate Bonus tolerance
3. Gain a practical insight into inspection of GD&T features using conventional methods, Co-ordinate Measuring Machine and functional gauges

Note: Participants are requested to bring a scientific calculator to be used during the programme.

## PARTICIPATION FEE

**Rs. 7500/-**  
+18% GST

IMTMA Members / Micro Companies / Individual

**Rs. 8500/-**  
+18% GST

IMTMA Non Members

**Rs. 4250/-**  
+18% GST

Educational Institutions / Students

Special concession available for Faculty & Students from engineering colleges  
(subject to availability of seats)

## PARTICIPANT PROFILE

- Industry recruits/ GETs
- Fresh Diploma holders/ B.E. in Mechanical Engineering and allied disciplines who wants to make their career in manufacturing @ core companies
- Practicing Engineers

### For Registration Contact

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