



# IIGDT Training

## “Introduction to Mechanical Drawings & GD&T”

### Objective:

To understand 2D & 3D graphical representation of a mechanical drawing or mechanical sketches which includes multiple views, symbols and other drawing details

### Course Length:

1 day (8-hours)

### Course Content:

**Background to Engineering Drawing Development**

**Overview of Related Engineering Standards**

**Review of Applicable Terms and Definitions**

**Evaluation of Engineering Drawing Components**

- Line Types
- Dimensions (baseline, chainline, coordinate, basic and reference)
- Tolerances (linear, angular, bilateral, unilateral)
- Symbols
- Border
- Title Block
- Revision Block
- Notes (general & specific)

**Review of Basic Drafting Conventions**

- Third Angle Projection –vs- First Angle Projection
- Isometric Views
- Orthographic Views
- Section Views
- Detail Views

**Evaluation of Generic Sample Part**

**Multiple Exercises to Reinforce Views, Projections and Drafting Practices**

**Introduction to GD&T**

- Overview
- Introduction to datums
- Transformation of Linear Tolerancing to Position & Profile

### Targeted Audience:

Any individual, including engineering and non-engineering managers who participate in design reviews or technical meetings within the company or with mechanical component and assembly suppliers. Any individual who needs to understand 2D & 3D graphical representation of engineering drawings and sketches. Non mechanical engineers (electrical, chemical, industrial, regulatory, etc.), machine/equipment operators and technicians, assembly personnel, administrative assistants to technical groups, technical sales and purchasing representatives who deal with mechanical components and assemblies.

### Prerequisites:

None