

1-Day

# Geometric Dimensioning and Tolerancing

## (GD&T) Blueprint Reading

Aerospace Quality Management Systems

Register by phone

919-635-5581

Register online

[www.apexqualityassurance.com](http://www.apexqualityassurance.com)



# At A Glance

## Training for Aerospace Quality Management Systems

The purpose of this seminar is to give participants the skills and knowledge to interpret the main aspects of a mechanical drawing. Some people have the innate ability to visualize objects in three-dimensional space from a two-dimensional drawing. But anyone can accomplish this if some basic rules are in place and honed with practice.

The class will begin with a discussion of the categories of drawings, and the meaning of each line type. Then the major focus will be on interpreting and visualizing orthographic projection. Also covered are auxiliary information on a print (such as the title block and notes), interpreting dimensions/tolerances, and other special symbols (such as roughness callouts and screw threads). Multiple examples will be provided to show specific applications.

## Seminar Goals

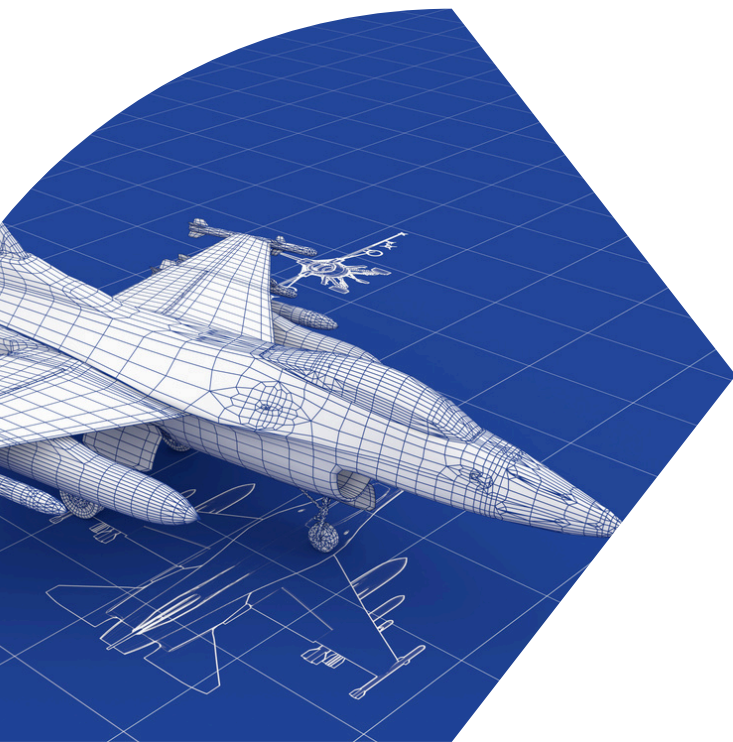
- Interpret orthographic projection
- Recognize first-angle and third-angle projection
- Know when to use various types of lines
- Identify auxiliary and section views and place them properly
- Correctly interpret title and revision blocks
- Understand and apply dimensioning & tolerancing to a print
- Recognize GD&T symbols and datums
- Identify and explain manufacturing callouts such as screw threads and surface finish



# Who Should Attend

## Training for Aerospace Quality Management Systems

This seminar is designed for product and manufacturing engineers, manufacturing and inspection personnel, and also those involved indirectly such as purchasing, cost estimators, and administrative personnel.



## Seminar Outline

### Training for Aerospace Quality Management Systems

- Introduction
- Importance of Engineering Drawings
- Basic Steps in Reading a Print
- Line Types: Visible, Hidden, Center, Extension, Dimension, Section, Leader, Phantom
- The Title Block
- Orthographic Projection Views
- Visualizing in 3D
- First vs. Third Angle Projection
- Section Views
- Dimensioning Practices
- Plus/Minus vs. Limit Dimensions
- Special Dimensions/Tolerances

