

ADVANCED PRINT READING

COURSE DESCRIPTION

How to interpret a technical drawing is an essential skill to anyone involved in the manufacturing industry. This course is designed for those seeking thorough coverage of the subject of drawing interpretation. This course presents the basic elements of a print and introduces the concepts that students must master to successfully interpret engineering drawings. Designed to provide you with an awareness of GD&T fundamentals, this course focuses on the basic requirements of engineering drawings, numeric dimensions and tolerances and geometric dimensions and tolerances.

LEARNING OBJECTIVES

- Visualize three-dimensional parts from drawings consisting of multiple views, including principal, auxiliary, partial and section views
- Recognize the symbols used with the geometric system of tolerances and properly read feature control frames.
- Recognize and properly consider bonus tolerances, datum feature identifiers, and the datum reference frame.
- Identify and read geometric controls on location, orientation, form, profile & runout.
- Interpret standard surface finish symbols and screw thread designations.
- Understand drawing features, symbols and notes unique to castings, forgings, and molded part prints, welded parts, sheet metal parts, gears, splines, and cams.
- Identify relevant information from a variety of other common types of prints used to convey specific types of information.

COURSE OUTLINE

- The Basics of Manufacturing Prints
- The Reading of Manufacturing Prints
- The Total Manufacturing Print
- Views
- Dimensioning Fundamentals



DYNAMIC DESIGN CONSULTING, LLC

www.dynamicdesignconsulting.com

ADVANCED PRINT READING

COURSE OUTLINE, CONT.

- Dimensioning Applications
- Size Tolerances
- Geometric Tolerances
- Surface Finish
- Threads
- Machine Terms and Manufacturing Processes
- Casting, Forging, and Molded Part Prints
- Welding and Sheet Metal Prints
- Gears, Splines, and Cams
- Types of Manufacturing Prints

Prerequisites: None

Course Format: 24 hours: 3 in-person sessions or 5 online sessions

WHO SHOULD ATTEND

This course is designed for anyone who needs to properly interpret and act upon the information contained in engineering specifications, including mechanical engineering technicians, manufacturing engineering technicians, machinists, welders, fabricators, tool & die makers, and quality assurance technicians.

Note: This course is not intended for design engineers who need to define engineering requirements - for a more in-depth coverage of GD&T, see: Basic GD&T.



DYNAMIC DESIGN CONSULTING, LLC

www.dynamicdesignconsulting.com

