**Category:**

Process Improvement Tools / Technical Skills

**Course Prerequisite:**

None

**Course Length:**

16 hours

**Materials:**

$72/student

(virtual)

$88/student (classroom)

**Cancellation Policy:**

Less than 14 days, 50% non-refundable , less than 7 days 100% non-refundable

**Minimum Number of Students:**

6

**Maximum Number of Students:**

16

**Delivery:**vILT or cILT  
(virtual or classroom)

**Pre-work:**None

**Blueprint 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 an overview 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. Material covered includes: visualizing the part, finding and interpreting the drawing information needed for a task, performing shop mathematics, and reading standard symbols and notes.

**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.

**Learning Objectives**Through training, participants will learn the following:

* Interpret and describe the technical information provided on industrial prints through drawings, dimensions, and notes.
* Navigate the total manufacturing print, including lines, scale, language, symbols, title blocks, and other components.
* Visualize parts from drawings consisting of multiple views, including basic, auxiliary, partial and various types of section views.
* Identify part dimensions and tolerances including geometric dimensioning and tolerancing.
* Calculate minimum and maximum allowable values for dimensions considering tolerances
* Interpret standard surface finish symbols and screw thread designations.
* Interpret symbols and notes used to communicate special manufacturing requirements that are not directly illustrated and dimensioned.
* Analyze drawing features, symbols and notes unique to castings, forgings, and molded part prints.
* Analyze weld symbols and interpret the unique symbols found on welded part prints and sheet metal prints.
* Analyze drawing features, symbols and notes unique to gears, splines, and cams.
* Identify relevant information from a variety of other common types of prints.