

# MFG 101 : BLUEPRINT READING

---

## Transcript title

Blueprint Reading

## Credits

3

## Grading mode

Standard letter grades

## Total contact hours

30

## Lecture hours

30

## Prerequisites with concurrency

MFG 100.

## Course Description

Covers reading and interpreting industrial blueprints used in manufacturing/fabrication. Includes interpretation of line types, geometric tolerancing and dimensioning, surface finish callouts, auxiliary views, and orthographic projection.

## Course learning outcomes

1. Demonstrate use of standard drawing title block notes and drawing formats that are typical in the machining, welding, and building construction trades.
2. Identify the meaning of different types of lines, symbols, print views, assembly prints, and call outs used to represent a three-dimensional object with two-dimensional drawings.
3. Interpret multi-view, sectional, and auxiliary drawings to visualize three-dimensional objects from two-dimensional drawings.
4. Interpret basic geometric, dimensioning, and tolerance standards indicated on industry standard blueprints.
5. Derive missing linear and/or angular dimensional values on industry standard blueprints.

## Content outline

1. General Measurement
2. Semi-Precision Measurement
3. Layout
4. Interpreting Engineering Symbols and Drawings
5. Interpreting Shop Symbols and Drawings

## Required materials

May have required materials, refer to the course syllabus for details.