

MFG 101 : BLUEPRINT READING

Transcript title

Blueprint Reading

Credits

3

Grading mode

Standard letter grades

Total contact hours

60

Other hours

60

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. Use 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 the blueprint.
5. Derive missing linear and/or angular dimensional values on industry standard blueprints.

Content outline

General Measurement Semi-Precision Measurement Layout Interpreting Engineering Symbols and Drawings Interpreting Welding Symbols and Drawings Interpreting Shop Symbols and Drawings

Required materials

None.