



BUSINESS TRAINING CENTER OUTLINE

COURSE TITLE: Technical Blueprint Reading Fundamentals

SCHEDULE: 20 Hours (2.5 hours/day, 2 days/week, 4 weeks)

REQUIRED TEXT/MATERIALS:

Basic Blueprint Reading, OER (Open Educational Resources)
Calculator (not phone), flash drive, Compass (recommended)

COURSE DESCRIPTION:

Students will learn to read blueprints and develop an understanding of how blueprints provide information necessary to control the manufacturing operation and quality outputs. Topics include terminology, standard abbreviations, the different types of lines on a blueprint, and reading different views. Major concentration will be towards ISO standards and geometric definitions, including profiles, parallelism, and true position. Focus will be on both paper and electronic formats. Students will be introduced to CAD environment processes throughout the course. The English inch and Metric dimensional examples will be included. The content is based on ASME Y14.5-2018, Dimensioning and Tolerancing.

COURSE OBJECTIVES:

After successfully completing this course, student will be able to:

1. Identify the parts of a print and the elements in the print body;
2. Explain the application of the various line types;
3. List the title block entries;
4. Describe the appearance and function of each line;
5. Identify each line variation on a sample print;
6. Determine and explain the meaning of lines;
7. Identify the projected views of an object;
8. Identify the standard view arrangements, including first and third angle projections;
9. Explain the basic rules for reading print dimensions;
10. Identify the primary methods of placing dimensions;
11. Identify thread dimensions;
12. Explain the major terms used in tolerancing;
13. Define some of the common abbreviations found on prints;
14. Identify detail and assembly prints
15. Identify entries made in a materials list;
16. Identify entries made in a revisions list;
17. Identify the methods used to show sectional views;
18. Determine, locate and identify section views, partial views and auxiliary views;

ATTENDANCE POLICY:

You are expected to attend all classes. Students are held accountable for all classes and assigned work.

Students are expected to contact their instructor prior to missing a class.

3 days of class absence is grounds for dismissal from the class.

TEACHING METHODOLOGY:

This class will focus on lectures, student participation, homework assignments and quizzes/exams.

METHOD OF EVALUATION/HOW GRADES ARE CALCULATED:

Exams (Midterm & Final)	40%
Quizzes (Week 1 &3)	40%
Homework	20%
Grade Total	100%

Students will earn full credential with a grade of 75% or better.