

Curriculum Learning Outcomes

100% of the curriculum learning outcomes will be covered in the high school course(s) by qualified CTE high school instructor(s).

Upon completion of this course, students will be able to:

- Interprets basic elements of a drawing or sketch.
- Interprets welding symbol information.
- Prepares an applicable bill of materials.
- Performs conversions of standard inch and metric measurements.
- Solve the common welding/fabrication workplace problems involving perimeter, area, surface area, and volume
- Calculate the weight and cost of welding consumables and materials

Curriculum Topics

- Weld Prints
- Construction Object Representation
- Print Reviews
- Welding Symbols
- Joint Design
- Fasteners and Structural Steel
- Computing Geometric Measurements and Shapes
- Fillet Welds
- Angular Development and Measurement Groove Welds
- Bends, Stretch outs
- Economical Layout
- Understanding Mathematics with Blue Prints

Students will demonstrate safe working habits and exhibit classroom and lab work habits consistent with occupational standards.

Assessments

A written test is available at www.ctecreditmn.com tests with **80% or better** accuracy.

Textbooks

- Title: Printreading for Welders^[L]_[SEP] Edition: 4th edition, American Technical Publishers, Inc
- Title: Practical Problems in Mathematics for Welders Edition: 5th edition, Delmar, Cengage Learning