

**Industrial Technology  
Hartley-Melvin-Sanborn CSD  
Course Benchmarks-Technical Drafting**

**Standards and Benchmarks**

**Standard I: Understand the use of CAD for technical drawing.**

Demonstrate previously learned basic drafting CAD skills.

Use welding symbols identification tools.

Use tolerancing symbols identification tools.

Construct various drawings for common fasteners and small industrial parts.

**Standard II: Understand language related to technical terms in drafting.**

Demonstrate use of tables and specification charts.

Use mathematics to solve technical problems.

Construct appropriate sectional views.

Construct necessary detail drawings.

**Standard III: Use CAD/CAM to create working programs from working drawings.**

Demonstrate proficiency with CAD/CAM drafting techniques.

Develop programs with drill commands.

Develop programs with contour commands.

Develop programs with pocket commands.

Develop programs with facing commands.

Choose appropriate machine tool options for various operations.

Demonstrate use of 3 axis's for 3-dimensional construction.

Create a computer generated construct simulation for milling.

**Standard IV: Manufacture small parts from CAD-CAM designs.**

Set-up stock for milling.

Set-up proper tool bits in CAM milling router.

Run previously designed part construction.

Manufacture interlocking parts.