



Description

This multi-level curriculum guides students through the entire designing process from the design of complex parts to virtual 3-D verification using Mastercam software.

Skills

- Focuses on the development of academic knowledge, employability skills, and technical skills. As students progress through the curriculum, the classroom instructor uses a detailed rubric to subjectively evaluate the student's skill and proficiency.

Objectives

- Identify angles as they relate to design and complete an angles worksheet.
- Identify features and navigate through the Mastercam interface.
- Create rectangles and lines using basic program commands.
- Use the program to create splines, surfaces, rotations, and mirrors.
- Create a 2-D part using the basic CAD functions.
- Use Mastercam to create G & M code and set job parameters.

Activities

- Lesson 1 Code and Coordinates
- Lesson 2 Mastercam Workspace
- Lesson 3 Arcs
- Lesson 4 Additional Tools
- Lesson 5 Basic CAD
- Lesson 6 Dimensions
- Lesson 7 Production Techniques
- Lesson 8 Analyze
- Lesson 9 Transform
- Lesson 10 Advanced CAD
- Lesson 11 CAM
- Lesson 12 Toolpaths
- Lesson 13 Speeds and Feeds
- Lesson 14 Contour Toolpaths
- Lesson 15 Pocketing with Islands
- Lesson 16 Drill Toolpaths
- Lesson 17 Two-Piece Part
- Lesson 18 Advanced Contouring
- Lesson 19 Advanced Pocketing
- Lesson 20 Challenge and Review

Standards

DEPCO courseware is developed from the Manufacturing Skill Standards Council (MSSC) and the National Skill Standards Board (NSSB). Close correlation with these standards will provide students with the skills and knowledge necessary for success in the workplace.

Module Includes:

Level 1 Industrial Training Center Includes: Training Manuals, Instructor's Manual, Installation CD, Mastercam Software, and Headphones (2).

Requirements

Computer required and sold separately

Curriculum Specifications

Industrial Training Manuals 1 and 2
Instructor's Guide
Installation CD