

Mechanical Systems



Description

In DEPCO's Mechanical Systems curriculum, students learn about the history, safety practices, and basic principles of mechanical systems. Students learn many principles for safety including lockout/tagout, OSHA regulations, and proper tool usages. In this curriculum, students use mathematical formulas, workloads, and belt tensions, among other principles.

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

- Describe Newton's laws of motion.
- Explain how lockout/tagout is used.
- Demonstrate how to properly use tools and measuring devices.
- Identify how to apply different torque formulas.
- Identify some of the different electrical motors and parts.
- Measure the work load applied to electric motors.

Activities

- Lesson 1 The History of Mechanical Systems
- Lesson 2 Safety
- Lesson 3 Tools and Measuring Devices
- Lesson 4 Torque and Data Sheets
- Lesson 5 Shims
- Lesson 6 Motors
- Lesson 7 Shafts
- Lesson 8 Bearings
- Lesson 9 Belts
- Lesson 10 Couplings
- Lesson 11 Pulleys and Sheaves
- Lesson 12 Spur Gears
- Lesson 13 Chains and Sprockets
- Lesson 14 Adjustable Sheaves
- Lesson 15 Alignment
- Lesson 16 U-joint
- Lesson 17 Loads
- Lesson 18 Multi-Configurations
- Lesson 19 Energy and Work
- 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, DEPCO Mechanical Systems Trainer, Shaft Unit One, Shaft Unit Two, Gear Motor Risers, Gear Panel, Indicator Panel, Alignment Panel, Chain Panel, Belt Panel, Safety Cover, Digital Photo Tachometer, Tool Cabinet with Tool Trays, Safety Glasses (2), and Headphones (2).

Computer is required and sold separately.