Short-term Maintenance Skills Training
Learn to operate, repair and troubleshoot industrial machinery. Training equipment includes more than 200 hands-on training aids that replicate tools, components and systems currently used on the factory floor across the country.

- 6 weeks, 7 hours a day
- April 25 – June 6, 2016
- 8:00 am to 3:00 pm
- Located at SCC Keokuk Campus, Room 511

Financial Assistance available.

Industrial Operations - Maintenance Skills Program Overview

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DAVID RECTOR, INSTRUCTOR comes to SCC after more than 30 years in the electric utility industry. Mr. Rector developed the training curriculum used by the Ameren Corporation for substation electricians, and administered the Ameren substation apprentice program in Missouri and Illinois.

Train for a career that’s in high demand right now.

Contact CBIZ to find out more!
319-208-5375 • cbiz@scciowa.edu
Industrial Operations - Maintenance Skills

### Volume 1: Shop Mathematics
- **Unit 1:** Base 10, Decimals, Decimal Equivalents, Percentages
- **Unit 2:** Fractions
- **Unit 3:** Algebraic Expressions, Simple Equations, Ratio, Proportion
- **Unit 4:** Graphs, Charts, Data Handling
- **Unit 5:** Weights, Measures, Metric Conversion
- **Unit 6:** Exponents, Square Roots, Right Triangles
- **Unit 7:** Angles, Plane Figures, Area
- **Unit 8:** Measurement of Solid Figures, Volume, Intro. to Trig.
- **Unit 9:** Trigonometric Tables

### Volume 2: Blueprint Reading & Machine Drawing
- **Unit 1:** Elements of Blueprints and Machine Drawing I

### Volume 3: Measurement
- **Unit 1:** Linear Measurement

### Volume 4: Hand Tools
- **Unit 1:** Care and Use of Hand Tools
- **Unit 2:** Mechanical Fasteners

### Volume 5: Basic Mechanical Components I
- **Unit 1:** Basic Machines
- **Unit 2:** Shafts, Couplings, Pulleys, Belts and Chain Drives
- **Unit 3:** Gears and Gear Ratios
- **Unit 4:** Advanced Couplings
- **Unit 5:** Basic Alignment

### Volume 6: Bearings & Lubrication
- **Unit 1:** Principles of Bearing Operation, Components, Bearings
- **Unit 2:** Principles of Friction and Lubricants

### Volume 7: Basic Mechanical Components II
- **Unit 1:** Levers, Cranks, Linkages, and Springs
- **Unit 2:** Types and Uses of Cams, Timing Adjustments
- **Unit 3:** Use of Elementary Timing Model in Timing Adjustments

### Volume 8: Machine Adjustment Fundamentals Using the STM
- **Unit 1:** Troubleshooting, Problem Solving, and Problem Identification Techniques
- **Unit 2:** Set Up Machine Standards Using the STM
- **Unit 3:** Problem Solving on Multiple Systems Using the STM

### Volume 8-A: Basic Pneumatics & Hydraulics
- **Unit 2A:** Air Compression, Properties of Air
- **Unit 2B:** Basic Pneumatics, Compressors, and Air Pressure Gauges
- **Unit 3A:** Hydraulic Flow and Control

### Volume 9: Electrical Components
- **Unit 1:** Principles of Electricity, AC & DC Circuits
- **Unit 2:** Basic Circuit Components, Switches, and Relays
- **Unit 3:** Digital Multimeter, Basic Measurements
- **Unit 4:** Input and Output Devices
- **Unit 5:** Electrical Schematics
- **Unit 6:** Generators & Transformers
- **Unit 7:** DC Machines
- **Unit 8:** Three-Phase AC & DC Motors

### Volume 10: Pump Basics
- **Unit 1:** Pumping Basics

### Volume 11: Valve Operation & Types
- **Unit 1:** Valve Operation and Type

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