

In addition to receiving a quality training experience from our Foundation Series, you will receive CEU credits upon completion of each subject area for a total of 2.3 CEUs for the entire series.

The CEU stands for continuing education unit that was created by the International Association for Continuing Education and Training (IACET). The development of the CEU provides a standard unit of measurement quantifying continuing education and training activities. As an authorized provider certified through IACET, we ensure that our courses follow the prestigious standards shared by our organization and IACET.

Industrial Facility Systems - 0.1 CEUs

Overview of Industrial Facility Systems

- Introduction to Industrial Systems
- Common Industrial Facility Support Systems
- Introduction to Industrial Standards
- Common Industrial Units of Measure

Safety - 0.3 CEUs

Industrial Facility Safety

- Industrial Facility Hazards
- Current and Voltage Dangers
- Industrial Protective Systems

Fire Safety

- Combustion Triangle
- Fire Hazards
- Common Fire Types
- Extinguishing Fires
- Fire Safety

Hazardous Communications

- Importance of Hazardous Communication
- Hazardous Communication Requirements
- Use of Hazardous Communication Programs

Lockout/Tagout

- Purpose of a Lockout/Tagout Program
- Principles of a Lockout/Tagout Program
- Lockout/Tagout Devices
- Authorized Team Member Responsibilities

Electrical Safety

- Electrical Shock
- Emergency Response Actions
- Electrical Safeguarding
- Electrical PPE
- De-Energizing Electrical Equipment

Industrial Signage

- Common Industrial Signs
- Hazard Identification Color Code
- Industrial Floor Marking Code

Personal Protective Equipment

- Personal Responsibilities
- Industrial PPE
- Care, Use, and Inspection of PPE
- Effects of Using Defective PPE

Mathematics - 0.8 CEUs

Whole Numbers

- Whole Numbers
- Number Systems
- Addition, Subtraction, Multiplication, and Division

Fractions

- Fractions
- Common Denominators
- Reducing Fractions to Lowest Terms
- Addition and Subtraction
- Multiplication and Division

Decimals and Percentages

- Decimals
- Decimal and Fraction Conversion
- Percentages and Decimal Equivalents
- Addition and Subtraction
- Multiplication and Division

Exponents and Scientific Notation

- Exponents
- Radicals
- Scientific Notation
- Addition and Subtraction
- Multiplication and Division

Scientific Calculator Use

- Basic Operations
- Percentages and Square Roots
- Scientific Notation
- Trigonometric Functionality

Fundamentals of Algebra I

- Basic Algebraic Terminology
- Basic Operations
- Addition and Subtraction of Algebraic Expressions
- Multiplication and Division of Algebraic Expressions

Fundamentals of Algebra II

- Axioms
- Using Axioms
- Solving Algebraic Equations
- Ratios and Proportions

Fundamentals of Geometry I

- Geometry Uses
- Angles & Measurements
- Plane Geometry Terms
- Calculating Perimeters
- Calculating Areas

Fundamentals of Geometry II

- Parts of a Circle
- Circumference and Area of Circles
- Surface Area and Volume of Three-Dimensional Shapes

Fundamentals of Trigonometry

- Uses of Trigonometry
- Pythagorean Theorem
- Trigonometric Functions
- Trigonometric Identities

Fundamentals of Statistics I

- Tables and Graphs
- Mean, Median, and Mode
- Normal Distribution Curves

Fundamentals of Statistics II

- Standard Deviation
- Distribution Curve Analysis
- Rules of Probability
- Industrial Applications

Introduction to Calculus

- Industrial Uses of Calculus
- Derivatives
- Integrals

Tools - 0.2 CEUs

Hand Tools I

- Hand Tool Safety
- Hammers, Punches, and Prying Tools
- Screwdrivers and Wrenches

Hand Tools II

- Cutting Tools
- Gripping and Holding Tools
- Measuring Tools

Power Tools

- Power Tool Safety
- Stationary Power Tools
- Portable Power Tools

Maintenance - 0.2 CEUs

Preventive Maintenance

- Introduction to Preventive Maintenance
- Advantages and Benefits
- Preventive Maintenance Programs
- Computer Maintenance Management Systems

Predictive Maintenance

- Predictive Maintenance Programs
- Tools and Techniques
- Thermography and Vibration Analysis

Basic Troubleshooting

- Troubleshooting Overview

- Troubleshooting Resources
- Normal System Operations
- Half-Split Method
- Troubleshooting Flowchart Components

Environment - 0.1 CEUs

Environmental Awareness

- Environmental Issues and Industry
- Environmental, Health, and Safety Regulations
- Priority Pollutants
- Minimizing Pollution

Hazardous Materials

- Common Hazardous Materials
- Handling and Disposal Procedures for Hazardous Materials
- Safety Precautions and Regulations

Computers - 0.1 CEUs

Computer Use Basics

- Basic Computer Components
- File Management and Naming Conventions
- Basic Networking Concepts
- Basic Commands

Computers in Industry

- Computer Systems
- Equipment Control and Monitoring Computers
- Portable Peripheral Devices

Print Reading - 0.1 CEUs

Print Reading Basics

- Common Industrial Prints
- Blueprints and Schematics
- Legend Use
- Title Blocks and Revisions
- Block Diagrams

Piping and Instrumentation Diagrams

- Piping and Instrumentation Diagrams
- Legends and Parts Lists
- Piping and Instrumentation Diagram Symbols
- Components and Equipment
- System Flow Paths

Science - 0.4 CEUs

Introduction to Chemistry

- Fundamental Concepts of Chemistry
- Mixtures, Solutions, and Compounds
- Chemical Properties
- Methods of Analysis

Water Chemistry

- Water Properties
- Types, Sources, and Effects of Water Impurities
- Sampling Methods
- Monitored Parameters
- Water Treatment Principles

Applied Physics: Laws of Motion

- English and System International/Metric Units
- Conversion Tables
- Force, Mass, Velocity, and Acceleration

- Laws of Motion

Applied Physics: Work, Energy, and Power

- Work, Energy, and Power
- Basic Types of Energy
- Potential vs. Kinetic Energy
- Levers and Inclined Planes
- Operation of Simple Machines

Applied Physics: Heat Transfer

- Heat vs. Temperature
- Fahrenheit and Celsius Scales
- Specific Heat
- Modes of Heat Transfer

Applied Physics: Fluid Mechanics

- Introduction to Fluids
- Pascal's Law
- Pressure, Force, and Area
- Fluid Flow and Pipe Area

Applied Physics: Ideal Gas Law

- Introduction to Gases
- Ideal Gas Law
- Calculating Pressure Change

Applied Physics: Thermodynamics

- Industrial Applications
- Zeroth Law
- First Law
- Second Law
- Third Law