Industrial Skills Training Catalog

Accident Causes, Prevention, and Investigation
When you complete this lesson, you will be able to recognize factors that cause accidents and methods to prevent accidents. In addition, you will understand the process of investigating an accident.
SCORM | Updated 10.2025

AC Induction Motor Maintenance
When you complete this lesson, you will be able to describe general electric motor maintenance and inspection activities.
SCORM | Updated 10.2025

Analytical Instruments
When you complete this lesson, you will be able to correctly identify analytical variables and explain the processes for measuring them. You will be able to explain analysis and describe the basic operation of direct and indirect analysis measurement devices.
SCORM | Updated 10.2025

Asbestos and Silica Awareness
When you complete this lesson, you will recognize the health risks associated with both asbestos and silica. You also will be able to identify ways to prevent exposure to these materials in the workplace.
SCORM | Updated 10.2025

Atomic Structure and Chemical Bonding
When you complete this lesson, you will be able to describe the various components of an atom and discuss atomic theory. You will also be able to explain how chemical bonds are formed and describe the two most common types of chemical bonding.
SCORM | Updated 10.2025

Ball Valves
When you complete this lesson, you will be able to explain the use, selection, and design of ball valves found in industrial applications.
SCORM | Updated 10.2025

Basic Petroleum Chemistry
When you complete this lesson, you will be able to discuss the molecular structure, physical properties, naming conventions, and commercial uses of several common hydrocarbons.
SCORM | Updated 10.2025

Basic Principles of Industrial Transmitters
When you complete this lesson, you will be able to describe the basic function and operation of pneumatic and electric transmitters. You will also understand the formula relating transmitter outputs to inputs.
SCORM | Updated 10.2025

Basic Wind Turbine Design
When you complete this lesson, you will be able to explain how a wind turbine harnesses the kinetic energy in wind and converts it into useful mechanical energy. In addition, you will be able to identify the principle components that comprise a typical, modern wind turbine.
SCORM | Updated 10.2025

Bearing Installation and Removal
When you complete this lesson, you will be able to explain some basic techniques for the installation and replacement of rolling contact and sliding surface bearings.
SCORM | Updated 10.2025

Behavior Based Safety Program Concepts
When you complete this lesson, you will be able to describe the factors affecting your personal

safety on the job including your capabilities, your work environment, and your attitude towards safety, and the behaviors you exhibit. In addition, you will be able to explain the difference between a positive safety attitude and safe working behaviors.
SCORM | Updated 10.2025

Biomass and Waste to Energy Power Plants

When you complete this lesson, you will be able to explain the difference between mass burn and refuse derived fuel waste to energy plants. You will be able to describe the types of fuel and the fuel processing that takes place in these facilities. You will be able to describe the combustions systems utilized in these facilities.
SCORM | Updated 10.2025

Boiler Burner Controls and Management

When you complete this lesson, you will be able to describe the different control types used, control hardware, and the effects of optimizing combustion. You will understand the system requirements for burner management, including flame monitoring techniques and scanning coal flames.
SCORM | Updated 10.2025

Boiler Feed Pump and Associated Auxiliary Equipment

When you complete this lesson, you will be able to describe the design and function of a typical boiler feed pump.
SCORM | Updated 10.2025

Boiler Feed Pump Flow Path and Major Components

When you complete this lesson, you will be able to identify the feedwater flow path and describe how various components contribute to its progress.
SCORM | Updated 10.2025

Boiler Feed Pump Water Supply and Control Systems

When you complete this lesson, you will be able to discuss the value of maintaining proper water levels in the hotwell, deaerator, and steam drum. You will also be able to describe how built-in controls help maintain a balanced system.
SCORM | Updated 10.2025

Boiler Fuel System Startup

"When the boiler fuel system is started, each component must be set for operation. The procedure for starting the boiler fuel system begins with ensuring the seal air, pulverizer and feeder components are operational and set for the desired capacity. The oil and lubrication systems must also be checked for operation before starting the pulverizers and completing the feeder permissives. Coordinating these procedures with operators in the control room ensures a safe and efficient startup of the boiler fuel system.

The Boiler Fuel System Startup training course explains standard procedures for initiating the boiler fuel system components during startup. It focuses on:

- Seal air, pulverizers, and feeders
- Lubrication and bearing oil levels
- Starting the pulverizers
- Feeder start permissives

This online training course is part of the Boiler Fuel Systems training series."
SCORM | Updated 10.2025

Boiler Operator Roles and Responsibilities

When you complete this lesson, you will be able to explain the work environment a boiler operator is subject to and describe the primary

responsibilities of a boiler operator.
SCORM | Updated 10.2025

Boiler Tube Repair

When you complete this lesson, you will be able to describe different types of tube assemblies which may need repair in a boiler. You will be able to list common causes of these leaks and procedures for repairing the tube and tube assemblies.
SCORM | Updated 10.2025

Boiler Water and Steam Cycle

When you complete this lesson, you will be able to explain the basic components that make up a condensate and feedwater system and describe the flow path through those systems. In addition, you will be able to explain the difference between saturated steam and superheated steam and identify the factors that affect the quality of steam.
SCORM | Updated 10.2025

Bolted Joints

When you complete this lesson, you will be able to describe commonly used bolt types and grades and discuss their proper use. You will be able to list common modes of joint failure and identify some preventive measures.
SCORM | Updated 10.2025

Bulk Power System Communication Basics

When you complete this lesson, you will understand the three levels of BPS communication as they relate to the system operator.
SCORM | Updated 10.2025

Bus Protection

When you complete this lesson you will understand the six basic substation bus configurations, as well as the various relaying systems used to protect them.
SCORM | Updated 10.2025

Calibration Overview, Part 1

When you complete this lesson, you will be able to explain calibration and describe basic calibration methods and equipment.Discuss the three-point and five-point methods of calibration.
SCORM | Updated 10.2025

Capacitance in AC Circuits

When you complete this lesson, you will understand how capacitance reacts in an AC circuit, be able to calculate total values, and understand calculations for capacitive reactance.
SCORM | Updated 10.2025

Capacity and Energy Emergencies

NERC Reliability Standard EOP-002 ensures Reliability Coordinators and Balancing Authorities are prepared for capacity and energy emergencies.
SCORM | Updated 10.2025

Centrifugal Pump Design

When you complete this lesson, you will be able describe various centrifugal pump designs and explain the role design plays in matching a pump to an application.
SCORM | Updated 10.2025

Centrifugal Pump Operation and Maintenance, Part 1

When you complete this lesson, you will be able describe the basic start-up and shutdown procedures used on single and multi-stage centrifugal pumps. In addition, you will be able to explain the basic inspections that should be completed on operating centrifugal pumps during each shift.
SCORM | Updated 10.2025

Chain Drive Maintenance and Troubleshooting
When you complete this lesson, you will be able to describe techniques for maintaining and troubleshooting chain drive systems in industrial facilities.
SCORM | Updated 10.2025

Check Valves
When you complete this lesson, you will be able to explain the use, selection, and design of check valves found in industrial applications.
SCORM | Updated 10.2025

Chemical Equations
When you complete this lesson, you will have the knowledge necessary to write and balance chemical formulas and equations.
SCORM | Updated 10.2025

Chlorine Awareness
When you complete this lesson, you will recognize the occupational hazards and potential health effects of chlorine exposure.
SCORM | Updated 10.2025

CIP Perimeters and Configurations
Upon completion of this course, you should understand the safeguards for BES Cyber Systems as outlined in CIP-005-5 and CIP-010-1.
SCORM | Updated 10.2025

CIP Physical Security
When you complete this lesson, you will be able to comply with the requirements of NERC standards regarding CIP Physical Security measures.
SCORM | Updated 10.2025

Circuit Breaker Time-Travel Characteristics and Testing
When you complete this lesson, you will be able to identify the purpose and principles of circuit breaker time-travel testing and explain the processes associated with conducting the three types of time-travel testing.
SCORM | Updated 10.2025

Circulating Water System Controls
When you complete this lesson, you will be able to describe typical instruments and control systems used with the circulating water system.
SCORM | Updated 10.2025

Circulating Water System Shutdown
When you complete this lesson, you will be able to describe circulating water system shutdown procedures.
SCORM | Updated 10.2025

Closed Heat Exchangers
When you complete this lesson, you will be able to identify the difference between single and multi-pass heat exchangers, the components of a typical closed heat exchanger, flow types, and common maintenance and troubleshooting procedures.
SCORM | Updated 10.2025

Coal Handling System
When you complete this lesson, you will be able to identify common coal handling processes. You will also be able to discuss the operation of essential pieces of equipment used at the plant site.
SCORM | Updated 10.2025

Combined Cycle Auxiliary Systems
When you complete this lesson, you will be able to describe the function and operation of the auxiliary components and systems found in a typical combined cycle power plant.
SCORM | Updated 10.2025

Combined Cycle Power Plant Components
When you complete this lesson, you will be able to identify and describe the major components of

a combined cycle power plant.
SCORM | Updated 10.2025

Combined Cycle Steam and Feedwater Operating Principles

When you complete this lesson, you will be able to describe the feedwater and steam flowpaths in a typical combined cycle power plant. You will also be able to explain the HRSG design principles governing plant operation.
SCORM | Updated 10.2025

Combustion Air and Flue Gas Flow Paths and Components

When you complete this lesson, you will be able to trace the flow paths of typical power plant combustion air and flue gas systems. You will also be able to describe the operation of major components within those flow paths.
SCORM | Updated 10.2025

Combustion Air and Flue Gas System Start-up

"The startup process for boiler fan operation systems vary from plant to plant. However, most plant standing operating procedures share a similar set of activities. Pre-start preparation and post-start monitoring of the fan operation system are important pieces of an operator's job.

The Combustion Air and Flue Gas System Startup training course describes the steps performed when putting the boiler fan operation system into service. This online course focuses on:

- ID and FD fan preparation
- Ignitor and boiler preparation
- Starting the FD fans
- Boiler purge
- Air preheaters

This course is part of the Combustion Air and Flue Gas System training series."
SCORM | Updated 10.2025

Compressed Air System Components

When you complete this lesson, you will be able to describe the basic components that make up a typical compressed air system. In addition, you will be able to explain some basic trouble shooting techniques used to detect problems in compressed air systems
SCORM | Updated 10.2025

Condensate and Feedwater System Control

When you complete this lesson, you will be able to explain steam drum level control methods and discuss their overall relationship to condensate and feedwater flow. In addition, you will be able to describe different types of level measurement used in the condensate and feedwater systems.
SCORM | Updated 10.2025

Condenser Efficiency

When you complete this lesson, you will be able to explain how to evaluate and maintain condenser efficiency.
SCORM | Updated 10.2025

Confined Space Procedures

When you complete this lesson, you will be able to discuss the reason for a confined space procedure and discuss the basic information found on a confined space permit. In addition, you will be able to explain the difference between a non-permit required confined space and a permit required confined space.
SCORM | Updated 10.2025

Confined Spaces: Entrant and Attendant Duties (CAD)

When you complete this lesson, you will understand the role of the authorized attendant, as well as the entrant working in confined spaces.

You will also be able to describe steps taken to safely enter and work within a confined space.
SCORM | Updated 10.2025

Controller Control Modes
When you complete this lesson, you will be able to describe the design and function of four main control modes used by industrial controllers.
SCORM | Updated 10.2025

Conveyor Belt Installation and Repair
When you complete this lesson, you will be able to describe the basic technique used to install and adjust new belting on a large industrial conveyor.
SCORM | Updated 10.2025

Conveyor System Designs
When you complete this lesson, you will be able to describe the components of a typical belt conveyor used in an industrial setting. In addition, you will be able to identify the equipment commonly found in large scale, industrial conveying systems, and describe the purpose of each piece of equipment.
SCORM | Updated 10.2025

Cooling Towers: Operating Principles and Designs
When you complete this lesson, you will be able to explain the operating principles of a cooling tower and identify and describe various cooling tower designs.
SCORM | Updated 10.2025

Corrosion Causes and Effects
When you complete this lesson, you will be able to identify the causes and effects of the various types of corrosion found throughout the water and steam systems in a industrial facility.
SCORM | Updated 10.2025

Couplings
When you complete this lesson, you will be able to identify different styles of couplings and how to maintain them.
SCORM | Updated 10.2025

Crude Unit
When you complete this lesson, you will be able to describe the crude unit and its major components. You will also be able to identify and discuss the process of crude oil distillation.
SCORM | Updated 10.2025

Decontamination
When you complete this lesson, you will be able to discuss principles of decontamination and describe activities performed in a standard decontamination corridor.
SCORM | Updated 10.2025

Determine Circuit Outputs from Specified Inputs
When you complete this lesson, you will be able to use formulas to compute DC series and parallel circuit outputs based on the known inputs.
SCORM | Updated 10.2025

Diaphragm Valves
When you complete this lesson, you will be able to describe the use, selection, and design of the two basic types of diaphragm valves.
SCORM | Updated 10.2025

Diesel Engine Support Systems
When you complete this lesson, you will understand the operation and importance of the supporting systems that make the diesel engine run and operate efficiently.
SCORM | Updated 10.2025

Diesel Plant Routine Maintenance
When you complete this lesson, you will be able to describe routine diesel inspections and

discuss their contribution to safe and efficient operations.
SCORM | Updated 10.2025

Diesel Power Plant Operations
When you complete this lesson, you will be able to describe basic diesel power plant operations.
SCORM | Updated 10.2025

Distributed Control System Components
When you complete this lesson, you will be able to list the components associated with a common distributed control system (DCS) and describe their functions.
SCORM | Updated 10.2025

Distribution System Components and Application
A distribution system's complexity seems overwhelming even to the most experienced personnel. This complexity comes from how the components can be modified and manipulated to convert energy into usable levels for consumers. Regardless of a component's design, it fulfills the same function universally.

The Distribution System Components and Application training course introduces configuration fundamentals, identifies the most common components, and clarifies the role a substation fills in a power system.

This course is part of the Distribution Systems training series.
SCORM | Updated 10.2025

Disturbance Control Performance
When you complete this lesson you will understand the requirements for recovery from a disturbance, what is deemed a Reportable Disturbance and how Contingency Reserves play a role in disturbance recovery.
SCORM | Updated 10.2025

Dog Bite Prevention
When you complete this lesson, you will be able to recall techniques for preventing a dog attack and techniques for minimizing the severity of the injury if the attack cannot be prevented.
SCORM | Updated 10.2025

Drug and Alcohol Awareness
When you complete this lesson, you will be able to recall the effects of drugs and alcohol, be familiar with the DOT required testing process, and the result-based consequences.
SCORM | Updated 10.2025

Ducting and Air Movement for HVAC Systems
When you complete this lesson, you will understand the important role ducting plays in the HVAC system's ability to provide maximum airflow. You will also be able to identify common HVAC airflow issues related to poorly implemented ducting.
SCORM | Updated 10.2025

Dynamic Compressors
"Dynamic air compressors are used in industrial plant applications requiring high volume airflow. Understanding dynamic air compressors is necessary to operate and maintain plant air systems and equipment.

The Dynamic Compressors training course describes the basic design and operation of dynamic air compressors, including centrifugal and axial types. This online course is part of the Plant Compressed Air Systems training series."
SCORM | Updated 10.2025

Electrical Backup Systems
When you complete this lesson, you will be able to distinguish between types of backup systems and choose the type that fits your application.
SCORM | Updated 10.2025

Electrical Distribution System Fundamentals
When you complete this lesson, you will be able to recognize and understand the process and purpose of designing an electrical power distribution system.
SCORM | Updated 10.2025

Electrical Faults and Current Ratings
When you complete this lesson, you will be able to explain causes and types of electrical overcurrent, and identify how to protect circuits from overcurrents and faults.
SCORM | Updated 10.2025

Electric Governor
When you complete this lesson, you will be able to identify the evolution of the electric governor, components, functions, and governor operations.
SCORM | Updated 10.2025

Elements and the Periodic Table of Elements
When you complete this lesson, you will understand how elements are named, grouped, and listed on the periodic table.
SCORM | Updated 10.2025

Emergency Procedures
When you complete this lesson, you will be able to discuss the purpose and scope of an emergency response plan. You will also understand the roles and responsibilities of those individuals responding to a hazardous materials release.
SCORM | Updated 10.2025

Energized Electrical Equipment Safety
When you complete this lesson, you will recognize the industrial workplace safety authority and be able to describe safe workplace practices.
SCORM | Updated 10.2025

Energy Production and Transfers
When you complete this lesson, you will be able to identify the elements associated with the production and transfer of energy in power systems.
SCORM | Updated 10.2025

Environmental Awareness
When you complete this lesson, you will be able to identify ways your awareness can reduce the environment impact of various processes and tasks. In addition, you will be able describe the process of designing and implementing an environmental management system (EMS) and discuss the overall goals of waste minimization and pollution prevention programs
SCORM | Updated 10.2025

Equipment Disconnects and Grounding
"Many devices are used to isolate and shield equipment from damage and protect personnel working on electrical equipment and circuitry.

The Equipment Disconnects and Grounding training course describes the design and function of disconnects used to isolate electric equipment. It also explains some methods of grounding plant equipment.

This online course is part of the Plant Electrical Systems training series."
SCORM | Updated 10.2025

Ergonomics in an Office Environment
When you complete this lesson, you will understand ergonomics and the disorders related to it. In addition, you will be able to recognize ergonomic hazards in an office environment and determine ways to mitigate these hazards.
SCORM | Updated 10.2025

Excavation and Trenching Safety
When you complete this lesson, you will be able

to identify the safe procedures minimizing the hazards of working in or near excavation and trenching sites and adhere to safe practices applying to the heavy equipment used in excavation.
SCORM | Updated 10.2025

Exposure to and Detection of Hazardous Chemicals
When you complete this lesson, you will be able to describe how exposure to hazardous materials occurs and what can influence the severity of the effects of the hazard. You will also be able to describe ways a hazardous release can be detected.
SCORM | Updated 10.2025

Fasteners
When you have completed this lesson, you will be able to describe the design and identify the purpose of various types of fasteners used in industrial facilities.
SCORM | Updated 10.2025

Features and Uses of Process Tanks
When you complete this lesson, you will be able to describe the main features and uses of process tanks.
SCORM | Updated 10.2025

Final Control Elements
When you complete this lesson, you will be able to describe the basic design and function of various types of final control elements used in control loops in industrial facilities.
SCORM | Updated 10.2025

First Aid
When you complete this lesson, you will be able to describe common injuries that require first aid treatment and provide aid for such injuries. You will also identify major emergencies requiring the services of emergency personnel and provide initial treatment for such injuries. When providing aid, you will adhere to the universal precautions taken to prevent the transmission of bloodborne pathogens and prevent infections.
SCORM | Updated 10.2025

Fixed Gauges
When you complete this lesson, you will be able to describe the various types of fixed gauges commonly used by maintenance and machining technicians. You will also be able to explain the purpose of the various fixed gauges.
SCORM | Updated 10.2025

Flow Paths & Components of the Boiler Water and Steam Systems
When you complete this lesson, you will be able to identify the major components of boiler water and steam systems and explain their functions.
SCORM | Updated 10.2025

Flue Gas Desulfurization, Open Spray Design, Part 2
When you complete this lesson, you will have an understanding of the overall process of cleaning the SO2 out of flue gas. In addition, you will have general knowledge of each of the systems used to accomplish this.
SCORM | Updated 10.2025

Fluid Catalytic Cracker
When you complete this lesson, you will be able to define what fluid catalytic cracker is, discuss the principles of cracking, and identify and describe the fluid catalytic cracking process and components.
SCORM | Updated 10.2025

Frequency Response and Bias
When you complete this lesson you will understand the basics of Frequency Bias, frequency deviation and response terminology,

and how frequency recovers after a disturbance.
SCORM | Updated 10.2025

Function of Boiler Water and Steam Systems

When you complete this lesson, you will be able to describe the function of the boiler water and the steam systems. You will also be able to distinguish between forced and natural circulation boilers.
SCORM | Updated 10.2025

Fundamentals of Gas Turbine Operation and Routine Maintenance

When you complete this lesson, you will be familiar with several common procedures for operating and maintaining a combustion turbine (CT) as well as some conditions that require emergency procedures.
SCORM | Updated 10.2025

Fundamentals of Reciprocating Engine Design

When you complete this lesson, you will be able to describe the major types of reciprocating engines and their fuel sources. You will also be able to describe the function of the major components of a reciprocating engine as applied to power generation.
SCORM | Updated 10.2025

Fundamentals of Using a CEMS

When you complete this lesson, you will be able to describe the basic steps for collecting Continuous Emission Monitoring System (CEMS) data readings, troubleshooting probe and sample systems, changing calibration gas bottles, and entering new data in the engineering workstation (EWS). You will also be able to describe the process for performing weekly, monthly, quarterly, semi-annual, and annual preventive maintenance (PM) procedures.
SCORM | Updated 10.2025

Gas Metal Arc Welding (GMAW)

When you complete this lesson, you will be able to describe gas metal arc welding (GMAW) methods. In addition, you will be able to discuss the design and function of components used in the GMAW process.
SCORM | Updated 10.2025

Gasoline Blending

When you complete this lesson, you will be able to describe what gasoline blending is, discuss the process to blend gasoline and why blending plays such an important role in refinery operations, and describe the significance of octane and gasoline additives in the gasoline blending process.
SCORM | Updated 10.2025

Gas turbine Control Schemes

When you complete this lesson, you will be able to identify common control schemes, gas turbine compressor startup and shutdown operations, and exhaust control on both simple cycle and combined cycle exhausts.
SCORM | Updated 10.2025

Gas Turbine Fundamentals and Configuration of Generating Facilities

When you complete this lesson, you will be able to discuss basic design of a simple cycle power plant and the function and operation of its fundamental piece of equipment, the combustion turbine.
SCORM | Updated 10.2025

Gas Turbine Water Wash and Drain Systems

When you complete this lesson, you will be familiar with several subsystems of the water and drain systems of the gas turbine compressor.
SCORM | Updated 10.2025

General Concepts and Job Briefings

When you complete this lesson, you will be able to recall general concepts regarding safety while

performing electrical work. You will also be familiar with what job briefings are and how they can help a worker avoid accidents.
SCORM | Updated 10.2025

Generator and Auxiliary Systems' Flow Paths and Major Components

When you complete this lesson, you will be able to identify the flow paths associated with the major components that support generator operation.
SCORM | Updated 10.2025

Generator and Auxiliary Systems' Normal Operations

When you complete this lesson, you will be able to describe tasks performed during normal operations of the generator and auxiliary systems.
SCORM | Updated 10.2025

Generator and Auxiliary Systems Start-up

When you complete this lesson, you will be able to describe the steps to start-up the generator and establish it on the electrical grid.
SCORM | Updated 10.2025

Generator Control in Reciprocating Engine Power Plants

When you complete this lesson, you will be able to explain generator operation modes and the methods used to control generator output voltage. You will also be able to describe ways the automatic generator control system regulates loading and protects against faults on the generator output.
SCORM | Updated 10.2025

Generator Overhaul

When you complete this lesson, you will be able to discuss the steps taken in shutting down the generator, preparing a generator for maintenance, and considerations when conducting the overhaul inspection.
SCORM | Updated 10.2025

Generator Protection

When you complete this lesson, you should understand generator protection schemes and NERC standards as they apply to generator protection methods and requirements.
SCORM | Updated 10.2025

Generator, Transformer, and Motor Protection

When you complete this lesson, you will understand the principles of operation governing ground fault protection, phase-to-phase short circuit, time overcurrent protection, and motor overload protection.
SCORM | Updated 10.2025

Graphical Rim-and-Face Alignment

When you complete this lesson, you will be able to recall the graphical method of performing rim-and-face alignment and the types of misalignment identifiable and correctable by this method.
SCORM | Updated 10.2025

Hand Tools, Part 1

When you complete this lesson, you will be able to explain safety precautions to take when working with hand tools. You will be able to explain and describe various types of wrenches, hammers, screwdrivers, and pliers commonly used in industrial facilities.
SCORM | Updated 10.2025

Harmonics

When you complete this lesson, you will be able to describe problems that may arise in electrical systems due to harmonics. In addition, you will be able to identify the benefit of equipment with minimal harmonic distortion and discuss the wiring methods used to minimize the effects of

harmonics.
SCORM | Updated 10.2025

Hazard Identification and Assessment
When you complete this lesson, you will be able to recall recommended practices for companywide safety and health programs regarding hazard identification and assessment.
SCORM | Updated 10.2025

Hazardous Communications Employee Training Program, Part 2
When you complete this lesson, you will be able to describe how exposure to hazardous materials occurs. You will also be able to explain how to choose and use equipment for personal protection.
SCORM | Updated 10.2025

Hazardous Material Procedures
When you complete this lesson, you will be able to describe some of the basic hazardous materials found in a power plant. Additionally, you will be able to discuss some of the procedures used while working with these products.
SCORM | Updated 10.2025

HAZWOPER Regulation Overview
When you complete this lesson, you will be able to discuss an overview of federal acts and regulatory bodies that protect workers who deal with hazardous materials. In addition, you will have a basic understanding of terminology and numbering used to outline a typical regulation.
SCORM | Updated 10.2025

Hearing and Noise Safety
When you complete this lesson, you will be able to identify conditions that lead to hearing damage or loss and use both engineering controls and personal protective equipment to prevent such damage.
SCORM | Updated 10.2025

Heat Transfer Principles
When you complete this lesson, you will be able to state the primary parameter that causes heat transfer. You will be able to explain the three types of heat transfer and the characteristics of them. You will also be able to describe conditions and problems that negatively affect proper heat transfer. Finally, you will be able to determine heat transfer rate given operating parameters in heat transfer equipment.
SCORM | Updated 10.2025

High-voltage AC
When you complete this lesson, you will be able to identify the values of high and ultra-high-voltage systems, common system components, and high and ultra-high specific measurement and testing considerations.
SCORM | Updated 10.2025

Horizontal Wind Turbine Design and Operation
When you complete this lesson, you will be able to explain how wind flowing over the blades causes the turbine rotor to turn. In addition, you will be able to describe the operation of wind turbine components and discuss how wind turbines are controlled.
SCORM | Updated 10.2025

HRSG - Auxiliary Equipment and Systems
"The main components of a heat recovery steam generator (HRSG) were discussed in the previous lesson. Many other systems also contribute to safe, efficient, and environmentally safe HRSG operation.

The HRSG - Auxiliary Equipment and Systems training course identifies auxiliary system found in an HRSG unit. It also discusses their purpose and how they benefit the unit. This course is part of the Combined Cycle Power Plant Operations

series."
SCORM | Updated 10.2025

Hydraulic Fluids
When you complete this lesson, you will be able to identify the three basic types of hydraulic fluids. In addition, you will be able to describe some of the considerations that need to be taken into account when selecting a hydraulic fluid for a specific hydraulic circuit.
SCORM | Updated 10.2025

Hydroelectric Generators
When you complete this lesson, you will be able to identify and describe the operations of the hydroelectric power generator and the component of the lower unit.
SCORM | Updated 10.2025

Hydroelectric Power Stations
When you complete this lesson, you will be able to identify the major components in a hydroelectric power station. You will also examine the operations of hydroelectric power stations, describe variations among them, and explain the components common to each hydropower generating station.
SCORM | Updated 10.2025

Hydrogen Sulfide Awareness (CAD)
When you complete this lesson, you will be able to recall the common warning signs, health effects, and personal protection requirements related to H2S exposure.
SCORM | Updated 10.2025

Impellers and Wear Rings
When you complete this lesson, you will be able to describe the principles behind centrifugal pump mechanical impellers, pump stages, fluid flow paths, and basic information regarding wear rings.
SCORM | Updated 10.2025

Industrial Math: Fractions, Percentages, and Ratios
When you complete this lesson, you will be able to interpret and solve problems using fractions, decimals, and percentages. You will also be able to interpret and solve problems using ratios and proportions.
SCORM | Updated 10.2025

Industrial Print Reading Overview
When you complete this lesson, you will be able to describe the different types of drawings used by site employees to design, repair, and maintain equipment in the facility. In addition, you will have the skills necessary to determine which type of drawing should be used to acquire the specific information directing a specific project.
SCORM | Updated 10.2025

Input/Output (I/O) Processing
When you complete this lesson, you will be able to discuss I/O error checking and its impact on communications and function. In addition, you will be able to identify the various types and structure of PLC memory and describe how memory interacts with the peripheral I/O.
SCORM | Updated 10.2025

Inspecting a Boiler's Exterior
When you complete this lesson, you will be able to describe some specific areas to look at, and what to look for when inspecting the exterior of a large watertube boiler.
SCORM | Updated 10.2025

Inspecting the Fireside of a Boiler, Part 2
When you complete this lesson, you will be able to explain some specific things to look for when doing a fireside inspection on the superheaters, reheaters, economizers, ash hoppers, baffles, sootblowers, and the boiler bottom seal on the

fireside of a large watertube boiler.
SCORM | Updated 10.2025

Installing Conduit and Pulling Wire

Electrical conduit is pipe that surrounds and protects electrical wires from damage. Properly installed conduit reduces the risks of shorting, fire, and moisture damage. The Installing Conduit and Pulling Wire training course explains the major types of electrical conduit. It reviews how to install conduit and the basics of pulling wire through the installed conduit. Installing Conduit and Pulling Wire is part of the Wire Installation training series.
SCORM | Updated 10.2025

Instrumentation and Controls

When you complete this lesson, you will be able to explain the basic operation of a boiler following instrumentation and control system. You will be able to describe the effects when actual parameter values are different than what is indicated. You will also be able to explain common responses to instrumentation and control problems.
SCORM | Updated 10.2025

Introduction to Alternating Current (AC)

When you complete this lesson, you will be able to explain the differences between AC power and DC power, define terminology relating to graphing AC power, and explain what is meant by effective values of AC power. You will also be able to describe the common production of AC power and define terminology regarding the characteristics of AC power.
SCORM | Updated 10.2025

Introduction to Automated Control

When you complete this lesson, you will be able to discuss the basic design and function of automated control loops.
SCORM | Updated 10.2025

Introduction to Belt Drive Maintenance

When you complete this lesson, you will be able to knowledgeably discuss the general use and maintenance of belt drive systems.
SCORM | Updated 10.2025

Introduction to Centrifugal Pumps

When you complete this lesson, you will be able describe the basic design and function of both single stage and multi-stage centrifugal pumps.
SCORM | Updated 10.2025

Introduction to Combustion Air and Flue Gas Systems

When you complete this lesson, you will be able to describe how the overall combustion process works and demonstrate a working knowledge of the combustion air and flue gas systems.
SCORM | Updated 10.2025

Introduction to Conveyor Systems

When you complete this lesson, you will be able to identify basic conveyor designs and explain how various general configurations are used to move different products and materials from point to point.
SCORM | Updated 10.2025

Introduction to Distillation

When you complete this lesson, you will be able to describe the theory of distillation and the configuration of a distillation column and its components.
SCORM | Updated 10.2025

Introduction to Gear Drives

When you complete this lesson, you will be able to describe and explain the function of a gear and define common terms utilized working with gears

and gear drives.
SCORM | Updated 10.2025

Introduction to Hydraulics
When you complete this lesson, you will be able to describe the basic components that comprise a typical hydraulic circuit and explain the function of each. In addition, you will be able to explain the use of hydraulic multiplication to increase the capacity of the hydraulic system.
SCORM | Updated 10.2025

Introduction to Industrial Electronics
When you complete this lesson, you will be able to describe the construction and operation of basic electronic components. You will also be able to explain common troubleshooting techniques used in electronic circuits.
SCORM | Updated 10.2025

Introduction to Industrial Math
When you complete this lesson, you will be able to explain the mathematical order of operations, the use of exponents and square roots.
SCORM | Updated 10.2025

Introduction to Motor Controls
When you complete this lesson, you will be able to draw a simple motor control circuit and describe relative ladder logic.
SCORM | Updated 10.2025

Introduction to OSHA (Occupational Safety and Health Administration)
When you complete this lesson, you will be able to describe the large role OSHA plays in maintaining employee health and safety as employees perform their daily work.
SCORM | Updated 10.2025

Introduction to Physics: Energy, Work, and Power
When you complete this lesson, you will be able to define different types of energy, work and power. You will also be able to use formulas to calculate potential energy, kinetic energy, work done, and power used.
SCORM | Updated 10.2025

Introduction to Positive Displacement Pumps
When you complete this lesson, you will be able to describe the basic design and operation of positive displacement pumps and identify operating conditions under which they are commonly implemented. Additionally, you will be able to discuss the operational differences between the two main classes of positive displacement pumps, which are reciprocating and rotary.
SCORM | Updated 10.2025

Introduction to Process Separators
When you complete this lesson, you will be able to identify common types of process separators and their components. You will also be able to describe the process separator's operating principles.
SCORM | Updated 10.2025

Introduction to Reciprocating Engine Power Plants
When you complete this lesson, you will be able to explain the operation of a reciprocating engine and describe the common configurations in which it can be used in power generation facilities.
SCORM | Updated 10.2025

Introduction to Switches
When you complete this lesson, you will be able to identify common types of electrical switching devices and describe the principles of their operation.
SCORM | Updated 10.2025

Introduction to the Condensate System
When you complete this lesson, you will be able to explain the purpose and operation of all major

components in the condensate system. In addition, you will be able to discuss the basic relationship between the condensate and feedwater systems.
SCORM | Updated 10.2025

Introduction to the GE LM Series Gas Turbine

When you complete this lesson, you will be able to describe the basic components that comprise GE's LM series of gas turbine. In addition, you will be able to explain the basic compressed air and hot gas flow paths through each type of LM gas turbine.
SCORM | Updated 10.2025

Introduction to the Siemens V-Series Gas Turbine

"Siemens Westinghouse has developed a large fleet of gas turbines used in many different applications across the globe. Understanding the components and design of the Siemens Westinghouse V-series gas turbine is necessary to distinguish it from others within the Siemens fleet.

The Introduction to the Siemens V-series training course describes the basic components of the V-series gas turbine. It also identifies the basic compressed air and hot gas flow paths through the V94 3 gas turbine. This online course includes:

- V-series gas turbine background
- Basic design characteristics
- Advantages of a combined cycle

Introduction to the Siemens V-series is part of the Combustion Turbine Fundamentals training series."
SCORM | Updated 10.2025

Introduction to Valves and Their Components

When you complete this lesson, you will be able to explain the basic design and function of valves, major valve components, and flow control element
SCORM | Updated 10.2025

Laboratory Health and Safety

When you complete this lesson, you will understand how to safely work in a laboratory. In addition, you will be able to describe the proper disposal of laboratory waste.
SCORM | Updated 10.2025

Ladder Safety

When you complete this lesson, you will be able to identify the specifications regarding several different types of ladders and adhere to standard safety precautions for the use, maintenance, and storage of ladders.
SCORM | Updated 10.2025

Laws and Principles of Thermodynamics

When you complete this lesson, you will be able to explain thermodynamics. You will also be able to describe thermodynamic terms in your own words. You will also be able to explain the relationship of thermodynamic principles to plant efficiency.
SCORM | Updated 10.2025

Level Measuring Devices

When you complete this lesson, you will be able to identify various level sensing and measurement devices, and describe their basic operation.
SCORM | Updated 10.2025

Line Protection

Transmission, sub-transmission and distribution systems all have different operating characteristics and objectives. The way they transport power varies significantly; with each

variation comes practical solutions to ensure safe and reliable operation. Each solution also has its limitations.
SCORM | Updated 10.2025

Lockout/Tagout Safety Program
When you complete this lesson, you will be able to explain the necessity of a lockout/tagout program and adhere to the procedures and practices of lockout/tagout safety.
SCORM | Updated 10.2025

Lubricant Filtration and Purification
When you complete this lesson, you will be able to explain how to use mechanical filters and lube oil purifiers to keep lubricating oil free of contaminants. In addition, you will be able to describe methods used to filter and purify lubricating oil in a power plant.
SCORM | Updated 10.2025

Lubrication Basics
When you complete this lesson, you will be able to explain how lubrication is used in machinery to reduce friction. In addition, you will be able to explain why certain types of equipment require lubricants with different viscosities.
SCORM | Updated 10.2025

Lubrication Sampling and Analysis
When you complete this lesson, you will be able to explain the importance of lubrication sampling and describe basic techniques used to collect lubricant samples. In addition, you will be able to explain how to use lubrication schedules to ensure completion of proper preventative maintenance.
SCORM | Updated 10.2025

Machine Hazards and Safety
When you complete this lesson, you will be able to identify common workplace hazards associated with operating machinery and apply safeguards to prevent injury and death in the workplace.
SCORM | Updated 10.2025

Maintaining Fan Operations in Combustion Air and Flue Gas Systems
When you complete this lesson, you will be able to describe how to perform the checks and monitoring necessary to maintain operation of fans and their components.
SCORM | Updated 10.2025

Maintenance of Direct Current Motors and Generators
When you complete this lesson, you will be able to describe the basic components of a DC motor and a DC generator, and be prepared to conduct basic maintenance and inspections of each.
SCORM | Updated 10.2025

Making Connections in a Junction Box
An electrical junction box is a container that houses electrical junctions. Junction boxes are an important part of an electrical system. They provide a place to splice and terminate wire. Like any other part of the electrical system, junction boxes have to be well managed for best results.

The Making Connections in a Junction Box training course explains how to make connections and terminations using several systems. This online course covers:

- Forming the wire
- Wire nuts
- Crimp-on terminals
- Terminal strips
- Motor connection boxes

Making Connections in a Junction Box is part of the Wiring Installation training series.
SCORM | Updated 10.2025

Manometers
When you complete this lesson, you will understand how different types of manometers function and will be able to read them.
SCORM | Updated 10.2025

Materials Handling and Storing Safety for Construction
When you complete this lesson, you will be able to minimize the risks of injury and illness by safely handling and storing materials in the workplace. You will be able to identify potential hazards when handling materials and identify ways to prevent those hazards. Finally, you will be able to recognize an employer's responsibilities for safe materials handling.
SCORM | Updated 10.2025

Measuring Rules and Tapes
When you complete this lesson, you will be able to identify rigid rules, folding rules, depth rules, and tape measures; you will also be able to explain the correct procedures for taking accurate measurements with them.
SCORM | Updated 10.2025

Mechanical Equipment
When you complete this lesson, you will be able to recall the general requirements for using mechanical equipment during electrical work.
SCORM | Updated 10.2025

Mechanical Seals Use and Installation
When you complete this lesson, you will be able to describe how mechanical seals work and identify the features of commonly used seal types. In addition, you'll be able to explain proper seal care.
SCORM | Updated 10.2025

Medium and High Voltage Switchgear
When you complete this lesson, you will be able to identify the technical details associated with construction and operation of high and medium voltage switchgears.
SCORM | Updated 10.2025

Megohmmeter
When you complete this lesson, you will be able to use a megohmmeter to safely take a reading of the resistance of wire insulation.
SCORM | Updated 10.2025

Molecular Chemistry of Water
When you complete this lesson, you will be able to discuss which elements combine to form water and why they bond. You will also learn some basic history of water and its special characteristics.
SCORM | Updated 10.2025

Motor Control Centers
When you complete this lesson, you will be able to explain the function of MCCs, common components of an MCC, and the difference between common classifications and their associated wiring schemes.
SCORM | Updated 10.2025

Motor Protection and Faults
When you complete this lesson, you will be able to explain the difference between internal and external motor faults. In addition, you will be able to select the proper overcurrent and short circuit protection devices for motor branch circuits.
SCORM | Updated 10.2025

MOV Disassembly and Inspection, Part 2
"Limitorque¬Æ valve operators come in many designs. Their use helps valves operate remotely in a plant. The previous lessons discussed MOV (motor operated valve) maintenance by disassembling and inspecting components for

wear and tear. Diligence in this maintenance contributes to longer run times and fewer forced outages, resulting in increased plant efficiency.

The MOV Disassembly and Inspection, Part 2 training course builds on the previous lesson by focusing on the steps to reassemble MOVs. This online course describes the reassemble techniques applied to the SMB 00/000 Limitorque MOV.

This course is part of the Motor Operated Valves training series."
SCORM | Updated 10.2025

Multimeter
When you complete this lesson, you will understand the basics of a digital multimeter and volt-ohm-meter and how to properly use a multimeter.
SCORM | Updated 10.2025

NERC Overview and Application for Generator Operators
When you complete this lesson, you will be able to identify the requirements and standards associated with NERC accountable non-system operator Generator Operators.
SCORM | Updated 10.2025

Normal Operation of the Boiler Water and Steam Systems
When you complete this lesson, you will be able to describe the normal operations of the water and steam cycle within a power generating unit, the relationship of components within the system, and the effect of adjustments made to those components that may affect the efficiency and safety of the plant's normal operation.
SCORM | Updated 10.2025

Ohm's and Kirchhoff's Laws Involving AC Circuits
When you complete this lesson, you will be able to describe Ohm's law and Kirchhoff's current and voltage laws as they relate to AC circuits. You will also be able to calculate power in a resistive AC circuit.
SCORM | Updated 10.2025

Open Heat Exchanger Design and Operation
When you complete this lesson, you will be able to explain how open heat exchangers use direct contact to heat condensate and remove non-condensable gases from the condensate. In addition, you will be able to describe the three basic types of open heat exchangers and the operational characteristics of each.
SCORM | Updated 10.2025

Operation of a Distillation Column
When you complete this lesson, you will be able to describe the start-up, normal operation, and shutdown of a distillation column.
SCORM | Updated 10.2025

Operator Fatigue
When you complete this lesson, you will be able to define and recognize symptoms of operator fatigue. You will also be able to recall the causes of operator fatigue, be familiar with ways to identify operator fatigue in yourself and others and identify ways to manage it.
SCORM | Updated 10.2025

Oscilloscopes
When you complete this lesson, you will understand how to use the controls of an oscilloscope for the purpose of measuring electrical signals. You will also be able to set an oscilloscope to measure voltage, frequency, time, and phase shift.
SCORM | Updated 10.2025

Overcurrent Protection, Fuses, and Breakers
When you complete this lesson, you will be able to identify types of fuses and breakers used in

electrical distribution systems and explain how they work.
SCORM | Updated 10.2025

Overpressure Safety Systems
When you complete this lesson, you will be able to describe the design, operation, and use of overpressure safety systems.
SCORM | Updated 10.2025

Package Boiler Fundamentals
"District energy could not be possible without the compact and economic nature of the package boiler. Becoming familiar with the package boiler, its functionality, components, and uses, creates a better understanding of how district energy works. It also highlights the advantages and disadvantage of using a package boiler.

The Package Boiler Fundamentals training course describes the purpose of the package boiler and the type and relationship of components within the system. It discusses the various situations in which a package boiler may be used. It also outlines its advantages and disadvantages.

This online course is part of the Heating & Cooling Fundamentals training series."
SCORM | Updated 10.2025

Pedestal Grinder
When you complete this lesson, you will be able to describe the design, function, and safe use of a pedestal grinder.
SCORM | Updated 10.2025

Personal Protective Equipment
When you complete this lesson, you will be familiar with some of the requirements of employers and employees for reducing risk and avoiding injury, illness, and death by properly selecting, using, and maintaining personal protective equipment (PPE).
SCORM | Updated 10.2025

Personal Protective Equipment for Construction, Part 2
When you complete this lesson, you will be familiar with some of the requirements of employers and employees for reducing risk and avoiding injury, illness, and death by properly selecting, using, and maintaining personal protective equipment (PPE).
SCORM | Updated 10.2025

Pilot Protection
When you complete this lesson you will understand the major forms of communications channels used by pilot protection, as well as the basic functions of the more common pilot protection schemes deployed in power system protection.
SCORM | Updated 10.2025

Piping and Instrument Drawings
When you complete this lesson, you will be able to use a PID to identify instrumentation, common equipment, and symbols used in your area. You will also be able to describe how components are related.
SCORM | Updated 10.2025

Piping Connections and Symbols
When you complete this lesson, you will be able to describe the methods most commonly used to connect lengths of piping, and identify advantages and disadvantages of each. You will be able to recognize symbols commonly used to indicate types of pipes, pipe-fittings, and welding connections.
SCORM | Updated 10.2025

Piping Expansion, Support, and Insulation
When you complete this lesson, you will be able to explain the effects of changing temperatures

on industrial piping and describe ways to allow for those effects.
SCORM | Updated 10.2025

PLC Network Protocols
When you complete this lesson, you will have a basic understanding of common PLC network protocols.
SCORM | Updated 10.2025

PLC (Programmable Logic Controllers) Programming Instructions, Part 1
When you complete this lesson, you will be able to describe the functions of the programming instructions most commonly used in PLC programming.
SCORM | Updated 10.2025

Plug Valves
When you complete this lesson, you will be able to describe the use, selection, and design of plug valves commonly found in industrial settings.
SCORM | Updated 10.2025

Portable Power and Hand Tool Safety for Construction
When you complete this lesson, you will be able to identify hazards associated with the use of hand and power tools. You will be able to prevent accident and injury in the workplace by adhering to safety practices and requirements. You will also be familiar with the employer requirements put in place for the protection of construction workers.
SCORM | Updated 10.2025

Positive Displacement Compressors
When you complete this lesson, you will be able to explain the basic design and operation of positive displacement air compressors, including both the reciprocating and rotary types.
SCORM | Updated 10.2025

Power Plant Shutdown Procedures
When you complete this lesson, you will be able to describe the basic steps associated with taking a fossil fuel-fired power plant off-line. In addition, you will be able to explain how operators prepare a power plant for an annual outage.
SCORM | Updated 10.2025

Power Plant Unit Control
When you complete this lesson, you will be able to describe the basic design and function of a boiler-following instrumentation and control system.
SCORM | Updated 10.2025

Power Supplies
When you complete this lesson, you will be able to identify the main sections of a DC power supply and describe the types of regulation and regulators. You will also understand how a linear regulator works and be able to troubleshoot power supply problems.
SCORM | Updated 10.2025

Power System Restoration
When you complete this lesson, you will be able to identify the basic concepts associated with power system restoration such as terms and critical issues.
SCORM | Updated 10.2025

Preparing for Power Plant Shutdown
When you complete this lesson, you will be able to describe the basic tasks that must be performed on plant equipment prior to a power plant shutdown.
SCORM | Updated 10.2025

Pressure and Vacuum Calibrators
When you complete this lesson, you will be able to understand how pressure and vacuum calibrators operate and how to use them.
SCORM | Updated 10.2025

Pressure Regulator Valves
When you complete this lesson, you will be able to describe the basic design and function of common types of pressure regulating valves used in industrial facilities.
SCORM | Updated 10.2025

Principles of Flow
When you complete this lesson, you will be able to describe the principles of fluid flow and understand how these principles provide multiple means for measuring flow rate in the process industry. Define flow and flow rate.
SCORM | Updated 10.2025

Principles of Pressure
When you complete this lesson, you will understand pressure and how it is measured. You will be able to apply conversion formulas to convert readings from one standard pressure scale to another.
SCORM | Updated 10.2025

Principles of Temperature
When you complete this lesson, you will understand the concepts of temperature and heat transfer and be able to convert between common temperature scales.Define temperature and explain the difference between temperature and heat.
SCORM | Updated 10.2025

Process Controls for Boiler Water and Steam Systems
When you complete this lesson, you will be able to describe the process and controls of the boiler water and steam systems.
SCORM | Updated 10.2025

Process Safety Management
The goal of the course is to provide awareness of the purpose of process safety management: to prevent unwanted releases of highly hazardous chemicals, and provide an overview of corresponding standards and best practices for process safety management.
SCORM | Updated 10.2025

Process Utilities Systems, Part 2
When you complete this lesson, you will be able to explain the function and design of heat and fuel, refrigeration, and power supply utility systems, and how they are linked in order to meet energy demands from industrial processes.
SCORM | Updated 10.2025

Protection Relays
When you complete this lesson, you will be able to identify protection relay elements on an electrical drawing according to their ANSI (American National Standards Institute) standard device numbers. In addition, you will be able to describe basic relay operations and compare the accuracy and options provided by commonly used relays.
SCORM | Updated 10.2025

Protection Systems Maintenance Programs
When you complete this lesson, you will be able to identify protection system terminology and assets and comply with applicable NERC standards.
SCORM | Updated 10.2025

Pump Efficiency and Reliability
When you complete this lesson, you will be able to describe commonly used pumps and discuss their maintenance.
SCORM | Updated 10.2025

Pump Troubleshooting
"Pump and motor combinations are common in industrial plants. Identifying malfunctioning equipment symptoms and taking action or assisting in the troubleshooting process is critical to plant success.

The Pump Troubleshooting training course describes basic troubleshooting steps. It identifies visual, audible, and tangible equipment malfunction symptoms. Pump Troubleshooting is part of the Centrifugal Pump training series."
SCORM | Updated 10.2025

Radiation Awareness
When you complete this lesson, you will understand a basic overview of radiation. In addition, you will be able to describe associated health risks commonly associated with radiation and identify methods to protect yourself and others from exposure.
SCORM | Updated 10.2025

Reciprocating Engine Auxiliary Systems
When you complete this lesson, you will be able to explain the operation of the major systems commonly found in a reciprocating engine power plant and describe their major components.
SCORM | Updated 10.2025

Reciprocating Engine General Inspection
When you complete this lesson, you will be able to identify the general inspection requirements, the components involved, and how to remove them for further inspection and overhaul.
SCORM | Updated 10.2025

Reciprocating Positive Displacement Pumps
When you complete this lesson, you will be able to describe the design and function of reciprocating positive displacement pumps commonly used in industry.
SCORM | Updated 10.2025

Reliability Coordination - Planning and Operations
When you complete this lesson, you will understand the role each Responsible Entity is expected to fulfill as a participant ensuring Reliability Assurance so that the Interconnection is operated in a reliable manner.
SCORM | Updated 10.2025

Respiratory Protective Program
When you complete this lesson, you will be able to identify respiratory hazards and utilize personal respiratory equipment to prevent injury or illness caused by poor breathing conditions in the workplace.
SCORM | Updated 10.2025

Reverse Osmosis
When you complete this lesson, you will be able to discuss the scientific principles on which reverse osmosis (RO) technology is based and explain the primary function of a reverse osmosis desalination system. You will also be able to identify the key components of a typical reverse osmosis system, with an emphasis on membrane technology, and describe the importance of permeate recovery percentage.
SCORM | Updated 10.2025

Rigging, Part 2
When you complete this lesson, you will be able to identify types of fiber ropes and the applications where they are best used. In addition, you will be able to describe techniques for care and use of ropes.
SCORM | Updated 10.2025

Rolling Contact Bearings
When you complete this lesson, you will be able to identify the most common types of rolling contact bearings, and recognize some of their design considerations and common operating characteristics.
SCORM | Updated 10.2025

Safe Driving Practices
When you complete this lesson, you will be familiar with the requirements of drivers of Department of Transportation (DOT) Class 1-6

light or medium duty vehicles. Additionally, you will be aware of defensive driving techniques, hazard perception, and driving attitude.
SCORM | Updated 10.2025

Safety and Health Programs
When you complete this lesson, you will be able to recognize the true cost of workplace accidents, see the benefits of an effective safety and health program, describe the critical elements of an effective safety and health program, and identify and prevent most workplace hazards.
SCORM | Updated 10.2025

Sampling Principles and Methods
When you complete this lesson, you will be able to describe the importance of accurate sampling. You will also be able to explain several sampling types and systems. You will be able to describe correct sampling procedures.
SCORM | Updated 10.2025

Scaffold Erection and Components
When you complete this lesson, you will be able to describe the proper erecting sequence of scaffolding. You will be able to identify components used to build a scaffold and the different types of scaffolding used in many constructions projects.
SCORM | Updated 10.2025

Scaffolding Safety for Construction
When you complete this lesson, you will be able to distinguish the responsibilities of those employees who work on or near scaffolding to assemble, maintain, and operate all scaffolding systems and adhere to safety requirements.
SCORM | Updated 10.2025

Scrubbers and Ash Removal Systems
When you complete this lesson, you will be able to identify the primary pollutants emitted from fossil fired boilers. In addition, you will be able to explain the basic design and operation of baghouses, electrostatic precipitators, and scrubbers.
SCORM | Updated 10.2025

Sheave Maintenance
When you complete this lesson, you will be able to describe the design and operation of sheaves and explain basic techniques employed to maintain them.
SCORM | Updated 10.2025

Shutdown of the Boiler Fuel System
When you complete this lesson, you will be able to describe the controlled and emergency shutdown procedures for the feeders and pulverizers.
SCORM | Updated 10.2025

Signal Generators
When you complete this lesson, you will understand the basic controls and operations of a signal generator. You will be able to use the device to generate basic waveforms for troubleshooting.
SCORM | Updated 10.2025

Single and Poly-phase Metering
When you complete this lesson, you will be able to discuss single and poly-phase specific meters including meter constants. In addition, you will be able to describe the process for meter reading, testing, and calibration.
SCORM | Updated 10.2025

Sliding Surface Bearings
When you complete this lesson, you will be able to identify the most common types of sliding surface bearings, and recognize some of their design considerations and common operating characteristics.
SCORM | Updated 10.2025

Smart Transmitters
When you complete this lesson, you will be able to describe the basic design, operation, and features of smart transmitters. You will also understand additional functionality available through the use of intelligent transmitters.
SCORM | Updated 10.2025

Solar Energy - Thermal Applications
When you complete this lesson, you will be able to explain how concentrated solar power can be used to generate electricity. You will also be able to describe the function and operation of the components that make up a functioning solar thermal power generating system.
SCORM | Updated 10.2025

Special Transformers
When you complete this lesson, you will be able to identify the various types of special transformers and describe how they are used.
SCORM | Updated 10.2025

Stationary Power Tool Safety
When you complete this lesson, you will be able to safely operate a number of stationary power tools by adhering to general work area safety requirements and specific requirements for many stationary power tools found in the workplace.
SCORM | Updated 10.2025

Steam Chemistry Control Guidelines
When you complete this lesson, you will be able to describe the importance of steam purity and chemistry to the steam turbine. In addition, you will be able to identify how water and steam chemistry are monitored and controlled.
SCORM | Updated 10.2025

Steam Turbine Control and Operation
When you complete this lesson, you will be able describe the basic operation of the valves that control the speed and operation of a typical steam turbine.
SCORM | Updated 10.2025

Steam Turbine Governor System
When you complete this lesson, you will be able to identify the components and function of a typical turbine governor system.
SCORM | Updated 10.2025

Stormwater Regulations and Pollution Prevention Plans
When you complete this lesson, you will be able to describe ways that stormwater runoff can impact the environment. In addition, you will be able to discuss stormwater regulations and explain how to effectively develop a stormwater pollution prevention plan (SWPPP).
SCORM | Updated 10.2025

Sweetening
When you complete this lesson, you will be able to identify and discuss what gas sweetening is and what role amines and solvent have in the sweetening process, and the process and equipment associated with a sweetening plant.
SCORM | Updated 10.2025

Tanks and Vessels Used for Storage
When you complete this lesson, you will be able to describe and explain various types of non-pressurized, pressurized, and refrigerated storage tanks and vessels. You will also be able to explain safety equipment associated with these tanks and vessels.
SCORM | Updated 10.2025

Temperature Calibrators
"Temperature instrument calibration must verify correct output from the primary element. It also verifies proper operation of the remaining sensor circuitry.

The Temperature Calibrators training course investigates the most common equipment needed to perform temperature instrument calibration. It explains the equipment's basic function and operation.

Temperature Calibrators is part of the Test Equipment training series."
SCORM | Updated 10.2025

Temperature Related Stress and Illnesses

When you complete this lesson, you will be able to recognize the causes and effects of temperature related stress. In addition, you will be able to identify illnesses associated with temperature related stress.
SCORM | Updated 10.2025

Testing Principles and Procedures

When you complete this lesson, you will be able to describe how tests are used to ensure on-specification quality products. You will be able to explain common chemical and physical tests performed on products to ensure this quality.
SCORM | Updated 10.2025

Thermal Desalination Technologies

When you complete this lesson, you will be able to discuss the principles on which thermal desalination technologies are based and explain the importance waste heat or steam plays in multiple effect distillation (MED) and multi-stage flash (MSF) systems. You will also be able to discuss the key components of MED and MSF systems, including the function of evaporators, condensers, demisters, and brine heaters. And you will be able to distinguish between multi-stage flash and multiple effect distillation technologies by comparing the differences between them.
SCORM | Updated 10.2025

Torque Wrenches

When you complete this lesson, you will be able to explain the need for torque wrenches in machining and maintenance operations. You will also be able to describe the various types of torque wrenches available and explain the proper procedures for their use.
SCORM | Updated 10.2025

Transducers

When you complete this lesson, you will be able to discuss the function of a transducer and describe types of conversions that transducers perform. You will also be able to explain the operating principles behind the most common types of transducers.
SCORM | Updated 10.2025

Transformer Connections

When you complete this lesson, you will be able to identify and explain how to make the most common types of connections for single-phase and three-phase transformers. You will be able to calculate the value of phase voltage and current, as well as line voltage and current.
SCORM | Updated 10.2025

Transformer Protection

When you complete this lesson you will understand the basic construction and protection methods commonly used in transformer protection.
SCORM | Updated 10.2025

Troubleshooting AC Circuits

When you complete this lesson, you will be able to outline the logical steps used for troubleshooting AC motor control circuits.
SCORM | Updated 10.2025

Troubleshooting Bearing Failures

When you complete this lesson, you will be able to recognize symptoms that may indicate failing

bearings. In addition, you'll be able to troubleshoot bearing failures and use the information you gain to prevent a reoccurrence.
SCORM | Updated 10.2025

Tube and Conduit Bending
When you complete this lesson, you will be able to describe how to properly bend tubing and conduit into a variety of angles and offsets.
SCORM | Updated 10.2025

Tubing Types and Applications
When you complete this lesson, you will be able to describe the design and function of tubing. In addition, you will be able to apply criteria to appropriately select tubing for various common applications.
SCORM | Updated 10.2025

Turbine Efficiency
When you complete this lesson, you will be able to explain how to calculate turbine efficiency. You will also be able to describe how parameters, components, and problems can affect turbine efficiency.
SCORM | Updated 10.2025

Types of Lubricants
When you complete this lesson, you will be able to describe the factors you must take into consideration when selecting a lubricant for a specific piece of equipment. In addition, you will be able to identify different viscosity grades and explain what each grade represents.
SCORM | Updated 10.2025

Uninterruptible Power Supplies (UPS)
"Power system reliability is directly linked to the performance of protective devices interconnected by IT devices. As such, the uninterruptible power supply (UPS) is one of the most critical components. The Uninterruptible Power Supply training course introduces UPS systems and explains how each is supplied.

This online training course includes:

- Types of power problems
- UPS types and characteristics
- UPS battery life considerations
- UPS functionality software
- UPS application

This course is part of the Batteries, Battery Chargers, and UPS training series."
SCORM | Updated 10.2025

Valve Actuators
When you complete this lesson, you will be able to discuss the use, selection, and design of various actuators, from simple manual hand-wheels to relatively complex electrical and hydraulic manipulators.
SCORM | Updated 10.2025

V-belts
When you complete this lesson, you will be able to explain the design and use of the most common variations of V-belts.
SCORM | Updated 10.2025

Vibration Analysis Program
When you complete this lesson, you will be able to describe a typical plant's vibration program and discuss how it contributes to the plant's operational readiness.
SCORM | Updated 10.2025

Vibration Introduction
When you complete this lesson, you will be able to define basic terms and measurement units associated with vibration. You will also be able to describe the relationship between a machine's

operating speed and vibration problems.
SCORM | Updated 10.2025

Water Management

When you complete this lesson, you will be able to identify the various issues of water management and their impacts on hydroelectric power generation.
SCORM | Updated 10.2025

Weight Measuring Devices

When you complete this lesson, you will be able to describe various weight measuring devices used in industrial applications and explain their operating principles.
SCORM | Updated 10.2025

Wind Energy Production

When you complete this lesson, you will be able to discuss the relationship between the size of a wind farm and its corresponding capacity factor. In addition, you will be able to explain how wind energy impacts traditional energy markets.
SCORM | Updated 10.2025

Wire and Cable Management

When you complete this lesson, you will be able to determine how to properly use conduit and cable trays to ensure the necessary neat and workmanlike appearance required by the NEC.
SCORM | Updated 10.2025