Plant Safety

Leading business schools rarely devote time to one of the most necessary and practical aspects of managing any industrial process - employee safety and the safe operation of equipment. Yet, poor safety practices can have a major negative impact on any business enterprise. Emerson Process Management recognizes the importance of management leadership in setting high safety standards and enforcing safety rules throughout every plant. Safety begins at the top, and our expanding offerings in the realm of safety are designed for top operating managers as well as safety professionals.

PSM (Process Safety Management) Fundamentals

Course 2720 CEUs: .7

This one day course is designed for managers, engineers, technicians, mechanics, operators, and other personal that work in a facility covered by OSHA's Process Safety Management standard.

Overview

If you want to quickly introduce your workers to the OSHA PSM standard this is the course. Participants will learn about each of the 14 elements of Process Safety Management, with special emphasis on Management of Change, Process Hazard Analysis and Pre-startup safety reviews. Each participant will be provided with a work manual to assist in future compliance and the strengthening of PSM program elements that exist in their facilities.

Topics

- The Regulations:
  Regulation History, Summary, Definitions, Compliance, Interpretations, and Citation Insights
  Covered Processes and Application Issues for Both PSM and RMP
- Elements of the Regulations:
  Employee Participation
  Process Safety Information
  Process Hazard Analysis
  Operating Procedures
  Training
  Contractors
  Pre-Startup Safety Review
  Mechanical Integrity
  Hot Work Permit
  Management of Change
  Incident Investigation
  Emergency Planning and Response
  Compliance Auditing
  Trade Secrets
- Hands on Sample Problems Worked During Course

OSHA 10 Hour General Industry Outreach

Course 2722 CEUs: 1.0

This 10-hour course is designed for managers, engineers, technicians, mechanics, operators, and other personal that work in any manufacturing facility.

Overview

If you want to quickly introduce your workers to the application of OSHA standards in the work environment this is the course. It covers the OSHA standards that are most commonly cited and provides participants with an intensive study of occupational safety and health compliance. The objective is to reduce/ prevent costly, time-consuming injuries/illnesses.

Topics

- Introduction to OSHA
- OSHA and Your Company
- The OSH Act
- General Duty Clause 5 (a) (1)
- Inspections/Citations/Penalties CFR Part 1903
- Subpart D: Walking and Working Surfaces
- Subpart E: Means of Egress/Evacuation
- Subpart H: Flammable/Combustible Liquids
- Subpart I: Personal Protective Equipment
- Subpart J: Lockout/Tagout
- Subpart L: Fire Protection-Emergency Action Fire Teams
- Subpart O: Machine Guarding
- Subpart S: Electrical
- Subpart Z: Hazard Communication

Students completing this course should:

- Discuss OSHA's current emphasis and enforcement policy.
- Describe the OSH Act and 29CFR 1910;
- Identify selected safety and health hazards and OSHA standards;
- Describe abatement methods for selected safety and health hazards;
- Explain and apply workplace inspection procedures consistent with OSHA policies, procedures, and directives.

Incident Analysis

Course 2728 CEUs: .7

This course is for process safety personnel who participate in or lead incident investigation teams.

Overview

This one-day, instructor-led course uses a combination of lecture, discussion, and hands-on exercises to teach the skills necessary to effectively function as the leader of an incident investigation committee, and to analyze incidents in a systematic manner that assures improvement of the process that generated the incident.

Topics

- ESH Management Theory
- Human Behavior
- The Incident Analysis Process
- Interviewing Techniques
- Practice Cases

Call to discuss pricing at your location

Location	Start Dates
Call to Schedule	512-832-3077

Safety Engineering Overview

Course 2730 CEUs:1.4

This course is for project managers, supervisors, and team members who provide supporting roles on a Safety Instrumented System (SIS) Project.

Overview

This 2-day instructor led course covers the Safety Lifecycle, terminology, and an introduction to industry standards such as IEC61508, IEC61511, and S84. Practical examples will cover the analysis, realization and operation of a safety instrumented system.

Topics

- SIS Terminology
- The Safety Lifecycle
- Risk and Probability
- Process Hazard Analysis (PHA)
- Risk Analysis
- SIL Determination
- Reliability Engineering
- SRS and SIS Design
- Start-up and Operation

Call to discuss pricing at your location

Location	Start Dates
Call to Schedule	512-832-3077

Safety Engineering

Course 2731 CEUs:2.8

This course is for professionals responsible for specifying and implementing Safety Instrumented Systems (SIS).

Overview This 4-day instructor led course covers the complete Safety Lifecycle. The IEC 61511 standard will be referenced and used as a guide through the analysis, realization, and operation of an SIS. Exercises will include process hazard analysis, SIL determination, SRS definition, and SIF design.

Topics

- SIS Terminology
- The Safety Lifecycle
- Risk and Probability
- Process Hazard Analysis (PHA)
- Risk Analysis
- SIL Determination
- Reliability Engineering
- SRS and SIS Design
- Start-up and Operation

Call to discuss pricing at your location

Location	Start Dates
Call to Schedule	512-832-3077

PlantWeb/DeltaV Introduction

Course 7101 CEUs: 2.1

Overview

This course is for plant managers, process and process control engineers, and maintenance personnel needing an introduction to how the PlantWeb technology is utilized in basic process control systems and safety systems.

Students will perform basic workstation operations including accessing displays, accessing faceplates, accessing modules to make process changes, responding to alarms and observing/changing tunable configuration parameters. Students who complete this 3-day course will be able to:

- use and apply PlantWeb terminology and acronyms
- identify DeltaV Explorer components
- define the different types of downloads
- commission and download a controller
- identify DeltaV Operate functionality
- operate a process using faceplates, detail displays, and primary control displays using DeltaV Operate
- define the Foundation™ Fieldbus technology terminology
- view device alerts using AMS Suite: Intelligent Device Manager
- define the DeltaV SIS architecture

Prerequisites

None.

Topics

- DeltaV System Description
- DeltaV Hardware
- Engineering Application
- Operation & Maintenance
- Alarm Management
- Security
- Bus Architecture
- Safety Life Cycle
- DeltaV SIS Overview
- Data Integration
- Batch

For Plant Safety training information please refer to the appropriate contact on page 118.
For regional training center contacts refer to pages 116-117.
Visit: www.emersonprocess.com/education for current dates, locations and enrollments.