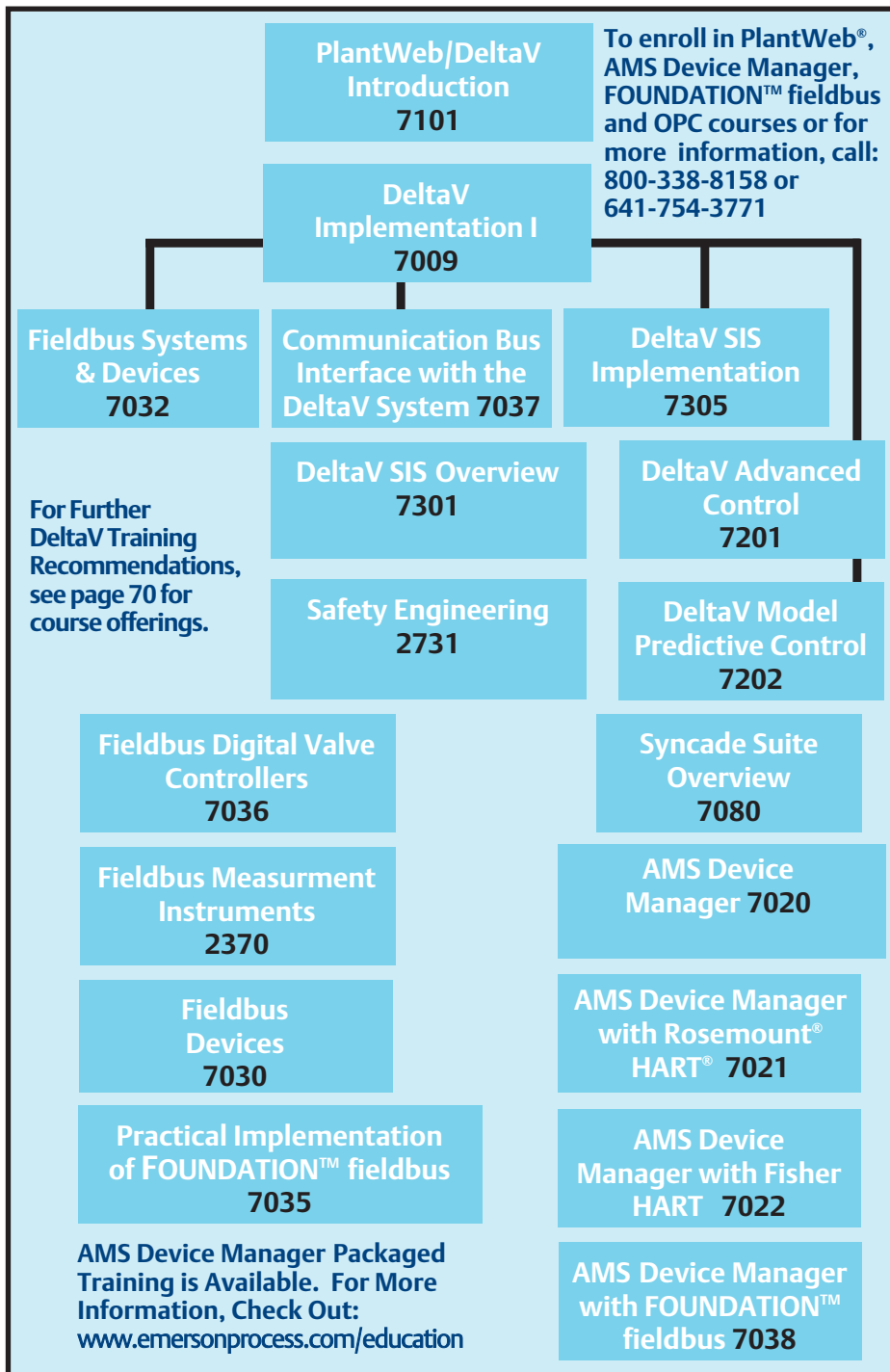


# LEARNING PATH

Emerson Process Management's PlantWeb digital plant architecture is today's cutting-edge automation technology, bringing together the diverse components of process control systems in a unique way to benefit end-users in many ways. This architecture is designed to take full advantage of the communications capabilities of the FOUNDATION™ fieldbus technology and its capacity for the open, continuous communication of large volumes of digital information generated by intelligent field devices. This information is accessed by the AMS Device Manager software and used for a variety of time and money-saving functions. The DeltaV™ digital automation system serves as an ideal automation system host in this environment.



## PlantWeb/DeltaV Introduction

**Course 7101 CEUs: 2.1**

This course is for individuals needing an introduction to the technology and concepts used in the new generation of process control systems.

### Overview

Students who complete this 3-day course will be able to:

- use and apply PlantWeb terminology and acronyms
- understand the functions of DeltaV hardware components
- understand the capabilities of DeltaV software applications
- understand the Foundation™ fieldbus technology
- understand AMS Device Manager software
- understand OPC

Perform basic workstation operations including accessing displays, interpreting faceplates and accessing modules to make process changes, responding to alarms and observing/changing tunable configuration parameters.

### Prerequisites

None.

### Topics

- DeltaV System Description
- Analog Control Modules
- Discrete Control Modules
- FOUNDATION™ fieldbus
- AMS Device Manager
- OPC

**Price** \$1,950

**Location**  
Austin, TX

**Start Dates 2010**  
3/22, 10/18

## DeltaV Implementation I

### Course 7009 CEUs: 3.2

This course is for users that use DeltaV Operate Graphics.

#### Overview

This 4-1/2 day course covers a complete DeltaV system implementation. Upon completion of this course the student will be able to define system capabilities, define nodes, configure continuous and sequential control strategies, operate the system and define users and security.

#### Prerequisites

Windows experience. It is recommended that prospective attendees new to process control systems attend Course 7101 or Course 7018.

#### Topics

- System Overview
- Explorer
- Control Modules
- Control Studio
- Motor Control
- Regulatory Control
- WorkSpace
- System Operation
- Alarms & Process History View
- Sequential Function Charts
- Phase Logic
- Security

**Price** \$2,750

#### Location

Austin, TX

#### Start Dates 2010

1/11, 1/25, 2/8, 2/22, 3/8, 3/22, 4/5, 4/19, 5/3, 5/17, 6/7, 6/21, 7/12, 7/26, 8/9, 8/23, 9/13, 9/27, 10/11, 10/25, 11/8, 11/29, 12/13

Edmonton, AB

1/18, 2/22, 3/22, 4/19, 5/10, 6/21, 7/26, 8/23, 9/20, 10/25, 11/22, 12/13

Fort McMurray, AB

4/12, 10/4

Saskatoon, SK

5/3, 11/15

## Syncade™ Suite Overview

### Course 7080 CEUs: 1.4

#### Overview

This 2-day class provides an overview of the Syncade Suite applications and their use within a Manufacturing Execution System (MES) environment. The Syncade Suite applications handle tasks that fit between the process control system environment, such as DeltaV™, and corporate Enterprise Resource Planning (ERP) systems, such as SAP. Each module in the suite will be covered briefly to provide the user with a basic understanding of the module, its functionality and how it fits into the overall MES functional layer. Integration methods and implementation techniques are not part of this class.

#### Prerequisites

None.

#### Topics

- Manufacturing Execution Systems (MES)
- Document Control and Authoring
- Security Basics
- Portal
- Training and Development
- Equipment Tracking
- Materials Management
- Inventory Management
- Recipe Authoring
- Order Management
- Weigh and Dispense

**Price** \$1,500

#### Location

Austin, TX

#### Start Dates 2010

2/1, 5/17, 9/27

**Note:** Detailed configuration classes are available for all Syncade Suite modules, see 7080 and 7090 series courses.

## Syncade™ Suite Document Control and Archiving

### Course 7081 CEUs: 2.1

#### Overview

This 3-day class provides the user with the necessary skills to set up, configure and maintain the DCA module in Syncade Suite. Students will be taught repository setup and administration settings, how to add documents to a user configured repository structure using manual or automated techniques, manually move documents through the promotion model as well as editing existing documents and making them available to the production cycle.

Users will configure and use the Change Request feature within DCA to move documents through the promotion model. Change request types and workflows will be created and users assigned to the roles in the steps to automate the document promotion process.

Document packages will also be taught in this class. Users will create package classes that will be used to create a print package for a production run.

**Prerequisites** None.

#### Topics

- DCA Overview
- DCA User Interface
- Repository Creation, Configuration and Use
- Document Types
- Configured Properties
- Creating Document Properties
- Adding Documents – Manual / Autoloader
- Document Life Cycle
- Document Change Control
- Change Request User Interface
- Change Request Life Cycle
- Change Request Types
- Change Request Workflows
- Creating Change Requests
- Review and Approval Processes
- Document Packages Overview
- Packages User Interface
- Package Classes

**Price** \$2,000

#### Location

Austin, TX

#### Start Dates 2010

2/3, 9/29

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For additional contact information refer to the appropriate contact on page 119. Updated dates & locations are available on our website at [www.emersonprocess.com/education](http://www.emersonprocess.com/education).



### Syncade™ Suite Training and Development

**Course 7082 CEUs: .7**

**Overview**

This 1-day class will provide the user with the necessary skills to configure the Training and Development module to successfully ensure the workforce is up to date with job related skill sets. Users will configure the tasks and skill sets necessary for an individual to complete a job function as well as maintain those skills over time. Users will configure an organizational structure that will be used to define departments and positions and assign skills to those positions that will set the requirements for a person holding that position. Courses will be created that will teach the tasks required to fill a position in the organization.

Users will also schedule classes and learn how to enroll themselves and others using the training and requirement planners in the TD module.

Users will also be taught how to set up the notification processes within the Syncade Suite administration menus..

**Prerequisites**

None.

**Topics**

- TD Overview
- Defining the Organizational Structure
- Creating Tasks
- Creating Skills and Assigning Tasks
- Certification Methods
- Setting Up Training Classes
- Creating Job Requirements
- Integrating TD with Other Syncade Suite Modules
- Maintaining Necessary Job Related Skills
- Administration Notification Processes

**Price \$700**

**Location** Austin, TX      **Start Dates 2010** 6/17

### Syncade™ Suite Equipment Tracking

**Course 7083 CEUs: 1.4**

**Overview**

This 2-day class will provide the user with the necessary skills to create, configure and maintain equipment used in the production process. Users will configure equipment classes and equipment that will provide a solution for managing equipment use, maintenance and calibration information. Events will be set up on the equipment class that define actions that can be performed, or need to be performed, on equipment created from the equipment class. Rules and groups will be configured to assist in implementing controls on equipment and when certain events need to occur. Schedules will be created to set up periodic preventive maintenance and work orders will be created to cover the unscheduled activities that may be needed to fully utilize production equipment.

**Prerequisites**

None.

**Topics**

- ET Overview
- Create Equipment Classes
- Define Calibration Targets
- Add Custom Properties
- Create Events and Event State Matrix
- Create Rules and Groups
- Material and Labor with Events
- Event Scheduling
- Create Equipment
- Integrating Documents and Skills
- Performing Events
- Work Orders

**Price \$1,400**

**Location** Austin, TX      **Start Dates 2010** 5/19, 10/7

### Syncade™ Suite Materials, Inventory and Order Management

**Course 7084 CEUs: 2.1**

**Overview**

This 3-day class will provide the user with the necessary skills to create and manage all types of materials as they flow into, through and out of the production environment during order execution. Users will create material masters to define the material characteristics, create inventory, create and execute orders, allocate materials, create material samples, track lots and containers and perform weigh and dispense activities.

**Prerequisites**

None.

**Topics**

- Material/Inventory Management Overview
- OM Overview
- Material Masters
- Material Properties
- Quality Statuses
- Order Creation and Execution
- Material Allocations
- Weigh and Dispense
- Trusted Dispensing
- Sampling
- Purchasing and Receiving
- Lot and Container Actions
- Physical Inventory
- Genealogy
- Inventory Adjustments

**Price \$2,000**

**Location** Austin, TX      **Start Dates 2010** 6/14



**Syncade™ Suite Recipe Authoring 4.0**

**Course 7095 CEUs: 1.2**

**Overview**

This full 3-day class will provide the user with the necessary skills to configure version 4 recipes for Syncade Suite execution. Users will learn to configure manual recipes, DeltaV recipes and recipes that integrate the Syncade Suite and DeltaV into a complete cohesive batch record.

**Prerequisites**

None.

**Topics**

- Recipe Authoring (RA) Overview
- RA Application
- Manual and Automation Recipe Hierarchy
- Work Instructions and Parameter Types
- Operations, Unit Procedures and Procedure Creation
- RA Simulator
- Process Segments
- Master Recipes
- Order Execution
- Parameter Referral and Deferral
- Reference Groups
- Formula Creation/Selection
- Behaviors and the Behavior Editor
- DeltaV Recipes
- Integrated Type 2 and 3 Recipes

**Price** \$2,000

**Location**                      **Start Dates 2010**  
 Austin, TX                      5/24

**Note:** Detailed application classes available to customers that have purchased Syncade Suite

**AMS Device Manager**

**Course 7020 CEUs: 2.1**

**Overview** Completing 3-days of AMS Device Manager hands-on instructor assisted training modules and exercises, provides the quickest route to your productive use of this predictive maintenance application. The training exercises focus on skills required by engineers and technicians, and are based on real-world tasks that most users will encounter on the job.

**7020-1 Configuring and Using AMS Device Manager**

- Viewing and Modifying Devices
- Creating a Plant Database Hierarchy and Adding Devices
- Field Communicator - AMS Device Manager
- AMS Device Manager Browser Functions
- Audit Trail
- Calibrating Device - Calibration Assistant
- Configuring and Monitoring System Alerts

**7020-2 System Administration**

- AMS Device Manager System Overview
- Installing an AMS Device Manager Server Plus Standalone
- Starting AMS Device Manager for the 1st Time
- Network Communication Interface Setup
- AMS Device Manager Database Management
- Installing a Distributed System
- Installing Device Types from Media

**7020-3 SNAP-ON™ Applications**

- AMS ValveLink® SNAP-ON Application - Basics
- MV Engineering Assistant SNAP-ON Application - Basics
- QuickCheck™ SNAP-ON Application
- Using AMS Device Manager OPC Server and the Matrikon OPC Explorer
- AMS Device Manager Web Services
- AMS Suite: Asset Portal™
- AlertTrack SNAP-ON™ Application

This instructor assisted course is operated in a hands-on, self-paced environment, which allows the student to work at their individual pace. Training can also be delivered at your plant with the help of our certified instructors. AMS Device Manager modules may be purchased for self-study for \$195 each or \$495 for all three paper/bound modules. [www.emersonprocess.com/education](http://www.emersonprocess.com/education)  
**Course Offerings> Packaged Training**

**Price** \$1,850

**Location**                      **Start Dates 2010**  
 Eden Prairie, MN              5/11, 7/13, 8/24, 12/14  
 Marshalltown, IA              4/13  
 Austin, TX                      2/16, 6/8, 9/14  
 Las Vegas, NV                3/2, 10/26  
 Ontario, CA                    7/27  
 Edmonton, AB                4/5, 8/23, 10/25  
 Fort McMurray, AB        3/15, 12/6

**AMS Device Manager with Rosemount HART Instruments**

**Course 7021 CEUs: 2.1**

Learn the installation, calibration, maintenance, and troubleshooting of measurement instrumentation using AMS Device Manager. The hands on focus is on skills required by engineers, technicians, or others that are new to the plant or instrument environment.

**Overview**

This 3-day course teaches maintenance and calibration of measurement devices using AMS Device Manager software to communicate and track information. The student will learn how pressure and temperature transmitters function, are installed, and calibrated using AMS Device Manager. The course uses hands-on training, labs, and lecture to teach the student how to:

- configure and use AMS Device Manager
- correctly perform transmitter installation and setup procedures
- properly configure SMART transmitters
- properly calibrate transmitters
- perform basic troubleshooting-transmitters

**Topics**

- Configuring and Using AMS Device Manager
- HART Communication
- SMART Transmitters (3051C, 3144P)
- Test Equipment Selection
- Transmitter Installation
- Transmitter Configuration
- Transmitter Calibration
- AMS Calibration Manager
- Intelligent Calibrators
- Transmitter Troubleshooting

**Price** \$1,500

**Location**                      **Start Dates 2010**  
 Eden Prairie, MN              5/25

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**AMS Device Manager with Fisher HART Instrumentation**

**Course 7022 CEUs: 2.1**

This 3-day course is designed to teach technicians and engineers how to commission, calibrate, configure, maintain, and troubleshoot Fisher smart devices using AMS Device Manager and the AMS ValveLink SNAP-ON.

**Overview**

The course begins with an introduction to the features and functionality of the AMS Device Manager software. It delves into device-specific techniques for commissioning, maintaining, and troubleshooting the following Fisher smart devices:

- DVC6000 Digital Valve Controller
- DLC3000 Digital Level Controller

**Prerequisites**

None, though a basic familiarity with Fisher smart devices will be beneficial.

**Topics**

- Introduction to AMS Device Manager
- Getting Started with AMS Device Manager
- Replacing and Deleting Devices
- HART Communicator
- Using the Audit Trail
- Monitoring System Alerts
- DVC6000 View from AMS Device Manager
- AMS ValveLink SNAP-ON Features and Functionality
- AMS ValveLink SNAP-ON Digital Valve Controller Diagnostics

**Price** \$1,900

**Location Start Dates 2010**

Edmonton, AB 6/14, 9/7  
Fort McMurray, AB 5/3

**AMS Device Manager with FOUNDATION™ fieldbus**

**Course 7038 CEUs: 2.8**

**Overview**

This 4-day lab/lecture course is for individuals who use AMS Device Manager integrated with the DeltaVTM system to calibrate, commission, and configure FOUNDATION™ fieldbus devices. The training exercises are based on real-world tasks that most users will encounter on the job.

**Prerequisites**

It is recommended that attendees have a general understanding of process control, control valves and transmitters.

**Topics**

- DeltaV Overview
- FOUNDATION™ fieldbus Overview
- AMS Device Manager Overview
- AMS Device Manager Browser functions
- Viewing and Modifying Devices
- Creating a Plant Database Hierarchy
- Commissioning Devices
- AMS with HART Devices
- Replacing Devices
- Audit Trail
- Calibrating Devices
- Configuring and monitoring System Alerts
- AMS ValveLink® SNAP-ON Application
- Engineering Assistant SNAP-ON Application
- Root Cause Diagnostic™ SNAP-ON Application
- QuickCheck™ SNAP-ON Application
- AMS Wireless SNAP-ON
- Micro Motion Meter Verification SNAP-ON Application
- AMS Device Manager Web Services
- AMS Suite: Asset Portal™
- AMS Device Manager Administration

**Price** \$2,650

**Location Start Dates 2010**

Austin, TX 4/12, 10/25

**Fieldbus Measurement Instruments**

**Course 2370 CEUs: 3.2**

This course is for individuals responsible for installing, configuring, calibrating, and troubleshooting FOUNDATION™ fieldbus measurement devices.

**Overview**

This 4-1/2 day class covers the integration of FOUNDATION™ fieldbus compliant measurement devices using the Field communicator. Upon completion of this course students will be able to: install, configure, calibrate, and troubleshoot Rosemount Fieldbus devices which include the 3051C and 3051S Pressure transmitters, 644, 3144P and 848 Temperature transmitters, 8742 Magnetic Flow transmitter, 8800C Vortex Flow transmitter, 5600 and 5400 Radar Level Transmitter, 752 Indicator, and the 3420 Fieldbus Interface Module (FIM).

**Prerequisites**

Experience in instrument calibration, maintenance/installation/operation would be helpful.

**Topics**

- FOUNDATION™ fieldbus Overview
- Fieldbus: Wiring/Segment Design/Function Blocks
- Field Communicator Operation
- Theory of Operation, Installation, Configuration, Maintenance, Calibration and Troubleshooting on the following Rosemount Devices:
  - 3051C Pressure Transmitter
  - 3051S Pressure Transmitter
  - 3144P and 644 Temperature Transmitter
  - 848 Temperature Transmitter
  - 8742 Mag Flow Transmitter
  - 8800C Vortex Transmitter
  - 5600 and 5400 Radar Level Transmitter
  - 752 Fieldbus Indicator
  - 3420 Fieldbus Interface Module

**Note:** Course may be conducted using other Fieldbus Hosts, such as DeltaV and National Instruments, call with any questions.

**Price** \$2,000

**Location Start Dates 2010**

Eden Prairie, MN 4/19, 10/18

**Fieldbus Devices**

**Course 7030 CEUs: 2.8**

This course is for individuals responsible for maintaining, troubleshooting, calibrating and modifying FOUNDATION™ fieldbus device parameters.

**Overview**

This 4-day lecture/lab course provides maximum hands-on experience working with FOUNDATION™ fieldbus instruments such as: the FIELDVUE® Digital Valve Controller, Rosemount Pressure and Temperature Transmitters. The student will use the DeltaV control system to commission fieldbus devices, assign foundation fieldbus function blocks to field devices, troubleshoot using diagnostics and AMS Device Manager to manipulate device parameters.

**Prerequisites**

There are no prerequisites for this course; however, a general understanding of process control including control valves, transmitters, control terms, and control loop basics is recommended. Computer skills should include a basic working knowledge of Windows.

**The 375 Field Communicator and AMS ValveLink for Fieldbus will be demonstrated and available for students as optional activities.**

**Topics**

- DeltaV Scaleable System Overview
- Macro Cycle Execution
- Fieldbus Function Blocks
- FieldVue Theory of Operation
- Transmitter Theory of Operation
- AMS Device Manager Methods
- Fieldbus Wiring Practices
- System Troubleshooting
- Accessing Fieldbus Devices
- Alarms and PlantWeb Alerts at DeltaV Workstations
- Segment Checkout Procedures
- Replace Wizard

**Price** \$2,550

**Location** Austin, TX  
**Start Dates 2010** 5/24, 11/8

**Fieldbus Systems and Devices**

**Course 7032 CEUs: 2.8**

This course is for individuals responsible for installing, troubleshooting, calibrating and configuring FOUNDATION™ fieldbus instruments and control strategies using the DeltaV™ scalable systems.

**Overview**

This 4-day lecture/lab provides maximum hands-on experience working with the integration of FOUNDATION™ fieldbus devices and the DeltaV scaleable system. The student will be able to install fieldbus instruments and segment checkout for the correct operation of the physical layer. The student will be able to use the DeltaV system to perform AMS Device Manger methods such as calibration, setup wizards, zero trim and diagnostics. The student will be able to implement a pressure loop using FOUNDATION™ fieldbus function blocks with the DeltaV Control Studio application. The student will configure PlantWeb Alerts and device alarm parameters.

**Prerequisites**

Course 7009 or Course 7018.

**The 375 Field Communicator and ValveLink for Fieldbus will be demonstrated and available for students as optional activities.**

**Topics**

- FOUNDATION™ fieldbus Overview
- Macro Cycle Execution
- Fieldbus Function Blocks
- Control Strategy Configuration
- Control Anywhere
- FieldVue Theory of Operation
- Transmitter Theory of Operation
- AMS Device Manager Methods
- Fieldbus Wiring Practices
- System Troubleshooting
- Configuring Fieldbus Device
- Alarms and PlantWeb Alerts
- Configuring a Fieldbus Operator Display
- Segment Checkout Procedures

**Price** \$2,750

**Location** Austin, TX  
 Edmonton, AB  
 Fort McMurray, AB  
**Start Dates 2010** 3/8, 6/14, 9/20, 12/6  
 3/15, 7/12, 9/27  
 1/25, 11/8

**Communication Bus Interface with the DeltaV™ System**

**Course 7037 CEUs: 2.1**

This course is for individuals responsible for interfacing with DeviceNet, AS-i, Profibus DP HART and serial communication busses to a DeltaV™ scalable system.

**Overview**

This 3-day course covers the integration of fieldbus compliant devices using DeltaV systems. Upon completion of the course the student will be able to install, configure and verify proper operations of AS-i, Profibus DP, DeviceNet and HART devices, including proper wiring practices. The AMS Intelligent Device Manager will be used to configure HART instruments.

**Prerequisites**

Course 7009, DeltaV Implementation or Course 7018, DeltaV Hardware and Troubleshooting. The 375 Field Communicator will be available for the students.

**Topics**

- HART Overview
- Configuring DeltaV Control Module with HART
- Configuring HART Device with AMS Intelligent Device Manager and/or Rosemount 375 Handheld Communicator
- Serial Interface Overview
- Configuring DeltaV and Serial Interface Card
- Actuator Sensor Interface (AS-i) Overview
- AS-i: Wiring and Installation
- Assembling and Configuring AS-i Network with DeltaV
- Profibus DP Overview

**Price** \$1,950

**Location** Austin, TX  
**Start Dates 2010** 3/15, 9/27

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### Practical Implementation of FOUNDATION™ fieldbus

#### Course 7035 CEUs: 1.4

This course is for individuals responsible for evaluating FOUNDATION™ fieldbus technology for process automation projects.

#### Overview

This 2-day course covers the practical implementation issues with FOUNDATION™ fieldbus faced by design and project engineers familiar with 4-20mA DCS installations. Upon completion of the course the student will understand the basics of fieldbus technology and be aware of areas that will change during project execution. The student will be able to design H1 fieldbus segments, specify equipment, comply with hazardous area requirements, modify current engineering practices, troubleshoot installations and estimate installed benefits for a project using FOUNDATION™ fieldbus. The course content is not vendor specific though DeltaV and Emerson Process Management field devices are used for examples and demonstration purposes.

#### Prerequisites

Background in instrumentation & electrical engineering, control systems engineering, or project engineering.

#### Topics

- Introduction to FOUNDATION™ fieldbus Technology
- Design of H1 Fieldbus Segments
- Hazardous Area Applications
- Project Engineering Practices Using FOUNDATION™ fieldbus
- Economic Benefits Compared to Traditional 4-20mA DCS Technology

Price \$1,350

<b>Location</b>	<b>Start Dates 2010</b>
Austin, TX	Call to Schedule
Edmonton, AB	Call to Schedule

### Fieldbus Digital Valve Controllers

#### Course 7036 CEUs: 2.1

This 3-day course is designed to teach technicians and engineers the basics of fieldbus digital valve controller installation, configuration, calibration, and troubleshooting using 375 Handheld, AMS ValveLink software and DeltaV.

#### Overview

The course begins with a review of the role and function of control valve positioners and proceeds through a series of hands-on exercises that require the student to disassemble, inspect, assemble, install, and commission a fieldbus digital valve controller. During commissioning, students will learn the basics of the fieldbus protocol, the role of function blocks, addressing, modes and status. Students will configure, calibrate, and commission devices using both 375 Handheld, ValveLink software and DeltaV. Hands-on exercises also teach students how to perform detailed setup routines and how to run and interpret various ValveLink diagnostics. The class ends with a troubleshooting session that presents common problems and their solutions.

**Prerequisites** None, though a basic familiarity with positioners - preferably digital valve controllers - and control valve basics will be most useful.

#### Topics

- Positioner Basics
- Fieldbus Overview
- Digital Valve Controller Installation and Mounting
- Modes and Status
- Configuration/Calibration with DeltaV
- Configuration and Calibration with the 375 Field Communicator
- Intro. to AMS ValveLink Fieldbus Functionality
- AMS ValveLink Setup Wizard/Detailed Setup
- Tuning
- Tag Management
- Pressure Control
- AMS ValveLink Diagnostics
- FIELDVUE Instrument Troubleshooting
- (Optional) Configuration/Calibration with NI Tools

Price \$1,900

<b>Location</b>	<b>Start Dates 2010</b>
Marshalltown, IA	1/26, 5/10, 7/27
Las Vegas, NV	4/13

### DeltaV™ SIS Overview

#### Course 7301 CEUs: 2.1

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

#### Overview

This 3-day course is a hands-on instructor led course. The course covers the safe, efficient, and reliable architecture of a smart SIS including Rosemount SIS instruments, DeltaV SIS and Fisher SIS Digital Valve Controllers. Students will gain a working knowledge in Safety Instrumented Function (SIF) design, implementation, and operations.

#### Topics

- SIS Terminology
- The Safety Lifecycle
- SIL Levels
- DeltaV SIS Hardware Architecture
- DeltaV SIS Software Architecture
- Rosemount SIS Instruments
- Fisher SIS Digital Valve Controllers
- DeltaV SIS Operations

Price \$1,950

<b>Location</b>	<b>Start Dates 2010</b>
Austin, TX	6/28, 8/23

### DeltaV™ Safety Instrumented System (SIS) Maintenance

#### Course 7303 CEUs: 2.1

This course is for individuals responsible for maintaining a DeltaV SIS.

#### Overview

This 3-day course is a hands-on instructor led course. The course covers the architecture of the DeltaV SIS including Rosemount SIS instruments and Fisher SIS Digital Valve Controllers. Students will gain a working knowledge of the hardware and software allowing them to troubleshoot and maintain the system.

#### Prerequisites

Course 7018, DeltaV Hardware and Troubleshooting, is a requirement.

#### Topics

- Safety Lifecycle
- DeltaV SIS Overview
- DeltaV SIS Hardware
- Safety Instrumented Functions
- Rosemount SIS Instruments
- AMS Device Manager
- Fisher SIS Digital Valve Controller
- SISNet Repeaters

Price \$2,100

<b>Location</b>	<b>Start Dates 2010</b>
Austin, TX	7/12, 12/6
Edmonton, AB	5/12, 10/13

### DeltaV™ SIS Implementation

#### Course 7305 CEUs: 3.2

This course is for personnel who design, implement, commission and service DeltaV SIS.

#### Overview

This 4-1/2 day course is a hands-on instructor led course. The course covers complete DeltaV SIS Implementation including hardware and software architecture. Students will be able to design a DeltaV SIS Network and Safety Instrumented Functions (SIFs). Additionally, students will be able to configure smart SIS instruments and their associated alerts, including partial stroke testing.

#### Prerequisites

Course 7009 is a requirement. Recommend IEC 61511 knowledge (Course BSE101 or BSE201).

#### Topics

- DeltaV SIS Fisher SIS Digital Valve Controllers
- The Safety Lifecycle Safety Standards
- DeltaV SIS Hardware Design Document Requirements
- DeltaV Safety Instrumented Functions
- DeltaV SIS Security
- Rosemount SIS Instruments Security
- DeltaV Version Control

Price \$2,750

<b>Location</b>	<b>Start Dates 2010</b>
Austin, TX	1/11, 4/19, 6/21, 8/30, 11/29
Edmonton, AB	5/17, 10/18



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