

RS3™ RS3 distributed control system training is formatted for individuals to progress at their own pace. Courses are designed to give engineers, operators, and/or technicians the information they will need to configure, operate, and troubleshoot RS3 systems in continuous or batch operations.

Introduction to RS3

Curriculum 3100 **CEUs: 3.5**

Overview This curriculum provides a starting point for all engineers, technicians and other personnel who will configure, install, or maintain any part of a RS3 Distributed Control System. It may meet all the needs of those configuring control systems for continuous processes requiring nothing more complex than cascade or ratio control, simple interlocks or motor controls. For others, 3100 modules serve as prerequisites for modules in the 3200, 3500 or 3600 curricula. This curriculum can provide a basic understanding of RS3 for managers and others whose success depends on the system but who will not work with it directly.

Modules

- 3100-1 Developing Basic Operating Skills Using the RS3 MTCC Console
- 3100-2 System Hardware and Architecture
- 3100-3 Configuring Basic Control Loops
- 3100-4 Configuring Trends, Reports, Alarms/ Console Configuration- RS3 MTCC Console
- 3100-5 Configuring Logic Functions/Displays
- 3100-6 Configuring Process Graphic Displays Using the RS3 MTCC Console
- 3100-7 Configuring Cascade/Ratio Loops

Time Required 1 week

Price \$2,950

Location **Start Dates 2009**
Austin, TX 3/2, 6/22, 10/19

RS3 Hardware and Maintenance

Curriculum 3200 **CEUs: 3.5**

Overview The 3200 curriculum is designed for technicians and engineers who are responsible for installing, starting up, or maintaining a RS3 installation. Students entering this curriculum should have a general electronics background, and should know how to use electronics test equipment such as a multimeter & current source.

Prerequisites 3100: modules 1, 2, 3 & 4

Modules

- 3200-10 RS3 Hardware Overview
- 3200-20 Power Supplies/Power Distribution
- 3200-70 The PeerWay
- 3200-30 Console Electronics
- 3200-31 CRT Displays
- 3200-32 Multitube Command Consoles
- 3200-40 Control Files -Coordinator Processor IV
- 3200-53 Overview of the I/O Subsystem
- 3200-50 Analog I/O Hardware
- 3200-51 Discrete I/O Hardware
- 3200-52 Contact I/O Hardware
- 3200-54 Low-Level Input Multiplexer
- 3200-56 PLC Interface
- 3200-57 Multipoint Analog Input/Output

Time Required 1 week

Price \$2,950

Location **Start Dates 2009**
Austin, TX 3/2, 6/22, 10/19

RS3 Operator Station Transition

Curriculum 3110 **CEUs: 1.4**

Overview

This curriculum is appropriate for engineers and technicians responsible for configuration of the RS3 Operator Station (ROS), who have completed RS3 training as noted in the Prerequisites shown below. The same training modules are also incorporated into the prerequisite curricula for students who are new to RS3.

Basic Configuration

Prerequisites: 3100: modules 1, 2, 3 & 4

Modules

- 3110-1 - Developing Basic Operating Skills Using the RS3 Operator Station
- 3110-2 - Configuring Trends, Reports, Alarms and Console Configuration Using the RS3 Operator Station
- 3110-3 - Configuring Process Graphic Displays Using the RS3 Operator Station
- 3110-4 - Administering and Optimizing the RS3 Operator Station

Time Required 16-18 hours.

Batch Configuration

Prerequisites: 3600

Modules

- 3600-13 - Exception Management in a Recipe Environment
- 3600-20 - Configuring RS3 Operator Station for RS3 Batch Operation

Time Required 8 hours

Price \$1,350

Location **Start Dates 2009**
Austin, TX Call to schedule

RS3 Process Operation

Curriculum 3400

Overview

The 3400 curriculum is designed for plant operators and supervisors who are responsible for day-to-day process operation. Training can be tailored to either a continuous or a batch process. The 3400 modules help the student learn how to analyze process conditions and make process adjustments, with confidence and without hesitation. Training activities help the student develop keyboard dexterity through repetition of routine procedures under increasingly challenging conditions. Qualification exercises require each student to demonstrate an adequate skill level before proceeding to the next training activity or module.

Modules

For MTCC Consoles:

- 3400-1 Basic Operating Displays and Adjustments Using the MTCC Console
- 3400-2 Operating Cascade and Ratio Loops Using the MTCC Console
- 3400-4 Operating Batch Processes Using ABC Batch Software through the MTCC Console (Batch Only!)

For ROS Consoles:

- 3400-11 Basic Operating Displays and Adjustments Using the RS3 Operator Station
- 3400-12 Operating Cascade and Ratio Loops Using the RS3 Operator Station
- 3400-14 Operating Batch Processes Using ABC Batch Software Through the RS3 Operator Station (Batch Only!)

Time Required

Standard Operator Training (non-batch) - 12 hours. Including batch - 20 hours.

Price \$2,050

Location **Start Dates 2009**
Austin, TX Call to schedule

To enroll in RS3 courses please call 800-338-8158 or 641-754-3771. 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.

RS3 Advanced Configuration**Curriculum 3500 CEUs: 2.1****Overview**

Advanced Control Block configuration training for those whose needs go beyond cascade or ratio control and straightforward Interlock logic.

Prerequisite

Curriculum 3100 Introduction to RS3

Modules

- 3500-1 Introduction and Overview
- 3500-2 Configuring Control Blocks for High Level Orchestration
- 3500-3 Optimizing Complex Logic Functions
- 3500-4 Optimizing Block Data Transfer

Time Required

3 Days

Price \$2,100

Location

Austin, TX

Start Dates 2009

3/2, 6/22, 10/19

**RS3 Process Operation Configuring
RS3 Control for Batch Processes****Curriculum 3600 CEUs: 3.5****Overview**

The 3600 modules are designed for engineers who must configure/support a batch process control system using RS3 ABC Batch software.

Prerequisite

Curriculum 3100, Introduction to RS3

Modules

- 3600-10 Introduction to ABC Batch Recipe
- 3600-11 Intro. to RBL Language/Scripts
- 3600-12 Configuring Batch Tasks
- 3600-2 Displays, Alarms, & Reports
- 3600-3 Exception Management in a Task Environment
- 3600-4 Batch Data Transfer
- 3600-5 Advanced Task Organization

Time Required

1 Week

Price \$2,950

Location

Austin, TX

Start Dates 2009

Call to Schedule

Load Rack Hardware Training**Course TA100 CEUs: 1.4**

Overview This 2-day course provides a general knowledge of Load Rack hardware and provides training needed for troubleshooting and repairing the communication links and control lines connecting between the terminal automation system and its peripheral devices. This course also teaches how to recognize problems in the terminal automation system, how to use diagnostics to isolate the failed devices or wiring, and how to replace defective electronic devices with new units.

Price/Location/Start Date: Call to Discuss

Introduction to Autoload**Course TA101 CEUs: .7**

Overview This 1-day introduction to the Autoload Terminal Management System teaches how to use the system to control normal loading operations within a terminal. The course is intended for terminal operators and provides the knowledge to perform day-to-day operations with the Autoload system.

Price/Location/Start Date: Call to Discuss

Autoload Configuration, Setup and DeltaV Integration**Course TA102 CEUs: 1.4**

Overview This 2-day advanced Autoload Terminal Management System course provides the training to reconfigure the terminal control system as new products and terminal equipment are added. Topics included are needed by terminal supervisors to manage the security and operation of their systems.

Price/Location/Start Date: Call to Discuss

Introduction to DANTAS**Course TA121 CEUs: .7**

Overview This 1-day introductory course for the DANTAS Terminal Management System teaches how to use the system to control loading operations within a terminal. The course is intended to provide the training necessary for performing normal day-to-day operations using the DANTAS system.

Price/Location/Start Date: Call to Discuss

DANTAS Configuration & Setup**Course TA122 CEUs: 1.4**

Overview This 2-day advanced DANTAS Terminal Management System course provides the skills needed to reconfigure the DANTAS system to manage new products or additional terminal equipment. Topics included are needed by terminal supervisors to manage the operation of their systems.

Price/Location/Start Date: Call to Discuss

DANTAS Administration & System Maintenance**Course TA123 CEUs: 1.4**

Overview This 2-day advanced DANTAS Terminal Management System course provides the skills needed to reconfigure the DANTAS system to manage both new products and additional terminal equipment. Topics included are needed by terminal supervisors to manage security and the operation of their systems.

Price/Location/Start Date: Call to Discuss

To enroll in Terminal Automation courses call: 281-207-2957.

Visit our website at: www.emersonprocess.com/education