

PlantPax Process System Configuration for Engineers

Process Control

COURSE AGENDA

Day 1

- Identifying a PlantPax System
- Locating ControlLogix Components
- Creating and Organizing a New Project [RSLogix 5000]
- Organizing ControlLogix Data
- Configuring Device-level Ring
- Configuring Devices Using HART

Day 2

- Programming a Function Block Diagram
- Configuring PlantPax AOI
- Creating a Graphic Display [SE]
- Using Tag Placeholders [SE]
- Configuring Global Objects [SE]
- Configuring PlantPax Faceplates [SE]

Day 3

- Creating a Tag Database [SE]
- Creating Alarms [SE]
- Creating a Data Log Model [SE]
- Creating a Trend [SE]
- Setting Up Reporting

Day 4

- Configuring Security [SE]
- Programming a PID Loop
- Tuning a PID Loop [SE]
- Programming Considerations for Applications [RSLogix 5000]
- Programming Structured Text

Day 5 (1/2 Day)

- Designing an SFC
- Determining Workstation Layout
- Configuring Redundancy



COURSE NUMBER: PRS013

Course Purpose

This course is intended for control engineers who have a background in process control – but are **new** to Rockwell Automation. This course introduces new students to the core components of a PlantPax process control system, including controllers, HMI, networks, and instrumentation devices. Students will look at the individual components and see their relationships to the complete system.

During the course, you will focus on the equipment control aspects and learn to:

- Create and organize a new project
- Develop control algorithms in function block programming language
- Create new interactive displays for the operators, set up alarms, and develop trends of real-time data

This system includes (but is not limited to) the basic concepts of the following components:

- *Development Software:* RSLogix 5000
- *Networks:* EtherNet/IP, ControlNet, and FOUNDATION Fieldbus
- *Modules:* Local I/O modules, Remote Flex I/O, and HART
- *Operator Interface:* FactoryTalk View SE [SE]
- *Programming Languages:* Function Block Diagram [FBD], Structured Text [ST], and Sequential Function Chart [SFC]

Who Should Attend

Control engineers who have a background in process control – but are **new** to Rockwell Automation - should attend this course. This is an introductory course covering basic concepts related to Rockwell Automation components.

This course is **not** intended for those experienced with RSLogix 5000, FactoryTalk View SE, or the various components. For details on the topics covered, please see the Course Agenda on page 1.

Prerequisites

To successfully complete this course, knowledge of basic process control is required.

Student Materials

To enhance and facilitate your learning experience, the following materials are provided as part of the course package:

- *Student Manual*, which contains the key concepts, definitions, and examples presented in the course and includes the hands-on exercises.
- *RSLogix 5000 and Logix5000 Procedures Guide*, which provides all of the steps required to complete basic RSLogix 5000 software tasks that are common to all Logix5000 hardware platforms.
- *FactoryTalk View SE Procedures Guide*, which provides all of the steps required to complete common FactoryTalk View SE application development tasks, including the tasks in the exercise.
- *PlantPAx Process Automation System Reference Manual*, which specifies control products and performance recommendations for a process system.
- *PlantPAx Customer Tools CD*, a multimedia disc of PlantPAx case histories, Flash Primers, product literature, and commentary from industry experts.

Hands-On Practice

Throughout this course, you will have the opportunity to practice the skills you have learned through a variety of hands-on exercises. These exercises focus on the skills introduced in each lesson.

Next Learning Level

Once you have an understanding of a process control system and the skills covered in this course, you may want to attend specific training such as:

- *RSLogix 5000 Level 4: Function Block Programming CCP152* course
- *FactoryTalk Historian Site Edition Configuration and Data Collection RS-FTHSEC* course
- *PID Loop Development and Tuning PRS010* course

Course Length

This is a 4.5 day course.

Course Number

The course number is PRS013



IACET CEUs

CEUs Awarded: 3.2

To Register

To register for this or any other Rockwell Automation training course, contact your local authorized Allen-Bradley Distributor or your local Sales/Support office for a complete listing of courses, descriptions, prices, and schedules.

You can also access course information via the Web at <http://www.rockwellautomation.com/training>

www.rockwellautomation.com

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