

# Experion<sup>®</sup> Process Knowledge System (PKS) Control Execution Environment: Controller & ACE



## Course Overview

**Course number:** EXP2001

**Course length:** 4-5 days

### Need to plan and implement your Experion PKS C200 or C300 Controller?

This course provides participants the ability to perform the following Experion PKS System tasks:

- Build control strategies in the Control Execution Environment that can be applied to the C200 (Chassis and PMIO), C300 (Chassis, PMIO, and Series C) and the ACE.
- Plan the C200 and C300 controllers including the selection of appropriate I/O, redundancy and communications
- C200 Series A and C300 Series C IO configuration
- C200 and C300 Control Module configuration. This includes configuring Data Acquisition, Regulatory Control and Logic
- C200 and C300 Sequential Control Module configuration. This includes the use of Steps and Transitions to implement process sequences
- MATH and Power Function Block configuration
- Loading and start-up, including loading the controller
- The use of PMIO in C200 and C300 control strategies.
- Perform Checkpoint Save and Restore

The course presents the basic concepts and strategies needed to develop guidelines for effective and consistent planning of the system. It includes extensive hands-on lab exercises where participants will build and configure a Control Execution Environment applicable to the C200, C300, and/or ACE. Lab exercises will include troubleshooting typical errors in configuration.

## Course Benefits

### Efficient planning and implementation of your Experion PKS C200 and C300 Controller

- Conceptual understanding of the C200 and C300 controllers to enable optimum utilization.
- Design and configure the C200 and C300 controllers for optimum control.

## Course Delivery Options

- In-Center Training
- Customer Site Training

## Who Should Take This Course?

### EXPERION PKS System Implementers

Experion System Engineering and configuration tasks can impact the following job roles. Other job roles performing these tasks could also participate.

- **Experion System or Application Engineer** responsible for configuring the controller, adding to or changing the controller configuration.

## Prerequisite/Skill Requirements

### Prerequisite Course (s)

- N/A. Some would benefit by taking the EXP02.

## Required Skills and/or Experience

- Working knowledge of Windows 2003 Server or XP.
- Ability to navigate the Experion Station
- Ability to call up point details, group details, and custom displays

## Desirable Skills and/or Experience

- Plant, process, and controls knowledge
- Experience configuring DCS Controller

## Course Topics

### You will learn how to....

- Recognize the role of the major hardware and software components and learn how data flows through the C200 and C300 controllers.
- Plan the C200 and C300 controllers.
  - Select appropriate components of the C200 and C300 controllers including processors, I/O and communications.
- Configure the C200 and C300 controllers including:
  - Hardware
  - Control Modules, which incorporate Data Acquisition, Regulatory Control and Logic
  - Sequential Control Modules which are used to control process sequences, such as start up, shut down and batch operations.
  - Checkpoint Save and Restore
- Configure additional I/O functionality for Honeywell Process Manager I/O applicable to both the C200 and C300 controllers.
- Perform Database Search operations
  - Parameter search
  - Where Used search

## Additional Training

To increase your knowledge and skills, there are additional courses available from Automation College.

**For more information and registration, visit [www.automationcollege.com](http://www.automationcollege.com).**