

# Experion PKS: Advanced – System Level Troubleshooting and Maintenance



## Course Overview

**Course number:** EXP-25

**Course length:** 9.5 days

### Need to troubleshoot an Experion® PKS system?

This course provides participants with the ability to troubleshoot both the hardware and software of the Experion PKS system.

- Hands-on lab exercises comprise 90% of the course
- Participants will be required to verify reported problems, create a hypothesis regarding the likely problem area, and apply a planned troubleshooting procedure to isolate the problem boundary in twenty one scenarios
- Locate the issue causing the problem, propose a solution and identify the implications to the control system and process of implementing the solution
- Participants will learn safer and more effective troubleshooting procedures along with improved navigation skills of system displays and programs
- Each student will study in Team System Environment comprising three students per team
- Each Team System Environment includes a Domain Controller, Redundant ESVT nodes, ACE-T node, EST node, OPC Server, redundant C200's with PM I/O, HC900/ML SCADA controller and redundant C300 controllers with C300 I/O

## Course Benefits

### Builds confidence in maintaining your System

- Information on common problem causes and resolutions
- Locate, analyze and rectify faults associated with the Domain Controller, Servers, and stations. FTE networks and Switches; C200/C300 controllers with PCDI and SCADA points; TPN/TPS and OPC points. Also PCDI to Safety Manager
- Required to identify faults in other parts of the Experion® PKS

## Course Delivery Options

- In-Center Instructor-Led Training

## Who Should Take This Course?

**Experion PKS Plant Engineers or Advanced System Technicians:**

- Responsible for troubleshooting and correcting problems in the entire system from the Domain Controller, Servers, and stations to the primary controllers

## Prerequisite/Skill Requirements

### Prerequisite Course(s)

- ((EXP-02 or EXP-02-AT or EXP-02-VT) and (EXP-2001 or EXP-2001-AT or EXP-2001-VT)) or
- ((EXP-02 or EXP-02-AT or EXP-02-VT) or (EXP-2001 or EXP-2001-AT or EXP-2001-VT)) and (EXP-05 or EXP-05-AT or EXP-05C3 or EXP-05C3S or EXP-05C2)) or
- (EXP-23 or EXP-23-AT)

Note: Related experience may not be an acceptable substitute

### Required Skills and/or Experience

- Working knowledge of Windows Server 2008 R2 and/or Windows 7 (64 bit)

### Desirable Skills

- Plant, process, and controls knowledge
- Experience configuring DCS Controllers
- Working knowledge of your process
- Working experience with field instruments, electrical components, valves, transmitters, and basic instrumentation
- Experience with installation and operation of an Experion PKS system
- Experience with installation and operation of an TDC 3000/ TPS system

## Course Topics

### You will learn how to...

- Use Experion PKS operating, configuration and troubleshooting displays to identify and rectify network faults in FTE, Server, Station, and Security connections

**Course Topics continued**

- Troubleshooting with system displays and programs to locate and rectify faults in a C200/C300 controller, with PMIO or Chassis IO
- Troubleshooting controller to field instrument type problems
- C200 troubleshooting – error indications Local LED's and Station Displays
- C300 troubleshooting – error indications Local LED's and Station Displays
- PM I/O troubleshooting (either C200 and C300 connected) - error indications Local LED's and Station Displays
- SCADA problems
- OPC problems
- Dynamic Alarm Suppression problem
- System Wide Events problem(R430)
- TPS/LCN – Experion communication and connection problems
- Experion System Logs and Analysis Tools
- Server and Security issues
- Station and Server redundancy issues
- EMDB and ERDB corruption issues
- FTE and Ethernet Switches
- Configuration Studio, Network Tree
- Experion Support and Maintenance, Using Diagnostic Studio
- Experion Backup and Restore
- TPN Backup and Restore
- C300 PCDI Connections to HC900/ML and Safety Manager

**Additional Training**

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

**For more information and registration, visit**

[www.honeywellprocess.com/en-US/training](http://www.honeywellprocess.com/en-US/training).