

Experion[®] Process Knowledge System (PKS) Controller/SCADA Troubleshooting and Maintenance



Course Overview

Course number: EXP05

Course length: 7-5 days

Need to maintain an Experion PKS system?

This course provides participants with a full understanding of both the hardware and software facets of the Experion PKS C200, C300 controller and SCADA interfaces. Hands-on lab exercises, utilizing a full-functioning process simulator, comprise 70% of the course. Participants will be required to install, configure and commission I/O, and configure Regulatory Control and Digital Composite. Participants will learn safer and more effective troubleshooting procedures that not only consider the hardware (cards, cables, power supplies, etc.), but also the impact of the loop parameter settings, and automatic controls.

Who Should Take This Course?

EXPERION PKS Plant Maintenance Technicians:

- Required to make routine additions and changes to controls on C200 or C300
- Expected to troubleshoot C200 or C300 controllers and points
- Expected to troubleshoot SCADA connections and points
- Required to identify level one faults in other parts of the Experion PKS

Course Benefits

Builds confidence in maintaining your System

- Hands on troubleshooting
- Identify the spare capacity on C200 or C300 controllers.
- Locate, analyze, and rectify faults associated with the C200 or C300 controller and SCADA points
- Analyze and localize faults associated with field equipment
- Respond to problems on the system

Course Delivery Options

- In-Center Training
- Customer Site Training

Prerequisite/Skill Requirements

Prerequisite Course(s)

- Working knowledge of Windows 2003 Server or XP

Required Skills and/or Experience

- None

Desirable Skills and/or Experience

- Working knowledge of your process.
- An understanding of basic electrical concepts, test equipment, and drawing symbols
- Working experience with field instruments, electrical components, valves, transmitters, and basic instrumentation.

Course Topics

Participants will be able to

- Build a C200 controller, with PMIO or Chassis IO or C300 controller/Series C I/O
- Build and commission loops using a hardware simulator
- Typical loops include feedback, positioning and digital control
- Use Experion PKS displays to troubleshoot HC900 SCADA problems
- Troubleshooting with system displays to locate and rectify faults in C200/C300 field connections, I/O, redundancy, power supply, and communications to server
- Use Experion PKS operating, configuration, and troubleshooting displays to identify (not rectify) network faults in FTE, Server, Station, and Security connections
- Review the troubleshooting, diagnostic, and correction process for faults using 1-5v, 4-20 ma, and HART (Not included: Fieldbus, Profibus and DeviceNet)
- Perform routine maintenance on the C200 or C300
- Utilize Knowledge Builder to look for additional information to support these tasks

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.