

Experion[®] Process Knowledge System (PKS) Control Execution Environment: CAB + ACE



Course Overview

Course number: EXP16

Course length: 3 days

This course provides you with the ability to configure custom blocks in a Control Execution Environment (CEE). The course shows you how to create a Custom Algorithm Block (CAB) for your control strategies that may need customization. While primarily focusing on CAB configuration, the course also provides Custom Data Block (CDB) configuration practice. The course extends your knowledge about configuring strategies in the CEE gained from a prerequisite Experion course.

The course is instructor led complemented by hands on lab exercises that support the course topics. Each participant will use an Experion Flex Station along with their own simulated ACE to build custom strategies.

Course Benefits

Extend Experion PKS capabilities through

- Determining when to use custom blocks.
- Configuring Custom Algorithm Blocks.

Course Delivery Options

- In-Center Training
- Customer Site Training

Who Should Take This Course?

Experion Process Control or Application Engineers

Engineers who are responsible for configuring custom strategies using the ACE node should consider attending this course.

Prerequisite/Skill Requirements

Prerequisite Course(s)

- EXP20, EXP2001, or prior Control Execution Environment (CEE) implementation experience.

Required Skills and/or Experience

- None

Desirable Skills and/or Experience

- Some familiarity with a programming language is recommended as Visual Basic .NET is used in the classroom environment.

Course Topics

You will learn how to....

- Plan the Experion Batch Manager in the CEE for your processes.
- Support custom block configuration in terms of
 - Recognizing custom block functionality and purpose
 - Identifying system requirements, planning, and design considerations
- Configure a Custom Algorithm Block (CAB) through tasks such as
 - Creating CAB Type and Library
 - Defining custom parameters and parameter references
 - Coding a custom algorithm using Visual Basic (VB).net
- Manage CAB strategies in terms of:
 - Modifying, exporting, and/or importing a block.
 - Testing and Debugging a CAB
- Examine insertion point concepts such as
 - Reviewing insertion point requirements
 - Creating a CAB to execute at an insertion point

Course Topics Continued

- Configure dynamic re-referencing through tasks such as
 - Defining and accessing at runtime re-reference parameters
 - Creating a CAB to dynamically re-reference parameters
- Perform history access using a CAB through tasks such as
 - Identifying history access requirements
 - Coding a CAB to access history from an OPC HDA server
- Access ACE file data using a CAB through tasks such as
 - Configuring a CAB to write to a file
 - Configuring a CAB to read from a file
- Examine how to migrate a CL program to CAB
 - Migrate a CL/HPM program to CAB
- Configure Inter-Cluster Peer-Peer Communication
 - Build an OPC Gateway (OPCG) and Inter-Cluster Gateway (ICG) to support inter-cluster communication
- Test and Debug a CAB program

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.