

COURSE DESCRIPTION

Save time and money by attending this fast-paced, hands-on course for programming the ControlWave® product family. Start with the basics of programming using IEC-61131-3 standard software and Bristol®-supplied functions, and advance into programming for communications with external controllers. This course provides you with the knowledge and skills required to define and control inputs and outputs of related real world applications, including basic communications and troubleshooting.

COURSE FEATURES

- Understand how IEC-61131-3, ControlWave Designer, and on-line utilities work
- Master skills necessary to create a program for ControlWave process controllers
- Learn the Bristol library of function blocks for measurement, calculations, process control, data storage, and alarming
- Understand OpenBSI Communications Software
- Master establishing ethernet/ IP communications using ControlWave Designer
- Learn to program polling and data transfers in BSAP and an I/O environment
- Understand how to define a hierarchical network of ControlWave controllers using NetView
- Understand the configuration of communication via other protocols such as MODBUS

WHO SHOULD ATTEND

- Personnel responsible for the establishing of communication interfaces to ControlWave automation products

PREREQUISITES

- Participants must have a strong working knowledge of personal computers and Windows XP, or a later version
- Participants should have a strong working knowledge of their application/ process
- Participants should have programming experience (course not recommended for beginning programmers)
- Participants should have completed “Creating a Simple Project” (contact us for details)

REGISTRATION

To register for this training course, complete the enrollment application on our website: www.EmersonProcess.com/Remote.

For further information on custom classes or general training information contact:

Evelyn Bellefeuille
Watertown, CT
1-860-945-2343
or 1-800-395-5497 toll free within the United States



Ensuring customer confidence through knowledge of Bristol® and ControlWave® products and applications.

COURSE AGENDA

DAY 1

- Flash Memory Communication Configuration via LocalView
- ControlWave File Conventions
- I/O Configuration
- Program Organization Units (POU)
- Functions, Function Blocks, Programs
- Variables/ Types
- Tasks/ Program Instances
- Class Project
- Debugging Techniques/ I/O Simulation
- Programming Languages
 - Ladder Logic
 - Function Block Diagram
 - Structured Text
- Creating Lists
- Programming for Audits/ Archives and Alarms



COURSE AGENDA CONTINUED

DAY 2

- Creating User Library of Function Blocks
- Programming the ControlWave for Communication
- OpenBSI Utilities
- Understanding BSAP Communications
- BSAP Messaging
- Polling Philosophy
- Configuring Polling Time Messages
- System Variables Affecting Communications
- Communication Port Configurations
 - Master Port
 - Custom Port
 - I/P
- Establishing a Network Using OpenBSI NetView

DAY 3

- Communicating to Bristol Devices in a BSAP Protocol Network
- Transferring Signal Lists Between ControlWaves
- Using CLIENT and SERVER Function Blocks and Serial Connections
- ControlWave MODBUS Master/ Slave
- Using DLM Software