

## ABB UNIVERSITY COURSE DESCRIPTION

# **US802** Control Builder, Process Panel, and Drives Integration using AC800M Controllers for AC800 Drives



Learn to configure an AC800M controller using Control Builder M Professional and to configure Process Panel as an operator interface. An introduction to interfacing drives to the AC800M

### Course type and methods

This is an instructor led workshop with short presentations and demonstrations, extended exercises, and hands-on sessions and discussion. Approximately 50% of the course is hands-on lab.

#### **Student Profile**

This course is targeted to control engineers, system engineers, service engineers, and maintenance technicians.

#### Prerequisites

Students should have basic knowledge of process control and the Microsoft Windows® operating system.

#### **Course objectives**

Upon completion of this course the participants will be able to:

- Build and configure a small system using AC800M controllers and Process Panel
- Use a project description and P&ID to define a control logic solution to meet process control objectives
- Use Control Builder to make the connection between
- S800 I/O modules and the control logic

- Recognize a variety of IEC 61131-3 compliant languages that Control Builder uses to implement control logic in an AC800M controller.
- Configure a Process Panel to act as an operator interface and establish communication with the AC800M controller
- Configure an interface between the AC800M controller and an ABB drive

#### **Main Topics**

- AC800M, Control Builder, and Process Panel system architecture
- AC800M and S800 hardware
- Creating a Control Builder project
- Managing libraries
- Connecting I/O
- Using IEC 61131-3 programming languages
- Creating an using control modules
- External communications
- Process panel communications
- Process panel configuration
- Control Builder and Process Panel builder project
   maintenance
- Drives integration

## Duration

The duration is 4 1/2 days

#### **Course Outline**

Day 1	Day 2	Day 3	Day 4	Day 5
<ul> <li>AC800M and S800 I/O</li> <li>hardware</li> <li>Creating a framework for a project</li> <li>Managing libraries</li> </ul>	<ul> <li>Using Control Modules</li> <li>Analyze the Control Builder Project</li> <li>Connecting and Configuring I/O</li> </ul>	<ul> <li>Function Block Language</li> <li>Other IEC Languages</li> <li>Configuring external communications</li> <li>Control Builder project</li> </ul>	<ul> <li>Interfacing Process Panel with AC800M</li> <li>Configuring Process Panel graphics</li> <li>Additional Process Panel</li> </ul>	<ul> <li>Interfacing drives with AC800M</li> </ul>
Variables and data types	<ul> <li>Task Assignment and Scheduling</li> <li>Downloading and going online</li> </ul>	maintenance	configuration <ul> <li>Process Panel maintenance</li> </ul>	

To register, contact the North America Customer Service Center or visit us online ABB Inc. +1 800 HELP 365 Option 2, Option 4

Fax: +1 919 666 1388 abbuniversity@us.abb.com

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