ABB UNIVERSITY COURSE DESCRIPTION

US802
Control Builder M Professional, Process Panel, and Drives Integration

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 controller is also provided.

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

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  - AC800M and S800 I/O hardware
  - Creating a framework for a project
  - Managing libraries
  - Variables and data types

- Day 2
  - Using Control Modules
  - Analyze the Control Builder Project
  - Connecting and Configuring I/O
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  - Downloading and going online

- Day 3
  - Function Block Language
  - Other IEC Languages
  - Configuring external communications
  - Control Builder project maintenance

- Day 4
  - Interfacing Process Panel with AC800M
  - Configuring Process Panel graphics
  - Additional Process Panel configuration
  - Process Panel maintenance

- Day 5
  - Interfacing drives with AC800M

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