

Course description

INT314

System 800xA with AC800M Basic Application Modifications

Course goal

The goal of this course is to learn the modification of existing applications / projects using the Extended Automation System 800xA with AC 800M controllers.

Learning objectives

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

- Explain the System 800xA architecture and the function of the different components
- Configure the AC 800M hardware and corresponding I/O's
- Describe the structure of application programs i.e. variables, libraries, programs, tasks
- Modify existing application programs by using Function Block Diagrams, Sequential Function Charts, Structured Text and Control Modules
- Setup the communication between controllers
- Load the controller and work in online mode
- Check the OPC connectivity to AC800M
- Navigate in the system and create new objects / aspects
- Modify graphic displays
- Manage and configure alarm and events
- Monitor trends and configure historical data collection
- Import / export System 800xA data

Participant profile

This training is targeted to system engineers, commissioning and maintenance personnel, and service engineers who need have a foundation for maintenance and administration skills.

Prerequisites

Students shall know the fundamentals of working with Control Systems and have basic knowledge of Windows XP and networking technologies.



Topics

- System 800xA architecture
- Engineering Workplace / Plant Explorer
- OPC connectivity
- Application structures
- AC 800M hardware
- Variables and data types
- Function Block Diagram
- Structured Text
- Control Modules
- Sequential Function Charts (SFC)
- Communication
- Alarm and events
- Historian and trends
- Graphic displays
- Operator Workplace
- Import and export

Course type and methods

This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab activities. The language of the course is English.

Duration

The duration of the course is Five days.

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Course outline

Day 1	Day 2	Day 3	Day 4	Day 5
<ul style="list-style-type: none">■ Course overview■ System 800xA architecture■ Operation■ Engineering workplace/ plant explorer■ OPC connectivity	<ul style="list-style-type: none">■ AC800M hardware■ Libraries■ Variables and data types■ Function block diagram	<ul style="list-style-type: none">■ Communication■ Task assignment and memory■ Control modules■ Structured text	<ul style="list-style-type: none">■ Sequential function charts■ Alarm and events■ Graphic displays■ Historian and trends	<ul style="list-style-type: none">■ Operator workplace■ Import and export■ System backup

ABB India Limited
Process Automation Training Centre
New PA Shop Floor Building, Plot No. 4A, 5&6, 2nd Phase,
Peenya Industrial Area, Bengaluru – 560058, Karnataka, India
Email: training@in.abb.com
www.abb.com/abbuniversity