COURSE DESCRIPTION

T314
System 800xA with AC 800M
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. If more comprehensive engineering skills are needed, it is recommended to consider the course T315 “Engineering” instead.

Main 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 the existing diagram using Diagram Editor;
- Setup the communication between controllers;
- Load the controller and work in online mode;
- Check the OPC connectivity at 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;
- Modify existing application programs by using Function Block Diagrams, Sequential Function Charts, Structured Text and Control Modules.

Participant profile

This training is targeted to system and application engineers, commissioning and maintenance personnel, 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 8 and networking technologies.

Topics

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

Course type

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

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Duration
The duration is 5 days

Course map

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
Topics	• Course overview; • System 800xA architecture; • Operation; • Engineering Workplace/Plant Explorer; • OPC connectivity.	• AC 800M hardware; • Libraries; • Variables and data types; • Function block diagrams.	• Structured Tex;t • Task assignment and memory; • Control Modules Diagrams.	• Sequential Function Charts (SFC); • Communication; • Alarm and events; • Graphic displays.	• Histrorian and trends; • Operator Workplace; • Import and export.
Time	9:00 am – 6:00 pm	9:00 am – 6:00 pm	9:00 am – 6:00 pm	9:00 am – 6:00 pm	9:00 am – 6:00 pm

Typical course layout (time or sequence may change)

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