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.

**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.

**Student 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 7 and networking technologies.
Course 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
• Modify the existing diagram using Diagram Editor
• 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

Main topic
• 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
• Diagrams
• Sequential Function Charts (SFC)
• Communication
• Alarm and events
• Historian and trends
• Graphic displays
• Operator Workplace
• Import and export

Duration
The duration is 5 days

Course Outline

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