

T360

System 800xA with AC 800M Basic Engineering for Channel Partners



The goal of this workshop is to learn the engineering workflow of a complete automation project using the Extended Automation System 800xA with AC 800M controllers.

The participants will learn to identify the critical issues and will gain the basic knowledge to start a project in an efficient manner. It is highly recommended to utilize the ABB technical coaching after this course in order to implement best practices.

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.

Student Profile

This training is targeted to project and technical sales support engineers from ABB channel partners.

Prerequisites

Students shall have working experience with Control Systems and have basic knowledge of Windows and networking technologies. The e-learning course T360e must have been completed upfront.

Course objectives

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

- Identify the critical issues with respect to an efficient engineering workflow in 800xA
- Create a new control project and plan the structure of application programs
- Select the suitable existing building blocks and describe the necessary steps to develop project specific libraries
- Configure basic control applications by using a variety of IEC 61131-3 languages
- Describe the principles to integrate other devices with various communication protocols
- Configure simple graphic displays, faceplates and operator workplaces
- Identify the critical issues to manage, structure and configure alarm and events
- Configure historical data logging and trends
- Describe the principles of user security
- Backup / restore System 800xA data
- Describe the steps to use bulk data handling
- CAD Drawing and VideONet

Main topic

- Engineering workflow
- AC 800M hardware configuration
- Available libraries
- Variables and data types
- IEC 61131-1 applications
- Diagrams, Control modules
- Sequential Function Charts (SFC)
- Task assignment
- Communication and device integration
- OPC connectivity
- Diagrams
- Graphic displays and faceplates
- Alarm and events
- Historian and trends
- Operator Workplaces
- User security
- Backup / restore
- Bulk data handling

- Simple reports (MS Excel Data Access)
- CAD Drawing and VideONet
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Duration

The duration is 5 days

Course Outline

Day 1	Day 2	Day 3	Day 4	Day 4
Engineering workflow AC 800M hardware configuration Available libraries Variables and data types IEC 61131-1 applications	Task assignment Diagrams Control modules (PID loops etc.) Sequential Function Charts (SFC)	Communication and device integration OPC connectivity Function Designer Graphic displays	Faceplates Alarm and events Historian and trends Operator Workplace	Operator Workplace User security Backup / restore Simple reports (MS Excel) Bulk data handling CAD Drawing and VideONet Next steps