

# 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.

#### Student Profile

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

#### Prerequisites

Students shall have working experience with control systems and have basic knowledge of Windows operating system 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 System 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

#### Duration

The duration is 5 days

- 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

#### Main topics

- Engineering workflow
- AC 800M hardware configuration
- Available Libraries
- Variables and data types
- IEC 61131-3 applications / Control Modules
- Sequential Function Charts (SFC)
- Task assignment
- Communication and device integration
- OPC connectivity
- Function Designer
- Graphic displays and faceplates
- Alarm and events
- Historian and trends
- Operator workplace
- User security
- Backup / restore
- Bulk data / Simple reports

Course Outline				
Day 1	Day 2	Day 3	Day 4	Day 5
Engineering workflow	Task assignment	OPC connectivity	Faceplates	Operator Workplace
AC 800M hardware	Control Modules	Function Designer	Alarm and events	User security
Available libraries	Sequential Function Charts (SFC)	Graphic Displays	Historian and trends	Backup / restore
Variables and data types	Communication and device integration		Operator Workplace	Simple reports
IEC 61131-3 applications				Bulk data handling
				Next steps