

## Course description

# T360

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

### Course goal

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.

### Learning 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

### Participant 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 XP and networking technologies. The e-learning course T360e must have been completed upfront.



### Topics

- Engineering workflow
- AC 800M hardware configuration
- Available libraries
- Variables and data types
- IEC 61131-1 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 Workplaces
- User security
- Backup / restore
- Bulk data handling
- Simple reports (MS Excel Data Access)

### 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.

### Duration

The duration is 5 days.

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## Basic Engineering for Channel Partners

### Course outline

Day 1	Day 2	Day 3	Day 4	Day 5
<ul style="list-style-type: none"><li>■ Engineering workflow</li><li>■ AC 800M hardware configuration</li><li>■ Available libraries</li><li>■ Variables and data types</li><li>■ IEC 61131-1 applications</li></ul>	<ul style="list-style-type: none"><li>■ Task assignment</li><li>■ Control modules (PID loops etc.)</li><li>■ Sequential Function Charts (SFC)</li><li>■ Communication and device integration</li></ul>	<ul style="list-style-type: none"><li>■ OPC connectivity</li><li>■ Function Designer</li><li>■ Graphic displays</li></ul>	<ul style="list-style-type: none"><li>■ Faceplates</li><li>■ Alarm and events</li><li>■ Historian and trends</li><li>■ Operator Workplace</li></ul>	<ul style="list-style-type: none"><li>■ Operator Workplace</li><li>■ User security</li><li>■ Backup / restore</li><li>■ Simple reports (MS Excel)</li><li>■ Bulk data handling</li><li>■ Next steps</li></ul>

To enrol on-line visit:

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ABB University, Oulton Road, Stone, ST15 0RS  
Tel: +44 (0)1785 285939  
Email: [training@gb.abb.com](mailto:training@gb.abb.com)

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