T315C&H System 800xA with AC800M
Engineering Using Control Builder

Learn to use Control Builder to engineer a complete control project using System 800xA with AC800M controllers.

Student Profile
This training is targeted to system and application engineers, commissioning and maintenance personnel, service engineers and system integrators.

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.

Prerequisites
Students should have fundamental working knowledge of control systems, Windows/Windows Server 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
- Navigate in the system and create new objects
- Create a new control project and design applications using IEC6113-3 languages
- Configure the AC800M hardware and I/O's
- Use standard library objects and develop project specific libraries and objects
- Setup the OPC connectivity to AC800M
- Configure process graphic displays, navigation links, graphic elements and faceplates
- Configure alarms and events
- Setup basic historical data collection and configure trend displays
- Create and customize operator workplaces
- Configure user accounts and security
- Create reports using Microsoft Excel data access
- Backup and restore System 800xA data

Main topic

- System 800xA architecture
- Engineering Workplace/Plant Explorer
- Project and application structures
- AC800M hardware
- System 800xA backup and restore
- Libraries, variables and data types
- Function Block Diagram and Structured Text
- Task assignment and memory
- Control modules
- User defined object types
- Sequential Function Charts (SFC)
- Communication
- OPC connectivity
- Graphic displays, Graphic elements, and faceplates
- Alarms and eventsw
- Basic history and trends
- Operator Workplace and user security
- Simple reports
- Import/Export Tool

Duration

The duration is 10 days

Course Outline				
Day 1	**Day 2**	**Day 3**	**Day 4**	**Day 5**
• Course overview • System 800xA architecture • Engineering Workplace /Plant Explorer • Project and application structures • AC800M hardware	• AC800M hardware • Project backup • Libraries • Variables and data types • Function Block Diagram • Structured Text	• Structured Text • Task assignment and memory • Control modules	• User defined object types • Sequential Function Chart (SFC)	• Communication • OPC connectivity
Day 6	**Day 7**	**Day 8**	**Day 9**	**Day 10**
• Plant modeling • Graphic displays • Graphic elements	• Faceplates • Alarm and events	• Historical data collection • Trend displays • Workshop "engineering"	• Operator Workplace • User security • Backup and restores • Import and export	• Simple reports • Document manager • National Language Support (NLS) • Bulk data handling