T316v

Engineering Efficiency – virtual training

The goal of this course is to practice new recommended methods and tools increasing efficiency in engineering and commissioning of automation solutions with AC 800M with Select I/O and S800 I/O in the Extended Automation System 800xA.

Course type and methods

This is an instructor led virtual course with interactive discussions and associated remote exercises. Approximately 50% of the course are practical exercises.

Student Profile

This training is targeted to application and instrumentation engineers, commissioning and service engineers and system integrators.

Prerequisites

Students should have attended the Engineering course T315 or T360e and T361e - System 800xA Engineering Efficiency e-learning.

Course objectives

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

- Understand the principle of engineering workflow
- Clarify and consolidate key project inputs, create a project, identify, and adapt module types
- Create and configure hardware manually and by using the BDM2 tool
- Configure and commission Select I/O with a Signal List including I/O Loop Check

- Create and configure controller application by using the BDM2 tool
- Create and configure HMI application by using the BDM2 tool
- Bind a controller application with an HMI application and perform a software test
- Bind both hardware and software configurations and prepare a project for a commissioning and a final site test

Main topics

- Engineering workflow
- Engineering efficiency
- Project inputs
- Hardware Engineering
- xStream Engineering
- Engineering with Signals
- Loop check
- Bulk Data Manager
- Ethernet I/O Wizard
- Application configuration
- HMI configuration
- Software test
- Late binding

Duration

The duration is 3 half-days.

Day 1	Day 2	Day 3
• Course overview	• Software configuration - Application	• Alarm and Event List
• Engineering workflow	• Create diagrams and Tag objects	• Configure Alarm and Event List
• Prepare project	• HMI Structure	• Adapt Operator Workplace
• Hardware configuration	• Prepare HMI Functional Structure	• Configure and adapt Operator Workplace
• Create and Configure I/O Units	• HMI Displays	• Trends configuration
• Allocate and parametrize I/O signals	• Prepare HMI displays	• Configure Trends
• xStream Engineering	• Summary	• Software binding and test
• Ethernet based I/O and Ethernet I/O Wizard		• Late binding HW and SW
• Hardware check		• Summary
• Functional I/O loop check		
•Summary		