Expert Workshop description

E137
System 800xA with AC 800M
Utilize Industrial Communication Protocols

Workshop goal
Industrial communication protocols such as PROFINET, EtherNet/IP, DeviceNet, Modbus TCP are increasingly important in projects. The workshop will provide an overview about the differences, advantages and usage of the various protocols. Students will learn how to use these protocols in System 800xA applications over the complete life cycle: sizing and planning, engineering, commissioning and troubleshooting.

Learning objectives
Upon completion of this workshop the participants will be able to:

- Explain features, range of applications and limitations of different protocols and devices
- Describe the required architecture for each protocol
- Identify the most important criteria for sizing and planning
- Explain the basic engineering workflow with the specific configuration tools
- Configure the dedicated communication interfaces in System 800xA
- Use specific AC 800M communication libraries
- Create standard applications to access process variables for various devices via the respective communication protocol
- Configure a Wireless HART gateway to be used as Modbus TCP device
- Configure alarms and events for respective communication protocols (network and device)
- Configure and use asset monitors for devices, if available
- Check, verify and troubleshoot the process communication during commissioning phase
- Diagnose and analyse communication faults

Participant profile
This Expert Workshop is targeted to application engineers, project lead engineers and service & support engineers.

Prerequisites and recommendations
Students should have attended the Engineering course T315 or have knowledge and experience associated with the content of this course. Basic knowledge of Ethernet networks is of advantage.

The required knowledge can be verified with user assessment module T710e-01 and T710e-13.

Workshop type and methods
This is an instructor led workshop with short presentations and demonstrations, extended exercises, hands on sessions and discussion.

Duration
The duration is 4½ days.