

COURSE DESCRIPTION

# CHJ410 – AC800PEC for HPR Control Builder

# Course goal

The goal of this course is to learn the engineering of the System 800xA with AC800PEC controllers based on standard hardware and software applications used in HPR.

# Main learning objectives

The participants will be able to:

- Explain the System 800xA architecture and the function of the different components
- Create a new project and plan the structure of application programs made for HPR
- Configure the AC800PEC hardware and corresponding I/Os for HPR field
- Design and configure application programs by using a variety of IEC 61131-3 languages
- Setup the OPC connectivity to AC800PEC and Process Panel 800
- Develop project specific libraries

#### Participant profile

This training is targeted to application engineers, programmers and system integrators who are working with HPR installation.

#### Prerequisites

Students shall know the fundamentals of working with control systems and have basic knowledge of Microsoft Windows. They should have attended the course CHJ400 "AC800PEC for HPR – Hardware and Tools" or have knowledge and experience associated with the content of this course.

# Topics

- Compact Control Builder overview
- AC800PEC and AC800M hardware
- Libraries
- Matlab/Simulink interface of HPR
- Variables and data types
- Function block diagram
- Structured text
- Task assignment/memory
- Control modules
- Communication
- OPC connectivity
- Alarm handling
- Backup and restore

#### Course type and methods

This is an instructor-led course with interactive classroom discussions and associated lab exercises. Approximately 60% of the course is hands-on lab activities.

#### Duration

The duration is 5 days.

### Remarks

Custom-tailored and on-site training courses are offered on request.

www.abb.ch/abbuniversity minerals.training@ch.abb.com ABB MyLearning