

## COURSE DESCRIPTION

# CHJ400 – AC800PEC for HPR

## Hardware and Tools

### Course goal

The AC800PEC control platform is ABB's high performance process control system and belongs to the Control<sup>IT</sup> product line. The AC800PEC is the optimum solution for combining high-speed control requirements of power electronic applications and low-speed process control tasks which are used simultaneously in HPR application. The AC800PEC controller is configured and programmed using Control Builder M, ABB's well-established programming tool complying with IEC 61131-3, and MATLAB®/Simulink® with Real-Time Workshop®. The course goal is to provide service and commissioning engineers with enough skills to be able to replace components by giving them the correct software and hardware setup and troubleshoot AC800PEC device failure.

### Main learning objectives

The participants will be able to:

- Distinguish the various hardware devices of the AC800PEC control platform used in HPR
- Use the AC800PEC tool to download/upload software from/to the AC800PEC controller
- Use the AC800PEC tool for diagnosis

### Participant profile

This training is targeted to application, test, service and commissioning engineers.

### Prerequisites

Basic knowledge of electronic and personal computer knowledge is required.

### Topics

- Introduction to AC800PEC family of hardware components
- Choices of fundamental configurations for HPR applications
- Configuration workshop using table model

- Principle of operation of the hardware devices
- The field I/O interfaces of AC800PEC used in HPR
- Communication to upper control levels
- How to get started, download, backup and installation procedures using the AC800PEC tool
- Configuration and use of AC800PEC tool
- Error handling, recovery boot procedures

### Course type and methods

Lectures, presentations, demonstrations and exercises using table models.

### Duration

The duration is 1 day.

### Remarks

Custom-tailored courses are offered on request.