Curriculum Description

Automation Products Training
HMI Specialist

Tuition Fee
$3,180 per student

Description
This program is designed to provide training in PB610 Panel Builder software, configuring communications between the drive and a CP6XX or CP6XXX series HMI, while learning to customize and configure an HMI application such as a Faceplate.

Goals
The goals of this Program are to guide participants into using the PB610 Panel Builder and the CP6XX and CP6XXX series HMI Display Panel product line for first line sales support. Also, participants will discover some features, shortcuts and practices to improve productivity when creating, testing, and debugging custom HMI applications. The student will learn to import tags of projects using ABB and third-party hardware. Finally, participants will learn how to connect to and directly control one or multiple drives using the HMI via the Modbus RTU and TCP/IP fieldbus protocols.

Training Type and Duration
This program is approximately 4 hours of Video Learning course modules, followed by 3 days of live classroom Instructor Led Training, which is approximately 80% hands-on lab exercises.

Student Profile
This Program is open for anyone who works with and sells the CP6XX HMI. It is intended for ABB authorized channel partners, OEM's, technical support professionals, application engineers, technicians, and end-users who are responsible for installing and maintaining applications with CP6XX HMI's.

Training locations and scheduling
This Live Remote Training Program is offered by our training facility in New Berlin, WI. Please visit the Drives, PLC and Motion Training Schedule for a list of upcoming classes.

https://new.abb.com/service/abb-university/united-states/drives/us-training/calendar/calendar-ind

Prerequisites
Participants must have:

- Intermediate skills with using a Windows® based computer
- At least six months experience working as Automation Systems technical professionals
- Completed all associated eLearning modules prior to enrolling in the Instructor Led classroom training

Learning Objectives
For successful completion of this program, students will:

- Identify different models of CP6XX series HMI Panels
- Configure panel communication protocols in PB610 (Panel Builder) software
- Modify parameter settings on the CP6XX and drives to establish proper communication between them
- Learn basic concepts related to the use of Modbus RTU and TCP/IP fieldbus protocols
- Import Tag names of inputs and outputs into the HMI library
- Import Tag names from projects that use third-party hardware, such as Siemens and Rockwell
- Read and Write data using screen objects (widgets)
- Control behavior and appearance of screen objects
- Configure Trends for data monitoring, logging and analysis
- Configure alarms, alarm summary displays and event triggers
- Create recipes while using widgets
- Configure users, user groups, and implement security settings to an HMI project
- Use the Scheduler feature to define timing of events.
- Identify various other features of the PB610 programming environment

Student Materials
Upon completion of this program each student will receive a student manual that includes all practice lab exercises.

Agenda

Classroom – Day 1	Classroom – Day 2	Classroom – Day 3
8:00 a.m. ~ 5:00 p.m. • Live RemoteTraining Introduction and Welcome • HMI Dive Faceplates Introduction • HMI Drive Faceplates Lab • CP600 First Project Introduction • First Project with Widgets Lab • First Project with Widgets Lab Review • ACXX80 Connectivity • ACXX80 Control Via Modbus RTU Lab • ACXX80 Control Via Modbus RTU Lab Review • Intro to Tagging, Trends, Alarms, and Recipes	8:00 a.m. ~ 5:00 p.m. • Intro to Tagging, Trends, Alarms, and Recipes (cont..) • Tagging, Trends, Alarms, and Recipes Lab • Tagging, Trends, Alarms, and Recipes Lab • Review • Additional Widgets and Features Lab • Additional Widgets and Features Lab Review • Intro to User Management and Passwords Lab	8:00 a.m. ~ 3:00 p.m. • CP600 User Management and Passwords Lab • CP600 User Management and Passwords Lab Review • CPxx Tag Mapping Rockwell Lab • CPxx Tag Mapping Rockwell Lab Review • (Optional) CPXX Tag Mapping Siemens Lab • (Optional) CP6xx Tag Mapping Siemens Lab Review

Note: Students will have access to ABB provided Laptops with software and tools used in the training at no additional cost. ABB will not troubleshoot student owned PC's.