ABB UNIVERSITY COURSE DESCRIPTION

C235
Network Platform with QCS LAN

Learn to maintain the hardware and software of an NP1200 and/or NP800 Network Platform connected to a QCS LAN.

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

Student profile
This course is targeted to personnel responsible for maintaining a Network Platform QCS.

Prerequisites
Students should have a basic knowledge of personal computers, process control and electronics.

Course objectives
Upon completion of this course, the students will be able to:
• Power-up the Network Platform and verify correct start-up
• Understand identification, function and set-up of the ASPC hardware
• Power-up the NP Service Workstation
• Use Configuration tool to create and/or modify the NP software
• Use the diagnostic tool to troubleshoot I/O problems
• Use the Update tool to install software updates, change IP address, etc.
• Perform scanner motor tuning
• Use standard procedures to standardize and check the sensors
• Use check samples to verify integrity of sensor measurements
• View a standardized history and a sample check history
• Put the Network Platform in scan mode and verify correct scanning and measurement profiles.
• Back-up and restore software
• Perform NP preventive and corrective maintenance
• Verify Frame set-up pages and profiles on QCS 800xA
• Understand the basic sensor theory and operation for the four core sensors – Basis Weight (STLK11), Moisture (HPIR-T), Caliper (GT) and Ash (STLXR3)

Duration
The duration of this course is 10 days.
### Course Outline

#### Day 1

**am**
- ASPC Hardware
- Electrical schematics
- NP Service Workstation

**pm**
- Health and Safety Awareness
- Course introduction
- Documentation overview
- Network Platform overview
  - NP Service Workstation
  - Labwork
  - Hardware identification and replacement
  - ASPC restart & verification
  - Frame tune and save

#### Day 2

**am**
- Review: Questions and answers
- Platform Engineering Tools (PET)

**pm**
- PET continued
- Labwork/demo
- Diagnostic tool
- Debug tool
- Data Dictionary

#### Day 3

**am**
- Review: Questions and answers
- PET cont’d
  - Configuration tool
  - Update tool
  - Demo

**pm**
- Labwork - Configuration tool and Update tool
- Software update
- IP address change
- Restart, etc.

#### Day 4

**am**
- Review: Questions and answers
- NP Documentation and Frame Specification review
- NP800 Electromechanical overview

**pm**
- NP800 continued
- Frame and Sensor Alignment (NP1200 & NP800)

#### Day 5

**am**
- Review: Questions and answers
- NP Documentation and Frame Specification review
- NP800 Electromechanical overview

**pm**
- Labwork - Configuration tool and Update tool
- Software update
- IP address change
- Restart, etc.

#### Day 6

**am**
- Network Platform Mechanical maintenance and demonstration
- Smart Weigt (cont’d) ASPC
- Smart Ash sensor (STLXR3)

**pm**
- Mechanical Demo (cont’d)
- Smart Weight Sensor (STLK11)

#### Day 7

**am**
- HPIR-T Moisture sensor
- HPIR-FW Fiber Weight sensor

**pm**
- Labwork – Basis Weight and Ash sensors

#### Day 8

**am**
- QCS 800xA – Demo
- scanner operation
- profiles
- reports
- Other sensors – Overview

**pm**
- Labwork – HPIR sensors
- GT Caliper sensor
- Labwork – GT sensor

#### Day 9

**am**
- Final review
- Exam
- Course critique
- Course ends

#### Day 10

**pm**
- Other sensors (cont’d)
- Sensor correlation overview