Course Overview

Course number: TPS-PT065
Course length: 5 days

Areas of emphasis in this course include information about the hardware layout of the various UCN devices including their cabling and interconnections, and practice in identifying component parts and ‘building’ a simple UCN system. Attendees are provided with detailed descriptions of the various point types and algorithms available within the HPM and become familiar with the decisions that are made on ‘partitioning’ the functionality of a HPM. Attendees become familiar with database definition and point building in classroom sessions, which are then followed by practical implementation exercises. Attendees are also provided with an introduction to Control Language (CL) sequence programming and carry out basic program editing.

Course Benefits

This course will provide experienced technical personnel with the skills to configure a Universal Control Network (UCN) system that includes a Network Interface Module (NIM) and High Performance Process Manager (HPM).

Course Delivery Options

- In-Center Instructor-Led Training
- On-Site Instructor-Led Training

Who Should Take This Course?

Attendees should be qualified electrical/instrument trades people or engineers

Attendees who can demonstrate that they have gained considerable experience in the implementation of Local Control Network (LCN) or UCN are also welcome.

Prerequisite/Skill Requirements

Prerequisite Course (s)

- TPS-PT030
- TPS-4770

Required Skills and/or Experience

- None

Desirable Skills and/or Experience

- None

Course Topics

- Given a Universal Station (US) or Global User Station (GUS) loaded with the Universal Personality, be able to call up the UCN and HPM status displays and explain and use the information presented on each display
- Given diagrams of UCN configurations, be able to identify and describe any UCN configuration errors
- Be able to identify the NIM chassis, associated circuit cards and UCN cable network components and describe the functions and indicators on each circuit card
- Given a UCN for which all cables, taps, terminators are disconnected, be able to correctly connect all UCN components and set the NIM’s LCN and UCN addresses
- Be able to locate Optimum Replaceable Units (ORUs) in an HPM and carry out hardware pinning where necessary
- Be able to describe HPM circuit cards and describe the functions and indicators on each circuit card
- Given a diagram of a UCN and a list of specific HPM control requirements, be able to enter, load and checkpoint the Network and Box Data Points required to define the UCN and HPM
- Give Diagrams of various point types, be able to enter, load and operate each point in the scheme, including the following point types:
  - Regulatory Control
  - Digital Composite
  - Device Control
  - Flag
  - Timer
  - General I/O
  - Regulatory PV
  - Logic
  - Process Module
  - Numeric
  - Array
Course Topics Continued

- Given sample CL program source code, be able to enter the program using the text editor, compile the program, load the program to the HPM and test it’s functionality.
- Given a control specification, be able to write, edit, compile, load and de-bug a CL program that satisfies the specification criteria.

Additional Training

To increase your knowledge and skills, there are additional courses available from Automation College.

For more information and registration, visit https://www.honeywellprocess.com/.