Course Overview

Course number: TPS-PT031
Course length: 4 days

This course provides experienced technical personnel with the skills to implement an Application Module (AM) within a Local Control Network (LCN) and Universal Control Network (UCN) environment. Areas of emphasis include information about the hardware layout of various AM configurations. Attendees are provided with detailed descriptions of the various point types and algorithms available within the AM and become familiar with the decisions that are made on ‘partitioning’ the functionality of an AM. 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) programming and carry out basic program editing and production of custom control strategies.

Course Benefits

- This is a more advanced course aimed at implementing the Application Module within a LCN
- Participants will be introduced to point building and database definition as well as giving an introduction to CL Programming

Course Delivery Options

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

Who Should Take This Course?

Attendees should be qualified electrical / instrument tradespeople or engineers.

Prerequisite/Skill Requirements

Prerequisite Course (s)
- TPS-PT030

Required Skills and/or Experience
- None

Desirable Skills and/or Experience

Attendees who can demonstrate that they have gained considerable experience in the implementation of LCN are also welcome.

Course Topics

- Given an LCN system comprising a Universal Station (US) or Global User Station (GUS), an AM, A Hiway Gateway (HG), or Network Interface Module (NIM), and a process connected controller, be able to demonstrate an understanding of the following AM concepts:
  - AM major functions
  - Basic AM hardware
  - AM point types
  - AM point scheduling
  - AM performance gauging mechanism
  - Hot, Warm, and Cold reload options
  - Checkpoint considerations on reload

- Given an LCN system comprising a Universal Station (US) or Global User Station (GUS), an AM, A Hiway Gateway (HG), or Network Interface Module (NIM), and a process connected controller, be able to:
  - Build several different AM Regulatory points using various algorithms and parameters and load them to the AM
  - Implement an AM Control Scheme that interacts with a Process Network based point
  - Build points in the AM that include the following types:
    - Numerics
    - Switch Points
    - Flags
    - Custom Points
    - Counters

- Given a design specification and an appropriate formula for the calculations, be able to:
  - Write a CL/AM program
  - Compile a CL/AM program
  - Link a CL/AM program to an AM regulatory point
  - Operate a control scheme that uses an AM regulatory point with a CL block program attached to it
Course Topics Continued

- Given an LCN system comprising a Universal Station (US) or Global User Station (GUS), and an AM, be able to perform the following:
  - Build an AM Regulatory point with the following special features attached to it:
    - Custom Enumerations
    - Custom Data Segments
    - Parameter Lists
    - Operate the point

Additional Training

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

For more information and registration, visit www.automationcollege.com.