CONTROLEDGE PLC

CONTROLLER CONFIGURATION AND CONTROL STRATEGY IMPLEMENTATION

| Honeywell PMC Academy

COURSE OVERVIEW

This comprehensive course is designed to equip participants with the knowledge and practical skills required to configure controllers and develop effective control strategies using various industrial programming languages. The course covers foundational to advanced programming techniques, function block libraries, and protocol integration for real-world automation applications.

This course has equipped participants with essential skills in controller configuration and control strategy development using multiple IEC 61131-3 languages. Learners explored advanced programming techniques, function block libraries, and protocol integration. They are now prepared to design, implement, and troubleshoot control systems in real-world industrial environments.

COURSE DURATION

2 Days

TARGET AUDIENCE

• Process Engineers

HANDS-ON TRAINING

Hands-on Training will be arranged during the session.

CERTIFICATE

Participants certification will be issued at the end of the course.

KEY LEARNING OBJECTIVES

Participants will learn to:

- CE PLC Introduction
 - ✓ CE PLC Hardware and IO's Overview
 - ✓ CE PLC Network Protocols and topology
- Ladder Logic Programming
 - ✓ Introduction to Ladder Logic
 - √ Starting and Testing a Ladder Diagram
 - ✓ Logic Gate, Timing and Counting Functions
 - ✓ Arithmetic Operations in Ladder Logic
 - ✓ Customized Function Blocks
- Function Block Diagram (FBD)
 - ✓ Overview of Honeywell Function Blocks
 - ✓ Ethernet/IP Function Blocks
 - ✓ HWFBLib and Func Lib
 - ✓ HART and Unit Conversion Function Blocks
 - ✓ Utility FB Libraries
 - ✓ Modbus FB and User-Defined FBs
 - ✓ OPC UA FBs and HonUAFb Helper
- Sequential Function Chart (SFC)
 - ✓ Syntax and Structure
 - ✓ Steps and Transitions
 - ✓ Graphical Editor Usage
 - ✓ Actions and Action Qualifiers
 - ✓ SFC Programming Techniques
- Instruction List (IL) Programming
 - ✓ Operators and Modifiers
 - ✓ Labels and Syntax
 - ✓ Instruction List Programming Concepts
- Structured Text (ST) Programming
 - ✓ Syntax and Programming Structure
 (If_Then, Case_Of, For_Do, While_Do, Repeat_Until)
 - ✓ Conditional and Looping Constructs:

For more information:

Honeywell PMC Academy Website

Direct contact with the local training center:

Americas and APAC

<u>Europe</u>

Honeywell Process
Measurement and Control

2101 CityWest Blvd Houston, TX 77042 www.honeywell.com

