

**Course Title: Programmable Logic  
Controller (PLC) - SMC**

**Course Code: PC 101**

**Course Background / Summary:**

The course focuses mainly on the fundamentals and basic concepts of Programmable Logic Controller (PLC). PLC theory, operation, and commonly used PLC functions are covered in detail. Among the topics covered is focusing on the PLC application process from the configuration and programming (ladder diagram) where all parts are interrelated and as a domain to control actuators. At the end of the training, the participants will be required to sit for a test to obtain a SMC Certified Professional PLC System.

**Course Objectives:**

- Identify the structure and operation of PLC.
- Identify the hardware configuration of the PLC.
- Design and write PLC programs and apply with actuators.

**Target Audience:**

- Technicians, Supervisors, Designers, and Engineers who are involved in the design, sizing, and operation of automated control systems using PLCs.

**Course Duration: 4 Days**

**Course Contents**

**1.0 PLC Development and Hardware Design**

**2.0 PLC Programming (Ladder diagram)**

**3.0 Logic and Sequence Projects**

**4.0 Timer and Counter Applications**

**5.0 Procedure for Selecting PLC Systems**