

## PLC (Level 1)

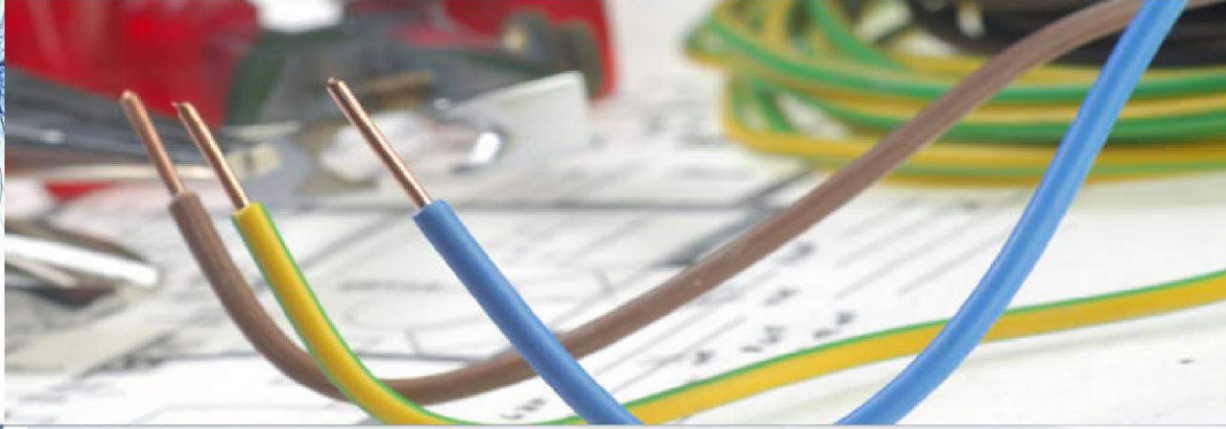
Course duration: 24 hrs

### PLC I Course Content

#### 1. Introduction to control systems.

- History in Brief.
- Introduction to "plc".
- Inputs and Outputs:
  - Digital Inputs / Outputs.
  - Analog Inputs / Outputs.
- Principles of PLC selection.
- Programming Languages.
- Statement List.
- Ladder Diagram.
- Function Block Diagram.





ENGO SOFT



ENGO SOFT



ENGO SOFT



## 2. General Applications.

- General Applications.
- Editing Ladder Diagrams (LAD).
- Basic Operations.
- Over 10 Exercises.
- Industrial Application: Garage Door Editing Ladder Diagrams (LAD).

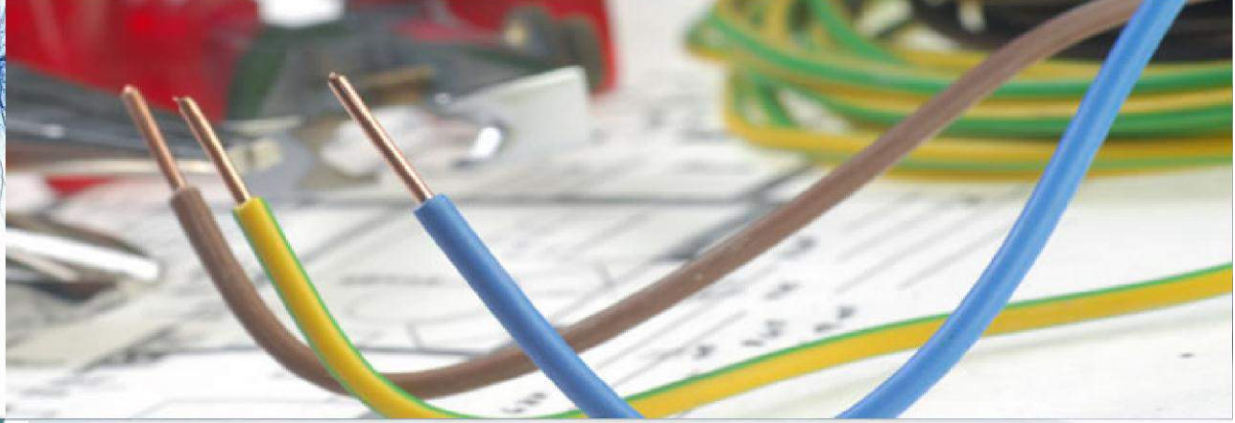
## 3. Boolean Logic Operations.

- Set / Reset Operations
- Markers -Timer Instructions
- Over 5 Exercises.
- Industrial Application:
- Traffic Application.
- Pump Application

## 4. Counter Instructions.

- Over 4 Exercises.
- Door & Traffic Simulator.
- Learning on "KGL" Software
- Learning on "WPL" Software

KNOWLEDGE  
IS  
POWER



### 5. Taking Principles of Wiring Connections.

- Learning on AllenBradly -SIEMENS Software's.
- Making Practical Applications on "PLC"
- Making Practical Applications on
- Garage Door Application.
- Traffic Application
- Pump Application



ENGO SOFT



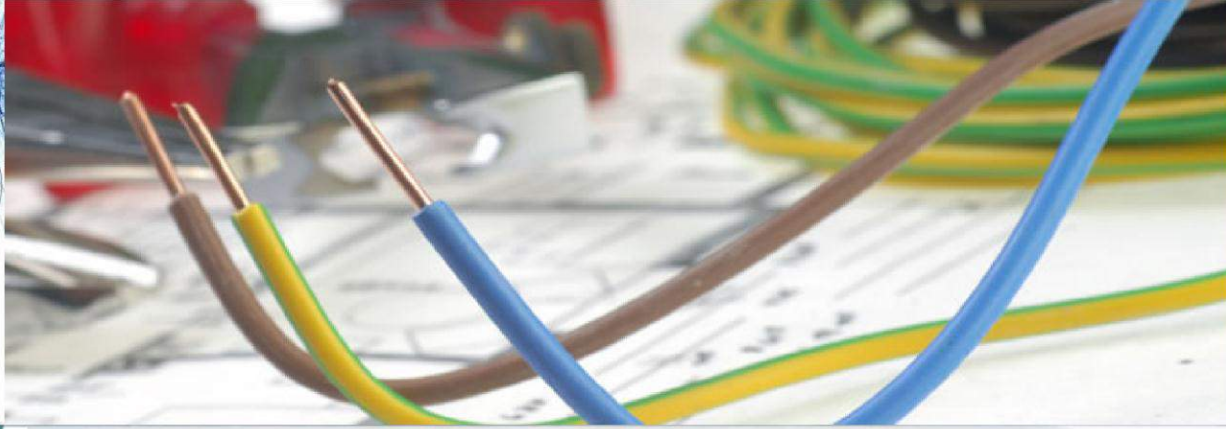
ENGO SOFT



ENGO SOFT







## PLC (Level 2)

Course duration : 24 hrs

### PLC II Course Content

#### 1. Introduction to the course -

- Introduction to Number systems:
- Binary Numbers
- Binary Code
- Hexadecimal Numbers.
- Hex Mask.
- Binary Floating-Point Arithmetic.
- PLC Memory:
- Processor Files
- Data Files
- Memory System
- I/O Structure
- Comparison Instructions.
- Math Instructions.
- Simple Exercise.



2. Duty Cycle Exercises.

3. Learn Tools of Data Transfer Instructions:

- Move/ Logical Instruction.
- Program Flow Control Instructions.

4. Industrial Exercises 1.

5. Complete The Tools of Data Transfer Instructions:

- File Shift and Sequencer Instruction.
- Sequencer Instructions.
- FIFO- LIFO.

6. Industrial Exercises2

7. Make Control on large Industrial Application

- Production line

8. Analogue modules and analogue scaling.

9. Data monitoring using the data table.

10. Introduction to communications.

11. Practical Application.