

**Course Overview:**

in this course we will give the basic information of PLC , the automation systems, Maintenance and the configuration and parameterisation of the hardware, handling with the STEP 7 Basis Software, You also will get an overview of human machine interfacing, and the integration of drives.

**Course Objective:**

- Identify the components and performance characteristics of the SIMATIC S7
- Install a PLC system, including the communication cabling and wiring of I/O
- Use the various address types to edit, reload, structure and run a program. Document, test, and basically troubleshoot the control system and its program.
- Diagnose and repair simple hardware problems.
- Utilize binary operations, timers, counters, comparators, and arithmetic operations for program modifications.
- Integrate and troubleshoot an HMI and Drive system within the control system
- Configure and troubleshoot Profibus DP nodes

**Course Outline:**

- SIMATIC S7 System Family overview
- Installation and maintenance of a PLC
- Hardware configuration and commissioning
- Drawing and Symbols
- Digital and Binary Operations
- HMI and Profibus DP
- Rewiring
- Drive Systems
- Program documenting, saving and archiving
- Maintenance and Troubleshooting
- Configuration

**Who Should Attend:**

Engineers, Technicians, service/maintenance personnel who install or maintain automation systems and their application programs.

**Training Language:**

EN / AR

**Training Methodology:**

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation