

**Course Code : IA 07**  
**Course Name : Weekend Course on Industrial Automation**  
**Course Duration : 192 Hrs (32 modules, each module is of 6 Hrs)**  
**Maximum Duration : 5 Months**

**Overview of the Course:**

IIATCA is conducting 192 Hrs weekend individually cared hands on training on Industrial Automation for practicing electrical, Instrumentation and Electronics engineers and working professionals, start-ups, entrepreneurs and managers of project developers, process industries, factory level operations, system integrators and EPC companies. Course focus is on Industrial Automation projects design and development.

The participants will gain knowledge and will have the opportunity to interact with highly experienced automation project managers and experts on site & resource assessment, system design, project planning, best practice in design and installation, bid preparation and evaluation, O&M planning, documentation etc. Course covers both hardware installation and software programming and system engineering for large and medium scale industrial automation projects.

**Who should attend:**

Electrical/Instrumentation and Electronics practicing engineers or project managers from industry who need skill upgradation.

**Learning Outcome:**

**PLC programming** in Rockwell and Siemens make hardware and software

- Introduction on Industrial Automation and various components of Automation PLC Hardware fundamentals,
- Ladder Logic Concepts
- Introduction to real world control components used in industrial process
- Identification and conventional electrical wiring through various applications
- Use of PLC programming software through various applications
- Real world control components like contactors, relays, timers, solenoid valves etc used in industrial process
- Identification and conventional electrical wiring through various applications
- Use of PLC programming software through various applications
- Concept of analog applications
- Communication Protocols

**SCADA programming** in Rockwell and Siemens

- Introduction to SCADA software
- Creating projects on SCADA Graphic displays, Screen generation
- Tags and Run mode of application with PLC communication Data logs, Alarms, Trending and Report generation

**AC Drives program** in *either of the any one* from Rockwell

- Introduction to AC Drives for AC motor speed control
- Speed torque characteristics of AC motors and also characteristics of mechanical loads/driven equipments
- General philosophy and various types of AC Drives
- Speed control, acceleration and braking of AC Drives
- Selection and application of AC Drives
- Configuration of V/F and vector controlled AC Drives

**System engineering:** One complete project on process plant

**Training Methodology:** The course will be conducted as individually cared program with hands on practical training supported by lectures as and when necessary sometimes using Power Point Presentations. Candidates shall have to program the hardware and software and wiring of the components also have to be done by them.

**Training Materials:**

All the candidates shall be given a CD consisting of

- 1.Training Documents
- 2.Freely distributable PLC programming software

**Certification:**

On completion of training, all candidates shall be evaluated by the authorities of International Society of Automation (ISA) – Kolkata Section and successful candidates shall only be issued certificates by them.

**Institute operating Time:** 10:00 am - 08:00 pm (Monday to Saturday)  
10:00 am – 04:00 pm (Sunday)

**Course Fees & Enrollment:** Please Contact us through

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