



Where Innovation Meets Automation

INDUSTRY 4.0

SIEMENS



Rockwell
Automation

KELON



DELTA

INDUSTRIAL AUTOMATION INTERNSHIP PROGRAM

This internship program is designed for engineering and diploma students who want hands-on experience in Industrial Automation, PLC, SCADA, HMI, VFD, and Industrial Communication Protocols. The program covers theory, practical training, and real-world project applications to prepare students for careers in automation and control systems.

Internship Modules



Introduction to Industrial Automation

- Basics of Automation & its role in industries
- Components: PLC, SCADA, HMI, Sensors, Actuators, VFDs
- Overview of Industrial Communication Protocols



Variable Frequency Drives (VFDs) & Motion Control

- Introduction to VFD and Motor Control
- Hands-on configuration of VFD parameters, start/stop control, and speed variation
- Integration of VFD with PLC & SCADA



PLC Programming & Implementation

- Understanding PLC hardware & software
- Hands-on training in Ladder Logic, Function Block Diagram (FBD), and Structured Text (ST)
- Working with Siemens, Allen Bradley, and Mitsubishi PLCs
- Practical exercises on Timers, Counters, and Logic Operations



Industrial Communication Protocols

- Fieldbus (Modbus RTU, PROFIBUS, CAN Bus)
- Ethernet-Based Protocols (PROFINET, EtherNet /IP, Modbus TCP/IP)
- Wireless & IIoT Protocols



SCADA & HMI Development

- Creating SCADA projects using Wonderware InTouch / TIA WinCC
- Designing Graphical User Interfaces (GUI) for industrial control
- Connecting SCADA with PLCs via Modbus, PROFIBUS, or EtherNet/IP
- HMI Screen Development and Data Monitoring

Industry Projects & Hands-On Training

- Real-time PLC, SCADA, and HMI project implementation
- Configuring and troubleshooting industrial automation systems
- Creating batch reports, data logging, and trending



WE ARE YOUR GATEWAY TO SUCCESS

Internship Benefits

- ✓ Hands-on experience with industrial-grade PLCs, SCADA, and VFDs
- ✓ Practical exposure to Industry 4.0 & IIoT protocols
- ✓ Certification upon successful completion
- ✓ Guidance from industry experts & trainers
- ✓ Placement assistance & career support

Eligibility & Duration

- **Who Can Apply?**

Engineering (B.Tech/B.E) & Diploma students in Electrical, Electronics, Instrumentation, and Mechanical Engineering

- **Internship Duration**

4 to 15 weeks (Flexible schedules available)

- **Mode of Training**

Online & Offline (On-Site Training Available)

How to Apply?

- Interested students can apply by sending their resume and a short cover letter to email address
- For more details, visit our website: or contact us.

Automation Training Program

Master PLC, SCADA & HMI

Enhance your skills in Industrial Automation with hands-on training!

Why Choose This Training?

- Industry-Oriented Curriculum
- Hands-on Practical Training
- Expert Trainers with Real-World Experience
- Certification Upon Completion
- Career Guidance & Placement Assistance

TRAINING MODULES

Module 1: PLC (Programmable Logic Controller)

- Introduction to PLC Architecture & Components
- Understanding Digital & Analog Inputs/Outputs
- PLC Programming with multiple languages, Ex: Ladder Logic
- Timers, Counters, Arithmetic & Logic Operations
- Upload, Download & Monitoring of Programs
- Troubleshooting & Best Practices



Module 2: SCADA (Supervisory Control & Data Acquisition)

- SCADA Software Overview & Industrial Applications
- Creating & Editing Graphical Interfaces
- Real-Time & Historical Data Trending
- Alarm & Event Management
- Communication with PLC & Field Devices
- Writing Automation Scripts

Module 3: HMI (Human-Machine Interface)

- Introduction to HMI & Various Industry Models
- Designing HMI Screens for Monitoring & Control
- Connecting HMI with PLC
- Real-Time Data Visualization & Alerts

Module 4: IoT

- Understanding IIoT & Industry 4.0
- Difference between IoT and IIoT
- IIoT architecture and components
- Applications of IIoT in Manufacturing, Energy, Water Treatment, Smart Grids, and Transportation

Module 5 : Software and Protocol

- DNP3 Protocol: Important Features of DNP3.
- IEC60870 PROTOCOL The two widely used protocols for SCADA Applications:
- HDLC (High-Level Data Link Control)
- MODBUS

Module 6: Communication Protocols

- RS 232/RS 485
- PROFIBUS
- Modbus RTU





Who Should Attend?

- Engineering Students & Graduates (Electrical, Electronics, Instrumentation, Mechanical)
- Industrial Professionals & Technicians
- Anyone interested in Industrial Automation & Control Systems

Training Benefits

- 🎯 Gain Hands-on Experience with PLC, SCADA & HMI
- 🎯 Learn from Real Industrial Case Studies
- 🎯 Get Certified & Boost Your Career Opportunities
- 🎯 Access to Industry Standard Software & Tools

ENROLL NOW

Take Your First Step Towards a Successful Automation Career!

GSIA is an MSME registered organization specializing in [industry/services]. With a focus on innovation, quality, and cost-effective solutions, we cater to both domestic and industrial clients across India. **MSME Registered Company-Govt of India.** GST compliant

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