



# IB Education Foundation's IB AUTOMATION & ELECTRICAL TRAINING INSTITUTE



## JOIN THE NEXT GENERATION OF AUTOMATION ENGINEERS THROUGH INNOVATIVE LEARNING

Training for Diploma, B.E, M. Tech of Instrumentation,  
Electrical, Electronics, E & TC, Mechatronics

**100% JOB ASSISTANCE**



**Well Equipped Lab**  
With All Software  
And Hardware



Training Includes  
**80% of Practical**  
& **20% Theory** Sessions



**Expert Faculties**  
Having Excellent  
Industrial Experience

## Director's Note

*Dear Engineer,*

We, IB Global Group started serving industry and society since July 2000, while providing the automation and electrical services and systems noticed an importance of the skilled manpower to deliver accurate work on the committed dates. Accordingly we have started providing training of automation and electrical solutions to engineers and successfully trained more than thousand engineers since 2005, they are now working in the multinational companies.

We are attentive about India's youth population since the long, other countries have natural properties however our human assets can be more valuable if we make them more and more skilled. So we have decided to become a committed partner of young engineers to provide them a good knowledge, develop their skills and attitude so that they will more masterminded in a challenging, technological and diverse world.

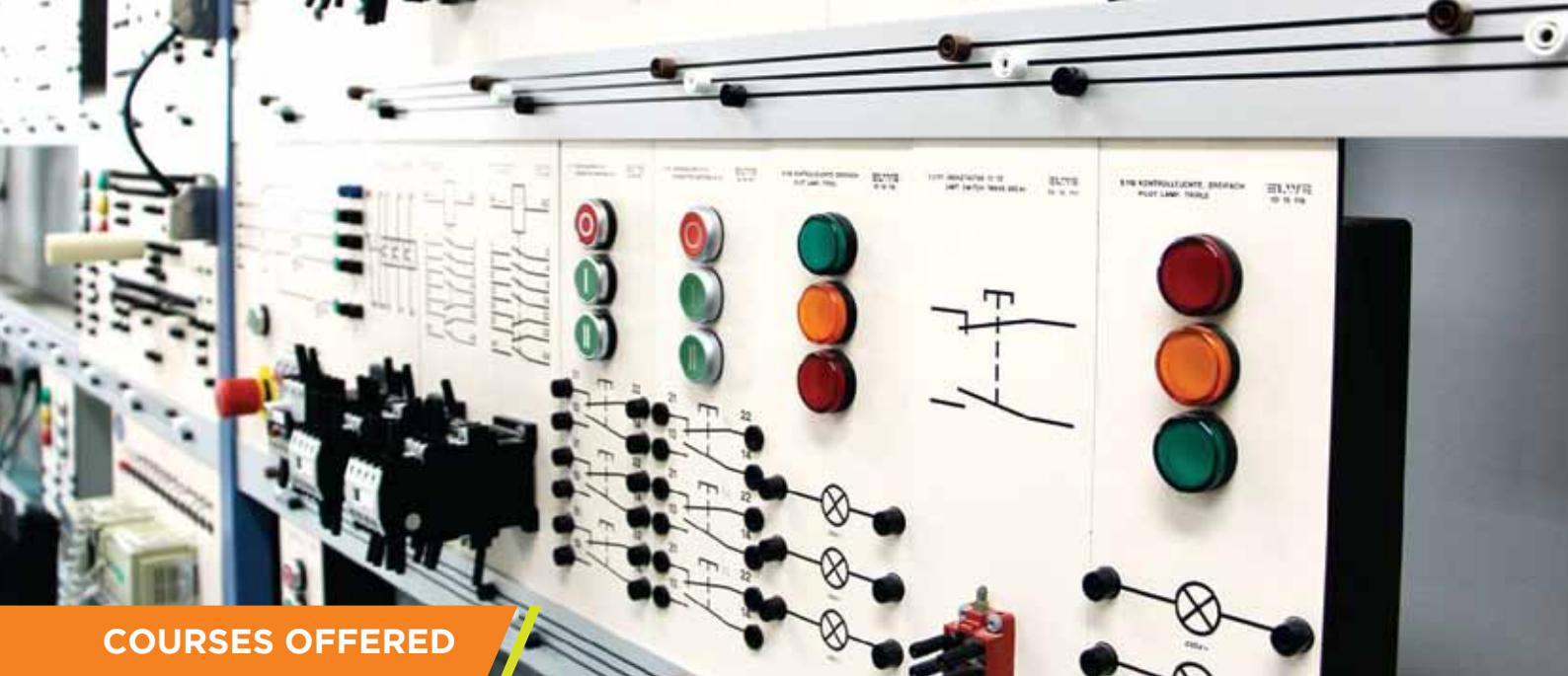
We have many times noticed newly pass out engineers are deeply worried about a job, like to clarify, in case he or she is skilled no need to worry about a job as industry always looking for the skilled and right attitude personnel all the time. So need to only keep a goal of having good skills with a right attitude. Let's work together on it.

Thanks and Regards,  
Director,  
**Prabhakar Ghuge**  
IB Global Group

**IB Automation Engineering Projects Pvt. Ltd.** started with the mission in 2000 to provide cost effective and quality services in Industrial / Building Automation and Electrical Solutions. We specialize in Design, Engineering, Programming and Commissioning of DCS, PLC, HMI / SCADA, Instrumentation and Electrical Systems for process, machine and building automation based on customer needs.

### OUR OBJECTIVE

- Excel as leading Industrial Automation Training Institute.
- Provide the skilled professionals to the industries.
- Provide exciting place for skills development in the field of Electrical and Automation.
- Provide skills in Design & Development of PLC, SCADA, HMI & DCS projects.
- Produce high competitive and skilled ENGINEERS those are versatile, competent & prepared for modern technologies.
- Provide opportunities for all our engineers to reach the best level of achievements of which they are capable.



## COURSES OFFERED

Sr. No.	Course Code	Course Title	Duration	Course Contents
<b>AUTOMATION &amp; ELECTRICAL DESIGN</b>				
1	IB:PLC: SCADA:01	Basic Course in PLC and SCADA	01 Month	01 PLC ( Siemens) & 01 SCADA (In touch Wonder-ware)
2	IB:CAD: EPLAN: 02	Electrical Design Course	01 Month	Electrical Designing Auto-Cad & E-PLAN
3	IB:PLC: SCADA: HMI:03	Advanced Automation Course	02 Months	02 PLC's (Siemens, Allen Bradley), 01 HMI (DELTA), 01SCADA (Wonder ware)
4	IB:PLC: SCADA: HMI:CAD: EPLAN:04	Diploma in Automation & Electrical Design	04 Months	02 PLC's (Siemens, Allen Bradley) , 01 HMI (DELTA), 01SCADA (Wonder ware) & Auto-Cad, E-Plan.
5	IB: AD: Diploma :05	Advanced Project Oriented Diploma in Industrial Automation & Electrical	06 Months	03 PLC (Siemens, Allen Bradley, Ge-Fanuc), 02 SCADA (Siemens, Wonder ware), 02 HMI (DELTA, Mitsubishi), Electrical Design includes: EPLAN & Auto-Cad , Basic Instrumentation, Communication Software's, DCS (Emersion@Mumbai / Honeywell@Mega Centre) on Field Exposure

**SIEMENS**

**Honeywell**

**AB**  
Allen-Bradley

**GE FANUC**

**NEXGENIE**  
Compact Genius PLC

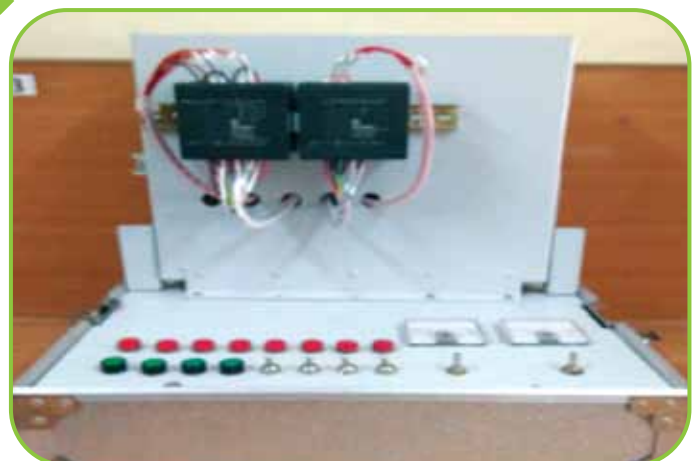
## DISTINCTIVE FEATURES

- Well equipped lab with all software and hardware.
- Project expert lectures in order to get all practical knowledge on site.
- Weekly exams
- Industrial / Workshop Visits
- Personal attention

## FACILITIES

- 100% Job Assistance
- Training includes 80% of practical & 20% theory sessions
- Expert faculties having excellent industrial experience
- Latest PLC & SCADA software & hardware implimentation
- On site exposure for providing best practical knowledge
- Full time live project training on PLC, SCADA & DCS
- Overall skill development of student for fulfilling current industrial requirement

## TRAINING KIT







## Advanced Project Oriented Diploma in Industrial Automation & Electrical

### **Introduction to Automation**

- Pneumatic and Hydraulic Technology
- Sensor Technology
- Electrical Systems and Design
- Relay Technology
- Automation Systems and Design

### **Instrumentation**

- Flow Measurement
- Pressure Measurement
- Temperature Measurement
- Level Measurement
- Process Control

### **Programming of PLC**

- The basic concepts of a PLC and its block diagram
- Different PLC architectures
- Networking & Communication
- Instructions for programming
- Emphasis is given on communications and downloading of the program to the actual PLC
- Hands-on experience of troubleshooting with the PLC

### **SCADA**

- Creating new SCADA Application
- Static screen development
- Dynamic linking
- Trending
- Configuring Alarms, recipes and report generation
- Securities

### **HMI (Human Machine Interface)**

- Introduction to HMI
- Interfacing & Networking with PLC
- Creating Screen
- User input / output Display
- Function Keys
- Uploading & downloading application

### **Control Hardware Design:**

- How to select a PLC for an application
- Selecting different paneling component
- Panel dimension and layout
- Wiring diagram generation
- Cable scheduling and sizing
- BOM (Bill of material) generation

### **E-PLAN Design:**

- Defining terminals & terminal strips in the project
- Single line diagram
- Multiline diagram
- Template building
- Symbol types and uses
- Micros
- Ferule numbering
- Cross references
- Placement of multi-level terminals and shielded cables in the project
- Convenient use of distributed terminals in the schematic diagrams
- Administrative plug-in and sockets in the project
- Convenient creation of manufacturer
- Connection external part database

### **Auto-Cad Design:**

- Introduction to AutoCAD Electrical
- Working with Projects and Drawings
- Connectors, point-to-point wiring diagrams and circuits
- Panel layouts
- Schematic and panel reports
- Creating symbols
- Layers

### **Industrial Electrical Controls- Design and Installation**

- Basics of Relays, Contactor, MCB, MCCB, ELCB, ACB, VCB, etc.
- Working details of different types of electric motors
- Designing of Control Circuits using Contactors, Relays, Timers Etc.
- DOL, Star Delta Starter designing for 3 Phase Motors with Specification
- Selection and sizing of cable
- Practical wiring session on different controls
- Motor Drives- AC Drives and DC Drives
- Safety and management concepts of designing a project

### **Control Panel Designing**

- Different types of panels
- Basic components to be installed in a Panel
- Wiring details of panel
- Specification and physical dimension of components

- Selection and sizing of cable
- Earthing and cabling of panels – standard procedures
- Power and control schematic
- Terminal Details

### **DCS and PLC System Design, Engineering and Development**

- System Architecture Drawing
- Dimensional Outline Drawing
- Detailed Layout Drawing
- Electrical Power Distribution & Grounding
- System Cable Schedule
- Cause and Effect
- Logic Diagrams
- IO List
- Cable Schedule
- Junction Box Schedule

### **DCS and PLC Hardware Design, Engineering and Development**

Automation Project: For execution project shall be given to each trainee engineer for the learning with 100% secrecy term.

- Study of P & ID's
- Instrument Hookups
- Instrument Data Sheets
- Grounding Layout In PIB
- Equipment Layout In PIB
- Instrument Loop sheets
- Interconnection Diagrams
- Instruments Block Diagram
- Instruments Cable Conduit Plan
- Local Panel Details
- Instruments Air Piping Details
- Instrument Mounting Details
- Junction Box Mounting Details
- Instrument Database

### **IOT**

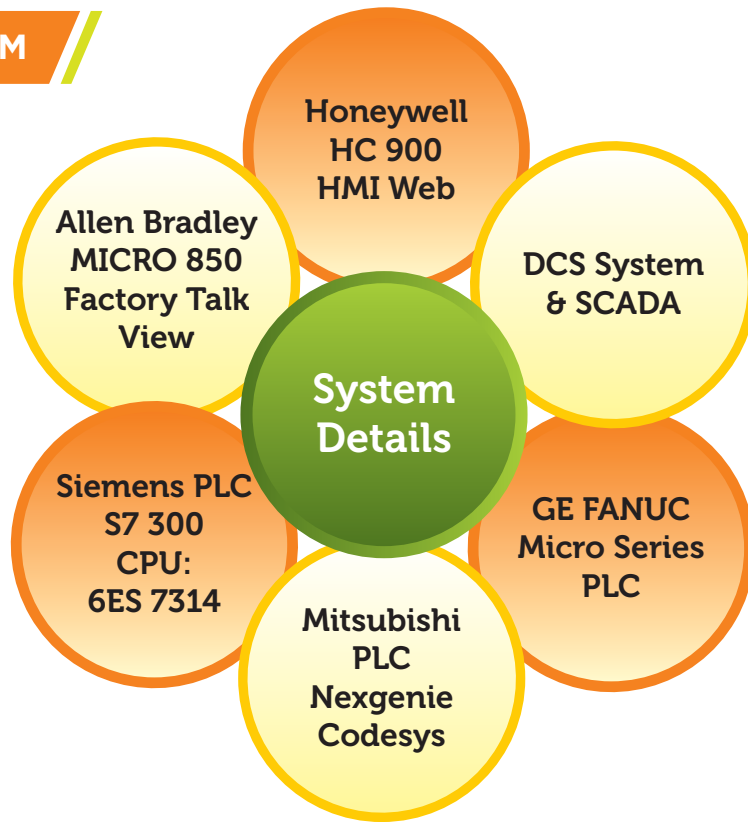
- Introduction
- Application

### **Industry 4.0**

- Introduction
- Application in Automation Industry

### **Manufacturing Execution System**

- Introduction
- Functional Areas
- Benefits
- Applications



**TRAINING LAB**



**SITE VISIT**





## OUR CLIENTS

**ABB**



**EMERSON**

**Honeywell**  
THE POWER OF CONNECTED



**SIEMENS**  
Ingenuity for life

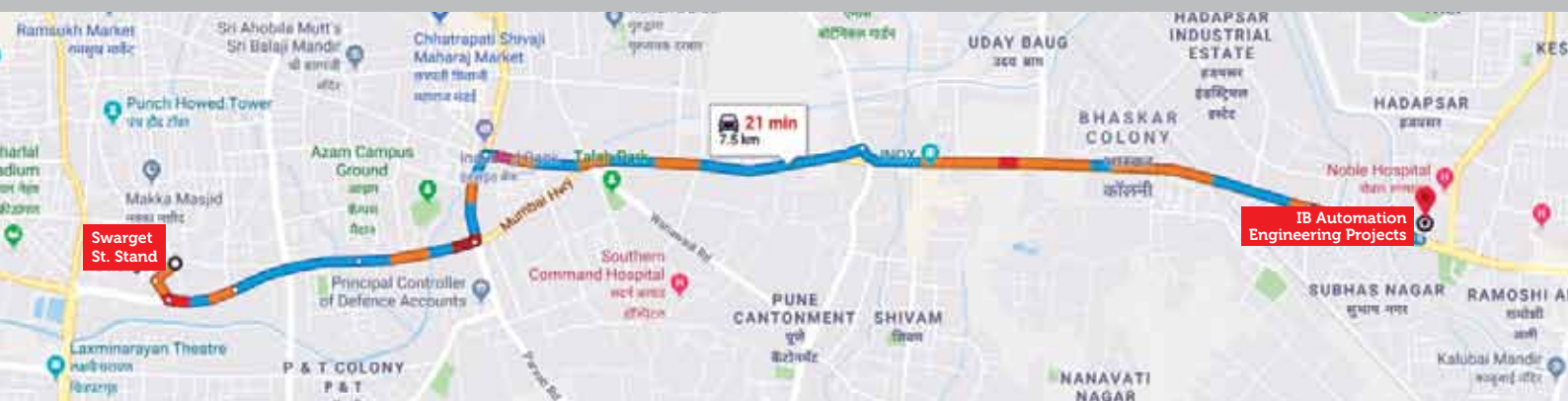


**Johnson Controls**



- ABB Bangalore
- Advance Sys-Tech Pvt. Ltd. Baroda
- ADM Agro Industries & Vizag Pvt. Ltd., Latur
- ADOR Welding Pvt. Ltd., Pune
- Blue Star India Ltd. Mumbai
- Comau India Pvt. Ltd.
- Concord Designs Pvt. Ltd.
- Detection Instrument India Pvt. Ltd. Mumbai
- Emerson EEC Pvt. Ltd. Pune
- Emerson Process Management India, Mumbai
- Fenix Process Technologies Pvt Ltd, Pune
- Frame Pvt. Ltd. Pune
- GE Pune
- General Motors India Pvt. Ltd
- GK Controls Pvt. Ltd.
- Godrej & Boyce Mfg. Co. Ltd.
- Hassia Packaging Pvt. Ltd.
- Honeywell Automation India Pvt. Ltd. Pune
- Indpro Electronic Systems (India) Pvt. Ltd.
- Invensys Mumbai
- Johnson Controls India Pvt. Ltd
- KBK Pune
- Larsen & Turbo Mumbai
- M P Engineering
- Siemens India Ltd., Mumbai
- SKF, Pune
- SRC Chemicals Pvt. Ltd.
- SLG, Mumbai
- Supertech Instruments India Pvt. Ltd.
- Thermax global Ltd, Pune
- Thyssen Krupp, Pune
- Transperent Energy Pvt. Ltd., Pune
- Xytel Pvt. Ltd.

## LOCATION



**IB GLOBAL GROUP**

**IB AUTOMATION ENGINEERING PROJECTS PVT. LTD.**

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