



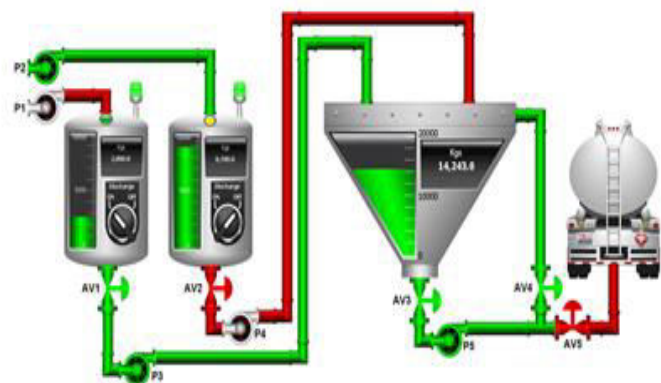
Embedded Technosolutions

Venture of IIT Bombay & VJTI Alumni

3 Times IIT Bombay Robo Competition Winner

**Industrial Certified
PLC Automation Developer**

**All India Council For Technical Skill
Development (AICTSD)
In Association with
IITians Embedded Technosolution**





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B R A N D

PROMISE

**We Guarantee You that, You Can Develop Your Projects by
Your Own After This Training Program**



PLC Automation

Module - 1

- Introduction to PLC hardware and role in automation
- Architectural Evolution of PLC
- Introduction to the field devices attached to PLC

Module - 2

- PLC Fundamentals - (Block diagram of PLC's)



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- Detail information about PLC components → Power supply, CPU, I/Os, Communication bus
- Various ranges available in PLC's

Module - 3

- Identifying Logix System hardware and software Components

Module - 4

- Types of Inputs & outputs / Source Sink Concepts
- Wiring of the I/O devices

Module - 5

- Concept of flags
- Scan cycle execution

Module - 6

- Setting up PLC's/Connecting CPU, I/O modules, Rack, Backplane and Communication bus

Module - 7

- Connecting Field devices to PLC's I/Os



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- Configuring Local 1756-I/O Modules

Module - 8

- Connecting a Computer to a Communications Network

Module - 9

- Installing and to starting the programming terminals
- Creating & Modifying an RSLogix new project
- Transferring a Project File to a Logix5000 Controller

Module - 10

- Identifying the status of PLC and communication bus

Module - 11

- Creating Tags & Monitoring Data in an RSLogix 5000 Project
- Forcing of the I/O's

Module - 12

- Managing RSLogix 5000 Project Files
- Back up of the programs and reloading



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Module - 13

- Creating various Tasks
- Organizing Data
- Entering, Editing, & Verifying Ladder Logic
- Configuring Logix5000 Controllers to Share Data
- Configuring a Message
- Documenting & Searching for Project Components

Module - 14

- Identifying Programming Strategies & Techniques
- Documenting & Searching Ladder Logic
- Programming Basic Instructions
- Programming Timer & Counter Instructions
- Programming Program Control Instructions
- Programming Compare Instructions
- Programming Compute & Math Instructions



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- Programming Move Instructions
- Programming with Advance Instruction Set

Module - 15

- Creating a Function Block Diagram
- Programming Logical Function Block Instructions
- Programming Timer & Counter Function Block Instructions
- Programming Analog Function Block Instructions
- Programming Timing Modes in a Function Block Instruction
- Programming & Monitoring an RMPS (Ramp/Soak) Function Block Instruction
- Controlling Program Flow Using Function Block Instructions



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Live Projects :

PLC Automation Based

- 1** Traffic Light System Designing
- 2** Water Level Control System Designing
- 3** Building Pump Automation Designing
- 4** Lift Application Designing
- 5** Emergency Trapping System Designing
- 6** Bottle Filling Machine Designing
- 7** Robotic Arm Application Designing
- 8** Burglar Alarm System