

# Department of Instrumentation & Control Engineering

## Faculty of Technology

### Dharmsinh Desai University

### Automation System Laboratory

#### Objective:

The objective of Automation System laboratory is to familiarize the students with the Industrial automation products like PLC and SCADA to control and monitor the plant and machine and impart skill for development of PLC programs.

Laboratory is equipped with Modular Controllers with Technology functions and advanced configurations. Students learn about ladder logic programming, wiring different I/O's (analog and digital) with PLC and SCADA programming. They acquire the practical skills sufficient to develop programs for basic automation process.

#### Programmable Logic Controller Details available in Automation System Laboratory-

Sr.No.	Name of Training Module	Details
1	Automation trainer kit	Controller: Make: Allen bradely Specification: Model: MicroLogix 1400 Programmable Logic Controller Systems with EtherNet/IP™, on- line editing and a built-in LCD panel, Supply: 120 -240 V AC Digital inputs-16 Digital Outputs-16 Analog Input-04 Analog Output-04 The trainer kit is equipped with I/O devices connected to PLC for program execution Software: RsLogix 500 English RsLinx 8.3.00
2	I/O training kit with controller	Controller: Make: Allen bradely

		<p>Specification:  Model: Micro 830 Allen Bradely PLC  Supply-20.4 to 26.4 V DC  Digital inputs-14  Digital Outputs-10  Trainer kit is equipped with Add-on cards.</p> <ol style="list-style-type: none"> <li>1) Model- 2080 IF2- 02 AI(0-10V)</li> <li>2) Model- 2080 OF2- 02 AO(0-10V)</li> </ol> <p>Communication port: EtherNet/IP. DH-485  Programming Software: Connected Components Workbench</p>
3	PLC Trainer	<p>Controller:  Make: Allen bradely  Specification:  Model: Micrologix 1000 Analog  Supply- 120-240 V AC  Digital inputs-12  Digital Outputs-08  Analog Input-02  Analog Output-02  Communication port: RS-232  The trainer kit is equipped with I/O devices connected to PLC for program execution  Software: RsLogix 500 English  RsLinx 8.3.00</p>
4	SCADA	<p>Wonderware Invensys SCADA  Software- InTouch 9.0  Specification: 32 Tag memory with development and runtime factory suit</p>