



Dr. D. Y. Patil Unitech Society's
Dr. D. Y. Patil Institute of Technology, Pimpri, Pune
Department of Electrical Engineering

Activity: "Innovative Teaching Learning Pedagogy"

Date & Day: 24th Oct 2024, Thursday

Activity Name: Video Demonstration

Subject: PLC and SCADA

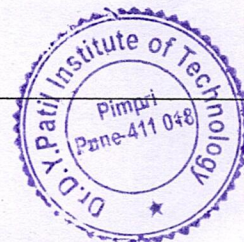
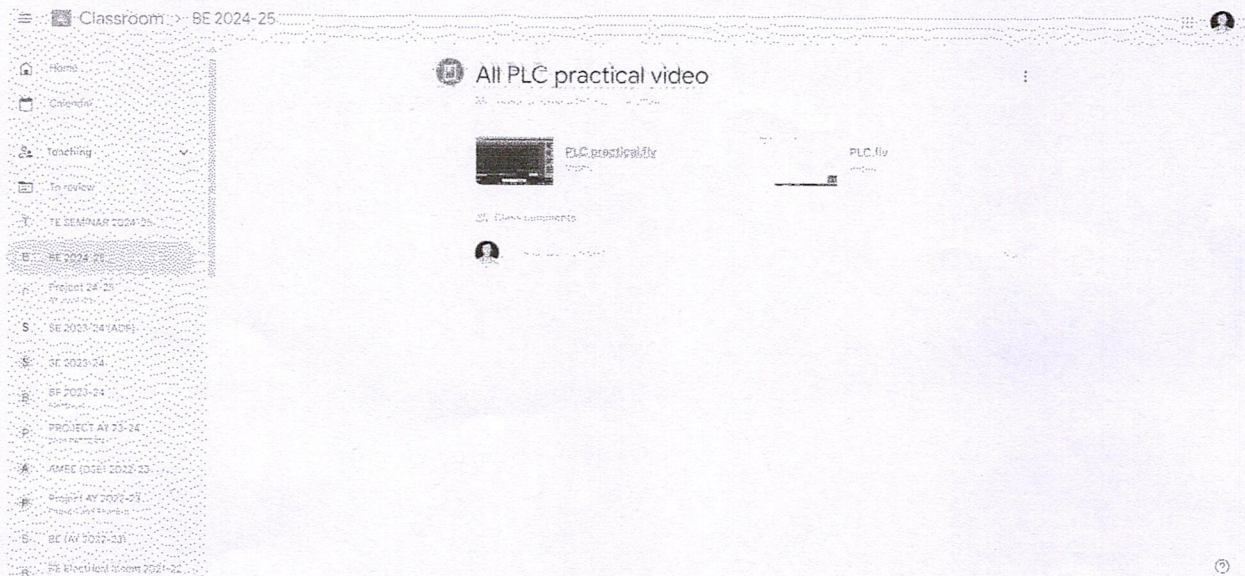
Venue: Google classroom

Activity conducted by: Mr. Swaraj Kadam

Objectives:

- To demonstrate the real-time functioning of PLC and SCADA systems through visual examples.
- To enhance students' understanding of automation sequences, ladder logic operations, and SCADA interfaces.
- To connect theoretical concepts with practical industrial processes through video-based experiential learning.

Photographs:



Uploaded Videos:

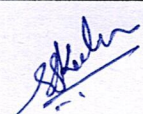
Topic	Link	Time
Lamp ON OFF and Logic gates	Watch here	27
Delayed operation of timers TON and TOF	Watch here	30
Counter and combination of counter & timer Part 1	Watch here	17

Outcome:

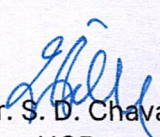
- Students gained visual clarity on the integration of PLC and SCADA in industrial systems.
- Students developed an understanding of real-time process monitoring and control logic execution.
- The activity fostered interest and confidence in automation technology, bridging the gap between lab experiments and field applications

Mapping of POs and PSOs with Justification:

PO/PSO	PO/PSO Title	Mapping Level (1/2/3)	Justification
PO1	Engineering Knowledge	2	Students related theoretical concepts to real-world PLC-SCADA applications.
PO2	Problem Analysis	2	Video cases demonstrated fault detection and system responses in control systems.
PO3	Design/Development of Solutions	1	Students observed structured logic and control solutions implemented via PLC.
PO4	Conduct Investigations	2	Videos illustrated system monitoring and troubleshooting via SCADA.
PO5	Modern Tool Usage	3	Siemens PLC and SCADA environments were showcased for real-time automation.
PO12	Life-long Learning	2	Motivated students to explore automation beyond curriculum via visual learning.
PSO1	Technical Analysis Skills	2	Gained insights on logic execution, sensor-actuator interactions, and system flow.
PSO3	Multidisciplinary Application	1	Demonstrations connected electrical automation to process, manufacturing sectors.
PO1	Engineering Knowledge	2	Students related theoretical concepts to real-world PLC-SCADA applications.


Mr. Swaraj Kadam
Course Coordinator


Dr. Manasi Deore
DAC


Dr. S. D. Chavan
HOD

