

Hands-On Training Program on Programmable Logic Controllers

October 8, 2026

12 Noon to 2 PM: Theory Session: Hall No.: T-3-7, Dept. of ETCE, JU

3PM to 5PM: Practical Session: TI Innovation Lab, T-3-16A

Organized By



**Department of Electronics & Telecommunication Engineering (ETCE)
Jadavpur University (JU), Kolkata 700032**

In Technical Collaboration With



**IEEE Circuits And Systems Society (CASS) Kolkata Chapter
IEEE CASS Student Branch Chapter Jadavpur University**

Inaugural Session

Venue: T-3-7, Dept. of ETCE, JU : Time: 11.30AM

Welcome Address : Prof. P Venkateswaran

Inaugural Address: Prof. Sudipta Chattopadhyay, Head, Dept. of ETCE, JU

About IEEE CASS Kolkata Chapter: Dr. Chandrima Mondal, Vice-Chair

About Machine Learning and Intelligent Control Group: Dr. Pratyusha Rakshit

Vote of Thanks: Dr. Aditi Chatterjee, Swami Vivekananda Inst. of Sc. and Tech.(SVIST)

Topics To be Covered:

1. Introduction To PLC

- PLC vs. Relay Control Advantages
- Classification of PLC
- Difference Between PLC & FPGA

2. PLC Architecture

- Block Diagram of PLC
- Working of PLC

3. Ladder Logic Diagram

- Elements of Ladder Diagram
- Advantages of Ladder Logic Diagram

4. Siemens SIMATIC S7-1214C PLC

- Communication Interface & I/O Addressing
- Siemens Totally Integrated Automation Portal (TIA)

5. PLC Programming Examples

- Basic Logic Gates Implementation
- Digital Circuits Implementation
- Timer Implementation

Instructor Short Bio (Shayantan Sarkar):

Pursuing Ph.D. in Electronics & Tele-Communication Engineering (ETCE) at Jadavpur University; B.Tech. in ECE from Budge Budge Institute of Technology (2023). Qualified UGC NET in Electronic Science in December 2024 and June 2026. Previously served as a Lecturer in the ETCE Department at BBIT Polytechnic and worked as a Project Manager in the IT Sector with experience in Project Management and Technology driven Projects.

Instructor Short Bio (Tania Paul Das):

Pursuing Ph.D. (AICTE-QIP Fellow) in Electronics & Tele-Communication Engineering (ETCE) at Jadavpur University; M.Tech in IAR from Jadavpur University (2020); B.Tech in ECE from B.P. Poddar Institute of Management & Technology (2010), and Diploma in ETCE from Women's Polytechnic, Kolkata. Presently, serving as the Assistant Prof., ECE Dept., Budge Budge Institute of Technology - BBIT

Organizing Team

Prof. Sudipta Chattopadhyay, Head, Dept. of ETCE, JU

Instructors: Shayantan Sarkar & Tania Paul Das

Joint Coordinators: Dr. Aditi Chatterjee, Dept. of ECE, Swami Vivekananda Institute of Sc. & Tech.(SVIST)

Dr. Chandrima Mondal, Vice-Chair, IEEE CAS Kolkata Chapter & Asst. Prof., Dept. of ETCE, JU

Dr. Pratyusha Rakshit, Asst. Prof., Dept. of ETCE, JU; Prof. P Venkateswaran, Dept. of ETCE, JU