WORKSHOP SCHEDULE

Will be updated soon on the college website.

REGISTRATION FEE

- ✓ FREE for the first 60 candidates from Govt. Engineering / Diploma colleges under JUT on a first-come, first-served basis.
- ✓ For others registration Fee: 300 INR [Contact us for payment]

IMPORTANT DATES

Registration Date: 25th February 2026 onwards

TARGET AUDIENCE

All individuals from the following categories are invited to participate in the workshop

- 10+2 with science
- Graduation
- All Engineering Stream
- Working Professionals
- Industry Persons
- Academicians

CHIEF PATRONS

Prof. (Dr.) D. K. Singh, Vice Chancellor, JUT

PATRONS

Prof. (Dr.) Goutam Roy Choudhury
Chairman – Techno India Group
Prof. Mohit Chattopadhyay
Director – Techno India Group

HEAD OF INSTITUTION

Dr. B. B. Chattopadhyay
Director, Silli Polytechnic

PRINCIPAL INVESTIGATOR

Mr. Samir Sharma

CONVENOR:

Mr. Utpal Kumar Paul

CO-CONVENOR:

Dr. Arindam Sarkar

Mr. Rajesh Guria

INVITED EXPERTS:

- Prof. Dr. Manish Kumar
- Prof. Dr. Dinesh Saini
- Mr. Tulsi Ranjan Poddar
- Dr. Amar Prakash Sinha
- Mr. Arnab Chakraborty
- Dr. Ajit Kumar Keshri
- Dr. Bimal Kumar Mishra
- Dr. Sudipta Chakraborty

VENUE:

Conference Hall

Silli Polytechnic

Silli, Muri, Ranchi

Jharkhand-835102

REGISTRATION:

From 25th February 2026

Link: **https://forms.gle/yAZ2u3T2mTTTKeAv5**

PROGRAMME COMMITTEE:

Mr. Manish Kumar Pathak

Mrs. Rittwika Singha Deo Paul

Mr. Arun Kanti Manna

Mr. Peetamber Mahto

PAYMENT PROCEDURE

Will be updated soon on the website

National Hands-on Workshop on Industry-Oriented Automation and IOT Systems (IAIOT-26)

[20th to 22nd May 2026]

Sponsored by

Jharkhand Council on Science & Technology

Organized by

Silli Polytechnic

(Run /Estd. By Govt. of Jharkhand and Run by Techno India)
Silli, Ranchi-835102
Jharkhand

Website: www.sillipoly.edu.in

E-mail: iaiot2k26@gmail.com

Contact at: +91-7004777259

About Silli Polytechnic

Silli Polytechnic is as an Institution under Public Private Partnership between the Government of Jharkhand and Techno India, Kolkata. The Polytechnic College is running Diploma Engineering courses with Civil, Mechanical, Electrical, Electronics & Communications and Computer Science & Engineering disciplines with approval from AICTE and the State Board of Technical Education, Jharkhand.

The College is on about 9 Acre of Land and having more than 1.7 Lakh built up space consisting of Academic Building, Workshop, Canteen, Hostel for Boys and Staff Quarters. The College have a well stocked Library and all the Laboratories. Admission in the College is through Polytechnic Entrance Competitive Examination conducted by J.C.E.C.E Board, Government of Jharkhand. Few seats are available for direct admission as well.

The College is managed by Techno India Group, Kolkata one of the largest group in India having 3 Universities, 20 Engineering Colleges & 10 B-Schools with enviable track record of providing quality education to help 5 lakh students placed in various MNC's and pursue higher studies in India and abroad since last 26 years.

Silli is a town in Ranchi District and about 53 Km from Ranchi and well connected by road by NH 33 and NH 23. The nearest major Railway station is Muri which is about 5 Km. Silli lies closer to Purulia District of West Bengal.

About Workshop

Industrial Automation refers to the use of control systems such as computers, robots, or other technologies to handle different processes and machinery in an industry or factory. Its goal is to increase production efficiency, reduce costs, improve safety, and enhance quality control. Industrial automation is a key element in modern manufacturing and plays a vital role across many industries, from automotive to pharmaceuticals, food and beverage, and electronics.

Here's an outline of what such a workshop could cover:

1. Introduction to Industrial Automation

- **Overview of Automation in Industry**: Explanation of the role of automation in manufacturing, logistics, and other industrial sectors.

- **Benefits of Automation**: Increased efficiency, quality, and safety; reduced human intervention and errors.

- **Automation Technologies**: PLC (Programmable Logic Controllers), SCADA (Supervisory Control and Data Acquisition), HMI (Human-Machine Interface), and robotics.

2. Basic Components of Industrial Automation

- **Sensors and Actuators**: How sensors (e.g., proximity, temperature, pressure) and actuators (e.g., motors, solenoids) work within automated systems.

- **PLC Programming**: Introduction to PLCs, their functions, and basic programming using ladder logic.

- **Control Systems**: Discussion of feedback control, open-loop and closed-loop systems.

3. Hands-On Training with PLCs

- **PLC Setup**: Wiring and configuring a basic PLC system.

- **Programming PLCs**: Writing simple control programs using ladder logic or functional block diagrams.

- **Simulating Automation Tasks**: Practicing with small-scale automation scenarios (e.g., controlling lights, motors, or conveyor belts).

4. SCADA and HMI Systems

- **SCADA Overview**: Learn how SCADA systems are used to monitor and control industrial processes in real-time.

- **HMI**: Introduction to Human-Machine Interface systems for visualizing and interacting with automated processes.

- **Building HMI Screens**: Developing a simple user interface to control an automated system.

5. Robotics and Automation Integration

- **Robotics in Automation**: Understanding robotic arms, conveyors, and other automated machinery.

- **Programming Robots**: Basic coding and integration with PLCs.

- **Collaborative Robots (Cobots)**: Introduction to robots designed to work alongside human operators.

6. Industrial IoT (IIoT) in Automation

- **Introduction to IIoT**: How sensors, devices, and machines are interconnected using the Internet of Things in industrial environments.

- **Data Collection and Analytics**: Using IIoT for monitoring and optimizing production lines.

- **And many more.**