# JAIN COLLEGE OF ENGINEERING, BELAGAVI.

## Department of Electrical and Electronics Engineering

## Report of a one day workshop on "Industrial Automation and Energy Management"

- **Date:** 30-10-2025
- **Mode of Conduction:** Offline

**Resource Person:** Miss Amrutha Bandiwadekar, Skill Center Manager and Trainer, VTU Belagavi
Miss Priyanka Kadannavar, Student Coordinator and Trainer, VTU Belagavi

- **Under the Banner of:** IE(I)&TESLA
- **Photograph:**




- **Objectives of the Event:**
  - To provide students with hands-on exposure to Industrial Automation and Energy Management systems.
  - To bridge the gap between academic knowledge and practical industrial applications.
  - To develop technical skills in automation, wiring, and logic development for process control.

- **Program Flow: (Agenda Attached)**
  - Registration of Participants
  - Welcome Address & Introduction of the Speaker
  - Workshop conducted by the Resource Person
  - Interactive Q&A Session
  - Vote of Thanks
- **Outcome of the Program:**
  - Enhanced understanding of automation components, wiring methods, and logic development.
  - Improved awareness of energy management techniques and optimization in industrial setups.
  - Strengthened connection between theoretical learning and real-world industrial practices.
  - Encouraged students to explore career opportunities in industrial automation and energy sectors.
- **List of all the Participants with their signature:**

  Offline mode and around 53 Students and 1 faculty were present (Attendance is attached).
- **Feedback from the Students:**
  - Students found the workshop highly informative and engaging.
  - They appreciated the trainers' practical demonstrations and hands-on approach.
  - The session motivated students to explore automation-based career opportunities and apply classroom knowledge to real-world engineering problems.

31/10/25 — Event Coordinator

31/10 — HOD

03-11-25 — Principal & Director

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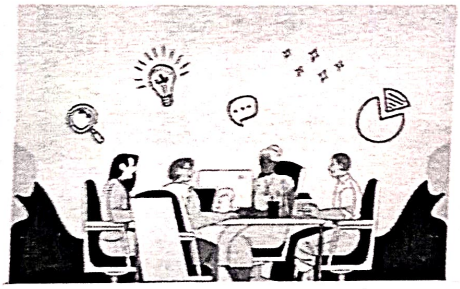
## Department of Electrical & Electronics Engineering

ONE DAY WORKSHOP

on

## "INDUSTRIAL AUTOMATION & ENERGY MANAGEMENT"

**Resourse Persons:**
*Miss. Amrutha Bandiwadekar*
*Skill Center Manager & Trainer, VTU Belagavi*
*&*
*Miss. Priyanka Kadannavar*
*Student Coordinator & Trainer, VTU Belagavi*



**C-210, EEE DEPT.**
**JCE, Belagavi.**

**30th October 2025**
Thursday
11:00am onwards

*Coordinator*
*Mrs. Laxmi Brungi*

**HOD**
**Dr. Venkatratnam Chitturi**

**Principal & Director**
**Dr. J Shivakumar**

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## Department of Electrical & Electronics Engineering

Academic Year 2025-26

Sem: VII

One Day Workshop on Industrial Automation & Energy management.

Date: 30-10-2025

| R. No. | Name | USN | Signature |
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em: VII

day
One Workshop

Date: 30-10-2025

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30 Oct 25
Event Coordinator

31/10
HOD

Estd. 2010

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## Department of Electrical & Electronics Engineering

### Report of " A 4-Days Hands-on Workshop on Automation with PLCs"

- Date:29-10-2025 **Offline Mode**
- Under the Banner of: **TESLA & IE(I)**
- Photograph:



- **Objective of the Event / Activity:**

  - To provide participants with practical exposure to Programmable Logic Controllers (PLCs) and industrial automation concepts.
  - To enable students to design and implement simple automation systems using PLC programming tools.
  - To bridge the gap between theoretical knowledge and industrial practices in automation.
  - To develop technical competencies and problem-solving skills relevant to automation and control engineering.

- **Program Flow: (Agenda/Schedule Plan as Attached)**

  - Welcome & Introduction.
  - Technical Session.
  - Feedback & Valedictory.

- **Outcome of the Program:**

  - Students gained hands-on experience in PLC programming and automation system design.
  - Enhanced technical and analytical skills applicable to real-world engineering problems.
  - Encouraged team collaboration and problem-solving mindset through project-based learning.
  - Strengthened industry readiness and employability in the field of automation and control.

- **Brief Summary:**

The Department of Electrical and Electronics Engineering, JCE Belagavi organized " A 4-Days Hands-on Workshop on Automation with PLCs" to provide students with industry-relevant skills in the field of automation and control systems. The workshop covered fundamentals of PLC architecture, ladder logic programming, and real-time system interfacing.

Participants engaged in simulation and practical sessions using PLC kits, learning to design, troubleshoot, and implement automation tasks such as motor control, conveyor operations, and process automation. The concluding session involved mini projects where teams demonstrated their automation concepts.

The workshop enhanced students' technical competence, teamwork, and readiness for careers in industrial automation, aligning with NBA Criterion 3 & 5 and contributing to SDG 4 (Quality Education) and SDG 9 (Industry, Innovation, and Infrastructure).

Event Coordinator HOD 31/10 Principal & Director 27.10

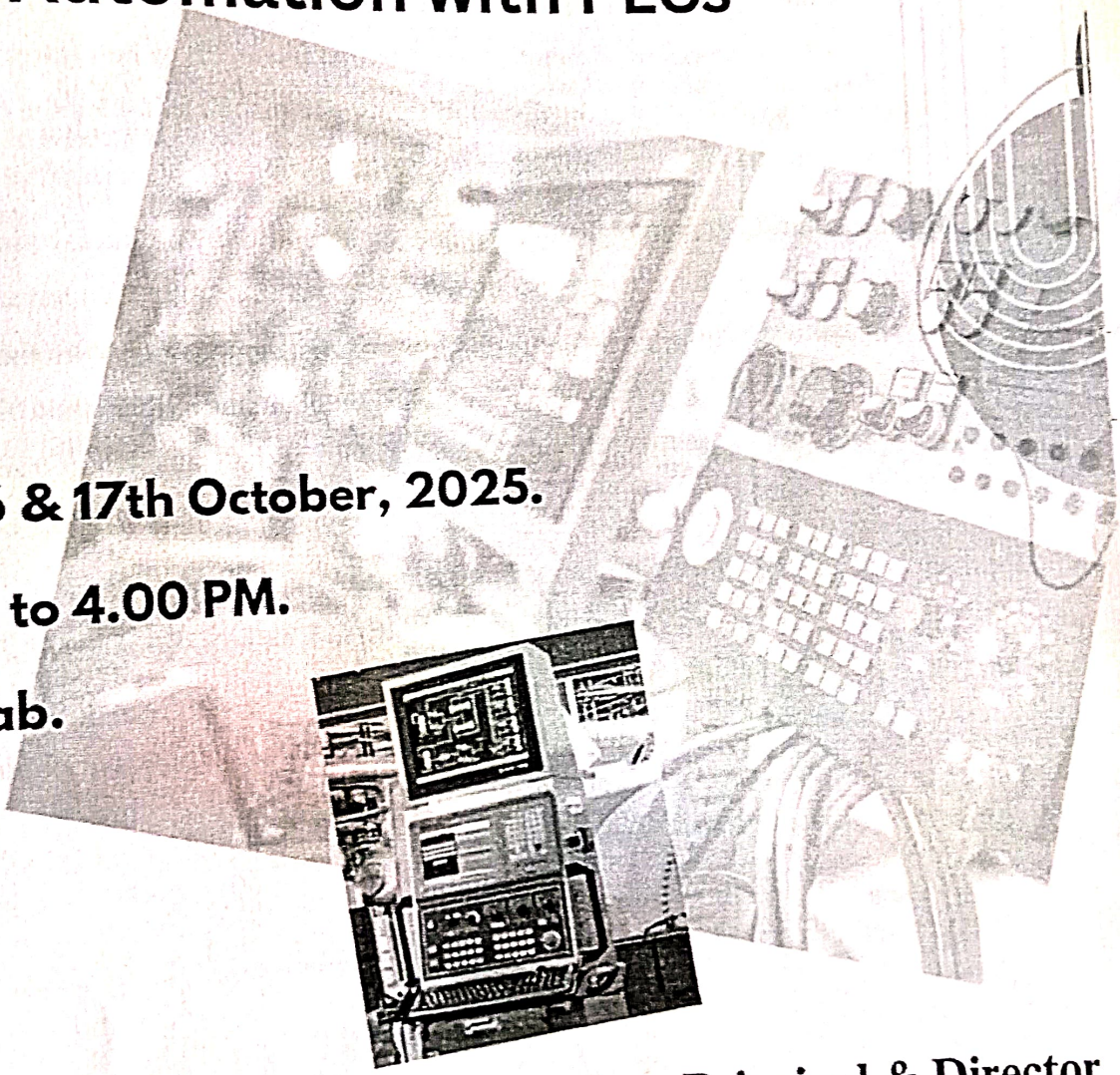
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## Department of Electrical & Electronics Engineering

# Four Days Hands-on Workshop on "Automation with PLCs"



**Date: 14, 15, 16 & 17th October, 2025.**

**Time: 1.00 PM to 4.00 PM.**

**Venue: PSS Lab.**

**Coordinators**
**Mr. Ashok B**
**Mrs. Mrugnayani G**

**HOD**
**Dr. Venkatratnam C**

**Principal & Director**
**Dr. J. Shivakumar**

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## Department of Electrical & Electronics Engineering

organizes

## 4-Days Hands on Workshop on Automation with PLC's
## ( from 14th October to 17th October 2025)

### SCHEDULE PLAN

| Time & Date | Topic |
|---|---|
| **01:00 PM to 04:00 PM**<br>**14/10/2025**<br>**Day – 1** | Introduction to PLC<br>• Basics of PLC's, Need of PLC's & Automation<br>• PLC Addressing Modes<br>• PLC Wiring Introduction & PLC Architecture |
| **01:00 PM to 04:00 PM**<br>**15/10/2025**<br>**Day – 2** | Understanding Digital Inputs/Outputs and Field Devices<br>• Ladder Logic Basics – Symbols, Instructions, Syntax<br>• PLC Programming Concepts – Bit Logic, Timers, and Counters<br>• Introduction to WPL Soft tool & hands on session on tool usage |
| **01:00 PM to 04:00 PM**<br>**16/10/2025**<br>**Day – 3** | Developing Ladder Logic Programs using PLC Software<br>• Testing and Debugging of Programs & Simulation<br>• Analog I/O Handling<br>• Handling & Interfacing Sensors & Actuators |
| **01:00 PM to 04:00 PM**<br>**17/10/2025**<br>**Day – 4** | Interfacing of Sensors, Motors, and Limit Switches<br>• Simulation of Industrial Control Applications<br>• Feedback Session<br><br>**Resource Person**<br>Mr. Mahesh Goral<br>CEO, Nextgen Technologies. Belagavi, Karnataka |

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## Department of Electrical & Electronics Engineering

**Four Days Hands-on Workshop on "Automation With PLCs" from 14th Oct. to 17th Oct**

| Sl No. | USN | Student Name | 14/10/25 | 15/10/25 | 16/10/25 | 17/10/25 |
|---|---|---|---|---|---|---|
| 1 | 2JI22EE001 | Abid Attar | | | | |
| 2 | 2JI22EE002 | Aditya P Dhamanekar | | | AB | AB |
| 3 | 2JI22EE003 | Aditya Emmi | AB | AB | AB | AB |
| 4 | 2JI22EE004 | Aishwarya Sudarshan Toragalli | | | | |
| 5 | 2JI22EE005 | Akash Kambar | | | | |
| 6 | 2JI22EE009 | Dayanand Jayapal Kori | AB | AB | AB | AB |
| 7 | 2JI22EE010 | Druva Ilkal | | | | |
| 8 | 2JI22EE011 | Guralingayya Kantimath | | | | |
| 9 | 2JI22EE012 | Harish konakeri | AB | AB | AB | AB |
| 10 | 2JI22EE014 | Kavya Tirakannavar | | | | |
| 11 | 2JI22EE015 | Keerti. Pujeri | | | | |
| 12 | 2JI22EE016 | Madival Sappadli | AB | AB | AB | AB |
| 13 | 2JI22EE017 | Mallik Tahashildar | | | AB | AB |
| 14 | 2JI22EE018 | Megha Rajannavar | | | | |
| 15 | 2JI22EE019 | Munjannavar Soundarya Sunil | | | | |
| 16 | 2JI22EE020 | Naik Swapnil Sambhaji | | | | |
| 17 | 2JI22EE021 | Navin Hubbali | AB | AB | AB | AB |
| 18 | 2JI22EE024 | Nirmala R Dalawai | | | | |
| 19 | 2JI22EE025 | Pallavi Ramesh Yalage | | | | |
| 20 | 2JI22EE026 | Patil Dhanashree Omprakash | AB | | | |
| 21 | 2JI22EE027 | Pavitra Nemagoudar | | | | |
| 22 | 2JI22EE028 | Pooja I hiremath | | | | |
| 23 | 2JI22EE029 | Praful Katariya | | | | |
| 24 | 2JI22EE031 | Ravasab M Baloj | | AB | AB | AB |
| 25 | 2JI22EE032 | Ritika Sulakhe | | AB | | |
| 26 | 2JI22EE033 | Sachin Nandaganvi | | | | |
| 27 | 2JI22EE037 | Sandeep Pawar | | | | |
| 28 | 2JI22EE038 | Santosh Desai | AB | AB | AB | AB |
| 29 | 2JI22EE039 | Satwik sambannavar | | | | AB |
| 30 | 2JI22EE040 | Shivaprasad koti | AB | AB | AB | AB |
| 31 | 2JI22EE041 | Shraddha VijayKumar Berad | | | | |
| 32 | 2JI22EE042 | Shweta ankalagi | | | | |
| 33 | 2JI22EE043 | Sneha basavaraj dhannugol | | | | |

| SL No. | USN | Student Name | 14/10/25 | 15/10/25 | 16/10/25 | 17/10/25 |
|---|---|---|---|---|---|---|
| 34 | 2JI22EE044 | Sneha Shrimant Gudlamani | | | | |
| 35 | 2JI22EE047 | Umesh khadarwadkar | | | AB | AB |
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| 36 | 2JI22EE050 | Vijayalaxmi | | | | |
| 37 | 2JI22EE051 | Vineet Mohite | | | | AB |
| 38 | 2JI22EE052 | Vivek V katadal | AB | AB | AB | AB |
| 39 | 2JI22EE053 | Vrushabh Muttur | | | | |
| 40 | 2JI22EE054 | Yash Tarale | | | | |
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| 43 | 2JI23EE402 | Numan Murtuza | AB | | AB | AB |
| 44 | 2JI23EE403 | Prajwal walishetti | AB | AB | AB | AB |
| 45 | 2JI23EE404 | Preeti | P.S.D | P.S.D | AB | P.S.D |
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| 47 | 2JI23EE406 | Sachin Lamani | | | | |
| 48 | 2JI23EE407 | Sakshi Sonaji | | | | |
| 49 | 2JI23EE408 | Saurabh Bharbhare | | | | |
| 50 | 2JI23EE409 | Varad Shete | | | AB | AB |
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| 52 | 2JI23EE411 | vaishnavi savalagi | | | | |
| 53 | 2JI23EE412 | Vinayak kammar | | AB | | |
| 55 | 2JI23EE413 | Vinayak Donnennavar | AB | | | AB |
| | | Total No. of Students Present | 41 | 43 | 38 | 37 |
| | | Total No. of Students Absent | 14 | 12 | 17 | 18 |

17/10/25 17/10/25

**Faculty Coordinator**

Mr. Ashok B.

Mrs. Mrugnayani G.

31/10

**HOD EEE**

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Shivaprasad
Vivek
Santosh