#### INSTITUTE

Sant Longowal Institute of Engineering and Technology (SLIET), Deemed to be University, has been established and funded by Ministry of Education (MoE), Govt. of India, in 1991 to provide technical education in emerging areas of engineering and technology. Over the years the institute has established itself as a premier Institute imparting technical education of a very high standard.

The institute caters to the technical manpower requirements at various levels by adopting a concept of a modular system in imparting professional education with an emphasis on practical training in the industry. The study programs include various courses at ICD, B.E. M.Tech. (NBA accredited) and Ph.D. in different branches of engineering and technology. The attention now of different institutions of higher education in different nations is on students' learning outcomes and assessment. The institute has a sprawling area of 451 acres surrounded by lush green land and offers a perfect environment to nurture a peaceful state of mind required to carry out research and other student activities.

### INSTITUTE VISION

SLIET shall strive to act as an international podium for developing and transferring technical competence in academics through formal and nonformal education, entrepreneurship, and research to meet the changing needs of society.

#### **DEPARTMENT OF EIE**

The electrical and Instrumentation Engineering department is poised to impart technical education related to the development of human resources, from the level of skilled workers to the engineering post-graduates. The courses being run by the department include:

- Integrated Certificate-Diploma Program DEE
- Integrated Certificate-Diploma Program DIN
- B.E. (Instrumentation and Control Engineering)
- B.E. (Electrical Engineering)
- M.Tech. (Instrumentation and Control Engineering)
- Ph.D. Programme

### ABOUT THE PROGRAM

This STTP on AI in Instrumentation and Control (Hybrid mode) aims at faculty, staff members and research scholars of engineering institutions and polytechnics approved by AICTE, officials from industry and other Research and Development organizations.

The program will also inspire faculty members and research scholars to generate new ideas in their research areas. This STTP will impart hands-on training in the various AI tools used.

#### BACKGROUND

The STTP is designed to provide participants with essential knowledge and practical skills in applying AI in industrial and research applications as it is revolutionizing industries, enhancing human capabilities, and reshaping our lives. The adaptive automation systems, powered by AI, bring increased flexibility, predictive capabilities and the ability to handle complex decision-making for more efficient and responsive industrial processes.

This program fosters discussions and collaboration to inspire research in AI applications for Instrumentation and control. By combining theoretical insights with hands-on experience, the STTP caters to educators, researchers, engineers, and students. The participants will stay updated on the latest trends and tools, gaining a comprehensive understanding of AI's role in solving real-world challenges in Instrumentation and Control.

Through engaging sessions and hands-on activities, the STTP provides actionable knowledge and fosters a deeper understanding of AI applications in Instrumentation and Control.

### Resource persons

Renowned experts and researchers from prestigious academic institutions, industries, and R&D labs worldwide, specializing in AI at both research and application levels, will conduct the online sessions in this program.

# SHORT-TERM TRAINING PROGRAM ON

# Al in Instrumentation & Control (AIIC-2025)

(24th - 28th Feb 2025)





# **ORGANIZED BY** DEPARTMENT OF EIE

# **Sant Longowal Institute of Engineering & Technology**

(Deemed to be University under MoE, Govt. of India) Longowal, Distt. Sangrur-148106 Punjab (India).

Patron: : Prof. Mani Kant Paswan.

**Director, SLIET** 

Co-Patron : Prof. A. S. Shahi **Dean (Academics)** 

**Chairperson**: Prof. Manpreet Kaur

HOD, EIE

**Coordinators**: Dr. R.K Garg

Dr. Asim Ali Khan Er. Sunil K Bansal

### **COURSE CONTENTS**

- Advances in AI, Sensors, and Cloud Computing
- AI in Industrial Automation
- AI in Power Systems and Energy Management
- Smart Sensor Networks, Industrial Communication Devices and IoT Integration.
- Deep Learning in Biomedical Signal and Image Processing.
- AI in food and agriculture instrumentation
- Role of AI in Predictive Maintenance and Fault Diagnosis
- AI-Driven Robotics in Control Systems
- Cybersecurity in AI-Driven Control Systems
- Real-Time Sensor Data Analytics
- Integrating sensor networks with cloud platforms.
- Signal and Image Processing Applications in Remote Sensing.
- Hands-on with AI Tools for Instrumentation.

### **OUR SPONSORS:**







#### MODE OF CONDUCTION

The training program will be conducted in Hybrid Mode. The soft copy of study material and PPTs will be shared with the participants with the due support of experts. E-certificates will be provided to all participants.

#### REGISTRATION

The number of seats is limited to 30. There is no registration fee for eligible participants from **SLIET Longowal**.

For participants from other organizations, the registration fee is as follows:

Faculty/Staff/Industry: ₹ 250

Research Scholars: ₹ 100

## **How To Apply**

Interested candidates must register for the STTP using the following link by February 21, 2025. Selected candidates will be notified on February 22, 2025.

https://forms.gle/X4hDHDBepN3dmbxD9

# Address for Communication:

Dr. R.K Garg, Prof. (EIE) Er. Sunil K Bansal, A.P. (EIE)

**SLIET Longowal** 

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