

## INSTITUTE



Sant Longowal Institute of Engineering and Technology (SLIET), Deemed to be University, has been established and funded by MoE, Government of India in 1991, to provide technical education in emerging areas of engineering and technology. 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 Certificate, Diploma, B.E. M.Tech. and Ph.D. levels in different branches of engineering and technology. The institute has a sprawling area of 451 acres surrounded by lush green land.

## INSTITUTE VISION

SLIET shall strive to act as an international podium for the development and transfer of technical competence in academics through formal and non-formal education, entrepreneurship, and research to meet the changing need of society.

## DEPARTMENT OF EIE

The department of Electrical and Instrumentation Engineering is poised to impart technical education related to the development of human resources, from the level of skilled workers to the engineering, post-graduate and Ph.D. level. The department has been awarded number of sponsored research projects from various Govt. agencies such as AICTE, MHRD, DST etc. The department caters to the manpower and technical requirements of various sophisticated and household industries. The department envisions holistic development of its students with the help of expert faculty, well equipped laboratories and a healthy learning and working environment. The focus of the department is to discover the true potential of students by creating a challenging yet interesting curriculum. The courses being run by the department include:

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

## ABOUT THE PROGRAMME

This innovative program aims to equip participants with the knowledge and tools to harness green energy solutions and inspire a wave of transformative ideas in the realm of sustainable development.

## BACKGROUND

The escalating threat of climate change and the pressing need for sustainable development have spurred global efforts to transition to cleaner and more renewable energy sources. In response to this imperative, the concept of Green Energy for Sustainable Development has emerged as a transformative solution. Green Energy includes a wide array of renewable resources, such as solar, wind, hydro, geothermal, and bioenergy, which generate power while minimizing environmental impact. By harnessing these abundant and clean energy sources, societies aim to reduce greenhouse gas emissions, mitigate climate change, and promote environmental stewardship. The concept of Green Energy for Sustainable Development goes beyond energy generation. It involves adopting eco-friendly practices across sectors, embracing energy efficiency, promoting circular economy principles, and ensuring equitable access to clean energy for all. Institutions, governments, and communities worldwide recognize the significance of transitioning to Green Energy for a more sustainable future. This background lays the foundation for courses which aim to educate, inspire, and empower educators and researchers to become drivers of change in the pursuit of a greener and more sustainable world.

## RESOURCE PERSONS

Renowned experts and researchers from premier Institutions (IIT/NITs) and other organizations and industries will deliver expert lectures.

**Short Term Training Programme (STTP)  
(Hybrid Mode)**

ON

**GREEN ENERGY FOR  
SUSTAINABLE DEVELOPMENT**

**(March 18-22, 2024)**

*ORGANIZED BY*

**Department of Electrical and Instrumentation Engg,**

**Sant Longowal Institute of  
Engineering & Technology**

(Deemed to be University under MoE, Govt. of India)

**Longowal, Distt. Sangrur-148106 Punjab, India**

**Patron : Prof. Manikant Paswan, Director**  
**Co-Patron : Prof. Surinder Singh, Dean (R&C)**  
**Convener : Prof. Surita Maini**  
**Coordinators : Dr. Charanjiv Gupta**  
**Dr. Ashwani Kumar Aggarwal**

**ABOUT STTP**

The STTP will explore various renewable energy sources and their role in promoting sustainability. The focus will be on understanding the importance

of transitioning towards green energy solutions. The fundamentals of solar energy, including photovoltaic systems and solar thermal technologies will be discussed. The concept of energy efficiency and its significance in reducing carbon emissions will be part of STTP. The economic and environmental benefits of adopting green energy solutions will be highlighted. Case studies will illustrate successful green energy projects and initiatives. Participants will learn about policy frameworks and incentives that promote the adoption of renewable energy. The course will also address the integration of renewable energy into existing infrastructure and power grids. Discussions on energy storage technologies, such as batteries and pumped hydro storage, will be included. The importance of community involvement and stakeholder engagement in green energy projects will be emphasized. Participants will have the opportunity to explore emerging trends and innovations in the field of green energy.

**ELIGIBILITY**

This interdisciplinary course is open for participants from Industry, Faculty members and Research Scholars from Institutes/ Universities.

**COURSE CONTENTS**

- Understanding sustainable development goals
- Global energy challenges and the need for renewable alternatives

- Solar photovoltaic (PV) systems and their applications.
- Wind energy potential assessment and site selection.
- Sustainable biomass supply chain and waste-to-energy concepts
- Grid integration challenges and solutions for renewable energy

**MODE OF CONDUCTION**

The training program will be conducted in hybrid mode. The soft copy of study material, PPT's will be shared with the participants. Certificates will be given to the participants.

**REGISTRATION**

No registration fees for faculty from AICTE institutes.

**IMPORTANT DATES**

Last date for registration: March 14, 2024

Notification of selection: March 15, 2024

**APPLY FOR COURSE**

Registration is required for participating in this course. Applicants can fill registration form at <https://forms.gle/DBqdj7vNaWR6ac8EA>

**ADDRESS FOR CORRESPONDENCE**

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