

## ABOUT THE 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 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 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 MECHANICAL ENGINEERING



Department of Mechanical Engineering is the largest department of the Institute. The department offers a number of programs at different levels ICD, Diploma, Degree and PG programs. Research areas covering such as Non-conventional Machining, Hybrid Machining, Composite materials, Functional nanomaterials, Automotive Engineering., Bio energy & Alternative fuels, Precision metrology, Optimization, Modeling and Simulation, CAD, FEA, Welding Technology etc. and have undertaken many sponsored projects. The department regularly organizes conferences/symposia and MoE/AICTE/ISTE sponsored training programs, and is committed to impart quality education, research, and training for attaining excellence.

## ABOUT THE PROGRAM

One Week Faculty Development Program (FDP) on **Emerging Advancements in Electric Vehicle Technology 'EAEVT-2025'** will be

conducted in **Hybrid Mode** from **27th to 31st January 2025**. This FDP will help the Faculty and Research Scholars/UG/PG students in understanding electric vehicle technologies and gain appreciable knowledge over the systems and will address the current state and future improvement trends. Electric vehicles (EVs) have gained great attention over the past few years around the world as a viable solution to decrease greenhouse gas emissions and to maintain a clean and healthy environment, with an aim to curtail the adverse effect produced by using internal combustion engines (ICEs) in the transportation and energy production sectors.

## PROGRAM SPEAKERS

The distinguished speakers will be from various recognized institutions and industries.

## MODE OF CONDUCTION

The training program will be conducted in **Hybrid Mode**. The soft copy of study material, *e-Certificates will be given to the participants.*

## ELIGIBILITY

This *interdisciplinary* course is open to Faculty (*Regular/Adhoc/Contract*), Research Scholars & Students (UG/PG) from Engineering institutes/colleges and other allied disciplines, and to Industry personnel working in the concerned/allied discipline, in India.

**One Week**  
**FACULTY DEVELOPMENT**  
**PROGRAM**  
**(Hybrid Mode)**  
on  
**EMERGING ADVANCEMENTS IN**  
**ELECTRIC VEHICLE TECHNOLOGY**  
**(EAEVT 2025)**

(January 27 - 31, 2025)



**Organized**  
by  
**Department of Mechanical Engineering**  
**Sant Longowal Institute of Engineering**  
**and Technology**

*(Deemed to be University under Ministry  
of Education, Govt. of India)*

**Longowal-148106**  
**Sangrur (Punjab)**  
**INDIA**

**Patron: Prof. Mani Kant Paswan, DIRECTOR**

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

**Chairperson: Prof. Shankar Singh**

(HOD- Mechanical & Civil Engg.)

**Coordinators:**

**Dr. Vivek Kumar, AsP- ME**

**Dr. Sumit Kumar. A.P, ME**

### COURSE CONTENTS

- Overview of EVs and powertrain
- The role of Industry 4.0/5.0 in electric vehicles
- Advanced Electric Machines for EVs
- Traction Battery technology
- Battery Management systems
- Traction motors & Motor controls
- EV Chargers & charging infrastructure
- Electric Vehicle Tribology and Additive Manufacturing
- Advanced composite for EVs
- Electric Vehicle Tribology and Additive Manufacturing
- Electric Vehicle Fluids
- Rheological and tribological testing of lubricants and greases for EV applications
- Start Up Opportunities in Electric Vehicle Sector

### REGISTRATION FEE

The registration fee structure is as follows:

| Participants  | Fee (₹) |
|---|---------|
| Faculty/Staff                                       | 250/-   |
| Research Scholars/students (UG/PG) other than SLIET | 250/-   |
| Persons from Industry                               | 250/-   |

- Seats are limited to **100** and selection will be based on first come first basis.
- Fee payment to be made to the account: 'EAEVT 2025' payable at **C.B.I, SLIET Longowal (IFSC Code: CBIN0283105 and Account No. 5736449090)**, on or before **25-01-2025** or use UPI id 12303759@cbi or use QR code for payment.



### IMPORTANT DATES

**Last date for registration: January 25, 2025**

**Notification of selection: January 26, 2025**

### HOW TO APPLY FOR COURSE

Registration is required for participating in this course. Applicants can fill registration form at

<https://forms.gle/T2vPJ36Y2V2aWozVA> or

scan the QR code



### ADDRESS FOR CORRESPONDENCE

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**Dr. Sumit Kumar (Coordinator)**

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**sumitkumar@sliet.ac.in**

**Chairperson: shankarsingh@sliet.ac.in**