

ECE Dept. Wall Magazine

Date: 4.4 2025

Venue: Lab Block ,ECE Department Corridor

KEY HIGHLIGHTS:

- ❖ The inauguration was done by honorable Director ma'am in the presence of esteemed HODs, faculty members and students of various departments.
- ❖ The ECE wall magazine provides a modern and visually appealing platform incorporating various sections for updates in the field of ECE and announcements.
- ❖ This enhancement will ensure that important information is communicated more effectively, thereby benefiting the students.



One-week FDP on Enhancing Research Capabilities for Academic Career Progression with NITTTR

Date: 17.3.25 to 21.3.25

Venue: Lab Block, Smart Classroom

KEY HIGHLIGHTS:

- ❖ From mastering research methodologies to exploring industry insights, 45+ participants took a deep dive into the future of academia.
- ❖ The FDP was concluded successfully with a week of learning and growth as a remote center for NITTTR Chandigarh.



Workshop on PCB designing

DATE: 7th February 2025

VENUE: BVS Auditorium

KEY HIGHLIGHTS:

- ❖ This workshop on PCB design and Emerging Trends provided an exposure to Schematic design of PCB to the students along with understanding about routing and design verification.
- ❖ It also provided exposure to the students with the real time industry & emerging trends with the help of projects shared by the expert during the session.
- ❖ The session was conducted by Mr. Sourabh Patyal, a seasoned trainer and instructor in the Electronics field.



Seminar on Energy Literacy

Date: 6th February 2025

Venue: BVS Auditorium

KEY HIGHLIGHTS:

- ❖ Department of ECE, GTBIT in collaboration with NPTI, National Apex Body under Ministry of Power, Government of India conducted a seminar on Energy Literacy.
- ❖ The seminar was presented by Dr. Mahindra Singh, Dy. Director, NPTI, a renowned expert in this field.
- ❖ The speaker shared valuable insights on Role of cloud and Generative AI in Energy Sector, importance of cyber hygiene in the Energy sector and various exciting opportunities in the related field.



Electrical Safety & CPR Mock Drill

Date: 28th January 2025

Venue: Smart Classroom, ECE Dept.

KEY HIGHLIGHTS:

- ❖ Electrical safety, First aid and mock drill on CPR was conducted .
- ❖ The training aimed to reinforce essential safety practices and emergency response protocols in the workplace covering Electrical Safety, emphasizing proper handling of electrical equipment, identifying hazards, and emergency shutdown procedures.
- ❖ The CPR demonstration and mock drill ensured that participants understand the correct steps for reviving someone in case of cardiac arrest.
- ❖ The session was led by accomplished professionals from Global Fire and Health Services, Rohtak (ISO certified), established in providing certified courses and trainings in First-Aid, Emergency Medical Care and CPR.



From sensors to solutions: Bridging problem solution fit and product market fit in IOT

Date: 17.1.25

Venue: Lab Block ,Smart Classroom

KEY HIGHLIGHTS:

- ❖ The event conducted in collaboration with IIC, GTBIT aimed to provide participants with a comprehensive understanding of IoT technology and the crucial steps in transforming ideas into market-ready products.
- ❖ The session began with an introduction to the basics of IoT, by our experienced ECE faculty Ms. Neetu and Ms. Varsha, highlighting the role of sensors in collecting real-time data and converting it into actionable insights.
- ❖ Videos were also provided as instructional guides on how to integrate sensors with platforms like Raspberry Pi and Arduino. These resources helped students understand how to set up, program, and troubleshoot the sensors.



Seminar on IOT And Cloud Platform Communication Protocol

Date: 8 November 2024

Venue: Lab 7

KEY HIGHLIGHTS:

- ❖ Students learned about various IoT Communication Protocols like MQTT (Message Queuing Telemetry Transport), CoAP (Constrained Application Protocol), HTTP/HTTPS (Request/response protocols for device-cloud communication), DDS (Data Distribution Service)- Scalable protocol for real-time data exchange and LWM2M (Lightweight Machine-to-Machine)- Device management protocol.
- ❖ They also learned about various Cloud Communication Protocols like RESTful APIs , Web Sockets and AMQP (Advanced Message Queuing Protocol)



Drone Making Workshop

Date: 6 November 2024

Venue: BVS Auditorium

KEY HIGHLIGHTS:

Students learned about:

- ❖ Drone Components: Essential parts of a drone
- ❖ Frame: The structure that holds the drone together, typically made of plastic or metal
- ❖ Various Motors, Electronic Speed Controllers (ESCs), Battery , Flight Controller, Camera
- ❖ Understand how to assemble the drone components, including wiring, motor alignment, and software configuration
- ❖ Problem-Solving Skills: Encouraged to design and build unique drones.



Sanchar 2.0 (ECE Dept.'s Annual Tech Fest)

- ❖ Date: 11 September 2024
- ❖ Venue: ECE Dept. Lab Block Ground floor
- ❖ KEY HIGHLIGHTS:
- ❖ Carrying the legacy forward Tech Fest Sanchar 2.0 was held where A vibrant display of creativity and innovation was presented by the Department of Electronics and Communication Engineering.
- ❖ Seven different events **Open house, Battle of codes, Quizzing Cameos, Tech talk, Bytes and brushes, The Pixel Perfect, The perfect pitch** were conducted successfully.
- ❖ The events were managed by the students in role of event managers, coordinators and volunteers under supervision of ECE faculty members. Tech Fest 2k24 embodied a fusion of knowledge and energy, highlighting the passion that Guru Tegh Bahadur Institute of Technology's students possess for their craft.
- ❖ The event was a huge success as last year. The event witnessed huge footfall of **around 600 + students** marking it as one of the most successful event of the institute.



STC on “Education in the METaverse Era” with NITTTR

Date: 27th-31st May 2024

Venue: Lab 18, First Floor

KEY HIGHLIGHTS:

- ❖ The objective of this course was to explore the basic dimensions and elements related to new and upcoming area of Metaverse and how Metaverse can be used in marketing of educational domain.
- ❖ Course was conducted by NITTTR Chandigarh with ECE department GTBIT as the remote center.
- ❖ The Course Content consisted of defining Metaverse, potential of Metaverse in business world, understanding the building blocks of Metaverse: Augmented Reality, Virtual Reality, Artificial Intelligence and IoT, Marketing and Metaverse, Obstacles and Challenges in application of Metaverse in various fields.

