

## ABOUT THE INSTITUTE

National Institute of Technology Manipur, a centrally funded institution is set up to impart quality technical education at various levels of higher learning. It is one of the ten new NITs established and developed as Institute of National Importance by an act of Parliament. NIT Manipur started its first session with the three branches of Engineering – Electrical and Electronic Engineering, Computer Science & Engineering, Electronics and Communication Engineering. The functioning of institute was started at its temporary Campus at Takyelpat, Imphal under the mentorship of NIT Agartala. The Institute has acquired 138.2 hectare of land in the lush green area of Langol, Imphal and started its functioning at its permanent campus since 2014. This Institute has now 5 branches of Engineering viz CSE, EEE, ECE, Civil, Mechanical and Basic Science and Humanities Department and open courses on B.Tech., M.Tech., M.Sc. and Ph.D.



## ABOUT THE DEPARTMENT

The Department of Electrical Engineering, which started in 2010, initially it was named as Electrical and Electronic Engineering, has qualified and devoted faculty members. Presently the department offers B.Tech, M.Tech and Ph.D. programmes. The departmental research is focused in the area of electric vehicles and its charging technologies, application of power electronics to the power systems, renewable energy integration and smart grid technology. The department has the state of the art laboratory and research facilities.

One Week

Short-Term Training Programme

On

Research Trends and Advancement of Power  
Electronics Converter for Photovoltaic and  
Electric Vehicle Systems

26<sup>th</sup> August - 30<sup>th</sup> August 2024

HYBRID MODE



Organized by:

Department of Electrical Engineering National Institute  
of Technology Manipur, Imphal, India – 795004

# OBJECTIVE OF THE PROGRAM

The short-term training program (STTP) is specially designed and framed, taking into account the latest research trends in energy management and the control of power electronics devices for photovoltaic (PV) and electric vehicles (EV) within the electric grid. This course comprehensively overviews fundamental concepts, practical applications, and advanced control strategies for grid-interfaced PV and EV systems. Furthermore, it delves into the various challenges and opportunities associated with integrating PV and EV into the grid. Distinguished speakers from academia and industry will share their expertise during the workshop, focusing on key thematic areas. The detailed topics covered include:

- Advanced power electronic interfaces for photovoltaic (PV) and electric mobility.
- Cutting-edge insights into electric vehicle charging technologies.
- Power quality issues with high penetration of renewable energy.
- Recent research trends in power electronics converters for PV and EV systems.
- Challenges and opportunities for electric vehicle integration into the grid.
- Electric vehicle charging Infrastructure.
- Power supply management for electric Vehicle
- Renewable energy and energy storage towards sustainable living.

### Chief Patron

Prof. D V L N Somayajulu  
Director,

National Institute of Technology Manipur

### Patron

Prof. Khumukcham Tomba Singh  
Registrar,

National Institute of Technology Manipur

### Patron

Dr. L Herojit Singh  
Dean Academic,

National Institute of Technology Manipur

### Chairman

Dr. Benjamin A Shimray  
HOD, Department of EE

National Institute of Technology Manipur

### Coordinators

Dr. Manash Kumar Mishra

Asst. Professor, Department of EE

National Institute of Technology Manipur

Dr. Shuma Adhikari

Asst. Professor, Department of EE

National Institute of Technology Manipur

### Advisory Committees

Dr. Kundan Kumar

Asst. Professor, Department of EE

National Institute of Technology Manipur

Dr. Chitrasen Meiti

Asst. Professor(Contractual), Department of EE

National Institute of Technology Manipur

# REGISTRATION DETAILS

The details of the registration fee for this short-term programme are as follows:

Academician/ Faculty members	Rs 200
Research Scholar/ PG/ Others	Rs 100

1. Registration amount has to be transferred to below mentioned account details Only (PhonePe/GPay/Paytm):

Name of Account: **Director NIT Manipur IRG**

Account No:**60330100000143**

IFSC Code: **BARB0NITMAN**

Bank Name: **Bank of Baroda**

Branch: **NIT Manipur Campus**

2. Registration has to be done using the following link:

<https://forms.gle/9ZjrQ1hiMFURqm3TA>

On receipt of registration, participants will be sent a confirmation of their participation through email

QR scan for the link



## WHO CAN ATTEND?

Academicians, Faculty members, R&D organizations as well as industries, and Research Scholars (PhD, PG) students of power system, power electronics, and control systems can participate in this One-Week Online Short-Term Course.



## IMPORTANT DATES

Course duration: 26<sup>th</sup> August 2024 to 30<sup>th</sup> August 2024

Last Date: Registration cum submission of fee: 24<sup>th</sup> August 2024