## ONE WEEK

# **Short-Term Training Programme On**

Recent Trends in Modeling and Control of Grid interfaced Photovoltaic and Electric Vehicle Systems

30th October -3rd November 2023



# **HYBRID MODE**



# **Organized by:**

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

### 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.

### **OBJECTIVE OF THE PROGRAM**

The short-term training program (STTP) is specially designed and framed taking into account the recent trends of energy management and control of power electronics devices for photovoltaic (PV) and electric vehicles (EV) into the electric grid. Particularly this course describes general concepts, applications, and control strategies of grid-interfaced PV and EV systems. In addition, it discusses the various challenges and opportunities while PV and EV are connected to the grid. Eminent Speakers from the field of Academia and Industry will be delivering their lecturers on the thematic areas of the workshop. The details topics are as follows:

- Power Electronic Interfaces for Photovoltaic and Electric Mobility.
- Integration of Photovoltaics in a Distributed Generation
- Integration of Electric Vehicles with Distributed generation
- Challenges and Opportunities in Integrating PV with Grid
- Challenges and Opportunities for Electric Vehicles Integration into Grid
- Power Supply Management for Electric Vehicle
- Renewable Energy and Energy Storage towards Sustainable Living.
- Control of Power Electronic Converters in Distribution Grid Application



#### **Chief Patron**

Prof. Khumanthem Manglem Singh Director (i/c), NIT Manipur

#### **Patron**

Dr. Loushambam Herojit Singh Dean Academic, NIT Manipur

#### **Coordinators**

Dr. Manash Kumar Mishra
Asst. Professor, Department of EE
National Institute of Technology Manipur

Dr. Kundan Kumar Asst. Professor, Department of EE National Institute of Technology Manipur

#### **Convennors**

Dr. Benjamin A Shimray
HOD, Department of EE
National Institute of Technology Manipur

Dr. Shuma Adhikari Asst. Professor, Department of EE National Institute of Technology Manipur



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.



## **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: BARBONITMAN

Bank Name: Bank of Borada

Branch: NIT Manipur Campus

2. Registration has to be done using the following link: <a href="https://shorturl.at/lmo56">https://shorturl.at/lmo56</a>
On receipt of registration, participants will be sent a confirmation of their participation through email.

QR scan for the link





### **IMPORTANT DATES**

Course duration: 30<sup>th</sup> October 2023 to 3<sup>rd</sup> November 2023

Last Date: Registration cum submission of fee: 28<sup>th</sup> October 2023