



One Week Faculty Development Programme (Online) on

Next Generation Power Electronics: AI Application in Sustainable Energy and E- Mobility

7th -11th September, 2026



Organized by
E&ICT Academy IIT Guwahati
in association with National Institute of
Technology, Manipur

Venue: In Webex Platform (Online)



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About E&ICT Academy

Electronics and ICT Academy is an initiative of the Ministry of Electronics and Information Technology (MeitY), Government of India for conducting various faculty/Research Scholar Development Programme. Academy has planned short term training programmes on fundamental and advanced topics in IT, Electronics & Communication, Product Design, Manufacturing with hands-on training and project work using the latest software tools and systems. In addition, the Academy will conduct specialized/ customized training programmes an research promotion workshops for corporate sector & educational institutions. Training of 1,35,000 Faculty Members/Trainers in Engineering and non-engineering colleges. Besides training of faculty members, at least 350 new/ unique FDPs would be developed in niche/ state-of-the art technological areas, considering future-of-work and integration of industry specific requirement.

Registration Fees:

Rs. 500/- (Inclusive of GST)

Mode of Payment: Online

Only (NEFT/RTGS/IMPS)

Registration Link:

<https://forms.gle/mDmC5fgdrGhWSd3c7>

Scan to Register



eictacad@iitg.ac.in
eictacad@gmail.com



+91-361-2583182 (O)
+91-7086502139 (M)



About NIT Manipur

About NIT Manipur National Institute of Technology Manipur, a centrally funded institution is set up to impart quality technical education at various levels of higher learning. 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 is established 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.

Course Objective

This FDP aims to enhance the knowledge and research capabilities of faculty members, researchers, and industry professionals in emerging power electronics technologies. The FDP focuses on the application of Artificial Intelligence (AI) for the design, control, optimization, and monitoring of sustainable energy systems and electric mobility solutions. The FDP will equip participants with contemporary skills and insights necessary to address the challenges of future energy and transportation systems while fostering academia–industry collaboration and high-impact research.

Course Outcome

Upon successful completion of the FDP, participants will be able to:

- Develop a strong understanding of next-generation power electronics technologies for sustainable energy and electric mobility applications.
- Apply AI techniques for the design, control, optimization, monitoring, and predictive maintenance of power electronic and energy systems.
- Design AI-enabled battery management systems, smart charging infrastructures, and vehicle-to-grid (V2G) solutions.
- Utilize advanced simulation and real-time testing platforms (e.g., OPAL-RT and Typhoon HIL) for modeling, validation, and performance assessment.

Who Can Attend?

Programme is open to Faculty Members and PhD Research Scholars from Universities and Colleges. The Faculty/ Staff are requested to submit the NOC from their respective departments before attending the session. For details of the programme and course contents etc., please log onto Electronics and ICT Academy website: <https://eict.iitg.ac.in>

For Online Transfer

Account Name: IIT Guwahati R
and D, E&ICT Academy
Account No.: 36071160089
IFSC Code: SBIN0014262
Bank Name: State Bank of India



Please Note:

- 1.Registration fees is refundable if the registration cancellation request is submitted before the last date of registration.
2. Participants have to submit UTR No. as the proof of payment while registering for the Faculty Development Programme.

Course Date

7th -11th September, 2026

Last Date of Registration

01/09/2026

**(Online Registration Link will be open
from: 10/06/2026)**

Per Day Timing

09:30 am to 05:30 pm

Contact Hours for the Course

- The mode of training is Instructor-led live online.40Hrs (Theory, Activities, Case Studies & Evaluation)
- E-certificates will be given to participants who have attended more than 75% of the FDP sessions and complete the given online assessments during FDP.40Hrs (Theory, Activities, Case Studies & Evaluation)

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