



FACULTY DEVELOPMENT PROGRAMME (FDP)

"Power Electronics Technology for Self-Reliant and Viksit Bharat"

(7th Dec to 12th Dec 2024)

Organised by

Visvesvaraya National Institute of Technology, Nagpur, M.S., India

In Association With

Electronics & ICT Academy, NIT Warangal

Sponsored by

Ministry of Electronics and Information Technology (MeitY), GoI



Preamble:

"Electronics & ICT Academy – Phase II" was set up at NIT Warangal with financial assistance from MeitY, GoI. This academy's role is to offer Faculty Development Programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, advice and support for technical incubation and entrepreneurial activities.

About the FDP:

This Faculty Development Program (FDP) aims to empower educators and researchers with the latest advancements in Power Electronics Technology, vital for shaping a Self-reliant and Viksit Bharat. This program delves into recent trends in embedded power electronics, emphasizing renewable energy integration with grid and storage solutions. Participants will explore cutting-edge smart EV charging infrastructure for future e-mobility and the design of high-power density power electronic converters, application of AI and Machine Learning in power electronic converters, reliability analysis and the development of fault-tolerant converters and many more.

Major Course Content:

- Mission for Self-reliant and Viksit Bharat with the help of Power Electronics Technology
- Renewable energy integration with the grid and storage
- Smart EV charging infrastructure for future E-Mobility
- Design of High-Power Density power electronic converters
- Recent Trends in Embedded Power Electronics Technology
- Application of AI/ML in Power Electronic Converters
- Fault diagnosis using AI/ML techniques
- Reliability analysis and fault-tolerant converters
- Design of Power conditioning systems for domestic and industrial applications
- Laboratory Sessions

Experts/Speakers:

Resource persons will be from IITs, NITs, and Industries.

Registration Fees:

Registration fees for the FDP, inclusive of GST is:

Faculty/Research Scholars	Rs. 2500/-
Industry Participants	Rs. 7500/-

Participants need to pay the Registration Fee Online using the following details:

Account Name: Electronics & ICT Academy NITW

Account No: 62423775910

IFSC: SBIN0020149

Bank and Branch: State Bank of India, NIT(REC) Warangal

How to Apply:

Participants are required to fill out the online registration form by clicking on the following link:

<https://forms.gle/jgkz8HiJsLwLDH7f9>

Selection Criteria:

Selection will be made based on first-come-first-serve basis to a maximum number of 40 participants. Candidates will be issued satisfactory certificates on successful completion of the course.

Important Dates:

Last date of Application	02 Dec 2024
Selection Notification	03 Dec 2024

About VNIT Nagpur:

Visvesvaraya National Institute of Technology, Nagpur is one of the thirty one National Institutes of Technology in the country. The Central Govt. by Act of Parliament (National Institutes of Technology Act, 2007 (29 of 2007)) declared VNIT Nagpur as an Institute of National Importance along with all other NITs. Earlier, the Institute was known as Visvesvaraya Regional College of Engineering (VRCE). It was established in the year 1960. The prime objective of establishing Regional Engineering Colleges was to impart quality technical education throughout the country and foster national integration. For more details about VNIT, explore www.vnit.ac.in

About EED, VNIT Nagpur:

The Electrical Engineering Department at VNIT offers a comprehensive M. Tech program in Integrated Power System (IPS) and Power Electronics and Drives (PED), and Ph D aiming to provide in-depth knowledge and practical experience in these fields. EED VNIT is having well equipped laboratory with state of the art equipment in the area of power electronics and its various applications

About NIT Warangal:

National Institute of Technology, Warangal, is the first among 17 RECs set up as a joint venture of the Government of India and the state government. Over the years, the college has established itself as a premier Institute imparting technical education of a very high standard, leading to B. Tech degrees in various branches of engineering, M. Tech., and Ph.D. Programmes in various specializations. For more details about VNIT, explore www.nitw.ac.in

About EED NIT Warangal:

The Department of Electrical Engineering, NITW established in 1959. The department has been actively engaged in teaching and research in diverse fields of Electrical Engineering with excellent faculty. The department offers Under Graduate Programme in Electrical and Electronics Engineering and Post Graduate Programmes in "Power Electronics & Drives", "Power Systems Engineering", "Smart Electric Grid", "Control & Automation" and also offers Ph.D. Programme in Electrical Engineering. The department has well-equipped state-of-the-art laboratories and dynamic group of faculties with profound experience in academics, research and industry collaboration.

Course Coordinators:

Dr. Pradyumn Chaturvedi, Associate Professor, EED, VNIT, Nagpur

Dr. Narendrababu A, Assistant Professor, EED, VNIT, Nagpur

Dr. B. L. Narasimharaju, Professor, EED, NIT Warangal

E-mail: pradyumn.c@eee.vnit.ac.in,
anbabu@eee.vnit.ac.in, blnraju@nitw.ac.in

Ph. No: 9826585016, 8630381828, 9448401052