



ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP)

ON

Research Potential in Advanced Power Electronics & Renewable Energy

(13th January, 2025 - 24th January 2025)

Organized by

Electronics & ICT Academy & Department of Electrical Engineering, NIT Warangal

In Association With

New Horizon College of Engineering, Bengaluru & IEEE Power Electronics Society Bangalore Chapter

(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)



Preamble:

Electronics & ICT Academy was set up at NIT Warangal with financial assistance from MeitY, Gol. The role of academy is to offer faculty development programmes in 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 FDP is designed to address advancements in power conversion topologies and their industrial applications, encouraging research and academic quality improvement among professionals, students, and academicians. The course offers a unique opportunity to explore real-time power electronic systems and their applications through theoretical sessions, simulations, and laboratory-based experiments and demonstrations. The development of switching devices, magnetic components, control techniques, computational methods, and DSP/FPGA controllers has driven these advancements. Power electronics applications span various fields, including renewable energy industry, transportation, medical, telecommunications, residential energy systems, and electric vehicles, with both low and high-power switching converters being developed in these areas. Additionally, this FDP aims to provide scope for future research.

Major Course Content:

- Power converters for renewable energy interface.
- High Power Density Converters for electronic products
- High Bright LED lighting systems for indoor/outdoor applications
- Advanced Electric Drives and Control Techniques for EVs
- Energy Efficient Drives especially for elevators
- Hands on exposure to renewable integration & power converters.
- Enabling technologies for high power density converters.

Faculty conducting this programme:

The programme will be conducted by the faculty members from NIT Warangal; Academicians in the concerned field from IITs/NITs/IIITs are invited to deliver lectures in the programme. Speakers from industries are also expected to deliver the lectures as part of the course.

Registration Fee Particulars:

Faculty and Research Scholars	Rs. 1000 /-
Industry Participants	Rs. 2250/-

Participants are required to pay the Registration Fee Online using the following NEFT transfer details:

Online Transfer Details	
Account Name	: Electronics & ICT Academy NITW
Account No	: 62423775910
IFSC code	: SBIN0020149
Bank and Branch	: State Bank of India, NIT(REC) Warangal

How to apply:

Faculty/Ph.D. scholars of Electrical Engineering/allied disciplines & Industry personnel are encourage to apply. Participants are required to apply through online registration form by clicking on the following link:

<https://forms.gle/NWEH4gCvSp2U5hVN6>

Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 50 (Fifty). Candidates will be issued certificates on successful completion of the course.

Important Dates:

Last date (Application)	06.01.2025
Selection List by E- mail	10.01.2025
Duration	13.01.2025 to 24.01.2025

About NITW, EE Department, 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, it 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. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

The Department of Electrical Engineering was established as one of the major departments of NITW, in the year 1959. It offers B.Tech in Electrical & Electronics Engineering, M.Tech program in Power Electronics & Drives and Power Systems and Ph.D program. Warangal is known for its rich historical and cultural heritage.

About NHCE, R&D and EEE Department, Bangalore:

New Horizon College of Engineering is an Autonomous college affiliated to Visvesvaraya Technological University (VTU), approved by the All India Council for Technical Education (AICTE) & University Grants Commission (UGC). It is accredited by NAAC with 'A' grade & National Board of Accreditation (NBA). New Horizon college of Engineering is located in the heart of the IT capital of India, Bangalore. The college campus is situated in the IT corridor of Bangalore surrounded by MNCs and IT giants.

Department of Research and Development at New Horizon College of Engineering (NHCE), Bangalore boasting a vibrant R&D culture fostering an innovative spirit, inspiring young minds across the campus. The sustained and passionate efforts of the R&D Cell at NHCE have carved a niche for the institution both in India and abroad. The R&D Cell has established a dynamic Institution's Innovation Council (IIC) and maintains active collaborations with various working groups and professional bodies both domestically and internationally.

The Department of Electrical and Electronics Engineering is one of the prestigious branches of Engineering and one among the oldest departments of NHCE-Bangalore started in 2001. The EEE Department has been playing a vital role in producing engineers and technologists of high caliber ever since it was established in the year 2001. A critical investigation and innovation into the modern state-of-art and cutting-edge technology lead to the fact that an electrical graduate fit better in today's competitive world.

Coordinators:

Dr. B. L. Narasimharaju
Professor
Department of Electrical Engineering
National Institute of Technology,
Warangal – 506004, Telangana
Email: blnraju@nitw.ac.in
Ph. No: 9448401052

Dr. Vinoth Kumar K
Professor & Associate Head, Dept. of R&D
Dr. Sujitha S
Professor, Dept. of EEE
New Horizon College of Engineering,
Bengaluru – 560103, Karnataka
Email: dr.vinothkumar@newhorizonindia.edu
sujithas@newhorizonindia.edu
Ph. No: 9944808092, 9942372240