

ABOUT THE INSTITUTION

New Horizon College of Engineering is an Autonomous college affiliated with Visvesvaraya Technological University (VTU), approved by the All India Council for Technical Education (AICTE) & University Grants Commission (UGC). NAAC and the National Board of Accreditation (NBA) have accredited it with an A grade. New Horizon College of Engineering is located in the heart of the IT capital of India, Bangalore, surrounded by MNCs and IT giants. The campus offers a scenic, peaceful environment that nurtures personal and intellectual development. The modern infrastructure supports effective curriculum delivery, and students can access state-of-the-art facilities and faculty support to pursue their interests.

ABOUT THE DEPARTMENT OF R & D

The Department offers unparalleled facilities and proactive initiatives to promote sponsored, academic, and consultancy research. Our vibrant R&D culture fosters an innovative spirit, guiding and mentoring young minds with the help of motivated faculty members from all departments. The sustained and passionate efforts of the R&D Cell at NHCE have carved a niche in India and abroad. It has established the vibrant Institution's Innovation Council (IIC) and actively collaborates with various work groups and professional bodies in India and abroad.

ABOUT THE DEPARTMENT OF EEE

The EEE Department at NHCE, Bangalore, is one of the oldest and most prestigious branches of engineering, with a history dating back to 2001. Since its inception, the department has produced high-calibre engineers and technologists, earning an 'A' Grade accreditation from NAAC and NBA. By collaborating with multinational companies in

Electrical Engineering, the department aims to bridge the gap between industry and academia. The Indo-French Center of Excellence in Electricity, Automation, and Energy (IFCEEAE) is an initiative resulting from an 'MoU' with the French Ministry of National Education and Schneider Electric India Pvt. Ltd.

ORGANIZING COMMITTEE

Chief Patron

Dr. Mohan Manghnani, Chairman,
New Horizon Educational Institution, Bengaluru

Patron

Dr. Manjunatha, Principal
New Horizon College of Engineering, Bengaluru

Convenors

Dr. Revathi V, Professor & Dean, R & D, NHCE

Dr. Sakthivel Aruchamy, Professor & HoD, EEE, NHCE

Organizing Secretaries

Dr. Vinoth Kumar K,
Professor & Associate Head – R&D,
Department of EEE / R&D,
New Horizon College of Engineering, Bengaluru
E-mail: dr.vinothkumar@newhorizonindia.edu
Mobile : +91 9944808092

Dr. Sujitha S,
Professor, Department of EEE,
New Horizon College of Engineering, Bengaluru
E-mail: sujithas@newhorizonindia.edu
Mobile : +91 9942372240

Co-ordinators

Dr. Mausri Bhuyan, Assistant Professor, EEE, NHCE

Ms. Sangeetha C N, Assistant Professor, EEE, NHCE

Short Term Training Programme (STTP) on

Research Challenges in Advanced Power Converters for Industrial Electronics Applications

11th November 2024 – 15th November 2024

Jointly organized by

Department of Research and Development
&
Department of Electrical and Electronics Engineering



**NEW HORIZON
COLLEGE OF ENGINEERING**

Autonomous College Permanently Affiliated with VTU, Approved by AICTE & UGC
Accredited by NAAC with 'A' Grade, Accredited by NBA

Bengaluru 560103, Karnataka, India

Sponsored by



In Association with



THEME OF THE PROGRAMME

Learn the fundamentals of power generation technology from renewable energy sources such as wind and solar power at our workshop. We will cover controlling and managing power electronic converters and energy storage components when connecting these sources to the grid. Explore the design of power electronic converters, including conventional and emerging topologies, to optimize energy conversion and transmission, control reactive power, minimize harmonic distortion, and increase efficiency. We will also focus on power quality issues and innovative energy management principles. Join us to discuss common interests, challenges, and solutions for grid integration of renewable energy systems. Finally, we will explore the expected trends in power electronics technology for renewable energy systems. This event aims to bring together experts in Power Electronics & Renewable Energy to provide an interactive forum for discussing and exchanging ideas to promote sustainable economic growth through renewable energy.

PROGRAMME CONTENT

The programme covers the following important aspects

- Introduction about Power Converters
- Trends in Power Electronics.
- Modelling of Converter to utilize Fuel cell as a Compensator in a Distributed Generation system.
- Applications of Power Electronics Converters in DFIG.
- Design of Autonomous control of microgrid by Power Electronics Converters.
- Design of Power Converters for Solar Photovoltaic Systems.
- Advanced Power Electronics Technologies on Solar Photovoltaic and Wind Power.
- Design of Power Converters for Fuel Cell Systems.

- Design of high-gain DC-DC Converters for PV Applications.
- Role of Data Mining and Artificial Intelligence in Electrical Engineering.

EXPERT INSTRUCTORS

Highly qualified faculty members from prestigious institutions such as IIT and NIT and industry professionals will lead both theory and practical sessions during the Faculty Development Program (FDP).

WHO CAN ATTEND?

Faculty members, Research Scholars, UG, and PG students from AICTE-approved institutions are eligible for the STTP.

IMPORTANT DATES

Last date for registration : **30.10.2024**

DURATION OF COURSE SESSIONS

The course consists of five offline sessions, each lasting two hours.



REGISTRATION

Classification	Fee
B.E / B.Tech students / PG Students / Research Scholars / Faculty Members / Industry	₹ 1500

Registration fee to be paid through NEFT as per the details given below:

Bank Name : INDIAN BANK
Branch : New Horizon College of Engineering,
Bengaluru
Account Number : 484700078
Account type : CURRENT A/C
IFSC Code : IDIB000N112

The fee should be paid only online.



The registration fee includes GST, course material, lunch, and refreshments.

HOW TO APPLY?

The participant has to register through the portal below:

<https://forms.gle/FwtHscERtzGAYZB8>

Participant Selection and Certification Criteria

Selection for the offline STTP will be on a first-come, first-served basis, with a maximum of 50 participants permitted. Selected candidates will be notified by 03.11.2024.