

An Online One Week Short Term Course
On
**Power Electronics and
Renewable Integration for
Consumer Applications
(PERICA-2020)**

16th September - 20th September, 2020

Organised by



Electrical Engineering Department
Motilal Nehru National Institute of Technology
Allahabad, Teliarganj, Prayagraj-211004
India.

RESOURCE PERSON

The speakers for the course will be the faculty/ domain experts from IITs, IISc, NITs and Industry /Abroad.

ORGANIZING COMMITTEE

PATRON

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Director, MNNIT Allahabad

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CONVENER

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COURSE OBJECTIVE

The aim of this short term course is to educate and train the participants on different aspects of power electronics applied in renewable and consumer applications. Over the last two decades the power electronic technologies have been playing major role in consumer applications. Power processing through converters and digital controllers have been used extensively for development of consumer electronics. Renewables like solar and wind have become emerging sources of energy for feeding the domestic and commercial loads. Global concerns for clean and sustainable energy have compelled mankind to increase the usage of renewable sources. Power technologies for simple, reliable, cheap and fast power conversion are need of the hour. The same is also reflected in the current research trends and plays a vital role in improving the quality of human life.

The participant would be exposed to the various challenges faced in today's low power converter technologies, the state of art in various streams of power electronic research and consumer applications.

ABOUT THE INSTITUTE

Motilal Nehru National Institute of Technology Allahabad, (MNNIT) (formerly Motilal Nehru Regional Engineering College MNREC, Allahabad) is an institute with total commitment to quality and excellence in academic pursuits. It is among one of the leading institutes in India. It was established in the year 1961 as a joint enterprise of Central Govt. of India and State Govt. of Uttar Pradesh in accordance with the scheme of establishment of REC's. However with effect from June 26th of 2002 the institute became deemed university and an Institute of national importance.

COURSE CONTENT

The course will be interactive consisting of the following components

- ✓ Design of efficient power converters
- ✓ Motors for electric vehicle application
- ✓ Modern UPS Technologies
- ✓ LED technologies and recent advancements
- ✓ AC & DC hybrid power supply systems and its analysis.
- ✓ Hybrid renewable energy systems
- ✓ Power electronics for wind, fuel cell and solar PV system.
- ✓ Trends in power supplies and battery chargers.
- ✓ Switched mode rectifiers and high PFC converters.
- ✓ Harmonic pollution, Active filters, Power conditioning systems and VAR compensators.
- ✓ Variable speed drives: applications and challenges.
- ✓ Power electronics and energy conservation.
- ✓ EV charging station.

WHO CAN ATTEND?

The course would benefit many across various disciplines of engineering and technology. It is of interest to serving teachers and researchers, UG, PG and doctoral students of different Universities/ Institutes/ colleges & Professionals working in the Industries. No shortlisting criteria. All the applications will be considered.

IMPORTANT DATES

Last date for online registration: **15/09/2020**

Course dates: **16/09/2020 - 20/09/2020**

ABOUT THE DEPARTMENT

The Electrical Engineering Department (EED) came into existence in the year 1961, with the objective to produce technical manpower of high quality and promote research and development activity. With a modest beginning of introducing four year BE degree course in 1961, a post graduate programme in Electrical Machine / Power System / Control System was introduced in the year 1970-71.

Currently, the department offers courses leading to a Bachelor of Technology in Electrical Engineering and Post Graduate (M. Tech.) and Ph.D programs in (i) Power Electronics and Drives (ii) Control & Instrumentation and (iii) Power System, under Regular, Part-Time and QIP categories. The department has qualified and experienced faculty in all the related fields of Electrical Engineering viz. Electrical Power System, Electrical Machines, Control & Instrumentation and Power Electronics.

The vision of the Department is to produce globally competitive technical manpower with sound knowledge of theory and practice, with a commitment to serve the society and to foster cutting edge research in Electrical Engineering pertaining to the problems currently faced by the country and the world.

COURSE EVALUATION

On successful completion of the course, the participants would be awarded 'Course Completion E-Certificate'.

FEE STRUCTURE

Participants: Industry and R&D Units: Rs.1500
Faculty/Academic Staff: Rs. 1000/-
UG, PG Students and Ph.D Scholars: Rs.750/-

ONLINE PAYMENT OF COURSE FEES

Bank account information for direct transfer of registration fee for PERICA-2020.

Account Name: PERICA-2020

Account Number: 7766020000075

IFSC Code: BARB0VJMNRE

Bank: Bank of Baroda

Branch: MNNIT Allahabad

ONLINE REGISTRATION

After paying registration fee by any online mode, kindly capture an image of proof for the payment. The participants have to register for the course online at the following registration portal and send the registration form to venkateshn@mnnit.ac.in

Link: <https://forms.gle/hp14Lhu7ABzoGqwHA>

MAILING ADDRESS

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