

4th One Week Self-Financed Short Term Course on Advances in Power Technologies (APT-2025)

June 23 – 27, 2025 [Hybrid Mode]



About the Institute (MNNIT Allahabad)

Motilal Nehru National Institute of Technology (MNNIT) Allahabad was formerly known as Motilal Nehru Regional Engineering College MNREC, Allahabad. It is an institute with total commitment to quality and excellence in academic pursuits, and 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, now known as Motilal Nehru National Institute of Technology Allahabad.

About the Electrical Engineering Department

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

About APT-2025

The power sector is undergoing rapid advancements, with a focus on renewable energy sources like solar and wind, digitalization, and smart grids, all aimed at increasing efficiency, reducing emissions, and improving grid stability. Smart grids are transforming the traditional power system by enabling two-way communication, real-time monitoring, and automation, leading to improved efficiency and reliability. Emphasis on the development of smart cities has also posed many challenges such as need of green and clean energy, smart transportation systems etc. This has led to the increasing penetration of Distributed Generation in the form of Microgrid and smartgrid.

The Department of Electrical Engineering has successfully organized three sequels of one week short term course on Advances in Power Technologies (APT), i.e., APT-2017, APT-2018 & APT-2021, from 15th – 20th May, 2017, 10th – 14th September, 2018 & 20th - 24th December, 2021. The 2nd one week short term course on Advances in Power Technologies (APT-2018) from 10 – 14th September, 2018, was organized in joint collaboration with the Department of Electrical Engineering, KNIT Sultanpur, under the twinning scheme of TEQIP-III. In continuation, the Department of Electrical Engineering, MNNIT Allahabad proposes to organize the 4th one week self-financed short term course on Advances in Power Technologies (APT-2025) during 23rd to 27th June, 2025 in hybrid mode. This one week short term course on "Advances in Power Technologies" aims to make people aware about the integrated power development schemes and changing scenario in the power sector. This is an interdisciplinary course that will cover the application of artificial intelligence techniques in developing smart and sustainable energy solutions. It will also focus on dissemination of the state of art knowledge in Modern distribution system and grid interface technologies.

The 4th one week short term course on "Advances in Power Technologies (APT-2025)" will cover the following broad areas but not limited to:

- Self-healing grids intelligent monitoring and management
- AI applications in developing smart and sustainable energy solutions
 - Architectures, grid codes and standards of smart grid
- Advanced metering, communication networks and Cyber security of smart grid
- IoT applications in smart grid
- Challenges and opportunities of EVs integration in smart grid
- Smart sensors for smart grid protection
 - Energy management and demand response
- Energy storage systems for smart grids

The course objective is to bridge the gap between academic research and industry, providing in-depth insights into sustainable smart grids, e-mobility and renewable energy integration through expert sessions and hands-on sessions. **Important Note:**

- The candidates must pay the registration fee within the due date i.e., June 18, 2025.
- It is mandatory to mention "02/Short Term Course (APT-2025/EED/2025-26/SNFCE)", as a remark while transferring the registration fee.
- For successful registration the complete details shall be provided on the google form link within the time frame.
- Participation is purely on first come and first serve basis.
- Details about the STC will be posted at appropriate time on the Institute website. Please keep visiting <u>https://www.mnnit.ac.in/index.php/institute/469-stc-short-term-course</u>
- Accommodation in hostels/EDC guest house may be provided to the candidates based on first come and first serve on payment basis (as per Institute norms), depending upon the availability.

Organizing Committee

Patron:

Chairperson:

Prof. Rama Shanker Verma Director, MNNIT Allahabad Prof. Richa Negi Head, EED

Coordinators (s):

Prof. Nitin Singh, EED, MNNIT Allahabad Dr. Niraj K. Choudhary, EED, MNNIT Allahabad Dr. Navneet K. Singh, EED, MNNIT Allahabad

Convener (s):

Dr. Kapil Chauhan, EED, MNNIT Allahabad Dr. Vishal K. Gaur, EED, MNNIT Allahabad Dr. Satnesh Singh, EED, MNNIT Allahabad

Important Dates

April 10, 2025	Application Submission Starts
June 18, 2025	Last Date of Application and Payment of Registration Fee
June 23, 2025	Start Date of STC
June 27, 2025	End Date of STC

Registration Fees

Category	Registration Fees (Rs.) (Including GST@18%)
Students	590
Persons from	1180
Academia	
Persons from	1770
Industry	

Payment Mode: NEFT/IMPS

Account Number: 10424975574 IFSC Code: SBIN0002580 Account Name: SNFCE MNNIT Allahabad Bank & Branch: SBI, MNNIT Allahabad Swift Code: SBININBB828 (Note: Please mention "02/Short Term Course (APT-2025/EED/2025-26/SNFCE)", as a remark while transferring the registration fee

Google Form Link for Registration:

https://forms.gle/k5AUUfZe5gQymayHA

Contact Us

<u>APT-2025</u>

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