

About the Program

Modern civilization has become reliant on the unremitting supply of clean electrical power. But the power supplied by the grid and transmission system may not be always clean and continuous. In addition to the latest trends in power and energy sectors, the power and voltage requirement of the industrial applications also reached a higher level and better power quality. The researchers have invariably utilized, modified, tested, and implemented the various type of energy sources, energy storage and system configurations for a large number of applications for medium/high power and medium/high voltage systems for modern power system in grid interactive and islanded modes. The harmonic filtering and minimization, power factor improvement, reactive power compensation, static var compensation, and drives are based requirement of power and energy sectors. The conventional controllers as well as advanced controllers have been exploited for their efficient and effective performance. Recently, Artificial Intelligence (AI) based controllers are used in harmonic filtering with higher efficiency and more dynamics in power systems; the researchers have reported various methods in the literature for various applications.

The course is intended to cover all the traditional as well as advanced topics in energy and power sectors technology and their control including modeling and simulations.

About the Institute

The MANIT is successfully meeting the objective of producing skilled Technocrats of the highest quality who can take up the challenges of the industries and Research organizations of the country. MANIT offers various undergraduate

and post graduate courses and research programs. Under the peaceful and friendly environment, MANIT producing technocrats who are resources to Nation and the world. Our bright students with excellent technical skills have always been contributed to the successes of various sections.

The total area of campus is 650 acres and protected by boundary wall and ring road. The entire campus consists of administrative and academic building, workshop, Library and community centre, Residential area accommodation for students and staff and other general amenities such as post office, Shopping complex, a School for children, dispensary, an auditorium with capacity of 1000 persons and sports complex with vast expand of open area.

About the Department

The Department of Electrical Engineering Department was established in the year 1960. The department offers under graduation, post-graduation in Electrical Drives and in Power System and doctoral program. The department has highly qualified and competent faculty members and adequate facilities to support teaching and learning activity.

Programme Educational Objectives of the Department

To apply specialized knowledge for solving multi-disciplinary problems in the field of Power Electronics and Electrical Drives.

To apply analytical skills to meet the challenges of evolving technology in the area of Power Electronics to meet industrial requirement.

To promote research in the promising areas of power electronics and electrical drives through projects and dissertation based on green technology, and industrial applications.

Maulana Azad

**National Institute of Technology, Bhopal,
M.P. – 462003**

**ONLINE ONE-WEEK SHORT-TERM COURSE
ON**

***Research Trends in Energy and
Power Systems (RTEPS)***

From 19th to 23rd October 2020

Patron

Prof. N.S. Raghuvanshi, Director

Head, Electrical Engineering

Prof. Maisha Dubey

Organizing Committee

Dr. Rishi Kumar Singh,

Dr. Shailendra Kumar, Prof. Sanjeev Singh



Organized by

**Department of Electrical Engineering,
Maulana Azad National Institute of
Technology, Bhopal-462003, M.P., India.**

Registration and General Information.

For participation in the 'course' should fill the google form and mail at following mail address:

<https://forms.gle/3neZcdhVSXY9ixEB6>

Address for Communications:

Dr. Rishi Kumar Singh,

E-mail: rishiksingh@yahoo.com, **Mo: 9827260938**

Dr. Shailendra Kumar,

E-mail: er.dwivedi88@gmail.com, **Mo: 9716379527**

Prof. Sanjeev Singh

Email: sschauhan.sdl@gmail.com, **Mo: 9465237795**

Organizing committee, Department of Electrical Engineering, Maulana Azad National Institute of Technology, Bhopal, M.P., India, 462003.

The last date of applications 15th October 2020. The candidates would be informed of their selection through E-mail by **18th October 2020.**

Course Content

- Renewal energy sources, power quality and battery charging.
- Future of Artificial Intelligence in Power System Application
- Latest trends in Solar and Wind energy generations
- Switching Techniques for Parallel Connected Converters.
- Demand Response pertaining to Effective Pricing, Smart Grid, Custom Power Devices
- Basics of OPAL RT for Power system Research
- Application of Optimization in power and energy system
- DC power generation from rotating electric machines and Doubly fed induction

Generator

- Latest trends in renewable energy based microgrids
- Power systems compensation and protection

Who can apply:

- Faculty members working in the area of power and energy systems
- Industrial persons and Consultants.
- Research Scholars, UG and PG students.

Speakers:

Faculty members from IITs/NITs/ Others.

Course fee

Students/ Research scholars	Rs. 300/-
Institute/ College Teachers	Rs. 600/-
Delegates from industries	Rs. 1000/-

Account Name: Director MANIT

Account Number: 10020150107

State Bank of India, MANIT, Branch, Bhopal

IFSC Code: SBIN0001608

Swift Code: SBININBB268

In remark, kindly mention RTEPS payment.

No fee for MANIT Students.

Registration Link"

<https://forms.gle/3neZcdhVSXY9ixEB6>

Venue

ONLINE

Over Google Meet Platform

Speakers:



Prof. (Dr.) Ashish k Singh
Professor & Head,
MNNIT Prayagraj



Prof. (Dr.) Ashish Srivastava
Professor & Head,
Manipal University, Jaipur.



Dr. Himanshu Mishra
School of computing and electrical
engineering
IIT Mandi, India



Dr. Sabha Raj Arya
Electrical Engineering Department
SVNIT Surat, India



Dr. Omhari Gupta
Electrical engineering Department
NIT Jamshedpur



Dr. Omveer Singh
Department of Electrical
Engineering, GBU Noida.



Dr. Kapil Shukla
Electrical Engineering Department
MNIT, Jaipur India



Dr. Rajan Kumar
Electrical Engineering Department
NIT, Hamirpur



Dr. Sanjay Tolani
Electrical Engineering Department
SVNIT Surat

Other Speakers from MANIT-
Dr. Rishi Kumar Singh, Prof. Sanjeev Singh and
Dr. Shailendra Kumar