

DISTRIBUTED GENERATION AND MICRO-GRID

August 9-14, 2021

CURRENT CHALLENGES

Conventional power system



- Depletion of Fossil Fuel Resources
- Poor Energy Efficiency
- Environmental Pollution

Distributed generation

- Multiple generation sources
- Bi-directional power flow
- Power flow time co-ordination and management



SOLUTIONS WE WILL LEARN



- Impact of distributed generation on microgrid
- Islanding detection techniques on microgrid
- Power quality and electromagnetic compatibility
- Wide area power system monitoring and control
- Distributed cyber security techniques for smart grid



A microgrid is defined as a type of the grid consisting of prime energy movers, power electronics converters, distributed energy storage systems and local loads.

Last date

August 7, 2021

Registration Fee

Free of Cost

Registration Link

<https://forms.gle/TsGQNiAFwtCeukWg6>

**Registration
Details**

Organised by

NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND RESEARCH, CHANDIGARH

in association with

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION, NEW DELHI

Certification:
E-certificates shall be issued to all attendees on 80% attendance.

Experts Speakers

Dr. Bhim Singh, Professor, IIT Delhi

Dr. B.K.Panigrahi, Professor, IIT Delhi

Dr. Bidadhar Subudhi, Professor, IIT Goa

Dr. Barjeev Tyagi, Professor, IIT Roorkee

Dr. Bhavesh Kumar Bhalja, Professor, IIT Roorkee

Dr. Santosh Biswas, Professor, IIT Bhilai

Dr. A.V.Ravi Teja, Associate Professor, IIT Ropar

Dr. Prashant Agnihotri, Associate Professor, IIT Bhilai

Dr. Anandarup Das, Associate Professor, IIT Delhi

Dr. Bharat Singh Rajpurohit, Associate Professor, IIT Mandi

Dr. Narsa Reddy, Associate Professor, IIT Mandi

Dr. Vineetha Ravindran, Lulea University of Technology, Sweden

Dr. Hamed Bakhtiari, Lulea University of Technology, Sweden

Participation Details:

The STC will be conducted online, and is open to the Faculty members of technical institutions preferably from the Electrical Engineering Department. Other accepted departments are Electronics, Instrumentation, Computer Science & Mechanical Engineering. Postgraduate students and Ph.D. Scholars can also apply.

Programme Coordinator

Dr. Lini Mathew

Professor and Head

Electrical Engineering Department, NITTTR, Chandigarh

Email: lini@nitttrchd.ac.in

Mobile : 09876440458

Electrical Engineering Department is one of the major departments, created since the establishment of the institute. With the institute being raised to the level of national institute, the department had been conducting a large number of courses in the various emerging areas for the faculty members of Engineering colleges and polytechnics all over the country. The department has been very successfully offering Masters of Engineering Course in Instrumentation and Control in the Regular and Modular mode for several years. Being a research centre for Panjab University, Chandigarh and Punjab Technical University, Jalandhar research scholars are pursuing their Ph.D. in various areas of Electrical Engineering areas.

Facilities:

- Centre of Excellence for Hardware in Loop (HIL) in collaboration with Typhoon HIL.
- Microgrid Testbed, Grid Simulator, Phasor Measurement Unit, Doubly Fed Induction Generator (DFIG)
- MOU with M/s Typhoon HIL for research funding for Ph.D. Scholars
- Energy Lab setup with Wind, Solar & Fuel Cell integration, microprocessor based energy manager, Solar PV Training and Research Kit
- Cascade Multilevel inverter (H- Bridges) which can be interfaced with MATLAB using Dspace unit and Cyclone III FPGA development kit

A National Resource Centre for Electrical and Electronics Engineering

Developed and launched highly rated and accepted ARPIT based MOOCs courses (i) Real Time Power System Analysis and Smart Grid, (ii) Big Data Analysis in Smart Grid.

National Institute of Technical Teachers Training and Research (Formerly TTTI), Chandigarh is one of the four national institutes established by the Government of India in 1967 for the development of technical education in the country. The institute offers a wide range of Short-Term Courses for faculty and staff of technical institutions from all around the country. NITTTR also offers both part-time and regular Masters' Degree and Ph.D. programs in six engineering disciplines.

