



Training Program on Smart Grid Technologies

15-19 September 2021

Venue: PBCEC Classroom, Visitors' Hostel, IIT Kanpur

Course program



Day 1: 15 th September 2021	
09:00 AM - 09:45 AM	Inauguration
09:45 AM - 10:45 AM	Smart Grid Overview - Dr. S. C. Srivastava, IIT Kanpur
10:45 AM - 11:45 AM	Smart Grid Architecture - Dr. Ankush Sharma, IIT Kanpur
11:45 AM - 12:00 PM	Tea Break
12:00 PM - 01:15 PM	Smart Grid Measurements – Dr. Sreenath, IIT Kanpur
01:15 PM - 02:15 PM	Lunch
02:15 PM - 03:30 PM	Smart Grid Communication: A Case Study – Mr. Navpreet Singh, IIT Kanpur
03:30 PM - 03:45 PM	Tea Break
03:45 PM - 05:00 PM	Network Microgrids: Overview of UI-ASSIST Project - Dr. Santanu Mishra, IIT Kanpur
Day 2: 16 th September 2021	
09:15 AM - 10:30 AM	Data Analytics - State Estimation, Forecasting and more - Dr. Saikat Chakrabarti, IIT Kanpur
10:30 AM - 11:45 AM	Advanced Distribution Management System and DSO - Dr. Abheejeet Mohapatra, IIT Kanpur
11:45 AM - 12:00 PM	Tea Break
12:00 PM - 01:15 PM	Wireless Power Transfer Technology for Electric Vehicle Battery Charging - Dr. Shuvendu Samanta, IIT Kanpur
01:15 PM - 02:15 PM	Lunch
02:15 PM - 03:30 PM	Grid Integration of Renewables - Dr. Prasanjeet, IIT Kanpur
03:30 PM - 03:45 PM	Tea Break
03:45 PM - 05:00 PM	Energy Efficiency and Market Transformation - Mr. Anil Chaudhary, EESL
Day 3: 17 th September 2021	
09:15 AM - 10:30 AM	DC Technology: HV and LV DC - Dr. Alok Ranjan Verma, IIT Kanpur
10:30 AM - 11:45 AM	Cyber Security Aspects in Smart Grid - Dr. Kamakshi Swain, IIT Kanpur
11:45 AM - 12:00 PM	Tea Break
12:00 PM - 01:15 PM	Transmission Line Protection using Synchrophasor Technology - Dr. Vishal, IIT Kanpur
01:15 PM - 02:15 PM	Lunch
02:15 PM - 3:30 PM	Visit to Smart City Pilot Project Implementation, Batch-1 (SGCC, SS, Pilot-1)– Mr. Shiv Kumar Singh / Mr. Viresh Patel, IIT Kanpur
03:30 PM - 3:45 PM	Tea Break
03:45 PM - 5:00 PM	Visit to Smart City Pilot Project Implementation, Batch-2 (Pilot-1, SGCC, SS)– Mr. Shiv Kumar Singh / Mr. Viresh Patel, IIT Kanpur
07:30 PM Onwards	Course Dinner
Day 4: 18 th September 2021	
09:15 AM - 10:30 AM	Role of ICT in Smart Grid Technology - Mr. Pawan Vishwakarma / Mr. Aman Gupta, OSI
10:30 AM - 11:45 AM	IoT in Smart Grid - Dr. Amey Karkare, IIT Kanpur
11:45 AM - 12:00 PM	Tea Break
12:00 PM - 01:15 PM	Smart Grid Interoperability - Dr. Ankush Sharma, IIT Kanpur
01:15 PM - 02:15 PM	Lunch
02:15 PM - 03:30 PM	Visit to RTDS, Typhoon, OPAL-RT Lab Facility and Thermal Energy Storage System (Batch-1) – Dr. Rakesh Panda / Mr. Avinash Kumar / Mr. V. K. Tiwari, IIT Kanpur
03:30 PM - 3:45 PM	Tea Break
03:45 PM - 5:00 PM	Visit to Thermal Energy Storage System and RTDS, Typhoon, OPAL-RT Lab Facility (Batch-2) – Dr. Rakesh Panda / Mr. Avinash Kumar / Mr. V. K. Tiwari, IIT Kanpur
Day 5: 19 th September 2021	
09:15 AM - 10:30 AM	Controllers for Microgrids - Dr. S. R. Sahoo, IIT Kanpur
10:30 AM - 11:45 AM	Battery Technologies - Dr. K. S. Nalwa, IIT Kanpur
11:45 AM - 12:00 PM	Tea Break
12:00 AM - 01:15 PM	SCADA EMS ADMS OMS DERMS Solutions from OSI Internationals - Mr. Pawan Vishwakarma / Mr. Aman Gupta, OSI
01:15 PM - 02:15 PM	Lunch
02:15 PM - 03:15 PM	Network Microgrids Simulation Study, Dr. Anupam Soni, IIT Kanpur
03:15 PM - 03:30 PM	Open Discussion
03:30 PM - 04:00 PM	Valedictory / Closing
04:00 PM - 05:00 PM	High Tea