



Short Term Course on Power Quality Issues in Electric

Vehicles Charging Networks



(9th-13th September 2024)

Department of Electrical Engineering National Institute of Technology, Uttarakhand

About NIT, Uttarakhand

National Institute of Technology, Uttarakhand is located in the hilly terrain of Srinagar Garhwal, Pauri Uttarakhand. NIT, Uttarakhand was established in 2009 under the Act of Parliament of India by the Ministry of Education and designated with the status of "Institute of National Importance".

About

Department of Electrical Engg.

The Department of Electrical Engineering was founded in 2010 at the same time the Institute was founded, and it features a fine blend of young and energetic professors. Currently, the department offers a B.Tech. in Electrical & Electronics Engineering and an M. Tech. degree in Electrical Engineering with two specialties, namely Power System & Renewable Energy and Power Electronics & Electrical Vehicle.

The department is also offering Ph.D. program in the emerging areas of Electrical Engineering for both full time and part time researchers. The significant areas of expertise of faculty of department are Power Systems, Power Electronics, and Control Systems. They have been actively researching cutting-edge technologies and routinely publishing their findings in prestigious international publications and conferences. The department is also running the IEEE student branch chapter.

About NaMPET

National Mission on Power Electronics Technology (NaMPET) is a national mission program launched by the **Ministry of Electronics and Information** Technology (MeitY), Govt. of India, with a vision to provide the country with the capability to become a dominant player in Power Electronics Technology. Through this National level R&D Program, **Research, Development, Deployment and Commercialization of Power Electronics** Technology is envisaged by enhancing the indigenous R&D expertise and infrastructure in the country with active participation from academic institutions and industries. Centre for Development of Advanced Computing (CDAC). Thiruvananthapuram, a premier R&D organization under MeitY, is the Nodal Centre coordinating the activities of NaMPET.

About CDAC

CDAC undertakes application-oriented research, design and development in electronics, so as to generate state-of-the art producible, marketable. field maintainable products and systems. The Power Electronics group has very close association with leading academic institutions like IISc, IITs, NITs etc. CDAC has contributed significantly to the growth of industry through indigenous development of commercially viable products and systems, foreign technology absorption, consultancy and training.

Course Description

This course initiates candidates into the emerging area of Power Electronics in the application of Electric Vehicles and helps learn the Basics of Battery driven EVs and its Dynamics, Motors, Power Quality, Harmonics Impact on grid, Batteries, Charging etc. The program consists of instructor led physical lecture sessions.

Objectives

- To enhance technical and professional competency of the faculty members, Ph.D., PG and UG students.
- The recent STC has its potential applications to industrial and factory automation.

Resource Persons

- Prof. Mukesh Kumar Pathak, IIT Roorkee
- Prof. Hari Om Bansal, BITS Pilani
- Prof. Shally Vadhera, NIT Kurukshetra
- Mr. Saravana Kumar, NaMPET, Thiruvananthapuram
- Dr. Manish Barwar, OPAL-RT

Esteemed speakers from renowned institutions such as IITs (Indian Institutes of Technology), NITs (National Institutes of Technology), CFTIs (Centrally Funded Technical Institutions), and distinguished professionals from the industry will deliver talks during the short-term training program.

Patron

Prof. B. V. RAMANA REDDY Director

Chief Convener

Prof. Vivek Shrivastava, Professor EE-Department, NIT Uttarakhand

Convener

Dr. Ravinder Kumar Assistant Professor EE-Department, NIT Uttarakhand

Coordinators

Dr. Mahiraj Singh Rawat Assistant Professor EE-Department, NIT Uttarakhand

Dr. Tripurari Nath Gupta Assistant Professor EE-Department, NIT Uttarakhand

Address For Correspondence

Interested individuals should submit their nominations, along with the course fee, through the Google Form.

Dr. Ravinder Kumar, Assistant Professor Department of Electrical Engineering National Institute of technology, Uttarakhand,

Srinagar Garhwal- 246174 (Uttarakhand), India

How to Apply

A registration form (google form/ offline) should be sent to ravinder.kumar@nituk.ac.in on or before 30 August, 2024.

The google form link is https://forms.gle/F18U1cuxk1EJfqDSA

The payment to be made online /by RTGS to the NIT Uttarakhand Bank Account. Details are as follows:

A/C Name	SBI General Account
Bank Name	SBI, Srinagar-Garhwal
A/c No.	37530603682
IFSC Code	SBIN0003181

Note: The registration fee (non-refundable includes registration kit, course certificate) for the course is INR 1500/- for Industry professionals, Faculty and INR 1000/- for research scholars from recognized Engineering colleges. No fee for the participants of NIT Uttarakhand.

Accommodation

Limited accommodation is available in the NITUK Hostels for outstation participants on nominal charges and on a first come, first serve basis. Charges of Institute Hostel rooms are approximately INR 250/- per day on sharing basis. No TA/DA will be provided to the participants.