Preamble:

Electric mobility has become an important and urgent enabler of decarbonisation and air quality improvement. The challenges of Electric mobility in India, including development of electric vehicles and charging infrastructure require more attention and research. Recently, the government of India has issued guidelines for the second phase of Faster Adoption and Manufacturing of Electric Vehicles (FAME), which is a demand side incentive scheme, under the National Electric Mobility Mission Plan (NEMMP). This seems to be quite aggressive keeping in view the boundaries of the existing power infrastructure. The proposed short term course will address the key issues related to Power electronics, Electric drives and energy management aspect of Electric vehicles, and their adoption in existing Indian infrastructure. Few of the topics which will be given due weightage includes – High power density converter, Energy efficient motor drive, Electric vehicle charging stations and their impact on distribution grid, Energy management using advanced controllers, optimal site selection and Smart power system interfacing solutions.

About IIT (BHU), Varanasi

The Indian Institute of Technology (Banaras Hindu University), Varanasi owes its existence to the farsighted vision and relentless efforts of the founder Mahamana Pandit Madan Mohan Malaviyaji, who created the first comprehensive residential university of India. Three engineering and technological institutions were established viz. the Benaras Engineering College (BENCO) in 1919, the College of Mining and Metallurgy (MINMET) in 1923 and the College of Technology (TECHNO) in 1932, as the constituent units of Banaras Hindu University. The first ever Bachelor degree course in Electrical, Mechanical, Metallurgy, Mining, Ceramics and Pharmaceutics in India were pioneered at BHU while Pharmaceutics also being the first in Asia. After country's independence in 1947, post graduate and doctoral research programmes were also introduced here. These colleges produced outstanding engineers who led various indigenous industries, academic institutions and R&D laboratories both within and outside the country. The three engineering colleges were merged to form the Institute of Technology (IT, BHU) in 1968. The erstwhile IT, BHU has been converted into IIT (BHU), Varanasi w.e.f. 29 th June, 2012. Since then IIT (BHU) is witnessing realization of several significant academics, research and developmental programmes and new initiatives in all spheres of the Institute. This year IIT(BHU) has been placed at 11th position in NIRF Ranking-2020, among the top engineering Institutions.

About Electrical Engineering Department

The department since its inception offered combined bachelor's degree in Electrical and Mechanical Engineering. Separate undergraduate programme in Electrical Engineering started in 1949. The M.Tech courses were progressively introduced over the years. The Department started its Five year

QIP-SPARC@IIT BHU

Online Short term course on

Transition towards Electric Vehicles and their Charging Ecosystem in India (TEVCEI-2021)

January 11-16, 2021

Organized by

Department of Electrical Engineering
Department of Civil Engineering
Indian Institute of Technology (BHU) Varanasi
Uttar Pradesh, India

Under the aegis of

Ministry of Education
Government of India

Integrated Dual Degree program leading to Master's degree with specialization in Power Electronics in the year 2006. The department is conducting research projects funded by DST, AICTE, CPRI and other R&D organizations.

Resource Persons

From IITs, University of Warwick and Industries

Course content

- Power converters
- Energy Efficient EV drive
- Electric Vehicles as virtual power plant
- EV charging infrastructure
- Advanced Control techniques
- Planning and operation of distributed charging infrastructure
- Resilient distributed power network
- Site selection for charging stations: Electrical / Civil Engineering aspects
- Smart power system interfacing solutions

Organizing team

Coordinator

Dr. Santosh K Singh (Electrical Engg.)

Co-Coordinators

Dr. Kalpana Chaudhary (Electrical Engg.)

Dr. N.K. Swami Naidu (Electrical Engg.)

Dr. Ankit Gupta (Civil Engg.)

Registration

- There is no registration fee for attending the short term course.
- Participation certificates will only be provided to faculty members of AICTE approved institutes.
- For registration as student, attach a copy of the Institute Identity card
- Google form link https://forms.gle/khDTRFNX3i7WyT8Q8
- Scanned application in the prescribed format should reach the course coordinator by Email on or before 6th January, 2021.

For any queries please contact

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Department of Electrical Engineering
IIT (BHU) Varanasi
Mob: +91-7376938254
sksingh.eee@iitbhu.ac.in

QIP-SPARC short term course on TEVCEI-2021

Registration Form

Please complete the details below and Email the scanned copy to the Course Coordinator.

1. Name_____

2. Category: Faculty/Industry/Student

3. Organization: _____

4.Address:
_____

5. Tel. No. (Mob): _____

6.E-mail ID: _____

7.Qualification: _____

Signature of the Candidate

Prof./Dr./Mr./Ms../Mrs./_____
is an employee of our institute/organisation. The applicant will be permitted to attend the online QIP-SPARC short-term course on "Transition towards Electric Vehicles and their Charging Ecosystem in India" at IIT (BHU) Varanasi during 11-16 January, 2021.

Signature of the Head of the Department/ Institution/ Organisation