



ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON HYBRID VEHICLES AND BATTERY MANAGEMENT SYSTEM

(7th - 16th MARCH, 2022)

Organized By

E & ICT Academy & Department of Electrical Engineering, NIT Warangal

In Association With

Department of Electrical & Electronics Engineering,
Shri Vishnu Engineering College for Women, Bhimavaram

(Sponsored by the Ministry of Electronics and Information Technology (MeitY), GOI)



Preamble:

Electronics & ICT Academy was set up at NIT Warangal with financial assistance from MeitY, GoI. The role of academy is to offer faculty development programs in emerging areas of Electronics, Information Communication Technologies; training & consultancy services for Industry; Curriculum development for Industry; CEP for working professionals; Advice and support for technical incubation and entrepreneurial activities.

Usage of fossil fuels and energy crisis are increasing enormously day after other, electric power generation using traditional methods causing global warming and environmental degradation. Electricity is a key factor to economic growth especially for transport applications. Above aspects draws an attention to green and clean production of energy using renewable energy sources. Usage of electrical energy for electric transport is a challenging task. This can be achieved with electric machines, drives, batteries, charging stations, converters, etc., Major research focus is on design of electric vehicle, battery management and charging stations to reach the common people at affordable price.

This 10-day workshop is intended to cover certain specific application areas where there is increasing demand for improved research on electric vehicles, electric drives, bi-directional DC-DC converter topologies, control techniques, battery energy management, charging methods, etc. For example, battery management systems have several applications like vehicle to grid (V2G), Grid to Vehicle (G2V), electric traction, etc. It requires accepting penetrations at source & load sides with higher efficiency. Demonstration of certain experimental setup will be provided. Also, this workshop aims at giving scope for research.

Objectives: This FDP aims at exploring opportunities of conducting research on:

1. Introduction to Electric Vehicles
2. VSI and CSI schemes for EV
3. Simulation Studies on Electric Vehicles
4. Braking for Electric Vehicles
5. Battery Modelling Methods
6. EV Charging Methods and its Challenges
7. Thermal Management for Batteries
8. Hybrid Energy Storage System.

Registration Fee Particulars:

Faculty and Research Scholars	Rs. 500 /-
Industry Participants	Rs. 1500/-

Participants are required to pay the Registration Fee Online using the following NEFT transfer details:

Online Transfer Details	
Account Name	: Electronics & ICT Academy NITW
Account No	: 62423775910
IFSC code	: SBIN0020149
Bank and Branch	: State Bank of India, NIT(REC) Warangal

Resource Persons: Eminent & finest Researchers, Faculty from International Universities, IITs, NITs, IIITs, Various Universities & Industry experts.

Eligibility: Faculty / Research scholars of Electrical Engineering, Mechanical Engineering / allied disciplines & Industry personnel.

How to apply: Participants are required to apply through online registration form by clicking on the following link:

<https://forms.gle/vcpmZ88w2eTcVRUT7>

Selection Criteria:

Selection will be made on the first-come-first-serve basis to a maximum number of 100 (hundred). The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the Online/DD payment will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

Important Dates:

Last date for Application with fee: 2nd March 2022

Selection List by Email: 4th March 2022.

FDP Duration: 7th to 16th March 2022.

About NIT Warangal, EE Department:

NIT Warangal, formerly known as Regional Engineering College was established in the year 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 14 Departments offering eight undergraduate and 32 post-graduate programs besides doctoral programs. About 5000 students across the country and about 500 international students study on the campus. Its R & D activities have gained momentum with funding/MoU from governmental agencies/industries.

The Department of Electrical Engineering was established as one of the major departments of NITW, in 1959. It offers B. Tech. in Electrical & Electronics Engineering, M. Tech. program in Power Electronics & Drives and Power Systems and Ph.D. program. Warangal is known for its rich historical and cultural heritage. It is situated at a distance of 140Km. from Hyderabad. Warangal is well connected by rail and road. National Institute of Technology campus is 2 Km. away from Kazipet junction and 12Km. away from Warangal station.

About SVECW Bhimavaram, EEE Department:

Shri Vishnu Engineering College for Women (SVECW), Bhimavaram, is one of the foremost Institutions founded by Late Padmabushan Dr. B. V. Raju. It was established in the year 2001-2002 to empower women in professional courses. The college has the vision to develop the students with a disciplined and integrated personality and to achieve academic excellence.

The Department of Electrical and Electronics Engineering has been so structured, in terms of experienced staff and excellent laboratory facilities. The department is offering both B. Tech. and M.Tech. (Power Electronics) programmes and recognized as a research center by JNTUK Kakinada. The department is accredited by NBA under Tier-I and bagged R&D projects worth Rs. 1 Crore from various funding agencies and also Awardee of eBAJA in Innovation category for consecutive years organized by SAEINDIA.

Coordinators:

Dr. Udaya Bhasker M Assistant Professor Electrical Engineering Dept.NIT Warangal, Pin:506004 Email: ub@nitw.ac.in Mobile: 8702462241	Dr. G Durga Prasad Associate Professor Electrical & Electronics Engg. Dept. SVECW, Bhimavaram Email: durgaprasad_garapati@svecw.edu.in Mobile: 9483830071
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