



**A FIVE DAY ONLINE NATIONAL ATAL FACULTY DEVELOPMENT PROGRAMME (FDP)**  
**ON**  
**ELECTRIC TRANSPORTATION INFRASTRUCTURE FOR E-MOBILITY IN INDIA**  
**(02<sup>nd</sup> – 06<sup>th</sup> August, 2021)**

**Sponsored by :**  
All India Council for Technical Education (AICTE)  
ATAL Academy, Govt. of India, New Delhi

**Organized by :**  
Department of Electrical Engineering  
NIT Warangal, India

**AICTE Training and Learning (ATAL) Academy:**

AICTE Training and Learning (ATAL) Academy is established to empower faculty to achieve goals of Higher Education such as access, equity and quality. AICTE is committed for development of quality technical education in the country by initiating various schemes launched by Govt. of India, Ministry of Human Resource Development e.g. SWAYAM, MOOCs, Start-up Initiatives, Prime Minister Kaushal Vikas Yojana, Sansad Adarsh Gram Yojana (SAGY), Swachh Bharat/ Unnat Bharat Abhiyan, Yoga Activities etc. Council understand that there is a need of the day to train the young generation in skill sector and having faculty & technicians to be trained in their respective disciplines. It was felt that Training with latest tools and technologies is vital to keeping an institute competitive and more productive. Training is required for increasing the knowledge and skills of students to make them more employable to acquire global competencies. It also transforms them to harmonize with society and most importantly to make them a good citizen of the country, which support for technical incubation and entrepreneurial activities.

**About NIT Warangal and Department:**

NIT Warangal, formerly known as Regional Engineering College was established in 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 13 Departments offering eight undergraduate and 34 post-graduate programmes besides doctoral programmes. About 5000 students across the country and about 500 international students study on the campus.

The **Department of Electrical Engineering** was established as one of the major departments of NITW, in the year 1959. It offers B.Tech in Electrical & Electronics Engineering, M.Tech program in Power Electronics & Drives, Power Systems Engineering, Smart Electric Grid and Ph.D programs. The Department has strong Industry Interaction and is involved in various Research & Consultancy projects in coordination with industry, Governments of India, Telangana & Andhra Pradesh.

**Course Outline:** This FDP will offer a unique opportunity to all the participants in the relevant & research advancements in Electric Vehicle Systems through theoretical sessions, simulation & hands on training and demonstrations.

**Topics to be Covered:**

- Advanced HF Switching Device Technologies.
- Power Management system for Electric Transportation.
- Soft-Switching techniques in Power Converters
- Recent advanced topologies for EV Applications.
- LED drivers for high bright Automobile Lighting systems.
- Modern Electric Drives (SRM/BLDC etc.) for EVs.
- Optimization Techniques for EV Systems.
- Bidirectional Converters for Storage Interface in EVs, G2V & V2G systems.
- Converters for Renewable Energy Interface in EVs.
- Hands-on experience using modeling, simulations and experimental demonstrations.
- Condition Monitoring of Electric Vehicle Systems.

**Who should attend?**

The Faculty Members of the AICTE Approved Institutions, Research Scholars, PG Scholars, staff of host institutions of Electrical Engineering & allied branches.

**No Registration Fee for participants from of AICTE approved Institutions.**

**Resource Persons:** Faculty from NIT Warangal and reputed institutions/organizations/industries.

**Important Information:** The certificates shall be issued to those participants who are registered on ATAL portal [www.aicte-india.org/atal](http://www.aicte-india.org/atal) and attend the program with minimum 80% attendance and score minimum 60% marks in the test. For more details refer this link <https://atalacademy.aicte-india.org/FAQs>

**How to apply:** Follow the AICTE ATAL registration Link

<https://atalacademy.aicte-india.org/signup>

**Selection Criteria:** As per AICTE ATAL guidelines & first-cum-first-serve basis. Maximum participants are limited to **200**.

**Patron:**

**Prof. N.V. Ramana Rao, Director, NIT Warangal**

**Coordinator :**

**Dr. B.L. Narasimharaju, Associate Professor, NIT Warangal**

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**Organizing Team:**

**Dr. B.L. Narasimharaju, Dr. A.V. Giridhar & Dr. Ch.Ramulu**

**Department of Electrical Engineering, NIT Warangal**