



AICTE Training & Learning (ATAL) Academy Sponsored

FACULTY DEVELOPMENT PROGRAM

on

Agricultural PV Systems and Electric Vehicles: Pioneering Sustainable Energy and Transportation Solutions

(Offline mode:25.11.2024 to 07.12.2024)



Organized by

Department of Electrical and Electronics
Engineering
(Accredited by NBA, NAAC)

VIGNAN'S LARA INSTITUTE OF TECHNOLOGY AND SCIENCE

(Autonomous)

An ISO 9001:2015 Certified Institution
(Approved by AICTE, New Delhi & Affiliated to JNTU, KAKINADA)

Vadlamudi, Guntur

### **About the Institute**

Vignan's Lara Institute of Technology & Science, was established with the aim of providing quality technical education at Vadlamudi, Guntur District, Andhra Pradesh in the year 2007 under the aegis of Lavu Educational Society and headed by the experienced academician and visionary Dr. Lavu Rathaiah. The college is located at Vadlamudi, on the Guntur-Tenali highway, about 15 kms from Guntur and 12 kms from Tenali. It is affiliated to the Jawaharlal Nehru Technological University Kakinada, approved by the AICTE, New Delhi. The institute was accredited with NAAC and NBA (CSE, IT, ECE, EEE & MECH). College got autonomous status by the UGC for ten years. It has also been awarded 2(f) and 12(B) statuses.

# **About the Department**

The department of Electrical and Electronics Engineering was established from the inception of the institute, 2007. It has well-qualified faculty, many of whom hold doctorates from the reputed institutions like IIT, NIT, and state universities. The main goal of the department is to produce young engineers of high knowledge, competent and resourceful who can execute well in a variety of jobs. To achieve this, the department is making committed efforts in nurturing a formidable base both in analytical and technological aspects. Every year our students secure placements in the reputed MNCs and some are admitting for higher education. The Department is establishing the practice of inviting specialists from other reputed institutions to deliver extension lectures on topics of current interest and future importance.

#### **About the FDP**

India has huge potential to become a global leader in agrivoltaics and set an example for other countries to follow. With its abundant sunlight, large agricultural sector and urgent energy needs, India is an ideal place for the expansion of vertical solar panels and agri-PV systems. Agri-PV systems open up areas for dual use: production of photovoltaic electricity and agricultural crops on the same area. Agri-PV systems therefore provide clean, renewable energy that can be used to power electric vehicles. This is particularly important in rural areas, where there is often a lack of infrastructure to develop electric vehicle charging stations. Farmers can potentially utilize solar energy both for agricultural production and for powering electric vehicle (EV) charging stations.

# **Topics to be covered in FDP**

- > Fundamentals of Agri-PV systems and Types
- > Present status of Agri-PV systems in India
- > Opportunities and Challenges for Agri-PV systems
- ➤ Performance indicators of Agri-PV systems
- Development of civil/mechanical structure for Agri-PV systems
- > Specification of the solar cell, module, inverter and its applications
- > Fundamentals of Electric vehicles
- > Types of charging stations
- Practical insights into Electric Vehicles
- > Practical insights into Solar systems
- Practical insights into biogas power plant
- Applications of IoT for Agri-PV system and EV charging systems

### **Resource Persons**

- 1) Dr. Dogga Raveendhra, NIT Allahabad
- 2) Dr. T. Ramesh, NIT AP
- 3) Dr. Vuddanti Sandeep, NIT AP
- 4) Dr. Sankar Peddapati, NIT AP
- 5) Dr. B Jayababu, VLITS, Vadlamudi
- 6) Dr. T Vinay Kumar, NITW
- 7) Dr. L N Sastry Varanasi, Director RT Limited
- 8) Dr. K Anil Naik, NITW

#### **Committee members**

#### **Chief Patron**

Dr. L. Rathaiah, Chairman

### **Patron**

Sri. L. Sri Krishnadevarayalu, Vice-Chairman

## **Principal**

Dr. K. Phaneendra Kumar

### Convener

Dr. M.Shareef syed, HoD EEE

#### Coordinator

Dr. B Jayababu, Professor, EEE

### **Co-Coordinator**

Mr. M. Nagaraju, Associate Professor, EEE

## **Advisory Committee**

- 1) Dr. Y. P Obulesu, VIT Vellore
- 2) Dr. Ch. Saibabu, JNTUK Kakinada
- 3) Dr. Srinivas Bhaskar Karanki, IIT BHU
- 4) Dr. S Sivanagaraju, JNTUK Kakinada
- 5) Dr. G Nageswarareddy, Yogi Vemana University
- 6) Dr. K Vimal Kumar, JNTUN, Narasaraopet
- 7) Dr. P Radhika, VNITSW, Guntur
- 8) Dr. Siva Vara Prasad, LBRCE, Mylavaram
- 9) Dr. Y. S. Kishore Babu, JNTUN, Narasaraopet
- 10) Dr. K. Venkata Reddy, JNTUK Kakinada
- 11) Dr. G. Durga Sukumar, VITS, Hyderabad

## **Organizing Committee**

All the Faculty Members of Department of EEE

## **Registration and Fee Particulars**

- No Registration Fee
- Selection as per AICTE ATAL guidelines & first cum- first-serve basis
- Participants are limited to 50
- Registration for the program can be done by logging into the ATAL portal https://atalacademy.aicte-india.org/
- After clicking on the link, it will ask you for signup
- Fill your details and submit the form
- If you are having account previously, please use those credentials to login in the above link

### Who can attend?

- Faculty Members of AICTE Approved Institutions
- Research Scholars
- Persons working in R&D Organizations
- Industry Persons & PG Students

### **Certificate Criteria**

- Minimum Attendance needed: 80%
- A test will be conducted at the end of the program
- Exam Score: Minimum 60% marks in the test

## **Important Dates**

Last date to register	20/11/2024
Date of confirmation	23/11/2024
Date of Commencement of FDP	25/11/2024

**FDP Timings:** 09:30AM to 5:30PM

## For any queries contact

Dr. B. Jayababu 9949725753 Mr. M. Nagaraju 9032907105

#### REGISTRATION FORM

Two weeks
AICTE Training and Learning (ATAL) Academy
FDP Program

Agricultural PV Systems and Electric Vehicles: Pioneering Sustainable Energy and Transportation Solutions

[25.11.2024 to 07.12.2024]

Name:
Designation:
Institute/Organization:
Mobile:
Email:
Date:
Signature of the Applicant with Date:
Signature of Authorized Signatury with Soul

Signature of Authorized Signatory with Seal