

**A 5 DAY OFFLINE FACULTY DEVELOPMENT
PROGRAM ON**
**Applications of Artificial Intelligence
in Electrical Engineering: An
Academic and Research Perspective**
23rd to 27th June 2025

ORGANIZED BY

Dept. of EEE, UCE, JNTUK, Kakinada
In Collaboration with
**Dept. of EEE, Sri Vasavi Engineering
College, Tadepalligudem**



Coordinators

Dr. T. Murali Mohan,
Professor, Dept. of EEE, UCE, JNTUK
Dr. D. Sudha Rani,
Professor & Head, Dept. of EEE, SVEC

VENUE

**Sri Vasavi Engineering College
(Autonomous)
Tadepalligudem, West Godavari
District
Andhra Pradesh-534101
www.srivasaviengg.ac.in**

About JNTUK, Kakinada:

Jawaharlal Nehru Technological University, Kakinada (JNTUK), established in 2008, is a premier institution offering UG, PG, and Ph.D. programs in Engineering, Pharmacy, and Management. With jurisdiction over 11 districts and more than 150 affiliated colleges, JNTUK is known for its strong academic foundation, industry collaboration, and emphasis on research and innovation. The university supports advanced learning through dedicated R&D centers, updated curricula, and partnerships with national platforms like NPTEL and IISc.

About the Department of EEE, UCE:

The Department of Electrical and Electronics Engineering, UCE-JNTUK, established in 1946, is one of the oldest and most reputed departments in the university. It offers UG, PG, and Ph.D. programs with a strong focus on innovation, research, and industry relevant education. The department emphasizes modern technological developments in electrical sciences and strives to equip students with both theoretical foundations and practical skills suited for global challenges.

About SVEC College:

"Sri Vasavi Engineering College" was established in the year 2001 by "Sri Vasavi Educational Society" with a desire to share the responsibilities of the society for the development of quality Technical Education. The college, shaping its students into disciplined young citizens of good character and culture lays emphasis on practical experience so as to enable them industry ready. The college is recognized by AICTE and permanently affiliated to JNTU Kakinada and also recognized by UGC under section 2(f) & 12(B). The College got UGC Autonomous status in the year 2018. The college offers UG, PG and Diploma Programs in Engineering (EEE, ECE, CSE, ME, CE, CST, ECT, CSE (DS), AI&ML and CSE (AI)) along with MBA. The college is accredited by NAAC with "A" Grade. UG Programs offered by the departments of EEE, ME, ECE & CSE are accredited by NBA.

About the Department of EEE, SVEC:

The department was established in the year 2002. The three "E" s stands for Excellence, Expertise and Efficiency of this department. The cardinal priority is to give the students real time experience and help them learning the true functional elements of ELECTRICAL & ELECTRONICS. In its journey of 24 years, it has put many assiduous efforts in providing such training to the students. Although Electrical engineering is a field of engineering that generally deals with the study and application of electricity, electronics, and electromagnetism, our department has made enormous efforts to give an extra mileage to the students by training them on software design and hardware-software integration so as to create more space for them in the job market. The Department was recognized as research centre by JNTUK.

About the FDP:

The rapid advancements in Artificial Intelligence (AI) and its integration into core Electrical Engineering (EE) domains such as power systems, power electronics, smart grids, and electric vehicles have opened new frontiers in both academia and industry. To keep pace with this evolving technological landscape, it is essential for faculty members and researchers to up skill and realign their teaching and research focus areas.

Outcomes of the FDP:

Upon completion of this FDP, participants will be able:

- AI/ML Basics: Understand core AI and ML concepts for electrical engineering.
- Smart Grids: Apply ML to grid monitoring, fault prediction, and automation.
- Power Systems: Use Deep Learning for fault detection and diagnostics.
- Renewables: Optimize batteries and energy flow using AI techniques.
- Practical Skills: Build ML models in Python and MATLAB for Electrical Engineering problems.
- Curriculum & Research: Guide projects and integrate AI/ML into teaching.

Topics to be covered:

- Introduction to Artificial Intelligence and Machine Learning for Electrical Engineers
- Applications of Machine learning in Smart Grids and Power System Automation
- Deep Learning for Fault Analysis Power System
- Deep Learning for Fault Tolerant and Diagnosis in Power Electronics
- Optimization of Maximum Power Point Tracking (MPPT) Techniques for Renewable Energy Systems.
- Renewable Energy Integrated with Battery Management Systems
- Machine Learning-Based Battery Analytics for Electric Vehicle Applications
- Hands-on Workshop: Implementing Deep learning Models for Electrical Applications using MATLAB

Resource Persons:

- Dr. Sri Phani Krishna Karri, Assistant Professor, NIT AP
- Dr. Sankar Peddapati, Assistant Professor, NIT AP
- Dr. Rajesh Kumar Patnaik, Associate Professor, GMR Institute of Technology.
- Dr. Dhananjay, Assistant Professor, Siddhartha Academy of Higher Education (SAHE)-Deemed to be University, Vijaywada.
- Dr. Anilkumar Chappa, Assoc. Prof., Sri Vasavi Engineering College (Autonomous)
- Dr. E N V D Vara Prasad, Assistant Professor, Sri Vasavi Engineering College (Autonomous)

Targeted Participants:

The program is open to faculty members, research scholars, and postgraduate students from AICTE approved institutions, as well as industry professionals. The number of participants is limited to 50, and registration will be accepted on a first-come, first served basis

Registration:

Eligible candidates have to register through the following link on or before 15th June 2025

There are no charges for registration, course materials, or certification.

Link for registration:



<https://forms.gle/PKZmoFbjYCSZYoo9>

Confirmation of Participation & Certificates

Upon registration, confirmation will be sent via email to selected participants by 18th June 2025.

For Correspondence:

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Advisory Committee

Dr. Ch. Rambabu, Prof. & DEAN (SA)
Dr. V Srinivasa Naresh, Prof. & DEAN (R&D)
Dr. D Jaya Kumari, Prof. & HOD, CSE & CST
Dr. E Kusuma Kumari, Prof. & HOD, ECE & ECT
Dr. M V Ramesh, Prof. & HOD, ME
Dr. G Loshma, Prof. & HoD, CAI & (AI&ML)
Dr. G Radhakrishnan, Prof. & HOD. CE
Mr. N Raja Sekhar, Assoc. Prof. & HOD, BSH
Mr. Naveen Kumar D, Sr. Asst. Prof. & HOD, MBA

Chief Patrons

Prof. C.S.R.K. Prasad,
Hon'ble Vice Chancellor, JNTUK-Kakinada
Sri. G. Satyanarayana, President, SVEC
Sri. Ch.V.V. Subba Rao,
Secretary & Correspondent, SVEC

Patrons

Dr. K.V. Ramana, Rector, JNTUK
Sri. Ch. Apparao, Technical Director, SVEC

Co-Patrons

Dr. V. Ravindranath, Registrar, JNTUK

President

Dr. GVNSR Ratnakara Rao, Principal, SVEC

Convener

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Co-Coordination

Dr. Anilkumar Chappa,
Assoc. Prof., Dept. of EEE
Dr. D J Krishna Kishore,
Assist. Prof., Dept. of EEE

Organising Committee

All Faculty of EEE Department