

About JNTUA

The College of Engineering, Anantapur was started at Guindy, Madras in 1946 and shifted to Anantapur in 1948. The college was initially affiliated to Madras University during 1946–1955 and to Sri Venkateswara University, Tirupathi during 1955–1972. In 1972, by an Act of State Legislature, JNT University was established at Hyderabad and the College of Engineering, Anantapur went into the fold of JNTU. Later in the year 2008, by an Act of AP State Legislature, JNTU was trifurcated into three independent universities viz., JNTU, Hyderabad, JNTU, Kakinada and JNTU Anantapur. JNTU College of Engineering, Anantapur became a constituent college of JNTUA and was renamed as JNTUA College of Engineering, Anantapur. The JNTUA College of Engineering, Pulivendula, established in the year 2006 and Oil Technology Research Institute (OTRI), Anantapur, established in the year 1948 also became constituent units of JNTUA. A new constituent college JNTUA College of Engineering, Kalikiri established in 2013 also came under the fold of JNTUA. The OTRI was later renamed as Oil Technology and Pharmaceutical Research Institute (OTPRI), in 2016. In addition to the above four constituent colleges, the JNTUA has 70 Engineering Colleges, 46 Pharmacy Colleges and 26 stand-alone MBA/MCA colleges affiliated to it. Since its inception, JNTUA is committed to develop and nurture technological education and intends to produce technical manpower of high quality, comparable to the best in the world.

Chief Patron

Prof. H. Sudarsana Rao

Hon'ble Vice Chancellor
JNTUA, Ananthapuramu.

Patron

Prof. S. Krishnaiah

Registrar
JNTUA, Ananthapuramu.

Programme Director

Prof. G. Prasanthi

Director
Faculty Development Center,
JNTUA, Ananthapuramu.

Chairperson

Dr. S. M. V. Narayana

Principal, AITS, Rajampet.

Convener

Dr. P. B. Chennaiah

Associate Professor & Head, Department of EEE,
AITS, Rajampet.

Programme Co-Ordinator

Dr. S. Venkateswarlu

Assistant Professor, Department of EEE
AITS, Rajampet.

Email: chvreddy237@gmail.com

Mobile No: +91 7010256116.

Organizing committee

- **Dr. M. Padma Lalitha**, Professor, Dept. of EEE, AITS, Rajampet.
- **Dr. O. Hemakesavulu**, Associate Professor, Dept. of EEE, AITS, Rajampet.
- **Dr. Pasala Gopi**, Associate Professor, Dept. of EEE, AITS, Rajampet.
- **Dr. Palepu Suresh Babu**, Assistant Professor, Dept. of EEE, AITS, Rajampet.
- **Dr. K. Vijaya Bhaskar**, Assistant Professor, Dept. of EEE, AITS, Rajampet.



**FIVE-DAY FACULTY
DEVELOPMENT
PROGRAMME ON**



**“Securing Smart Grids with Quantum–
Secure Cyber Physical Systems for
Electrical Vehicles”**

Date: 24th – 28th November 2025

**Sponsored by Jawaharlal Nehru
Technological University Anantapur**

Jointly Organised by

Department of EEE

**Annamacharya Institute of Technology
and Sciences (Autonomous), Rajampet
New Boyanapalli, Rajampet – 516126,
And**

**Faculty Development Center,
Jawaharlal Nehru Technological
University Anantapur
Ananthapuramu – 515002**



www.aitsrajampet.ac.in

About AITS

Annamacharya Institute of Technology & Sciences, Rajampet is an AUTONOMOUS institution and is affiliated to JNTU, Anantapur. The institute was started in the year 1998 under the auspices of Annamacharya Educational Trust in picturesque surrounding on a spacious 30-acre campus near Tallapaka, the birth place of Annamacharya, the renowned saint poet. The Institute is well located on Hyderabad – Chennai Highway. The Institute offers B.Tech, M.Tech, MCA, MBA, courses. The Institute is accredited by National board of Accreditation (NBA) for the departments EEE, ECE and CSE, The Institute is also accredited NAAC with the grade of “A” and obtained 2(f) & 12B from UGC. The institute has been accredited by Institution of Engineers India (IE) and is Institutional member of ISTE. AITS is a pioneering educational institution with a mission, vision and zeal to impart quality education to rural area students in the field of Technology and Science.

About the EEE Department

Department of Electrical & Electronics Engineering was started with the inception of the college in the year 1998, with B. Tech program in Electrical and Electronics Course with the intake of 40 students, subsequently increased from 60 to 240 intake. Department is also offering PG programmes in Electrical Power Systems. The Department is facilitated with highly qualified, committed and expert faculty members. As a part of the academic plan, the department is making several plans to conduct international conferences, National conferences, FDPs, Guest lectures, Seminars, Industrial visits, Internship trainings and consultant work for student's development, organized with industrial collaboration.

About Programme

The integration of Electric Vehicles (EVs) into modern power systems introduces both opportunities and challenges. EVs, when connected to smart grids, function not only as loads but also as energy storage units, enabling advanced concepts like Vehicle-to-Grids.

However, this creates new Cyber Physical System (CPS) vulnerabilities, such as risks of (CPS) vulnerabilities, such as risks of cyberattacks, data breaches, and grid instability. With the emergence of quantum computing, conventional cryptographic protocols face obsolescence due to their potential to be broken by quantum algorithms. This highlights the urgent need for quantum-secure communication frameworks and resilient CPS designs to ensure grid reliability, EV charging security, and sustainability. The proposed FDP aims to train faculty and researchers on post-quantum cryptography, anomaly detection, CPS security frameworks, and EV-smart grid integration, equipping them with skills to carry out teaching, research, and collaborative projects in this evolving area.

Objectives of FDP

- To familiarize faculty with the fundamentals of quantum computing threats to smart grids and EV systems.
- To provide insights into post-quantum cryptographic techniques and their applications in secure V2G communications.
- To train participants on cyber-physical system modeling for EV-integrated smart grids with emphasis on security, reliability, and sustainability.
- To enhance knowledge on quantum sensing, intrusion detection, and anomaly monitoring for protecting EV charging infrastructure.
- To promote interdisciplinary collaboration among academia, industry, and research organizations for advancing quantum-secure grid technologies.

Outcomes of FDP

- At the end of the FDP, participants are expected to:
- Understand the threats of quantum computing to existing smart grid and EV communication systems.
 - Apply post-quantum cryptographic techniques in the context of EV-grid security.
 - Develop basic models of secure CPS frameworks for EV charging and V2G systems.
 - Identify research gaps and project opportunities in quantum-secure smart grid technologies.
 - Contribute to the development of next-generation teaching modules, collaborative research proposals

focused on secure, sustainable energy systems.

Resource Persons

The sessions of the Faculty Development Programme will be conducted by a distinguished panel of eminent experts from prestigious universities, renowned research organizations, and leading industries. Their diverse expertise will provide participants with a comprehensive blend of academic insights, cutting-edge technological developments, and practical industry applications.

Instructions To Participants

TARGET AUDIENCE

The participant must be a teaching faculty from constituent and affiliated colleges of JNTUA, Ananthapuramu.

GUIDELINES

- No Registration Fee
- Participants will be selected on First-Come First-Serve basis.
- An evaluation test will be conducted at the end of the FDP.
- Certificates will be issued based on the attendance percentage, test score and submission of feedback.
- Accommodation will be provided on request.

REGISTRATION :

To register for the FDP Scan the QR Code:



Or Click on the below link

<https://shorturl.at/z2LHv>

No Objection Certificate Link:

<https://shorturl.at/Kaomp>

Last Date for Applying FDP: 20.11.2025

Confirmation of Participation: 22.11.2025

Event Details

Mode of Conduct	: Offline
Timing	: 9:30 AM to 5:00 PM
Venue	: EEE Smart Room