



**MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE**  
(UGC-AUTONOMOUS INSTITUTION)

Affiliated to JNTUA, Ananthapuramu & Approved by AICTE, New Delhi  
NAAC Accredited with A+ Grade, NIRF India Rankings 2024 - Band: 201-300 (Engg.)  
NBA Accredited - B.Tech. (CIVIL, CSE, ECE, EEE, MECH, CST), MBA & MCA

**A Report on Guest Lecture on**  
**“EEE in the 21st Century: Career Paths & Emerging Trends”**  
**Organized by Department of Electrical and Electronics Engineering**  
**In association with**  
**The Institution of Engineers (India) [IEI]**  
**on 09.05.2025**

**Report Submitted by: Dr. V.B. Thurai Raaj, Assistant Professor in EEE, Coordinator-Skill Development Cell & SPOC, APSSDC t-SDI.**

**Resource Person Details: Prof. T Vinay Kumar, Assistant Professor Gr-I, Department of Electrical Engineering, NIT, Warangal**

**Total Participants: 120 Participants, including Faculty Members**

**Venue: Seminar Hall-D**

**Mode of Conduct: Offline**

**Report Received on 17.05.2025.**

The Department of Electrical and Electronics Engineering, in collaboration with the Institution of Engineers (India) and the Alumni Welfare Association, organized a guest lecture titled "EEE in the 21st Century: Career Paths & Emerging Trends" on 9 May 2025. The event aimed to enlighten students and faculty about current developments in the electrical and electronics engineering domain, highlight diverse career pathways, and discuss emerging technological trends shaping the industry.



The guest lecture commenced at 10:00 AM with a formal welcome by **Dr. A. V. Pavan Kumar**, Professor and Head of the Department of EEE. He emphasized the importance of continuous learning, industry readiness, and the role of alumni as mentors for current students. **Dr. V.B. Thurai Raaj**, Assistant Professor/EEE and Event Coordinator, introduced the resource person **Prof. T. Vinay Kumar**, an esteemed alumnus of MITS (Batch: 2001–2005, from Dept. of EEE) and a faculty member at NIT Warangal, Dept. of EEE. Prof. Vinay Kumar delivered an insightful lecture titled “EEE in the 21st Century: Career Paths & Emerging Trends.”



**Prof. T Vinay Kumar** began his talk by expressing his appreciation for the institute and shared how the academic foundation built at MITS contributed to his professional journey. He then delved into his experiences moving from academic studies to a corporate software development environment. His session, themed “**EEE in the 21st Century: Career Paths & Emerging Trends**”, was both motivational and informative, covering key areas:



### 1. Changing Landscape of EEE Careers

- Emphasized the transition from traditional core roles to interdisciplinary opportunities involving AI, data analytics, IoT, and automation.
- Urged students to remain adaptable and continuously upskill in response to evolving technologies.

### 2. Emerging Technologies and Tools

- Introduced trends such as Smart Grids, Electric Vehicles, Industrial Automation, and Renewable Energy Systems.
- Recommended tools and platforms like **MATLAB/Simulink**, **SCADA**, **PLC programming**, **Python**, and **IoT** kits for enhanced technical preparation.

### 3. Role of Artificial Intelligence in EEE

- Discussed how AI tools like **ChatGPT**, **MATLAB AI toolboxes**, and **Edge Impulse** are being integrated into modern electrical systems and research.
- Showed practical applications of machine learning in predictive maintenance, grid optimization, and control systems.

### 4. Project & Portfolio Building

- Encouraged students to work on real-time projects and maintain a GitHub portfolio.
- Suggested project ideas such as:
  - Smart Energy Metering Systems
  - Solar-Powered IoT Devices
  - AI-Based Fault Detection in Electrical Networks

### 5. Career Roadmap and Guidance

- Discussed diverse career paths including R&D, government services, MNCs, and academia.
- Provided tips on resume building, certifications, and networking through platforms like LinkedIn and IEEE communities.

### Program Outcome:

- **Industry Awareness:** Students gained a broad view of career options and technology shifts in EEE.
- **Motivation & Clarity:** The talk inspired confidence among students to pursue higher goals.
- **Skill Direction:** Emphasized what tools and knowledge areas are essential in the coming years.
- **Alumni Bonding:** Strengthened the connection between alumni and current students.

The Chief Guest was felicitated by Dr. A. V. Pavan Kumar, Head of the Department, EEE, and Mr. K. Revathi, Co-Coordinator, IEI. The session concluded with a vote of thanks proposed by Dr. R. Sriganesh, Assistant Professor of English and Foreign Languages. Dr. Sriganesh acknowledged Prof. T Vinay Kumar's invaluable contribution and expressed gratitude to the management, principal, HoD, organizing team, and all attendees for their support and participation in making the session a success.

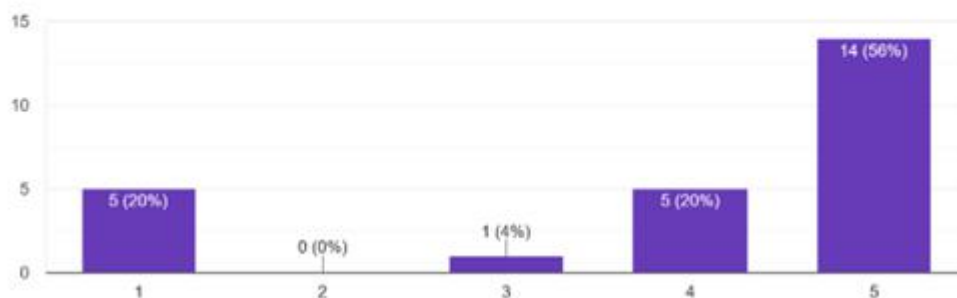


## Feedback:

As the Event Coordinator, I would like to express my heartfelt gratitude to the **Management** and **Dr. C. Yuvaraj**, Principal, for granting permission and extending financial support to organize this program. My sincere thanks go to **Dr. C. Kamal Basha**, Professor & Vice Principal – Administration, for his timely assistance and unwavering support. I am deeply grateful to **Dr. A. V. Pavan Kumar**, Professor & Head of the Department of Electrical and Electronics Engineering (HoD/EEE), for his consistent guidance and encouragement throughout the planning and execution of this event. I also extend my appreciation to **Mrs. K. Revathi**, Assistant Professor, Department of EEE & Co-Coordinator – IEL, for her dedicated coordination and valuable support in making this event a success. Lastly, I take this opportunity to thank all the **faculty members of the EEE Department**, as well as the teaching and non-teaching staff and students, for their enthusiastic involvement, cooperation, and active participation.

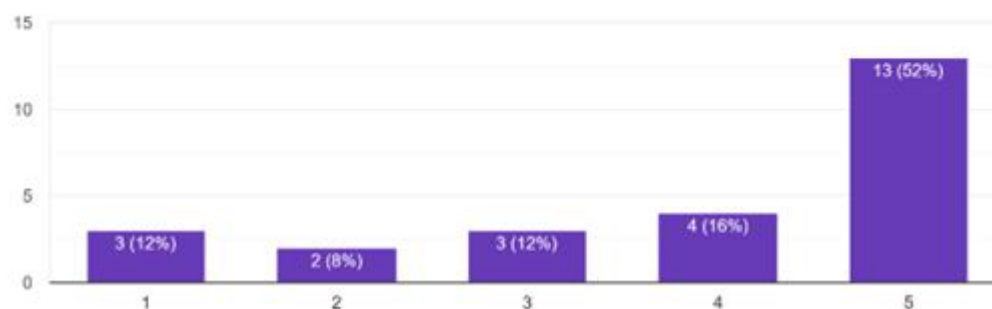
### 1. The interactive session was scheduled at a suitable time\*

25 responses



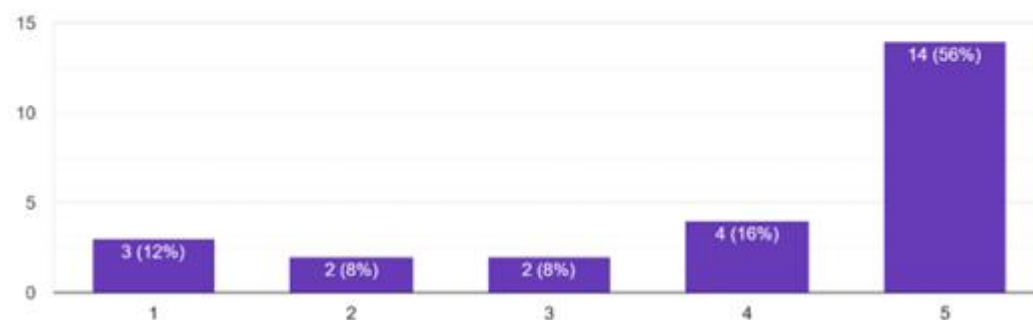
### 2. The interaction was useful and resource person explanation.\*

25 responses



### 3. The information in the interaction was presented in a clear and organized manner.

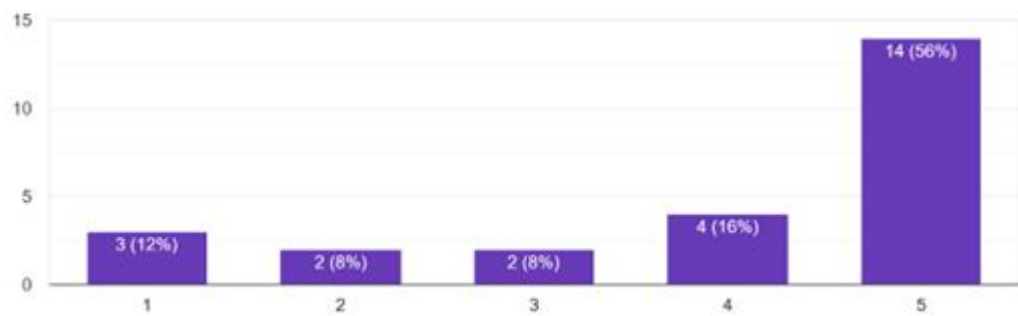
25 responses





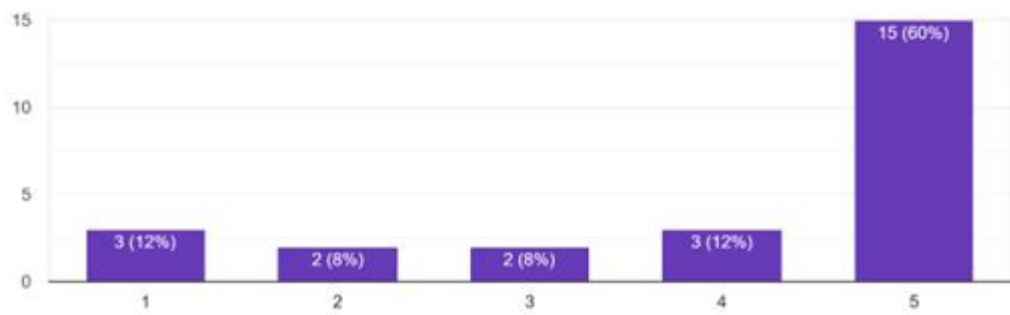
5. your impression of facilities provided by the institute for interaction.\*

25 responses



6. Overall, the session was informative and valuable.\*

25 responses



7. In what ways could this interaction have been improved to better suit your needs?

25 responses

