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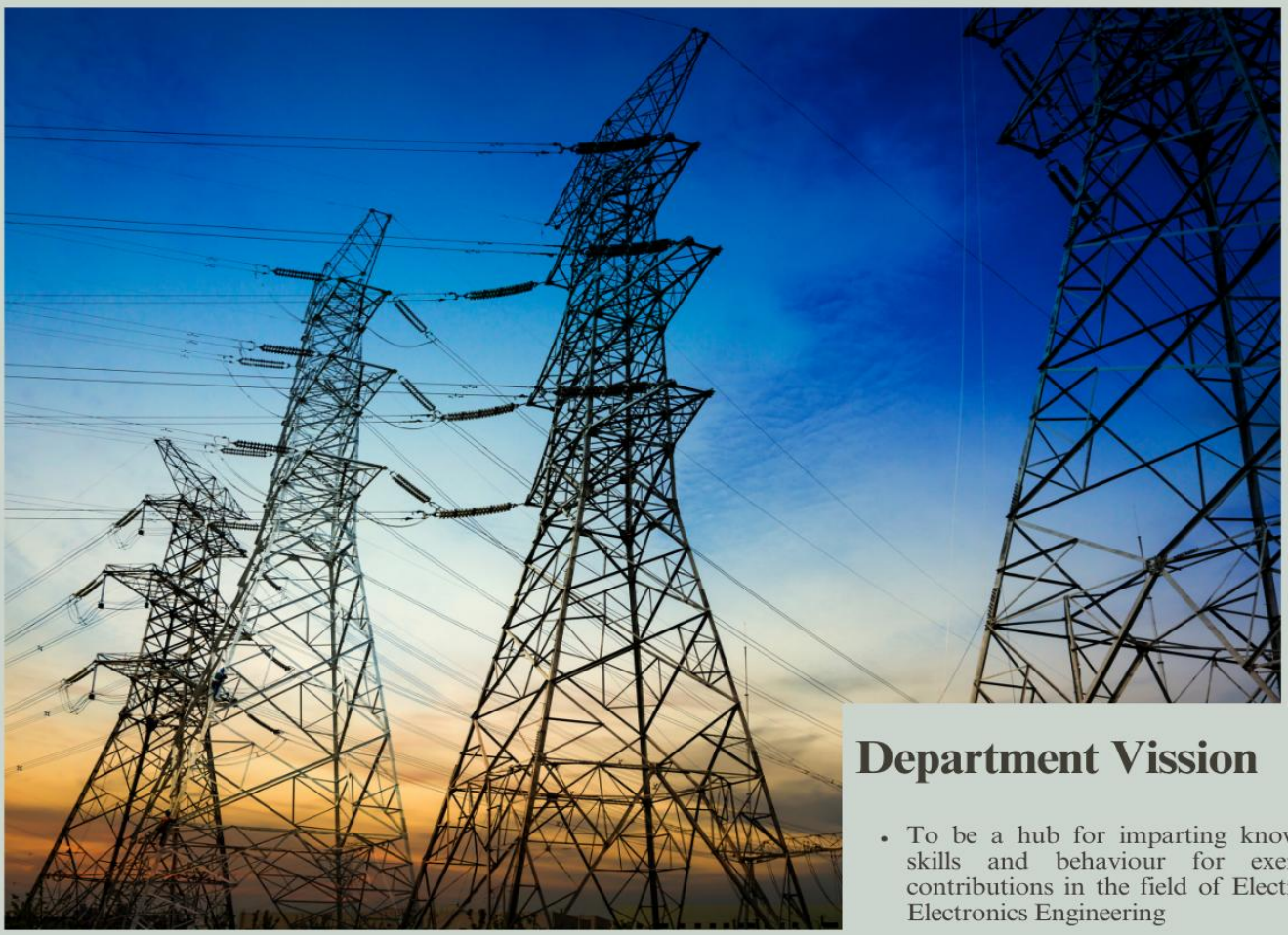
NSRIT AUTONOMOUS

# E-MINDS



## DEPARTMENT OF EEE

Established in 2008, the Department of EEE has grown steadily, offering programs that cater to the evolving needs of the industry. The department began with a B. Tech program with an initial intake of 60 students in 2008, followed by the launch of an M. Tech program in Power Systems Control and Automation with 24 students in 2014.The department consists of qualified and dedicated faculty who serve as the key pillars supporting the department's growth and success in all aspects. Our curriculum and activities encompass key areas such as power systems, control systems, electrical machines, electromagnetic theory, and computer languages. They also integrate the latest advancements in rapidly growing fields like electric vehicles and renewable energy systems through honour and minor degree, which are essential for modern societal development and industrial progress

## Department Vission

- To be a hub for imparting knowledge, skills and behaviour for exemplary contributions in the field of Electrical & Electronics Engineering

## Department Mission

- M1: To impart technical education through the state-of-the-art infrastructural facilities, laboratories and instruction
- M2: To inculcate industry-oriented learning through industrial visits, internships, projects at industries, MoU's to make students technically skilled oriented
- M3: Creating conducive environment for higher education, employment and entrepreneurship throughquality education, professional skills and research
- M4: To promote societal environment among students by inculcating moral and ethical values

THE CREW

## EDITORIAL MEMBERS

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Dr. R.S.R. Krishnam Naidu,
Professor & HOD - EEE

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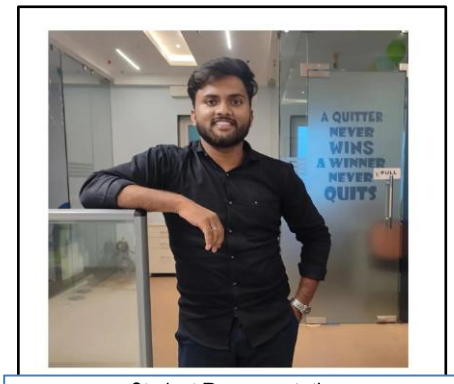
Mr. A. Bala Raja Ram,
Asst., Professor




Student Representative
Mr. K. Uma Maheshwar,
IV-EEE


Student Representative
Mr. P. Sasi Vardhan,
III-EEE

Student Representative
Ms. G. Ramya,
II-EEE

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## HOD Message:

It is a privilege and honour to lead the EEE department at this esteemed institution. Our field is at the heart of modern technological advancements, with a particular emphasis on the rapidly growing electric vehicle (EV) sector. This dynamic field encompasses core technologies like power systems, power electronics, electrical machines, control systems, and electromagnetic theory etc., all of which are critical to the development of efficient and sustainable transportation solutions.

To stay at the forefront of innovation, our departmental association, ADVAYA, organizes workshops, technical training, and expert guest lectures. These initiatives focus on emerging trends, including EV technologies, drone, IOT Technologies and aim to equip our students and faculty with the knowledge and skills needed to excel in this exciting domains.

Our department is committed to playing a pivotal role in shaping the future of electric mobility. By fostering research, development, and education in EV-related areas, we strive to create a sustainable and electrified transportation ecosystem.

## Department Profile

Established in 2008, the Department of Electrical and Electronics Engineering (EEE) offers a range of programs, starting with a B.Tech program with an initial intake of 60 students in the same year. The department expanded its offerings to include a Diploma program in 2012 with a 60-student intake and an M.Tech (Power Systems Control and Automation) program in 2014 with a 24-student intake.

Our faculty is highly qualified, with 2 Ph.D.s and 12 M.Tech s (4 of them are pursuing Ph.D. s in reputed universities). They are actively engaged in research and have published or presented papers in esteemed national and international journals and conferences.

The department recognizes the crucial role electrical engineers play in the growth of medium and large-scale industries. With India experiencing rapid industrial growth, the demand for electrical engineers has skyrocketed in various sectors, including the power sector, private companies, PSUs, and government organizations. This translates to a wealth of exciting career opportunities for our graduates.

## Department Vision

To be a hub for imparting knowledge, skills and behavior for exemplary contributions in the field of Electrical & Electronics Engineering

## Department Mission

**M1:** To impart technical education through the state of the art infrastructural facilities, laboratories and instruction.

**M2:** To inculcate industry oriented learning through industrial visits, internships, projects at industries, MOUs, to make students technically skilled oriented.

**M3:** Creating conducive environment for higher education , employment and entrepreneurship through quality education ,professional skills and research.

**M4:** To promote societal commitment among students by inculcating moral and ethical values.

## Program Educational Objectives

**PEO1:** Demonstrate the real-world engineering problem solving skills by applying the fundamental and conceptual engineering knowledge as a practicing Electrical and Electronics engineer or as a member/lead in a multidisciplinary project setting that utilize 21st century skills

**PEO2:** Provide research-based engineering solutions addressing the triple bottom line of environment and sustainability maintaining the professional standards, ethics and integrity

**PEO3:** Foster self-directed learning through their professional experience, technology advancements in their relevant field of interest and desiring graduates pursue advanced higher education leading to research

**Dr. R. S. R. Krishnam Naidu,**

**Professor & HOD – EEE**

**The following are the Activities and Achievements from the department of EEE during Mar to May, 2024:**

| S.No | Name of the Activity & Achievements | Organized by | Date of the Event | Page Numbers |
|---|---|---|---|---|
| 1 | Atal Tinkering Labs Mentorship | Board for Community Development through Education (BCDE) | 29-02-2024 to 02-03-2024 | 5 |
| 2 | Faculty FDP certificates on "Artificial Intelligence Applications to Electric Vehicles" | GMRIT | 04-03-2024 to 09-03-2024 | 6 |
| 3 | Faculty NPTEL – Swayam Certificates on EV - Vehicle Dynamics and Electric Motor Drives | NPTEL | Jan-Mar, 2024 | 7 |
| 4 | Student NPTEL – Swayam certificates in Constitution Law and Public Administration in India | NPTEL | Jan-Apr, 2024 | 8 |
| 5 | Certificates earned in edx platform | Raspberry Pi Foundation | May 9-17, 2024 | 9 |

1. **Atal Tinkering Labs Mentorship**

Participating in events beyond our campus provides students with invaluable opportunities for growth and learning. It exposes them to diverse perspectives, enhances their skills, and builds a strong network. We are delighted to share the achievements of our student **K. Chinna Venkateswara Rao** on successful completion of "**Atal Tinkering Labs Mentorship"** held at LENDI Institute of Technology and Sciences conducted from **29.2.2024** to **2.3.2024** sponsored by Board for Community Development through Education (BCDE) with support of UNICEF and Vigyan Ashram which aims at providing various processes and technologies, including projects using Arduino, input and output devices, programming and basics of electronic components using different circuits like beardboard, Tinker CAD, ZeroPCB, etc.

LENDI INSTITUTE OF ENGINEERING AND TECHNOLOGY
An Autonomous Institution Approved by AICTE & Permanently Affiliated to JNTU GV
with "A" Grade and NBA (ECE, CSE, EEE & ME)
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To
Kollimalla China Venkateswara Rao
NSRIT

Dear KOLLIMALLA CHINA VENKATESWARA RAO

Subject: Letter of Appreciation for Participation in the Atal Tinkering Labs Mentorship Programme

On behalf of Lendi, I extend appreciation to you for your active and enthusiastic participation in the Atal Tinkering Labs Mentorship Programme conducted from 29-02-2024 to 02-03-2024 at Lendi College Campus, recommended by JNTU GV and sponsored by the Board for Community Development through Education (BCDE) with the valuable support of UNICEF and technical guidance from Vigyan Ashram.'

Your commitment to enhancing your knowledge and skills in the field of community development and education is truly commendable. The three-day training programme aimed at providing insights into various processes and technologies, including Electronics projects using Arduino, input and output devices, programming, packaging, and the basics of electronics components using different circuits (Paper, Breadboard, TinkerCAD Electronics, Zero PCB), Tinker cad, slicing, 3D printing, etc.

Your active involvement in the program not only showcased your dedication to learning but also demonstrated your willingness to contribute to community development through education. The knowledge and skills you acquired during the mentorship programme will undoubtedly serve as a solid foundation for your future endeavours in the field. I express our gratitude to you for being an integral part of this transformative experience. Your enthusiasm, curiosity, and collaborative spirit added immense value to the overall success of the programme. We are confident that you will continue to apply the knowledge gained to create meaningful and positive changes in your academic and professional journey. I wish you continued success in all your future endeavours and hope that you will inspire others with your passion for community development and education.

Dr Haribabu Thammineni
Vice Principal
LENDI INSTITUTE OF ENGG. & TECH.
JONNADA (V), DENKADA Mandal
VIZIANAGARAM-535005

2. **Faculty FDP certificates on "Artificial Intelligence Applications to Electric Vehicles"**

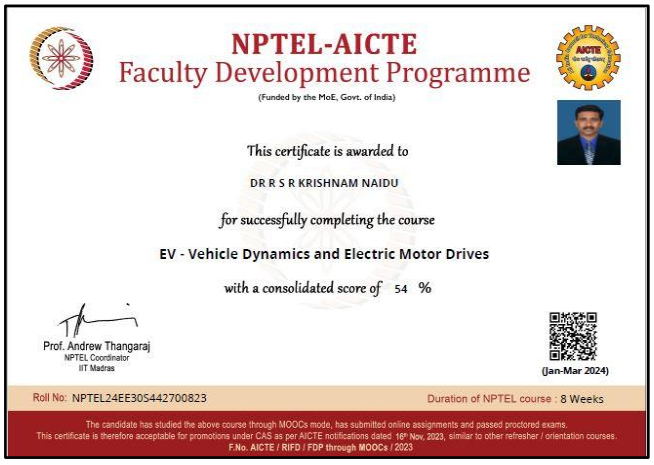
**Electric Vehicles (EVs)** are at the forefront of the global shift towards sustainable transportation. Beyond environmental benefits, EVs offer economic advantages through reduced fuel costs and lower maintenance requirements. The integration of Artificial Intelligence (AI) is revolutionizing the electric vehicle (EV) landscape. AI empowers EVs to optimize battery life, predict maintenance needs, and enhance driving safety. Participation of faculty in such advanced FDPs focused on AI in EVs is crucial for staying updated with industry trends, enhances research capabilities, and improving teaching methodologies. It fosters collaboration with industry, prepares students for future careers, and strengthens the institution's reputation as a leader in EV and AI research and education.

Our faculty **Dr. R.S.R. Krishnam Naidu**, **Mr. T. Ramana** and **L. Advila** has participated in one such FDP named **"Artificial Intelligence Applications to Electric Vehicles"** and successfully earned the certificate organized by one of the reputed institute GMRIT between **04th March 2024** and **09th March 2024**.



### 3. Faculty NPTEL – Swayam Certificates on EV - Vehicle Dynamics and Electric Motor Drives

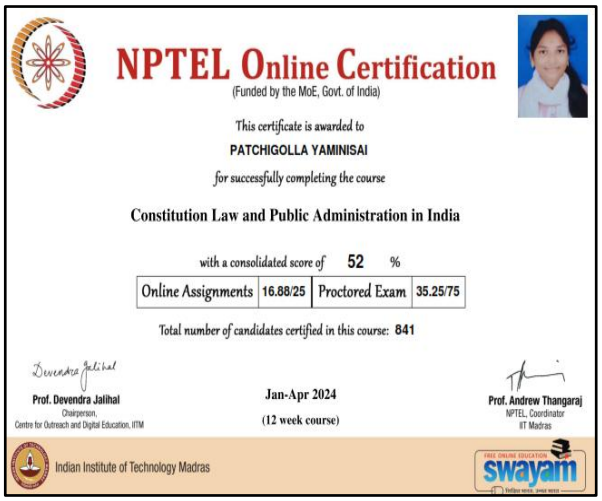
An NPTEL certificate in Electric Vehicles empowers faculty with the latest advancements and technological insights in the rapidly evolving EV sector. It enhances their understanding of EV components, battery technology, power electronics, and vehicle dynamics. Armed with this knowledge, faculty can effectively integrate EV concepts into their curriculum, conduct relevant research, and guide students in developing innovative EV solutions. Four faculty members **Dr. R. S. R. Krishnam Naidu**, **Mr. K. M. M. Tarakesh**, **Mr. A. Bala Raja Ram**, **Mrs. S. Yamini** has successfully completed a course termed **"EV - Vehicle Dynamics and Electric Motor Drives"** in NPTEL – Swayam from **Jan – Mar 2024**.






4. **Student NPTEL – Swayam certificates in Constitution Law and Public Administration in India**

Beyond technical expertise, our department emphasizes the importance of a strong foundation in the Constitution and public administration. This holistic approach equips our students to become responsible citizens and effective problem-solvers. By understanding the nation's framework and governance, our engineers are better prepared to address societal challenges, contribute to policy-making, and excel in diverse career paths. Three students **P. Yamini Sai**, **P. Teja Sree**, **E. Mounika** has earned a certificate each in "**Constitution Law and Public Administration in India**" offered in NPTEL – SWAYAM from **Jan – Apr 2024**.





## 5. Certificates earned in edx platform

Department of EEE recognizes the importance of Coding, which is the language of the future and encourages faculty and guides the students in gaining the skill that empowers individuals to create, innovate, and solve complex problems. Online platforms like edX offer unparalleled access to quality coding education, breaking down geographical barriers and allowing learners to acquire in-demand skills at their own pace. The edX platform offers a diverse range of courses blending core electrical engineering subjects with programming languages offered by various reputed institutes like “The National University of Singapore” and “Raspberry Pi Foundation”. Courses like “Python programming” and “AI & ML” has garnered significant interest from both faculty and students. Meanwhile, core courses like Electrical Circuit Analysis and Machines have also led to notable certifications A total of **17 courses** has been completed from **faculty** and **115 courses** have been completed by students in various courses index platform.