

# EEE DEPARTMENT 2023-24



**NEWSLETTER**

**01/01/2024-30/06/2024**

# OUR SOURCE OF INSPIRATION



**Dr. Ravuri Venkataswamy Chairman**



**Ravuri Balaji Vice Chairman**



**Dr. T.SunilKumar Reddy Principal**

## ABOUT COLLEGE

**Sri Venkatesa Perumal College of Engineering (SVPP)**, established in 2001 in Puttur, Tirupati, Andhra Pradesh, is promoted by the Tamilian Education Academy. Spread over 25 acres, SVPP features well-ventilated classrooms, state-of-the-art labs, and extensive sports facilities. It is affiliated with Jawaharlal Nehru Technological University Anantapur (JNTUA), ISO 9001-2000 certified, approved by AICTE, and accredited by NAAC with an 'A' grade. The CSE, ECE, and EEE departments are accredited by NBA. SVPP offers 5 undergraduate courses (540 seats) and 7 postgraduate engineering courses (18 seats each), along with MBA (120 seats) and MCA (60 seats). The campus has WiFi, a central library with digital resources, and a fleet of 20 buses for transportation. Seventy percent of the faculty are ratified by JNTUA, ensuring distinguished and experienced educators.

SVPP provides industry-standard labs and workshops, and research centers equipped with the latest software. Strong industry links through MOUs with companies like Infosys, Cyient, Wipro, Zenopsys, and ERDL enhance students' learning and employment prospects. The college's focus on employment includes active support for internships. Strategically located on the Chennai-Bangalore Highway, SVPP is 20 minutes from Tirupati Airport, offering a lush, green, and pollution-free campus environment.

## VISION OF THE INSTITUTE

To emerge as a Center of Excellence for Learning and Research in the domains of Engineering, Technology, Computing and Management.

## MISSION OF THE INSTITUTE

**M1:** To provide congenial academic ambience with state-of-art resources for learning and research.

**M2:** Ignite the students to acquire self-reliance in the latest technologies.

**M3:** Unleash and encourage the innate potential and creativity of students.

**M4:** Inculcate confidence to face and experience new challenges.

**M5:** Foster enterprising spirit among students work collaboratively with technical Institutes/ Universities/Industries of National and International repute.

## VISION OF THE DEPARTMENT

The vision of Electrical & Electronics Engineering Department is dedicated for curving the youth as dynamic, competent, valued and knowledgeable professionals who shall lead the nation to a better.

## MISSION OF THE DEPARTMENT

- Providing quality education, student centered teaching – learning process and state of art infrastructure for professional aspirants hailing from both rural and urban areas.
- Imparting technical education that encourages independent thinking, develops strong domain of knowledge, hones contemporary skills and positive attitudes towards holistic growth of young minds.
- Evolving the department into a centre of academic and research excellence.

## MEET OUR ESTEEMED FACULTY

We are proud to introduce our distinguished faculty members, whose expertise and dedication drive our institution's excellence.

### Professors

Dr. K. Siva Kumar (HOD)

Dr. G. Sreenivasan

Dr. G. Sheshadri

Dr. G. Sabarinath

### Associate Professors

Mr. M. Lokanadham

Mr. K. Venkatapathi

Mr. K. Kiran

Mr. S. Munisekhar

### Assistant Professors

Mr. J. Nagaraju

Mr. K. Janardhan

Mr. G. Vijay Kumar

Mr. A. Naveen Kumar

Mr. M. Harish

Mr. A. Rajesh

Mr. D. Mohan

Mr. K. Rajesh

Mrs. N. Sushmitha

Ms. P. Geetha

Mr. T. Pavan Kumar

Each of these individuals brings a wealth of knowledge and a passion for teaching, ensuring that our students receive the best education and mentorship. We are honored to have such a dedicated and talented team.

# Successful Completion of Solar PV and Electric Vehicle Grid Integration Project (Funding Project)



## PROJECT OVERVIEW

We are pleased to announce the successful completion of a remarkable project titled "A Multi Functional Solar PV System and Grid Based on Board Converter for Electric Vehicles." This innovative project was led by Professor J. Nagaraju during the 2023-24 academic year and aimed to advance the integration of solar photovoltaic systems with electric vehicle grids.

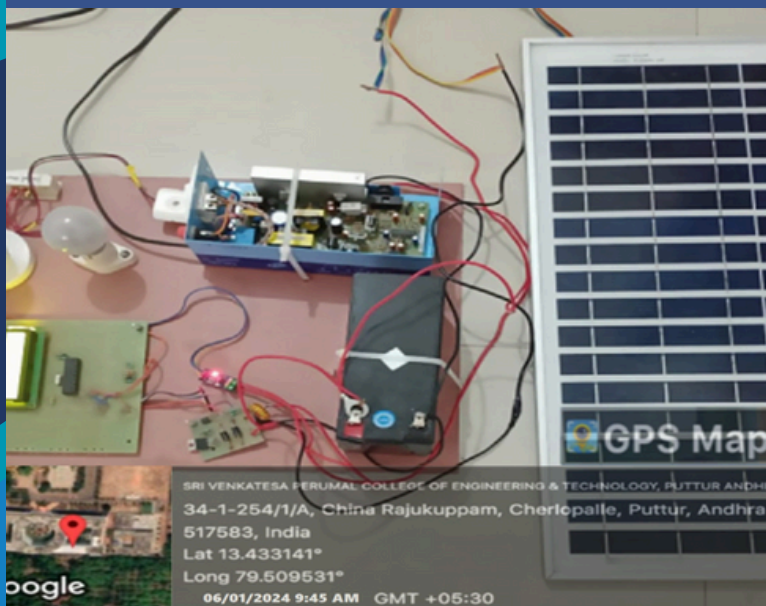
## FUNDING AND SUPPORT

The project was generously funded by **GEEKAY WINDING WIRES, SRICITY, ANDHRA PRADESH**, with a grant amounting to ₹39,000. The financial support from GEEKAY WINDING WIRES played a crucial role in facilitating the research and development necessary for this groundbreaking initiative.



## IMPACT AND FUTURE PROSPECTS

The successful completion of this project marks a significant milestone in our efforts to promote renewable energy and sustainable transportation solutions. By enhancing the efficiency and functionality of solar PV systems in conjunction with electric vehicle grids, this project sets the stage for future advancements in green technology and energy sustainability.



# Industrial Visits: Bridging Academic Knowledge with Practical Experience

As part of our initiative to provide students with practical industry exposure, we organized several industrial visits during the academic year 2023-24. These visits aimed to bridge the gap between theoretical knowledge and real-world applications, offering our students valuable insights into the workings of various industries.

## Visit to 132 kV Substation, Puttur

On 12th February 2024, students of II B.TECH EEE visited the 132 kV substation in Puttur. This visit was attended by 57 students and provided them with a comprehensive understanding of substation operations and maintenance.



## Visit to Ayana Power, Pavagada

On 13th October 2024, students of III B.TECH EEE visited Ayana Power in Pavagada. A total of 45 students attended this visit, where they learned about large-scale solar power generation and the implementation of renewable energy solutions.



**These industrial visits were instrumental in enhancing our students' practical knowledge and aligning their academic learning with industry standards.**

## Internship Achievements of Our Students

Our students have showcased their dedication and hard work by successfully completing various internship programs in the academic year 2023-24. Here are notable achievements:

### PCB Design Internship

Additionally, from February 1st, 2024, to February 29th, 2024, another group of students participated in a specialized internship focused on PCB Design, organized by Qmax Systems:

- Bopparajupalem Varsha
- Borra Gunavardhana Reddy
- Derangula Sravan
- Jagadabi Sunil
- Kasi Venkatesulu
- Chakali Manisha
- Choppa Yaswitha
- D. Gokul Krishna
- Madisetty Parthasarathi
- Mathali Tharun Kumar
- N. Karthik
- N. Roshini
- Budda Palli Nithin Kumar
- Dhasari Shiva
- Dodla Pratap Kumar
- Duvvuri Papa

This internship allowed participants to delve into the technical aspects of PCB Design, fostering their practical skills and broadening their understanding of the industry.



### Data Science and Machine Learning Using Python Programming Internship

From March 11th, 2024, to April 10th, 2024, the following students participated in a specialized internship on Data Science and Machine Learning Using Python Programming, organized by AdTech IT & Design Institute:

- Gundluru Vamsi
- K Sevanandakumar
- A Ganga Pavan
- B Mounika
- D Lakshmi Kanth
- G. Sudheer
- G S Riyaz Ahmad
- H Anil
- Billu Sai Kiran
- Bonala Ajay
- Chinipi Lokesh
- Dasari Mohith
- Kanna Munikumar
- A Lakshmi Srinivas
- G. Jaya Kumar

This internship provided participants with advanced skills in data science and machine learning using Python, enabling them to tackle complex data challenges and contribute to the growing field of data analytics.



We commend the dedication and hard work of all these students and look forward to seeing the innovative contributions they will make in their respective fields.

## Guest Lectures: Insights from Industry Experts

As part of our ongoing efforts to enrich our students' learning experiences, we organized a series of guest lectures during the academic year 2023-24. These lectures provided students with valuable insights from industry experts and academic professionals, bridging the gap between classroom learning and real-world applications.

### Advanced Materials and Manufacturing Techniques for Electric Machine Design

From 9th to 10th January 2024, a guest lecture on "Advanced Materials and Manufacturing Techniques for Electric Machine Design" was organized for II Year students. This event saw the participation of 57 students, who learned about the latest materials and manufacturing processes used in the design of electric machines.



This guest lecture was instrumental in providing our students with exposure to advanced concepts and industry trends, enhancing their academic and professional growth.

## Faculty Consultancy and Corporate Training Highlights

### Ms. P. Geetha:

Ms. P. Geetha is currently engaged in a corporate training program with Vijai Electricals Ltd., located off Raj Bhavan Road, Somajiguda, Hyderabad. Her training, which commenced on 16th October 2023 and will conclude on 25th January 2024, aims at improving the company's operational efficiency and electrical engineering practices, generating ₹43,000

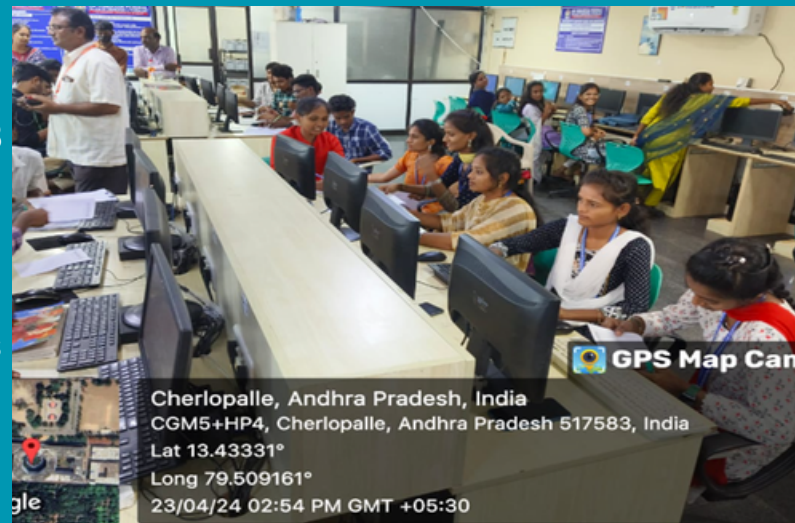
We commend our faculty for her dedication and expertise in contributing to industry advancements.

## Enhancing Technical Skills(Workshops): Bridging the Gap Between Academia and Industry

In our continuous effort to align academic knowledge with industry requirements, a series of workshops, courses, and visits were organized to enhance the technical skills of our students. These initiatives aim to provide hands-on experience and knowledge on modern tools and technologies.

### Value-Added Course on 3D Printing, PCB Design, and Battery Development

From 18th to 20th January 2024, a value-added course on 3D printing, PCB Design, and Battery Development was held, led by Dr. J. Sreenu Naick. This course was attended by 46 students and was relevant to Program Outcomes (PO1, 2, 3, 5, 9, 11, 12) and Program Specific Outcomes (PSO1, 2, 3).



### Workshop on Application of Machine Learning Algorithms in Predicting Electrical Machine Performance

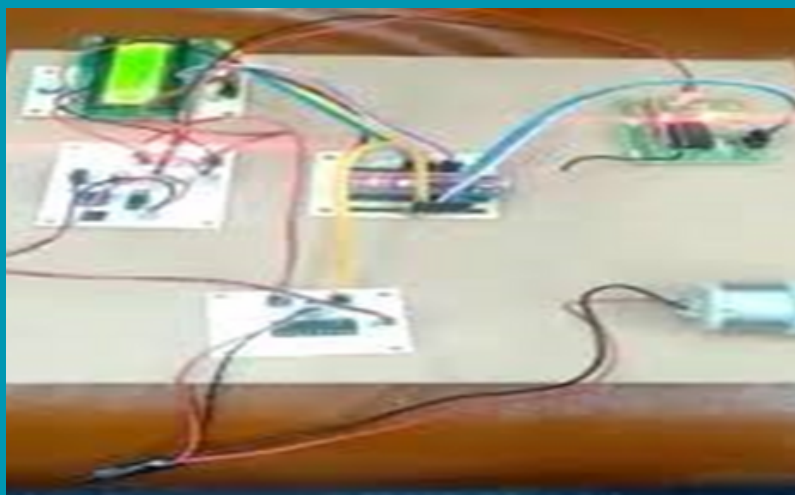
From 23rd to 24th April 2024, a workshop on the Application of Machine Learning Algorithms in Predicting the Performance of Electrical Machines was held, led by Dr. V. Joshi Manohar, Professor at Presidency University, Bangalore. This workshop was attended by 106 students and focused on Program Outcomes (PO1, 2, 3, 5, 9, 11, 12) and Program Specific Outcomes (PSO2).



# Innovative Projects Developed by Faculty Members

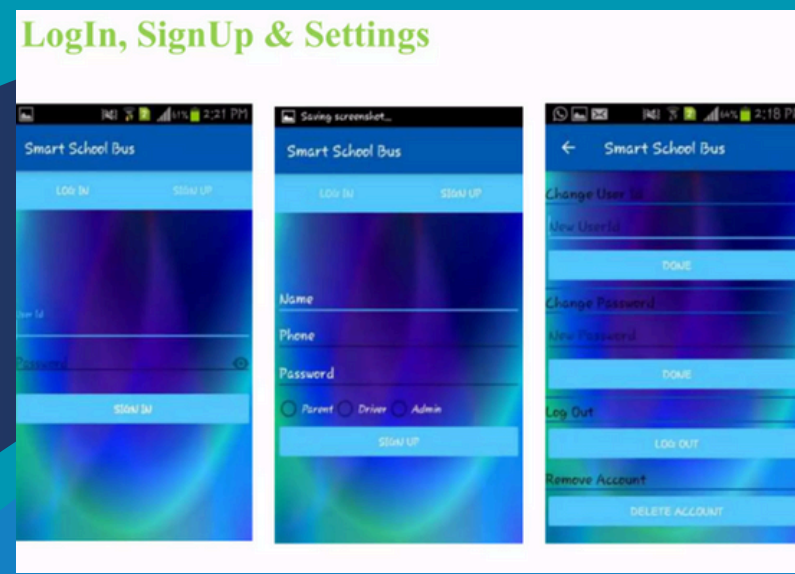
## IoT-Based Home Automation with Worldwide Control Using Arduino:

This project introduces a low-cost, flexible home automation system using an Arduino microcontroller and IP connectivity through local Wi-Fi. Authorized users can control devices remotely via a smartphone app, web browser, or IR remote module. The system manages appliances like lights, fans, and TVs based on sensor feedback, enhancing energy efficiency and automation in smart homes.



## Smart School Bus Ensuring Safety for School-Going Children:

This project enhances the safety of school children during their commute by using RFID technology to track their entry and exit from the bus. The status of the bus and student records are communicated to the school principal and parents via wireless communication and GSM technology, ensuring parents are informed of their child's location and enhancing overall security.



# Faculty Development Programs (FDP) Schedule for 2024

## Renewable Energy Systems

In February 2024, several faculty members will participate in a five-day program titled "Emerging Trends and Challenges in Renewable Energy Systems" from the 5th to the 9th. This program will feature:

- Dr. K. Siva Kumar
- Dr. G. Srinivasan
- Dr. G. Sheshadri
- Mr. M. Lokanadham
- Mr. K. Venkatapathi
- Mr. S. Munisekhar
- Mr. K. Janardhan
- Mr. M. Harish
- Mr. A. Rajesh
- Mr. D. Mohan
- Mr. K. Rajesh
- Mrs. N. Sushmitha
- Ms. P. Geetha
- Mr. T. Pavan Kumar

## 3D Electrical Engineering

In March, from the 11th to the 15th, faculty members will delve into "Aiming Towards 3D in Electrical Engineering" over a five-day period, exploring innovative techniques and advancements in the field. Participants include:

- Dr. K. Siva Kumar
- Mr. K. Janardhan
- Mr. G. Vijay Kumar
- Mr. D. Mohan
- Mrs. N. Sushmitha
- Ms. P. Geetha

## Computational Science and AI in Electrical Engineering

April brings a six-day intensive program from the 1st to the 6th, focusing on "Applications of Computational Science and Artificial Intelligence Algorithms in Electrical Engineering." This program will feature:

- Dr. K. Siva Kumar
- Dr. G. Srinivasan
- Dr. G. Sheshadri
- Mr. S. Munisekhar
- Mr. J. Nagaraju
- Mr. A. Rajesh
- Mrs. N. Sushmitha
- Ms. P. Geetha
- Mr. T. Pavan Kumar

## Control and Automation

Finally, in May, from the 9th to the 15th, a six-day program titled "Emerging Trends on Control and Automation at Present Scenario" will take place. Participants include:

- Dr. G. Srinivasan
- Dr. G. Sheshadri
- Dr. G. Sabarinath
- Mr. K. Kiran
- Mr. G. Vijay Kumar
- Mr. A. Naveen Kumar
- Mr. M. Harish
- Mr. K. Rajesh
- Mrs. N. Sushmitha
- Ms. P. Geetha

These programs are designed to enhance the knowledge and skills of our faculty, ensuring they remain at the forefront of their respective fields.

# Highlights from Our Recent Seminars

We are pleased to share highlights from our recent seminars, which have provided invaluable learning opportunities for our students.

## Seminar on Power Quality Improvement

- **Date:** 10/02/24
- **Topic:** Analysis of Power Quality Improvement in Grid-Connected Wind Driven Induction Generator
- **Expert:** Dr. Ramesh Babu, Power Supply Design Leader, ALSTOM TRANSPORT INDIA LTD, Bangalore
- **Student Participation:** 94 students (37 + 57)

Dr. Ramesh Babu discussed advanced techniques for improving power quality in grid-connected wind-driven induction generators, sharing his extensive experience in power supply design and providing students with practical solutions and insights.

This seminar has significantly enhanced our students' understanding of key topics in power engineering, and we look forward to organizing more such informative events in the future.

## Visiting/Adjunct Faculty Highlights

### Dr. U. Ramesh Babu

**Affiliation:** Power Supply Design Leader, ALSTOM TRANSPORT INDIA LTD, Bangalore

**Topics Covered:** Power Supply Design

**Duration:** 3 hours per week, 06 hours per month, for 07 weeks (Total hours: 21)

### S. Kedarnath

**Affiliation:** Design Engineer, Bhumitra Technologies, Tirupati

**Topics Covered:** Design Engineering

**Duration:** 3 hours per week, 12 hours per month, for 16 weeks (Total hours: 48)

These visiting and adjunct faculty members have enriched our curriculum with their expertise from industry and academia, providing valuable insights and practical knowledge to our students.

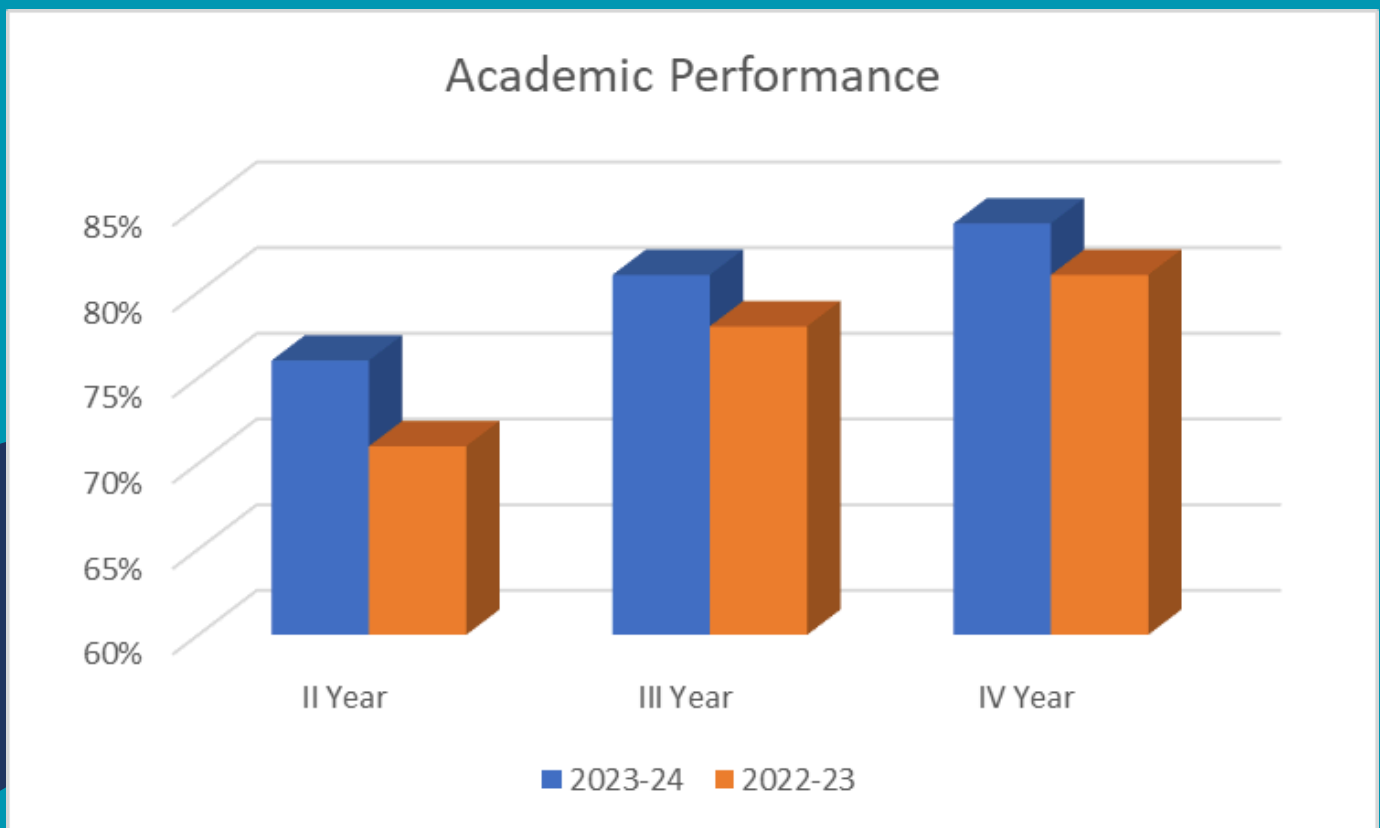
# Academic Performance Comparison

In the academic year 2023-24, we are delighted to report an overall increase in academic performance across all years:

- II Year: 76% (Up from 71% in 2022-23)
- III Year: 81% (Up from 78% in 2022-23)
- IV Year: 84% (Up from 81% in 2022-23)

This year, we have achieved higher overall percentages for all academic years, reflecting the dedication and hard work of our students and faculty.

For a quick and visual representation, here is the graph for your review:



This comparison highlights our commitment to academic excellence and continuous improvement.



# EEE DEPARTMENT

Presented By  
**Dr.K Sivakumar**



**Peace be amplified, world be rectified.**