



# SAKTHI POLYTECHNIC COLLEGE

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### NEWS LETTER



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#### DEPARTMENT VISION

➤ To stand out in imparting knowledge and skills in the field of Electrical and Electronics Engineering to transform Young aspirants into eminent Engineers.

#### DEPARTMENT MISSION

- 1.To create an environment that facilitates effective learning for the students.
- 2.To encourage the students to do innovative projects to bridge the curricular gaps.
- 3.To Provide adequate facilities & opportunities for the students to develop their social and interpersonal skills.
- 4.To encourage the faculty to attend staff development programs for enhancing their knowledge on the recent developments in the field of Electrical & Electronics Engineering and subsequent dissemination to the students.

#### EDITORIAL BOARD

- |                  |                   |
|------------------|-------------------|
| 1. Dr.S.Chitra   | - HOD i/c         |
| 2. Mr.V.Velu     | - Lecturer(Sr.Gr) |
| 3. Mr.M.Yuvarasu | - Lecturer        |
| 4.P.Yadhav       | - III EEE         |
| 5.A.Sai gokul    | - II EEE          |
| 6. M.Ravindhar   | - I EEE           |

#### ஆசிரியர் உரை

வாழ்க்கையில் உயரங்களை அடைய வேண்டும் என்றால், முதலில் உங்களை நீங்கள் நம்ப வேண்டும். ஒவ்வொரு நாளும் ஒரு புதிய வாய்ப்பாகும்; அதை அறிவை வளர்க்கவும், திறமையை மேம்படுத்தவும் பயன்படுத்துங்கள். சிறிய முயற்சிகளே பெரிய சாதனைகளுக்கு அடித்தளமாக அமைகின்றன. ஒழுக்கம், நேர்மை மற்றும் கடின உழைப்பு ஆகிய மூன்றையும் உங்கள் வாழ்க்கையின் வழிகாட்டியாகக் கொள்ளுங்கள். தோல்வி என்பது முடிவல்ல; அது வெற்றிக்கான புதிய தொடக்கம் என்பதை மறவாதீர்கள். உங்கள் கனவுகளை இலக்காக மாற்றி, தன்னம்பிக்கையுடன் முன்னேறுங்கள். நாளைய இந்தியாவை உருவாக்கப் போகும் பொறியாளர்கள் நீங்கள் என்பதில் பெருமை கொள்ளுங்கள்.

"உழைப்பை வழிகாட்டியாகவும்,  
தன்னம்பிக்கையை துணையாகவும்  
கொண்டால் வெற்றி உங்கள் காலடியில்  
இருக்கும்."



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**Since 1981**

**Department News Letter**

**For the Academic year 2024-2025-ODD Semester**

**With blessings from our founder**

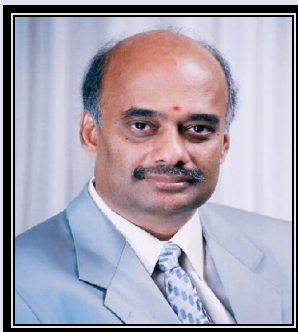


**Padma Bhushan**

**Arutselvar Dr. N. MAHALINGAM, B.Sc., F.I.E.**

**Founder – Sakthi Polytechnic College.**

Arutselvar DR. N. MAHALINGAM a legendary Gandhian by principle, a patriotic and proud son of the soil, Dr. N. MAHALINGAM was a man of pious living. His exemplary social contributions in numerous fields of socio-economic spectrum have benefited scores of institutions and individuals inspired by him during his long career. The government of India duly recognized his meritorious deeds and honored him with the prestigious Civilian Award - PADMA BHUSHAN. Dr. N. Mahalingam is also a recipient of many awards and titles conferred upon him by various educational, social and cultural institutions. As an industrialist he has several important positions and has played major roles fostering the development of agricultural, industrial, human resource and institutional development at the State and National levels. He is the Pioneer of sugar industry. He has rendered notable literary contributions. His social and humanitarian considerations took his journey beyond the boundaries of industries and scholarly tents he nurtured.



**CHAIRMAN**

**Dr. M. MANICKAM, M.sc., M.B.A.**

Dr. M. Manickam, the eldest son of Arutchelvar Dr N Mahalingam, is an industrialist, educationalist and an outstanding administrator with an M.B.A from the University of Michigan, U.S.A. He is the chairman of NIA educational institutions and Vice- Chairman of Sakthi Sugars. Under his capable guidance and stewardship, Sakthi Sugar Mills has expanded and set-up institutions in many places. Through his constant efforts, Sakthi Auto Components Ltd has modernized and expanded. He had been the President of the "All India Sugar Manufacturers Association" and currently he is the President of Indian Sugar Technologists Association. He was awarded an Honorary Doctorate Degree by Tamil Nadu Agricultural University. He evinces keen interest in the development of Good Infrastructure in the technical institute.



**CORRESPONDENT**

**THIRU.G MUNIASAMY, B.TECH., MBA**

Sakthi Polytechnic College is an Institution with a difference, started with the mission of providing quality technical education to rural youth at affordable cost. It is the vision of our beloved Founder Chairman Arutchelvar Dr. N Mahalingam, to empower the rural youth with technical knowledge and skills to train them as the most suited manpower to meet the needs and demands of the growing industrial scenario. We ensure that with the vast potentials for growth and avenues for development, Sakthi Polytechnic College will enhance the capabilities and nurture the latent talents of youth to emerge as entrepreneurs rather than job seekers.



**PRINCIPAL**  
**Dr.S.SENTHILARASU M.E.,Ph.D.,MISTE.,**  
**PRINCIPAL (IN-CHARGE)**

Technology is the need of the hour. In this era of Globalization when there is a need for an enormous number of technically qualified personnel, Polytechnics play a vital role in supplying the Industries, the inputs of their choice. Keeping this in mind our beloved Founder Arutselvar Padma Bhusan Dr N. Mahalinam established Sakthi Polytechnic College with a foresight and vision in this predominantly rural and agricultural area of Sakthi Nagar. The main aim of this Institution is to bring technical education within the reach of the rural youth. We ensure that our Institution with its excellent infrastructure, well qualified staff and conducive atmosphere for learning will go a long way in motivating the rural students to become leaders of technology in future. With Sakthi to lead them, Technical Education is no longer a distant dream for rural youth but very much a reality within their reach.



**DIRECTOR**  
**DR. K.R MUTHUSWAMY M.E., Ph.D.,**

“A desire can change nothing, a decision can change something but a determination can change everything”. It gives me immense pleasure to welcome you all to Sakthi Polytechnic College, an eco-friendly campus that strives with a goal to attain excellence by empowering students with sound knowledge, wisdom and experience. Our strength lies in creating pleasant ambience with an excellent infrastructure, qualified and experienced faculty, commitment to personal care, motivation to excel in academic/extracurricular activities and continuous interaction with

industry. Over the past 41 years, the college has witnessed a strong blend of state-of-the-art infrastructure and dedicated human resource committed to provide professional education with thrust on creativity and innovation. The motivating environment in SPC for knowledge assimilation, generation and dissemination with a sense of social responsibility, human values and concern for environment has carved a niche for itself among the best technical Institutes.



**Dr.S.CHITRA M.E., Ph.D.,MISTE.,  
Lecturer (Sel.Gr II) / HOD I/c**

We all are well aware of the fact that Electricity plays a pivotal role in the development of all industries which is an indicator of the prosperity of the nation. Hence the field of Electrical Engineering has become a significant branch of Engineering. Our department was established in the year 1981 and since then has produced so many successful engineers and entrepreneurs. The students of our department have secured state ranks many times and every year almost 95% of our students achieve I class & honors. This shows the commitment & dedication of our staff members in molding the careers of the students. We have well qualified staff members with vast experience (well over 25 years). The Non-teaching staffs (Technical Assistants) are equally experienced and knowledgeable to ably guide the students in their practical sessions. We have fully equipped Laboratories which will match those of even engineering colleges with meticulously planned layout & plenty of demonstration boards. Our labs stand out amidst those of plenty of polytechnics due to the erection of working models which can be normally found only in industries. Our department was awarded a grant of Rs 5 Lakhs by Government of India through MODROBS Scheme for setting up a separate CAD Centre for departmental utility. Besides offering Quality education to the students we offer Consultancy Services to the neighboring industries. We conduct exhibitions at periodical intervals on “Awareness on Electrical Safety & Energy Conservation” for general public. Vocational courses on “Servicing of Domestic Appliances” are conducted by us for the students of other branches

### **OUR FACULTIES**

| <b>S.No</b> | <b>Name of the Faculty</b>        | <b>Designation</b>                 |
|-------------|-----------------------------------|------------------------------------|
| 1           | Dr.S.CHITRA M.E. Ph.D.,MISTE.,    | Lecturer (Sel.Gr II)<br>/ HOD I/c. |
| 2           | Mr. S. SAKTHIVEL B.E. MISTE.      | Lecturer<br>(Sel.Gr I)             |
| 3           | Mrs. S. KASTHURI B.E., MISTE.,    | Lecturer<br>(Sel.Gr I)             |
| 4           | Mr. V. VELU M.E.,                 | Lecturer (Sr.Gr)                   |
| 5           | Mr. M. YUVARASU M.E.,             | Lecturer                           |
| 6           | Mr. R.S. KRISHNAMURTHY<br>I.T.I., | Workshop<br>Instructor             |
| 7           | Mr. P. VELUSAMY I.T.I.,           | Skilled Asst<br>(Sel.Gr.)          |
| 8           | Mr. P. PALANISAMY I.T.I.,         | Lab Asst.                          |

### **ACTIVITIES**

During the academic year 2024-2025 we have conducted the following activities.

1. Induction program
2. Students Activities

## **INDUCTION PROGRAM**

The Department of Electrical and Electronics Engineering organized an inspiring guest lecture on 18.06.2025 for the II and III Year EEE students on the topic "Read Today and Lead Tomorrow." The session was delivered by Dr. N. Thangapandi, who motivated students to develop the habit of reading as a foundation for personal and professional success.

During the lecture, Dr. Thangapani emphasized that regular reading enhances knowledge, critical thinking, communication skills, and self-confidence. He encouraged students to read not only academic textbooks but also newspapers, technical journals, biographies of great leaders, and books on emerging technologies to stay updated with the latest developments in the field of engineering.

The resource person highlighted how consistent reading can improve decision-making, creativity, and leadership qualities. He also shared practical tips on effective reading habits, time management, and lifelong learning. The interactive session inspired students to cultivate a reading culture and become responsible professionals capable of leading society with knowledge and integrity.

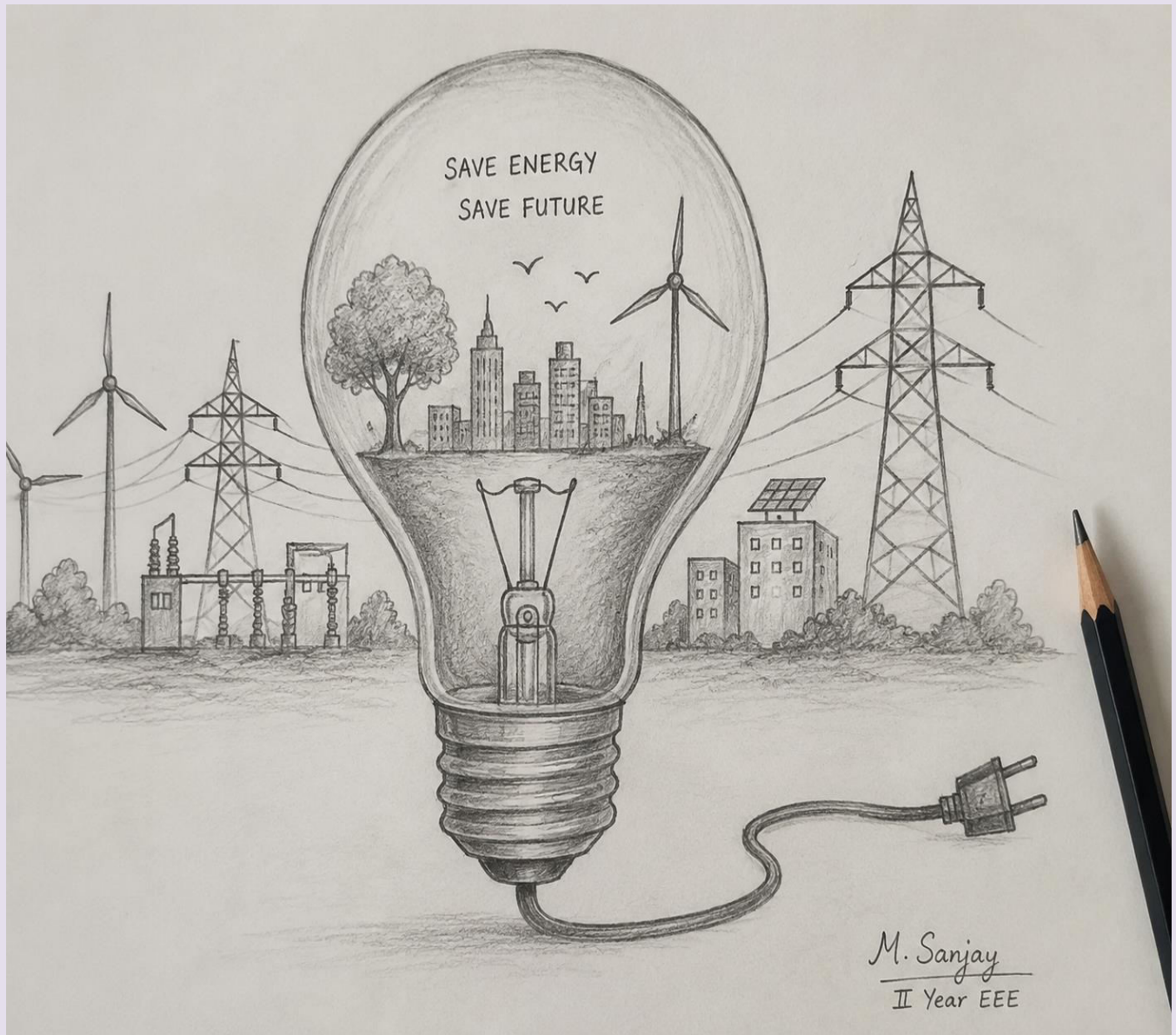


**Guest Lecture on Read Today And Lead Tomorrow**

## STUDENT ACTIVITIES



-Artwork by YANISH ROBERT S (I-EEE)



. -Artwork by M.SANJAY (II-EEE)

## கனவுகள்

கனவு காணும் கண்கள் என்றும்  
காலம் வெல்லும் வலிமை தரும்.  
முயற்சி என்னும் விதை விதைத்தால்  
வெற்றி என்னும் மரம் வளரும்.

தோல்வி வந்தால் துவளாதே,  
துணியை மட்டும் விடாதே.  
நம்பிக்கையுடன் நடைபோட்டால்  
நாளை நிச்சயம் நமதே!

-Written by Swathie (III-EEE)

## மாணவ வாழ்க்கை

புத்தகம் நம் தோழனாக,  
புதிய பாதை திறக்கிறது.  
ஆசிரியர் நம் வழிகாட்டி,  
அறிவின் ஒளி பரப்புகிறார்.

ஒற்றுமையுடன் கற்போம் நாம்,  
உயர்ந்த மனிதர் ஆவோம் நாம்.  
கல்வி என்னும் செல்வத்தால்  
காலம் முழுதும் சிறப்போம் நாம்.

-Written by Tamilselvan (III-EEE)

## *AI-Enabled Smart Grids and Renewable Energy*

The electrical engineering industry is undergoing a major transformation with the adoption of Artificial Intelligence (AI), renewable energy technologies, and digital power systems. Traditional power networks are evolving into intelligent smart grids capable of monitoring electricity flow, predicting faults, and optimizing energy distribution in real time. AI and the Internet of Things (IoT) are playing a significant role in making electrical systems more reliable, efficient, and environmentally friendly.

One of the most important developments is the Smart Grid. Unlike conventional power systems, smart grids use smart meters, digital sensors, and automated control systems to monitor electricity consumption and improve power quality. They help utilities quickly detect faults, reduce transmission losses, and integrate renewable energy sources such as solar and wind power. This technology also enables consumers to monitor their energy usage and reduce electricity bills.

Another emerging trend is the rapid growth of renewable energy integration. Solar photovoltaic (PV) systems, wind turbines, battery energy storage systems (BESS), and microgrids are becoming essential components of modern power systems. Advanced power electronic converters and intelligent controllers ensure stable and efficient operation even when renewable energy output varies due to weather conditions.

Artificial Intelligence is also transforming maintenance practices. Instead of waiting for equipment to fail, AI-based predictive maintenance analyzes data from transformers, motors, and transmission lines to identify potential problems before breakdowns occur. This minimizes downtime, reduces maintenance costs, and improves the reliability of electrical infrastructure.

For diploma students, developing skills in smart grids, power electronics, PLC and SCADA, embedded systems, industrial automation, AI applications, and renewable energy technologies will significantly improve career opportunities.

-Article by M.Yuvarasu, Lecturer-EEE