



SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE

(An Autonomous Institution)

(Approved by AICTE, New Delhi & Affiliated to Pondicherry University)
(Accredited by NBA-AICTE, New Delhi, ISO 9001:2000 Certified Institution &

Accredited by NAAC with "A" Grade)

Madagadipet, Puducherry - 605 107



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



NEWSLETTER "ELECTIC"

ODD SEMESTER



June 2024 – December 2024



Volume-10

| Issue-22



INNOVATE
for Tomorrow



ENGINEER
with Excellence



ELECTRIFY
with Passion



EMPOWER
Together



**"EMPOWERING MINDS,
ELECTRIFYING FUTURES"**



MESSAGE SECTION



With regards
Dr. V.S.K. Venkatachalapathy
Director cum Principal

MESSAGE FROM

DIRECTOR CUM PRINCIPAL

Sri Manakula Vinayagar Engineering College provides a serene and disciplined environment that helps students concentrate on their academic and personal growth. The institution is supported by highly qualified and dedicated faculty members in every department who guide students towards excellence. The college administration continuously strives to develop competent engineers equipped for the modern digital world through quality education and value-added courses that enhance employability skills. Along with academics, the institution emphasizes discipline, ethics, and character building to shape students into responsible citizens.



Accredited with NAAC 'A' Grade in 2013, the college became the first engineering institution in the Union Territory of Puducherry to receive this prestigious recognition.



From its very first batch, students have consistently secured university top ranks and gold medals under Pondicherry University.



The campus is equipped with state-of-the-art laboratories, modern equipment, a well-stocked library, and separate hostel facilities with gym amenities for boys and girls, ensuring a comfortable and enriching learning experience.



MESSAGE FROM

HOD



With regards
Dr. P. Jamuna, B.Tech, M.E., Ph.D.
Professor and Head,
Department of Electrical and
Electronics Engineering



Accredited by the NBA since 2008, the department continuously updates its curriculum to meet emerging trends in renewable energy, electric vehicles, and artificial intelligence.



Through value-added courses, hands-on training, and soft skill development programmes, students are well prepared for employment and competitive examinations.



The department is committed to nurturing future-ready engineers by combining academic excellence with practical exposure and research opportunities, making it one of the leading EEE departments in Puducherry.



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(AN AUTONOMOUS INSTITUTION)



INSTITUTE VISION



To be globally recognized for excellence in quality education, innovation and research for the transformation of lives to serve the society.

INSTITUTE MISSION



M1: Quality Education: To provide comprehensive academic system that amalgamates the cutting-edge technologies with best practices.



M2: Research and Innovation: To foster value-based research and innovation in collaboration with industries and institutions globally for creating intellectuals with new avenues.



M3: Employability and Entrepreneurship: To inculcate the employability and entrepreneurial skills through value and skill-based training.



M4: Ethical Values: To instil deep sense of human values by blending societal righteousness with academic professionalism for the growth of society.

DEPARTMENT HIGHLIGHTS

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ODD SEMESTER

2024-2025



DEPARTMENT VISION

To promote proficiency in the field of Electrical and Electronics Engineering by creating a stimulating environment for research, innovation and entrepreneurship



DEPARTMENT MISSION



M1: Quality Education: To impart high quality technical education with problem solving capabilities by innovative pedagogy in emerging technologies.



M2: Industrial and Societal Needs: To cater the dynamic needs of the industry and society by strengthening industry-institute interaction.



M3: Research and Innovation: To nurture the spirit of research attitude by carrying out innovative technologies pragmatically.



M4: Placement and Entrepreneurship: To inculcate the professionalism in career by advancing synergetic skills to compete in the corporate world.



PROGRAMME OFFERED

Our Electrical and Electronics Engineering Department at Sri Manakula Vinayagar Engineering College provides a **B.Tech** in Electrical and Electronics Engineering, emphasizing innovative power systems and renewable energy solutions.

S.No.	Course	Specialization	Duration
1.	B.Tech	Electrical and Electronics Engineering	4 Years



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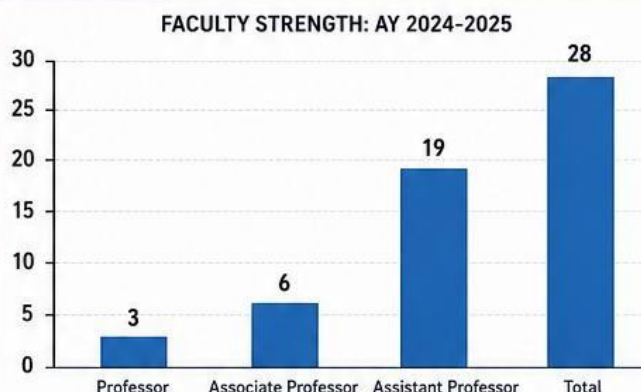
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DEPARTMENT HIGHLIGHTS



FACULTY STRENGTH: AY 2024-2025

Designations		Count
	Professor	3 Members
Ph.D	Associate Professor	6 Members
	Assistant Professor	19 Members
Total		28 Members



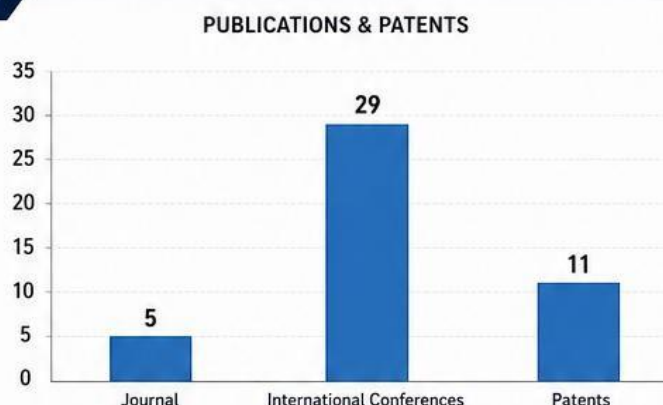
STUDENT STRENGTH: AY 2024-2025

Year	Batch	Total Number of Students
I	2024-2028	112
II	2023-2027	112
III	2022-2026	112
IV	2021-2025	88
Total		424



PUBLICATIONS & PATENTS

S.No.	Publications	Count
1.	Journal	05
2.	International Conferences	29
3.	Patents	11



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LABS / FACILITIES

INFRASTRUCTURE



Electrical Engineering Lab: focuses on home and industrial wiring.



Electronics I Lab: Provides basic electronics understanding.



Electronics II Lab: teaches the creation of analogue and digital circuits.



Electronics III Lab: covers linear and digital integrated circuits.



Electrical Machines I Lab: Practical knowledge of transformers and DC machines.



Electrical Machines II Laboratory: Characteristics and Applications of AC Machines.



Microprocessor and Microcontroller Lab: In-depth analysis of the 8085 microprocessor and the PIC16F877A microcontroller.



Power Electronics and Drives Lab: Electrical drive control techniques based on microcontrollers.



Power System Simulation Lab: Models for simulating an electric power system.



Electric and Hybrid Vehicle Laboratory: Design, testing, and analysis of electric vehicles.



Measurement and Control Lab: The fundamentals of measurement systems.



Embedded System Lab: Real-time electric systems based on ARM 7 processors.

RESEARCH FACILITIES



Electrical machine performance validation setup.



PLC Training equipment with motor setup.



FPGA speed control of BLDC motor.



IoT Development Kit.



Universal programmer burner.



PIC 16F and ARM 7 Development Boards.



Real-time MATLAB interfacing.



Jetson Nano



**EMPOWERING MINDS,
ELECTRIFYING FUTURES**





TRAINING ACTIVITIES

Empowering Students with Skills, Innovation & Real-world Exposure

1 AICTE Boot Camp



Confederation of Indian Industry Puducherry appreciated Mr. Mukesh Kumar from Department of Electrical and Electronics Engineering for his achievement at the AICTE Camp held in Trichy. The appreciation ceremony was organized by the CII Puducherry HR Circle at Puducherry on 20.10.2024 in recognition of his innovation and technical excellence.

2 AI POWERED ACOUSTIC WAVE MONITORING FOR RAIL DEFECT DETECTION

Mukeshkumar R, a third-year student from the Department of Electrical and Electronics Engineering, under the mentorship of Mr. Parthiban B from the Department of EEE, participated in the Grand Finale of Smart India Hackathon 2024 organized by All India Council for Technical Education, the Ministry of Education, and the Innovation Cell from 09.12.2024 to 13.12.2024, held at MIT World Peace University. The project titled "AI Powered Acoustic Wave Monitoring for Rail Defect Detection" utilized piezoelectric sensors and AI models developed using MathWorks MATLAB for real-time rail defect detection. The innovative solution was highly appreciated for its cost-effectiveness, technical innovation, and practical real-world applicability.



3 TEAM "SPARK MIND" – SMART HARDWARE INNOVATION

Third Year students Arokia Anandu Prasanth A and Lalith Kumar S from the Department of Electrical and Electronics Engineering at Sri Manakula Vinayagar Engineering College participated in the Smart India Hackathon 2024 – Hardware Edition as Team "Spark Mind" from 09.12.2024 to 13.12.2024 at Greater Noida. The team developed a low-cost and portable photometric device for detecting chlorine, silver ions, and E. coli in water (Problem Statement ID 1569). Their innovative solution was appreciated for its practicality, affordability, and real-world societal relevance.



Innovation



Teamwork



Real-world Impact

4 EV – 5DAYS TRAINING PROGRAMME (BATTERY MANAGEMENT SYSTEM)

EV- 5days Training programme conducted by the Department of Electrical & Electronics Engineering where the students gained hands-on experience in spot welding during 'Industrial training on Electric Vehicle' connection of 48V Battery management system (BMS), 40A,13 Series with NMC cell pack of 40 pieces.



48V BMS



Spot Welding



NMC Cell Pack



Hands-on Learning

LEARNING TODAY, LEADING TOMORROW



Skill
Development



Innovation &
Creativity



Industry
Exposure



Societal
Impact

"Empowering Engineers. Transforming Ideas. Creating Impact."



FACULTY DEVELOPMENT PROGRAM ON ELECTRIC VEHICLES



A Faculty Development Program on Electric Vehicles was conducted from 2nd to 5th July 2024 by the Department of Electrical and Electronics Engineering under Industry-Institute Collaboration at Sri Manakula Vinayagar Engineering College in association with the IEEE Student Branch and TVS Training & Services, a TVS Group Company.

The Staff Development Programme provided faculty members from core engineering departments with valuable insights into electric vehicle technologies, infrastructure, and emerging trends in sustainable transportation.



ONE-DAY HANDS-ON TRAINING ON IOT AND LOW-COST HARDWARE INTERFACING WITH MATLAB



One-Day Hands-on Training on IoT and Low-Cost Hardware Interfacing with MATLAB was successfully organized on 11th September 2024 by Sri Manakula Vinayagar Engineering College in collaboration with MathWorks and ARK InfoSolution Pvt. Ltd., Chennai.

The Staff Development Programme provided faculty members from various engineering departments with practical exposure to data acquisition, real-time processing, hardware interfacing, and mini-project development using MATLAB and IoT technologies.



GUEST LECTURE

“IoT Protocols for Electrical Engineers”

A Guest Lecture on “IoT Protocols for Electrical Engineers” was conducted on 10.08.2024, delivered by **Dr. Krishna Prasad**, Co-Founder & CEO of KanProKagno Innovation Private Limited.



Date: 10.08.2024



Venue: IEEE SB Classroom



Speaker: Dr. Krishna Prasad
Co-Founder & CEO,
KanProKagno Innovation Private Limited



GPS Map Camera

Madagadipet, Puducherry, India
WJ6P+HFV, Madagadipet, Puducherry 605106, India
Lat 11.911822°
Long 79.634628°
10/08/24 02:01 PM GMT +05:30

Google



GUEST LECTURE / WORKSHOP

“IoT Applications at Neyveli Lignite Corporation India Limited”

Er. Coumarane, Additional chief manager, NLC, Neyveli, provided Guest Lecture titled “IoT Applications at Neyveli Lignite Corporation India Limited” on September 26th 2024.

The session provided a valuable learning experience on real time project in NLC such as Smart Metering, Roof Top Solar, Township Smart Control, Street Light Control System, Bore Well Control System, Ambient and Weather Monitoring System.



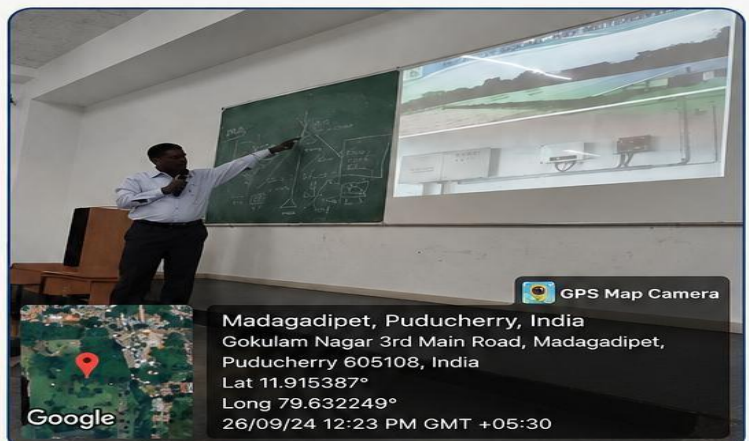
Date: 26.09.2024



Venue: IEEE SB Classroom



Speaker: Er. Coumarane,
Additional Chief Manager, NLC, Neyveli



GPS Map Camera

Madagadipet, Puducherry, India
Gokulam Nagar 3rd Main Road, Madagadipet,
Puducherry 605108, India
Lat 11.915387°
Long 79.632249°
26/09/24 12:23 PM GMT +05:30

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ALUMINI MEET



ALUMINI MEET



Department of EEE
Conducted Alumni meet on
15th August 2024.



TRAINING AND PLACEMENT



20 students from Electrical and Electronics Engineering, Mechanical Engineering and Civil Engineering were received Placement offer by **Srinsoft Engineering.**



STUDENTS ACTIVITY

An Origami session was conducted on **11.09.2024**, where students participated in a two-hour creative workshop exploring the art of paper folding and showcased their imagination through unique and intricate designs.



PLACEMENT SNAPSHOT



20

Students
Placed



3

Departments
(EEE, MECH, CIVIL)



Placed at
**Srinsoft
Engineering**



Placed On
August 2024



EMPOWERING MINDS. BUILDING TOMORROW.

Thank you to our alumni, partners and students for being
an integral part of our journey!



INDUSTRY COLLABORATIONS

MoU	PARTNERSHIP	SPONSORED LAB
TVS Training & Services 	MathWorks Faculty Development Programme (FDP) and student training sessions on Onramp Courses were conducted through ARK Infosolutions Pvt. Ltd. to enhance technical proficiency in MATLAB, Simulink, and emerging engineering applications. 	AICTE-India The Department of Electrical and Electronics Engineering established an All India Council for Technical Education sponsored MODROB Laboratory with advanced facilities including Electric Machine Analysis setup, IoT Kits, BLDC Controller, and PLC systems. The laboratory enhance students' practical learning, research capabilities, and hands-on experience in modern electrical engineering and industrial automation technologies. 

RECRUITERS & FUTURE PLANS

TOP RECRUITERS



and many more...

Future plan



Increase internship opportunities through industry partnerships and **MoUs**.



Encourage students to participate in research, innovation, hackathons, and startup activities.



Conduct industry-oriented workshops, certification courses, and industrial visits regularly.



Improve placement in multinational and product-based companies with higher salary packages.



Promote entrepreneurship and interdisciplinary project development among students.

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VOL: 10



ISSUE: 22

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DEDICATION • TEAMWORK • EXCELLENCE



