SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
(AN AUTONOMOUS INSTITUTION)

DEPARTMENT OF
ELECTRICAL AND ELECTRONICS ENGINEERING

EMBEDDED CLUB

(Academic Year: 2024 to 2025)

Submitted by
Mr.G.Rajavel
Assistant Professor
Faculty Coordinator

Preface

The Embedded Club of the Department of Electrical and Electronics Engineering at Sri Manakula Vinayagar Engineering College functions as a vibrant technical forum established to cultivate innovation, design thinking, and application-oriented competence among students. The club provides a structured academic platform where theoretical foundations are strengthened through systematic technical engagement, collaborative learning, and experiential exposure. Guided by faculty coordinators and actively managed by student office bearers, the club promotes an integrated approach to understanding modern electronic systems from a holistic perspective, emphasizing conceptual clarity, logical reasoning, and structured problem-solving methodologies. It regularly organizes technical discussions, knowledge-sharing sessions, design-oriented activities, interactive workshops, simulation-based explorations, and innovation-driven mini projects to enhance practical insight and analytical capability. The club also encourages interdisciplinary collaboration, teamwork, leadership development, and professional ethics, enabling students to adapt to rapidly evolving technological environments. By fostering creativity, critical thinking, and real-time application perspectives, the Embedded Club plays a significant role in equipping students with industry-relevant competencies, strengthening their technical confidence, and preparing them to become future-ready engineers capable of addressing complex engineering challenges with precision, responsibility, and innovation.

Mr. G. Rajavel
Program Coordinators

HoD/ EEE
(Dr.P.Jamuna)

Dr. AA. Arivalagar
IQAC coordinator

Dean Academics
(Dr.S.Anbumalar)

Director cum Principal
(Dr.V.S.K.Venkatachalapathy)

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ABOUT THE INSTITUTE

Sri Manakula Vinayaga Educational Trust was founded to provide quality and affordable education to the weaker sections of society. The trust established Sri Manakula Vinayagar Engineering College (SMVEC) in 1999. SMVEC is an autonomous institution affiliated to Pondicherry University. It offers 13 undergraduate, 8 postgraduate and 11 Research programs in engineering. SMVEC has been accredited by NAAC with "A" grade and NBA. The institution is also accredited by TATA consultancy services. The college has a good placement record with students getting job offers from top companies in India and abroad. SMVEC students have won many awards and accolades for their academic achievements. To be globally recognized for excellence in quality education, innovation and research for the transformation of lives to serve the society.

Vision

- To nurture the cornerstone of excellence in engineering education and drive innovation by seamlessly integrating the fundamentals of Science and Humanities

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 instill deep sense of human values by blending societal righteousness with academic professionalism for the growth of society.

ABOUT DEPARTMENT

Vision

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

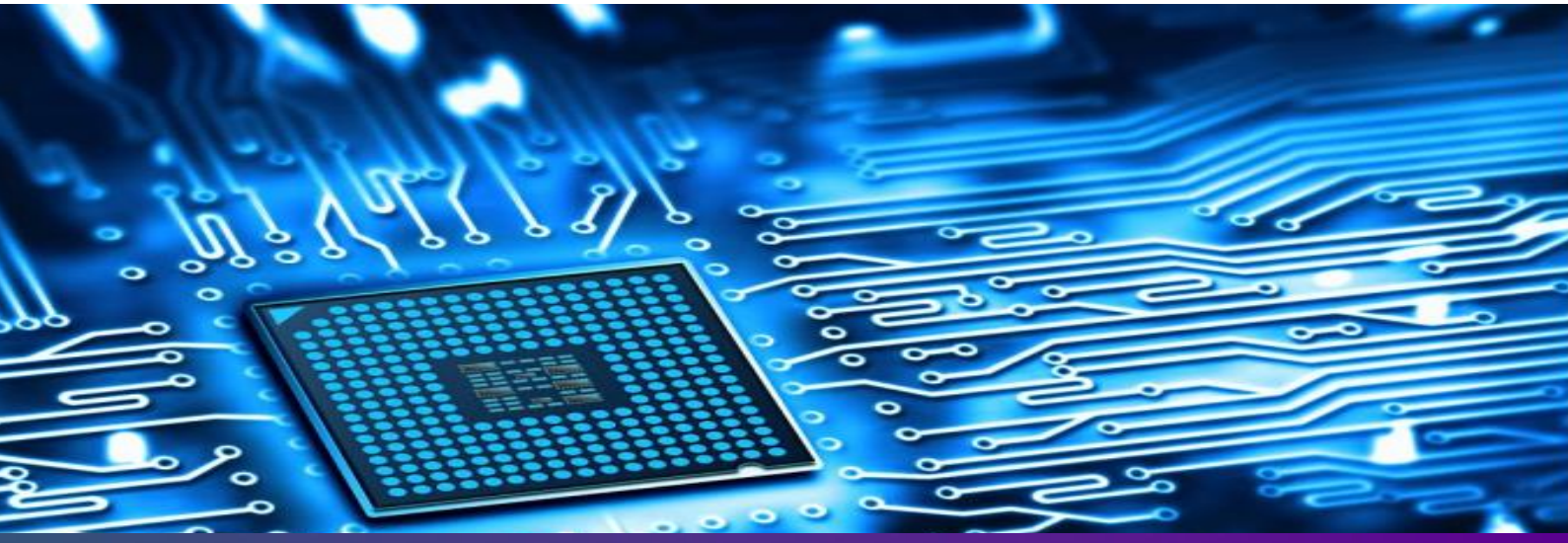
Mission

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.



"Transforming energy into ideas, and ideas into impact."

ABOUT EMBEDDED CLUB

Embedded systems are referred to as control systems tailored for specific applications. Embedded systems are used in many different fields such as automotive, robotics, IoT, AI, ML, biomedical equipment, and instrumentation etc. Looking at its diversity of applications and potential for production of highly innovative products, embedded system can be considered as the primary technology of the present and future.

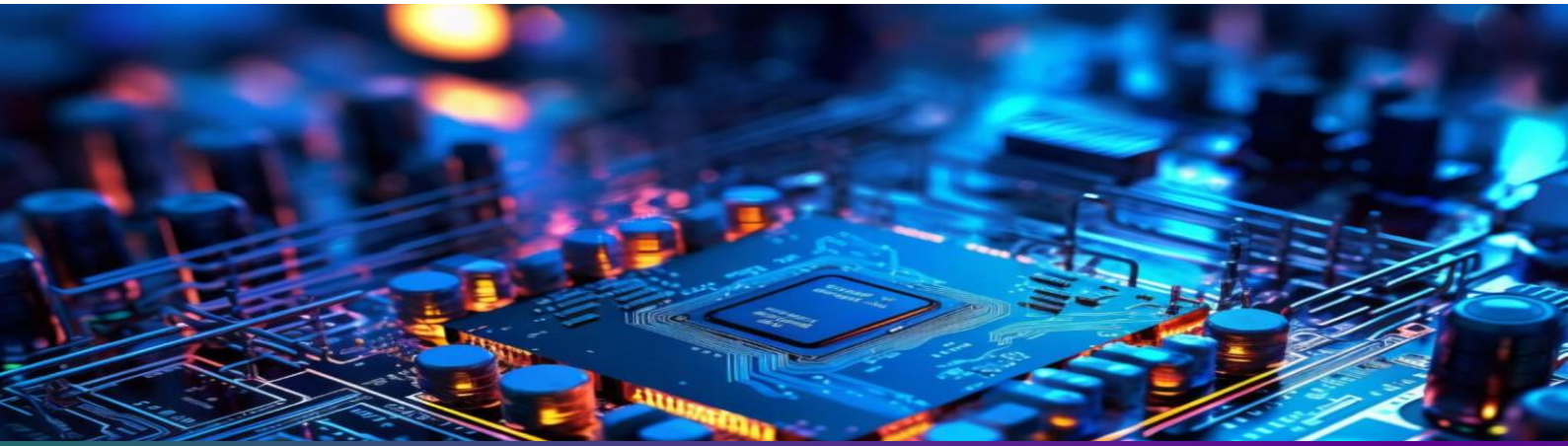
The function of the club is to deal from basics of electronics. This club aims to uncover those key topics that are not part of the curriculum. The club helps the students by integrating their skills in the various fields of engineering and technology to cope up with the highly competitive environment

Objectives of Engineering Clinic

- To make the students aware of the upcoming embedded system technologies.
- To understand hardware and software design requirements of embedded system.
- To analyze the embedded system specifications and develop software program.
- To create a platform for sharing innovative ideas and to develop mini projects.
- To make students to design real time applications.

Functions

- Organising Lecture session on embedded systems.
- Conducting frequent weekend contest.
- Weekly Hands-on training sessions.
- Designing of interfacing circuits.
- Conducting Hackathon for the benefit of students.



"Where circuits connect and innovation flows."

Office Bearers and portfolios

S.No	Name	Position
1.	Mr.G.Rajavel Assistant professor/EEE	Staff Coordinator
2.	Mr. R. Vignesh Assistant professor/EEE	
3.	Mr. C. ADREIN PERIYANAYAGAM Assistant Professor / EEE	
4.	Mr. P. Mohan Raj	President
5.	Mr. K. Jothikrishnan	Vice president
6.	Mr.Srisanthosh B	Secretary
7.	Mr. E.K Abdullah	Joint Secretary
8.	Mr. Tom Tijo Edattukaran	
9.	Ms. M. Savitha	Executive Members
10.	Mr. Mohanlal	
11.	Ms. M.Swetha	Technical Members
12.	Mr. Jeeva sudhan	
13.	Ms. Susangati Samantaray	

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Assistant professor/EEE
Staff Coordinator

Mr. P. Mohan Raj
President

Mr. K. Jothikrishnan
Vice president

Mr.Srisanthosh B
Secretary

Mr. E.K Abdullah
Joint Secretary

Ms. M. Savitha
Executive
Members

Year / Sem / Sec: I / I/A& B **DATE: 23.11.2024**

ENGINEERING CLINIC – CLUB ACTIVITY

Academic Year	:	**2024 – 2025**	
Date/Day	:	**23.11.2024/Saturday**	**Year/Sem/Sec: I/I A&B**
Activities	:	**"TROUBLE SHOOTING OF INDUCTION STOVE "**	

TROUBLE SHOOTING OF INDUCTION STOVE

INTRODUCTION:

Induction stoves have revolutionized modern cooking with their efficient, fast, and safe heating technology. However, like any electronic appliance, they can encounter issues that disrupt their functionality. This guide focuses on identifying and resolving common problems associated with induction stoves

APPLICATIONS:

1..Ensuring Safety:

Detecting and addressing problems such as electrical faults or overheating reduces risks of accidents, such as fires or electric shocks.

2.Cost Savings:

Proper troubleshooting prevents unnecessary replacement of parts or the entire appliance, saving money on repairs or new purchases.

3.Prolonging Appliance Lifespan:

Timely identification and resolution of minor issues prevent them from escalating into major problems, thereby extending the stove's service life.

4.Supporting Maintenance Practices:

Regular troubleshooting allows early detection of wear and tear, enabling preventive maintenance to keep the appliance in optimal condition.

FAULT OCCURS FREQUENTLY:

1. Power cord
2. Filter Capacitor
3. Heating Coil
4. Heating Sensor

CIRCUIT DIAGRAM:

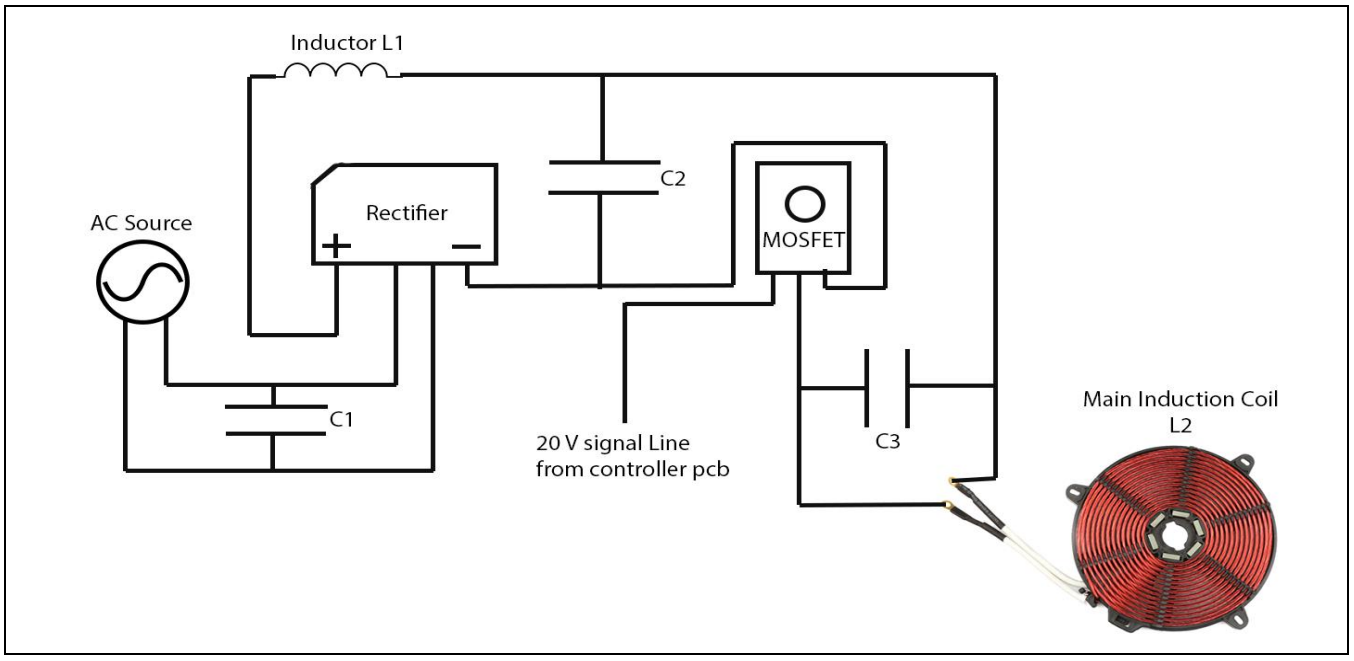


Fig (1). Circuit diagram for Induction Stove

Components Required:

S. No:	Components	Specification	Quantity
1	Electric Induction	-	1
2	Multimeter	-	1
3	Test Lamp set	-	1

Table:(1) Components required

INTERNAL VIEW OF INDUCTION STOVE:

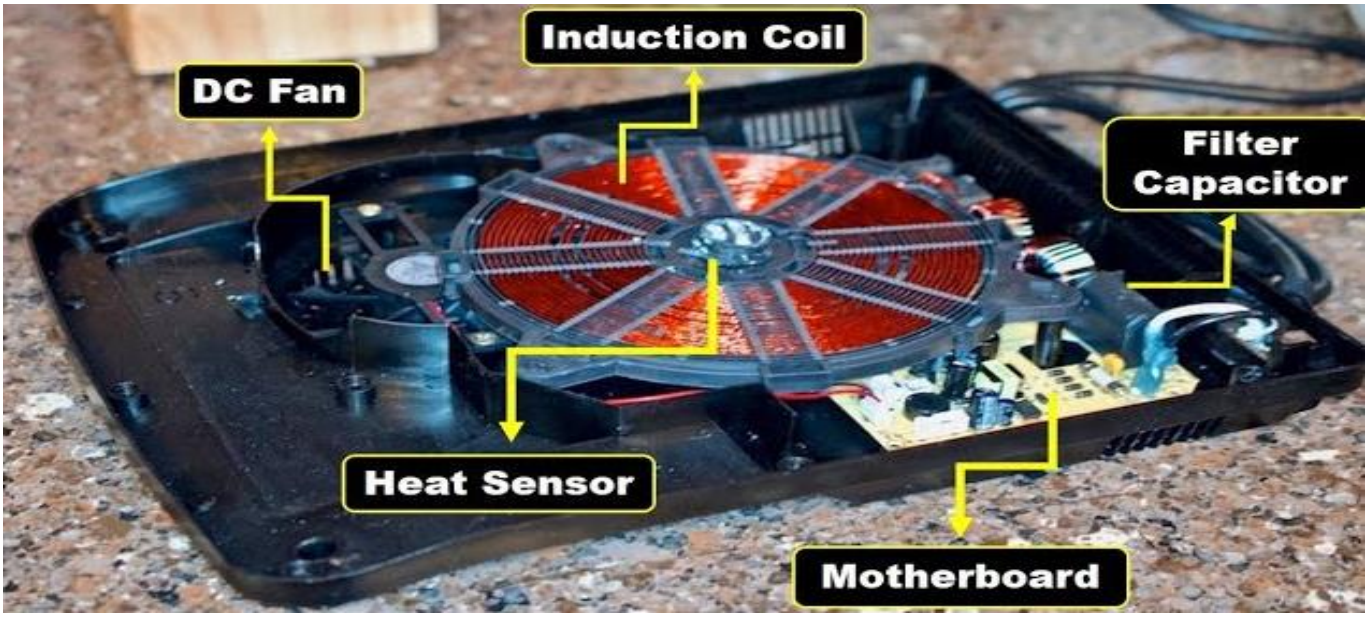
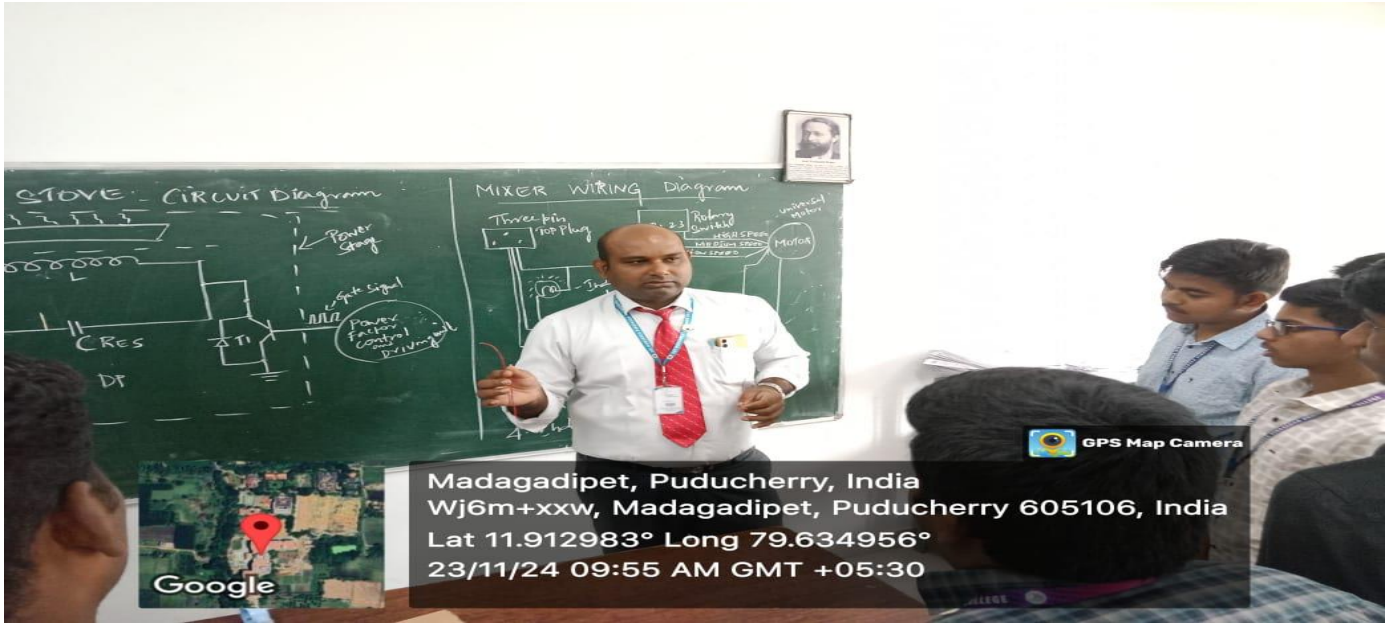


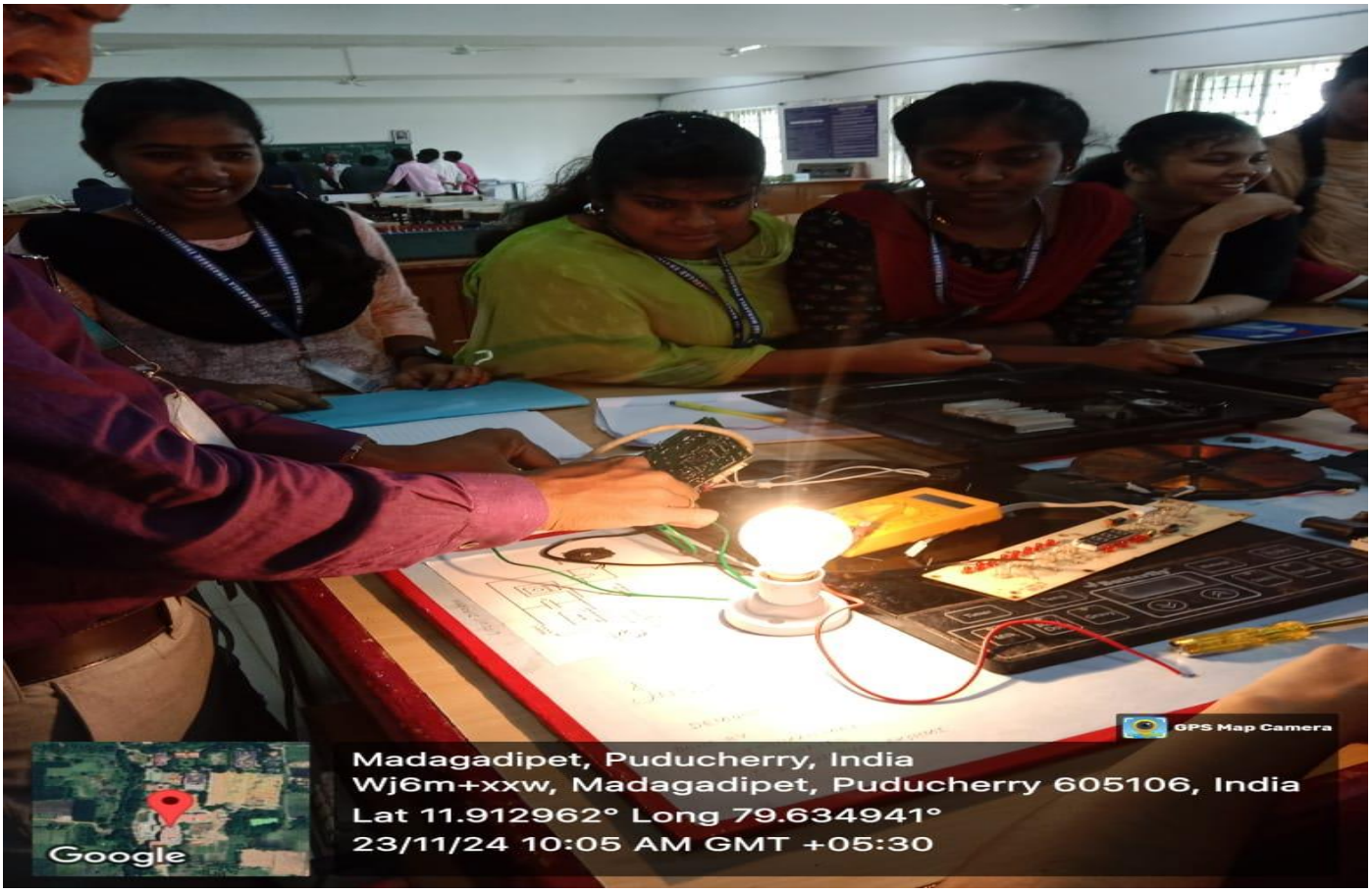
PHOTO GALLERY:

The faculty of the EEE Department Mr.J.Gnanavel and Mr.R.Vignesh giving a demonstration on troubleshooting an electric induction stove to the I-year, A&B section students.



Mr. Parthiban, a faculty member in the EEE Department, is explaining the circuit connections of induction to EEE department Students on board.

The faculty member is practically demonstrating the internal circuit of an induction stove to the first-year EEE Department students of A and B sections



Mr. J. Gnanavel, a faculty member in the EEE Department, is demonstrating to students how to use a multimeter and test lamp to check the continuity of a power cord and verify the input supply to a circuit board.

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