

# PLUGGED IN

ISSUED BY  
DEPARTMENT OF ELECTRICAL  
AND ELECTRONICS  
ENGINEERING

## NEWSLETTER

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## Department vision

To create globally competent engineers with an attitude for research and service to the society

## Department Mission

1. Empower students to solve engineering problems by providing state of the art learning environment.
2. Prepare students to be valuable professionals through research initiatives and industry interactions.
3. Develop students into responsible citizens through ethical conduct, empathy towards the less privileged and value based community initiatives.

## Program Educational Objectives

Our Graduates will

1. Be skilled professionals with a strong foundation in science, mathematics and engineering concepts.
2. Be agile to technological changes
3. Solve multidisciplinary problems through team work and commitment to society

# DEPARTMENT ACHIEVEMENTS



**MoU**

Department of Electrical and Electronics Engineering Signed MoU with Fuselage Innovations for a funded research project on "Load stabilisation for Marine Applications"



Department of Electrical and Electronics Engineering Signed MoU with Hykon India Ltd for consultancy work on Performance Evaluation and Load Test on PMSM motor for their Electric Autorickshaw

## Association Inauguration

The activities of the Electrical and Electronics Engineering Association (EARC) is inaugurated for the academic year 2024-2025 on 22nd August 2024, by Mr. Gorgis Aby, Associate Vice President of Business Development at TeraWe Technologies Pvt. Ltd.





## Copyright

Dr.Chikku Abraham, Vice Principal & Professor ,  
Muhammed Sahal VA (S7EEE), Anuja S (S7EEE) Aswin Lal  
KS (S5 EEE) and Adnan Razi (S7ME) secured copyright  
on the topic “ Solar Efficiency Accelerator using Mirror  
System”



## Add-on Course recognition by Govt.of Kerala

The courses offered by MITS-SIEMENS  
Centre of Excellence is officially approved  
by the Kerala Knowledge Economy Mission  
(KKEM), Government of Kerala



## Workshop organised

The department of Electrical and Electronics  
Engineering is organised a 2 day workshop on  
“Non-Linear Model Predictive Control and Digital  
Twin Technology with a Case Study of a Batch  
Reactor.” on 6th and 7th September 2024.

This event was designed to provide deep insights  
into cutting-edge control strategies and their practical applications. The resource  
person was Dr.I Thirunavukkarasu, Assistant Director (Doctoral Programmes) &  
Professor, Department of Instrumentation and Control Engineering, Manipal  
Institute of Technology



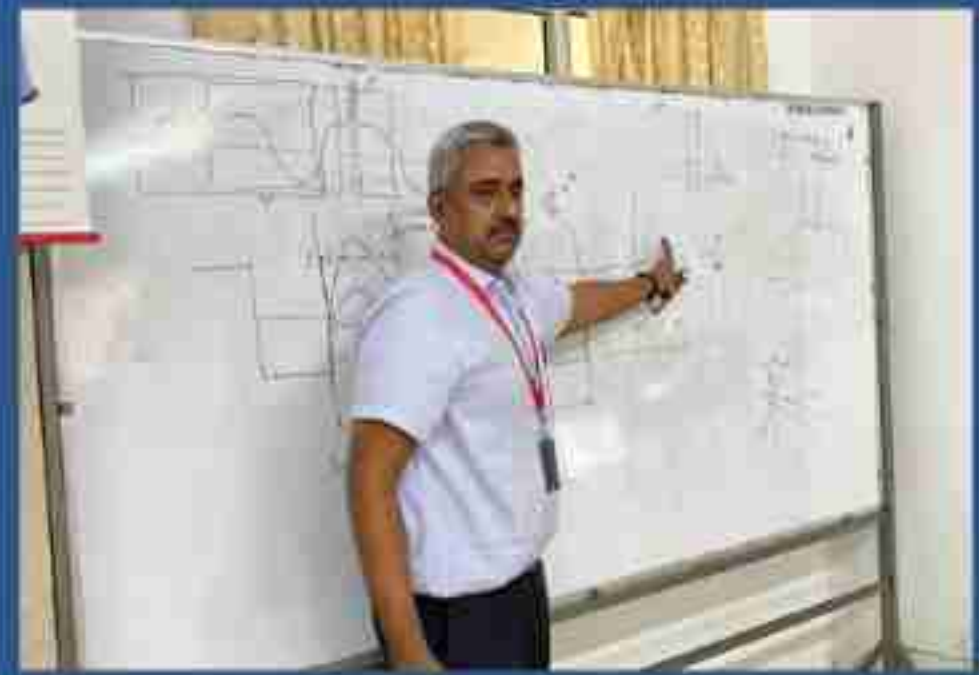
## IEEE PES SB CHAPTER Inauguration

The IEEE Power and Energy (PES) Student Branch  
Chapter of MITS is inaugurated by Dr. Ajith Gopi, Chair,  
IEEE PES Kerala Chapter and Additional Chief Technical  
Manager, ANERT on 6th August 2024. The Chief Guest  
delivered technical session on valuable insights into  
the future of renewable energy and its impact on global  
energy systems.





## FDP Organized



A 3 -day FDP on "Modern Computational and Control Techniques in Engineering : Applications in System Dynamic and Signal Processing" was jointly organised by department of Electrical and Electronics Engineering in association with Department of Electronics and Communication from 20th November 2024 to 22nd November 2024

## Industrial Collaboration

Permanent Magnet Synchronous Motor testing consultancy initiated with Hykon India Ltd. First phase of PMSM motor testing is successfully done in the presence of officials from Hykon



## Technical Talk

EARC-Association of Electrical and Electronics Engineering organized technical talk on the topic "Greening Indian Industries: Leveraging Open Access Power Trading for Renewable Energy Adoption" on 16/10/2024. The resource person was Mr. Nair Nandakuamar, Director, Southern Energy Development Corporation.



## Industrial Visits by Faculty

Faculty of Electrical and Electronics Engineering Department Dr.Anjali Varghese C, Mr.Venugopalan Kurupath and Mr. Jim George visited Fuselage Innovations to explore possible collaboration for a triparty funded project between Department of EEE, Cochin Shipyard and Fuselage





Dr.Anjali Varghese C, Mr.Venugopalan Kurupath, Mr.Jim George and Dr.Sivaprasad A visited dSPACE Technopark Campus Trivandrum to discuss about possible research and opportunities



## Industrial Visits of students

Students of EEE 2022-2026 batch visited Aptener Mechatronics PVT LTD , BENGALURU on 26 th July 2024



## Project Funding

Two Student projects from the EEE Department has been accepted for funding for the Agni Fellowship of IIT Palakkad Technology Hub foundation. The fellowship is for a period of 6 months with a funding of 60,000 each.

### Team 1:DRIVER ASSISTANCE SYSTEM FOR DEAF AND ELDERLY

Students: Kalyani Santosh, Amal K M, Avanthika S, Alen Sabu

Project Guide: Ms. Preenu Paul

Project Mentor: Prof. Venugopalan K.



### Team2: WARZONE TROOP CARRIRER VEHICLE

Students: Muhammed Sahal VA, Fathima Thasneem, WinstonAntony Roberts, Steve Joseph

Project Guide: Ms.Ambili Mohan

Project Mentor: Prof. Venugopalan K.





## Project Funding

Ms. Preenu Paul, Assistant Professor, Department of EEE, and our students: Aswin Lal K S (S5 EEE), Vivek Biju (S5 EEE), Shankar Mahesh (S5 EEE) Afeef K T (S5 ECE) and Alwin Aby Mathew (S5 CSEA) are selected among the top five teams and presented their innovative idea "Ecoloop

Acqaponics: Zero waste farming powered by Solar and Insect based recycling" at the IEEE Smart Village Symposium (ISV). The symposium was held on November 7 & 8, 2024 at the Dhirubhai Ambani Institute of Information and Communication Technology (DA-ICT), Gandhinagar, Gujarat.



## Capstone Project

- The Muthoot group has funded Rs. 200000/- for the project "Eco-spark-Retrofitted Electric Vehicle". The project will be done by 8 students of EEE 2021-2025 Batch
- Project Mentors: Mr. John Jacob, Mr. Ajith Vijayan
- Team Members: Akshay Abhilash, Aravind A S, Muhammed Bilal, Rosin Mathew, Nevin Shaji, Albin KN, Sneha Gopidas, Leon Biju

## FACULTY ACHIEVEMENTS

### PhD

Dr. Jim George has successfully defended his thesis on "Design and Implementation of an ANFIS based State feedback Sliding Mode Control with Optimization Perspective for DC Servo Position Control" at Vellore Institute of Technology, Vellore on 11/12/2024



### Publications

Dr. Sivaprasad A published a journal paper titled "A Two-Input Single-Output Boost Converter with Fault Tolerant Operation" in Distributed Generation and Alternative Energy Journal (Volume 39, Issue 3, Page number 593-612), 2024 (Scopus Indexed)



Ms. Ambili Mohan Published Research paper "Control of Attitude Trajectory of Launch Vehicle Using Optimal LQR-Based PID Controller" on 2nd Congress on Control, Robotics, and Mechatronics (CRM2024) Organized by SR University, Warangal, India and Technically Sponsored by Soft Computing Research Society.





## Technical Training of Faculty



Ms. Jeanmary Jose, Assistant Professor successfully completed 6 month AICTE QIP PG Certificate Programme 2024- AI&DS by IIIT Kottayam



Mr. John Jacob, Assistant Professor successfully completed 1 week "Train the trainer" programme at Tessolve Semiconductor Pvt. Ltd, Bangalore from 2nd December 2024 to 7th december 2024



Ms. Breeza Paulose has undergone Innovation Ambassador Training "Reskilling" (Total 21 sessions and 21 Contact Hours) conducted in online mode by MoE's Innovation cell & AICTE

## Faculty as Resource Person



Mr. Venugopalan Kurupath, Professor, Department of Electrical and Electronics Engineering Delivered a session on "Hands-on Exercise in MATLAB: Harmonic Analysis" in 3 -day FDP on "Modern Computational and Control Techniques in Engineering : Applications in System Dynamic and Signal Processing" at MITS Varikoli

Mr. Venugopalan Kurupath, Professor, EEE Department delivered a session on Engineering Ethics on 24th July 2024 at APJ Abdul Kalam Hall for fifth semester students



Mr. Jim George, Assistant Professor, Department of Electrical and Electronics Engineering Delivered a session on "Control of Nonlinear physical systems: DC Servo and Inverted Pendulum Applications" in 3 -day FDP on "Modern Computational and Control Techniques in Engineering : Applications in System Dynamic and Signal Processing" at MITS Varikoli



## FDP Attended

- Mr. Tony Mathew attended NPTEL-AICTE FDP on Power Electronics with Wide Band Gap Devices by IIT Mandi
- Dr. Anjali Varghese C attended 5 day online FDP on "Hydrogen Energy For Sustainable Future" organized by Department of Electrical Engineering, MES College of Engineering, Kuttippuram from 08/07/2024 to 12/07/2024
- Ms. Geethu Chacko attended 5 day online FDP on "Hydrogen Energy For Sustainable Future" organized by Department of Electrical Engineering, MES College of Engineering, Kuttippuram from 08/07/2024 to 12/07/2024
- Mr. Aravind Rajagopal attended 5 day FDP on "Applied Research in Electric Vehicle Technology and Renewable Energy Integration" organized by Department of Electrical Engineering, Adishankara Institute of Engineering and Technology, Kalady from 01/07/2024 to 05/07/2024
- Ms. Preenu Paul attended 5 day online FDP on "Hydrogen Energy For Sustainable Future" organized by Department of Electrical Engineering, MES College of Engineering, Kuttippuram from 08/07/2024 to 12/07/2024
- Ms. Breeza Paulose attended 5 day online FDP on "Hydrogen Energy For Sustainable Future" organized by Department of Electrical Engineering, MES College of Engineering, Kuttippuram from 08/07/2024 to 12/07/2024

## NPTEL

- Mr. Tony Mathew Successfully completed the 12 week course on Power Electronics with Wide Band Gap Devices by IIT Mandi with Elite+Gold Certification
- Ms. Breeza Paulose Successfully completed the 12 week course on "Introduction to Machine Learning" by IIT Madras with Elite Certification

## STUDENT ACHIEVEMENTS

### V-Guard Big Idea Tech Design Contest 2024

Two Teams from Electrical and Electronics Engineering department were selected as the finalist of V-Guard Big Idea Tech Design Contest 2024. The finalists of the Big Idea Competition will have the opportunity for a pre-placement interview (PPI) with V-Guard



**Team 1: Plasma Based Water purifier**  
**Members:KIRAN S (S7EEE),GOUDAM N**  
**DELEEP (S7EEE), MUHAMMAD MUSTHAFA B**  
**T (S7EEE)**



**Team 2:Sustainable Stabilizer**  
**Members:REMIEL GEORGE V J (S5EEE),MUHAMMED**  
**DILSHAD K(S5EEE),NEHA JOSE(S5EEE)**



## ***KSEB Quiz College level***



**Shuhaib Sadiq (S7 EEE),Aebel K Jijo (S7 EEE) secured first prize in College level KSEB Power quiz. Energy quiz is organized by KSEB Officers Association and are qualified for district level competition**



**Amal KM (S7 EEE), Aswinlal K S (S5 EEE) secured first prize in College level KSEB Energy Quiz and are qualified for District Level Energy quiz organized by KSEB Engineers Association**



## ***KSEB Energy Quiz District level***

**Amal KM (S7 EEE), Aswinlal K S (S5 EEE) secured second prize in District level KSEB Energy quiz organized by KSEB Engineers Association**





# Internship

## SELECTED FOR PLACEMENT ORIENTED INTERNSHIP

Still counting.....

## Congratulations

(2021 -25 batch)

**LARSEN & TOUBRO**

MUHAMMAD MUSTHAFA B T

ELDHOSE PAULSOE

ABDEL K IRIO

SABARINATH S

STEVE JOSEPH

**ABB**

**APTIV**

**dSPACE**

ALLEN SABU

AMAL KM

ELDHIO PAUL

KALYANI SANTHOSH

AVANTHIKA S

ALBIN K P

MUHAMMAD ASLAM CS

WINSTON ANTONY ROBERTS

**Marine Electricals**

ALEENA BILJI

FATHIMA THASNEEM

**SFO TECHNOLOGIES**  
A NeST Group Company  
CREATING INNOVATIVE SOLUTIONS

ELDO PAUL

P R KURIKOSE

MRUDUAL M SANTHOSH

ELDHIO PAUL

ALBIN K P

MUHAMMAD ASLAM CS

WINSTON ANTONY ROBERTS

ALEENA BILJI

FATHIMA THASNEEM

ROYAL M SAM

MILAN ELDHO BABU

CIDHU KRISHNA S

AJZAL V

## Participation in National Events

XPLORE E-VENTURE event was conducted by CENTRE FOR E-MOBILITY, SRM INSTITUTE OF SCIENCE & TECHNOLOGY, KATTANKULATHUR, CHENNAI, TAMIL NADU and our team ECOSPARK were qualified for the final round on the presentation at SRM INSTITUTE on 24th and 25th October 2024. Team ECOSPARK which participated in the event consists of 6 students from EEE 2021-2025 Batch. Team members are: Akshay Abhilash , Aravind A S, Leon Biju , Nevin Shaji, Rosin Mathew , Sneha Gopidas



## NPTEL Certifications by Students

S7 EEE	<ul style="list-style-type: none"> <li>Kalyani Santhosh Successfully completed NPTEL Course on Introduction to Internet of Things with Elite+Silver certification</li> <li>AVANTHIKA S Successfully completed NPTEL Course on Solar Energy Engineering and Technology with Elite Certification</li> <li>AMAL KM Successfully completed the NPTEL course on Solar Energy Engineering and Technology with Elite Certification</li> <li>AJZAL V A of Successfully completed NPTEL Course on Deep Learning - IIT Ropar</li> <li>Aleena Bilji successfully completed NPTEL Course on Solar Energy Engineering and Technology with Elite Certification</li> <li>Sreerag sreevalsalan Successfully completed Course on Deep Learning - IIT Ropar</li> <li>Akshay Abhilash Successfully completed NPTEL Course on Digital Circuits with Elite Certification</li> </ul>
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S7 EEE	<ul style="list-style-type: none"> <li>• Steve Joseph Successfully completed NPTEL Course on Deep Learning - IIT Ropar</li> <li>• Aravind A S Successfully completed NPTEL Course on Digital Circuits with Elite Certification</li> <li>• Fathima Farhan K Successfully completed with Elite Certification NPTEL Course on Solar Energy Engineering and Technology</li> <li>• Albin K N Successfully completed NPTEL Course on Digital Circuits</li> <li>• Mohammed Bilal Successfully completed NPTEL Course on Digital Circuits</li> <li>• Muhammad Musthafa BT Successfully completed NPTEL Course on Software Engineering</li> <li>• Muhammed Aslam C S Successfully completed NPTEL Course on Solar Energy Engineering and Technology</li> <li>• Fathima Thasneem Successfully completed NPTEL Course on Solar Energy Engineering and Technology with Elite Certification</li> <li>• Winston Antony Roberts of Successfully completed NPTEL course on Introduction To Machine Learning – IITKGP with Elite+ Silver Certification</li> <li>• Alen Sabu Successfully completed NPTEL course on Introduction To Machine Learning – IITKGP with Elite + Silver Certification</li> <li>• Steve Joseph Successfully completed NPTEL course on Introduction To Machine Learning – IITKGP with Elite Certification</li> <li>• Gidhu Krishna S Successfully completed NPTEL course on Introduction To Machine Learning – IITKGP with Elite Certification</li> <li>• Aebel K Jijo Successfully completed NPTEL course on Introduction To Machine Learning – IITKGP with Elite Certification</li> </ul>
S5 EEE	<ul style="list-style-type: none"> <li>• Remiel George V J secured Topper of 5% with Elite certification for the course on "Certification Software Testing" and successfully completed the course on Solar Energy Engineering and Technology</li> <li>• Gowri Priya Vinu Successfully completed Course on Solar Energy Engineering and Technology and Course on Modern Digital Communication Techniques</li> <li>• Sonel M Shibu Successfully completed Course on Solar Energy Engineering and Technology with Elite Certification</li> <li>• Devika Vineeth Successfully completed course on Introduction To Machine Learning – IITKGP</li> <li>• Shankar Mahesh Successfully completed course on Data Science for Engineers</li> <li>• Christeena Sabu Successfully completed Course on Solar Energy Engineering and Technology</li> <li>• Sheik Mohammed Maheel Successfully completed Course on Digital Circuits</li> <li>• Alim Al Irfan T A Successfully completed the Course on Digital Circuits with Elite Certification</li> <li>• Athira Santhosh Successfully completed Course on Solar Energy Engineering and Technology</li> <li>• Madhav P S Successfully completed course on Introduction To Machine Learning – IITKGP with Elite+ Silver Certification</li> <li>• Mridula Manoj Successfully completed course on Introduction To Machine Learning – IITKGP with Elite+ Silver Certification and Successfully completed NPTEL Course on Solar Energy Engineering and Technology</li> <li>• Gabrin Paul Successfully completed Course on Digital Circuits</li> <li>• Aswin Lal K S Successfully completed Course on The Joy of Computing using Python with Elite Certification</li> <li>• Fayas Basheer Successfully completed NPTEL Course on Digital Circuits with Elite Certification</li> </ul>



S5 EEE	<ul style="list-style-type: none"> <li>Jonathan Jacob Jose Successfully completed NPTEL Course on C Programming and Assembly Language</li> <li>Jasbeer K Mujeeb Successfully completed Course on Digital Circuits with Elite Certification</li> <li>Muhammed Dilshad K Successfully completed Course on Introduction to Machine Learning</li> <li>Vivek Biju Successfully completed Course on Solar Energy Engineering and Technology</li> <li>Anfaz K A Successfully completed Course on Digital Circuits with Elite Certification</li> <li>Arni Prem Successfully completed course on Introduction To Machine Learning – IITKGP with Elite+ Silver Certification and Successfully completed Course on Solar Energy Engineering and Technology</li> <li>Alin Cheriyan Successfully completed course on Introduction To Machine Learning – IITKGP with Elite Certification</li> <li>Bhavana R Successfully completed course on Product Design And Development with Elite+ Silver Certification</li> <li>Jerin Jolly Successfully completed Course on Introduction to Machine Learning with Elite+ Silver Certification</li> <li>Krishna T M Successfully completed Course on Digital Circuits</li> <li>Amitha Thomas Successfully completed course on Introduction To Machine Learning – IITKGP with Elite+ Silver Certification and Successfully completed Course on Solar Energy Engineering and Technology</li> <li>Amritha Santhosh Successfully completed course on Introduction To Machine Learning – IITKGP with Elite+ Silver Certification and Successfully completed Course on Solar Energy Engineering and Technology</li> </ul>
S3 EEE	<ul style="list-style-type: none"> <li>Akhila S Successfully completed NPTEL course on Python for Data Science with Elite Certification</li> <li>Aby Roy Successfully completed NPTEL Course on Problem Solving Through Programming in C</li> <li>ARJUN C S Successfully completed NPTEL Course on Introduction to Semiconductor Devices</li> <li>Abhinav R Successfully completed the NPTEL course on Introduction to Internet of Things with Elite Certification</li> </ul>

## Awards

Anagha Ravikumar (S5 EEE),Varun Haridas (S5 AI), and Vaishakh S. Nair (S5 CY) secured the First Prize in the Money Conclave 2024 Ideathon for their exceptional pitch, presenting the startup idea "Hire Kerala." Their achievement was rewarded with a cash prize of ₹25,000 and an investment of ₹6 lakhs to bring their innovative concept to life



## Newsletter Editorial Board



Faculty In Charge:  
Ms. Breeza Paulose



Student Editor:  
Ms.Jovial Rose George(S3EEE)



Student Editor:  
Ms. Gowripriya Vinu(S5EEE)