

M.I.E.T. ENGINEERING COLLEGE, TRICHY

**DEPARTMENT OF ELECTRICAL
AND ELECTRONICS ENGINEERING**

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

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About us

The Department of Electrical and Electronics Engineering at M.I.E.T. Engineering College was established in 1998 and offers two undergraduate programs: Under-Graduate Programme (B.E) in Electrical and Electronics Engineering and Post-Graduate Programme (M.E) in Power Electronics and Drives. The department has been accredited by the National Board of Accreditation (NBA) and recognized as a Research Department by Anna University. The programs cover subjects such as Electrical Machines, Transmission and Distribution, Electronic Devices and Circuits, Control Systems, Micro Processor and Micro Controllers, and Power System Operation and Control.

The department has well-equipped laboratories, including Electrical Machines Lab, Measurement and Instrumentation Lab, Control Systems Lab, Power Electronics Lab, Power System Simulation Lab, and Renewable Energy Systems Lab. The department also encourages students to organize seminars, workshops, and conferences on advanced areas of Electrical and Electronics Engineering, and invites eminent professors, scientists, technocrats, and industrialists to deliver guest lectures and interact with students.

VISION

- ❖ To be recognized as centre of excellence in Electrical and Electronic Engineering, contribution to the needs of stakeholders.

MISSION

- ❖ To impart quality education through comprehensive exposure, value additions and effective teaching learning process.
- ❖ To facilitate learning environment in view of challenges in the field of Electrical and Electronics Engineering.
- ❖ To provide Platform for students to update the contemporary knowledge with professional quality and commitment to lifelong learning.

STUDENT PUBLICATIONS IN JOURNALS & CONFERENCES

1. **K. Bhuvanesari** presented/published the paper titled “**Machine Learning based Secure and Efficient Renewable Energy Model for Power Inverter Application**” in MEST-23 in June 2023.
2. **B. Suriyamoorthi** presented/published the paper titled “**Multi Output DC-DC Converter for Electric Vehicle Application with Battery Protection and Monitoring**” in MEST-23 in June 2023.
3. **K. Parthiban** presented/published the paper titled “**Design of Integrated SEPIC-CUK Converter for Renewable Energy Resources**” in MEST-23 in June 2023.
4. **B. Prakash** presented/published the paper titled “**Off Board Electric Vehicle Battery Charger using PV Array**” in MEST-23 in June 2023.
5. **A. Prince Kiruthika** presented/published the paper titled “**PV Operated BLDC Based Modified SEPIC Converter**” in MEST-23 in June 2023.
6. **S. Nirmal Kumar** presented/published the paper titled “**Design and Implementation of an Intelligent Low Cost IoT Solution for Energy Monitoring of Photovoltaic Stations**” in MEST-23 in June 2023.

STUDENT INTERNSHIPS / INDUSTRIAL TRAINING

1. **P. Nagarjune** underwent **Control Systems Training** at **SD Pro Solutions** from **28.10.2022 to 31.10.2022**.
2. **D. Dhivya Sri** underwent **Control Systems Training** at **SD Pro Solutions** from **28.10.2022 to 31.10.2022**.
3. **P. Harish** underwent **Window Server Management Training** at **CADD Centre Livewire** on **15.10.2022**.
4. **P. Mohamed Irfan** underwent **Window Server Management Training** at **CADD Centre Livewire** on **15.10.2022**.
5. **E. Alen Joy** underwent **Embedded Systems Training** at **SD Pro Solutions** from **02.11.2022 to 05.11.2022**.
6. **M. Sanjeeth** underwent **Embedded Systems Training** at **SD Pro Solutions** from **02.11.2022 to 05.11.2022**.
7. **E. Bagapriyan** underwent **Embedded Systems Training** at **SD Pro Solutions** from **02.11.2022 to 05.11.2022**.

8. **P. Hariharan** underwent **Embedded Systems Training** at **SD Pro Solutions** from **02.11.2022 to 05.11.2022**.
9. **E. Bagapriyan** underwent **Embedded Systems Training** at **SD Pro Solutions** from **02.11.2022 to 05.11.2022**.
10. **P. Harish** underwent **Embedded Systems Training** at **SD Pro Solutions** from **02.11.2022 to 05.11.2022**.
11. **A. Syed Khan** underwent **IT Project Training** at **CADD Centre Livewire** on **15.10.2022**.
12. **K. Siva Sankar** underwent **IT Project Training** at **CADD Centre Livewire** on **15.10.2022**.
13. **D. Mohammed Ismail** underwent **IT Project Training** at **CADD Centre Livewire** on **15.10.2022**.
14. **M. S. Sadik Ali** underwent **IT Project Training** at **CADD Centre Livewire** on **15.10.2022**.
15. **N. Mohamed Hany** underwent **IT Project Training** at **CADD Centre Livewire** on **15.10.2022**.
16. **S. Mohamed Irfan** underwent **IT Project Training** at **CADD Centre Livewire** on **15.10.2022**.

STUDENTS PARTICIPATION IN MOOC/NPTEL/SELF LEARNING COURSES

1. Student Abdul Jamees J (Register No. 812420105001) successfully completed the course on “Augmented Reality and Virtual Reality” offered under the Naan Mudhalvan Programme.
2. Student Abdulrahman B (Register No. 812420105002) successfully completed the course on “Augmented Reality and Virtual Reality” offered under the Naan Mudhalvan Programme.
3. Student Manoj R (Register No. 812420105007) successfully completed the course on “Augmented Reality and Virtual Reality” offered under the Naan Mudhalvan Programme.
4. Student Sangavi M (Register No. 812420105330) successfully completed the course on “Augmented Reality and Virtual Reality” offered under the Naan Mudhalvan Programme.
5. Student Sivasankar K (Register No. 812420105338) successfully completed the course on “Augmented Reality and Virtual Reality” offered under the Naan Mudhalvan Programme.
6. Student Anusuya K (Register No. 812420105003) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.

7. Student Arshath Mohamed P (Register No. 812420105004) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.
8. Student Lakshmi V (Register No. 812420105006) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.
9. Student Nivedha K (Register No. 812420105011) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.
10. Student Prabakaran V (Register No. 812420105012) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.
11. Student Rajasri R (Register No. 812420105013) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.
12. Student Vigneshwaran M (Register No. 812420105019) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.
13. Student Aabith Hussain J (Register No. 812420105301) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.
14. Student Abishegan D (Register No. 812420105302) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.
15. Student Gulzar Ahmed B (Register No. 812420105312) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.
16. Student Mohamed Irfan S (Register No. 812420105321) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.
17. Student Poorani P (Register No. 812420105325) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.
18. Student Saravanakumar A (Register No. 812420105331) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.
19. Student Shaik Salman S (Register No. 812420105335) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.
20. Student Suriya Prakash B (Register No. 812420105341) successfully completed the course on “Electric Vehicle Charging System” offered under the Naan Mudhalvan Programme.

FACULTY AS RESOURCE PERSON

Faculty	Event	Date	Location / Organizer
Mr.D.Jayaraj	Science Robotics Expo	02.06.2023	Trichy / The Almighty's Matriculation School
B.Muthuselvi	Seminar on Recent trends in Industrial process automation	08.02.2023	National Institute of Technology, Trichy

GUEST LECTURES

- A One-Day Seminar on “Scope of Technical Software” was organized for EEE students on 28.03.2023 at the B-Block Seminar Hall. The seminar was delivered by **Mr. K. Kuralarasan, Mr. K. Vasudevan and Mr. K. Someshwaran**, Business Development Head and Technical Head, **Livewire, Trichy**.



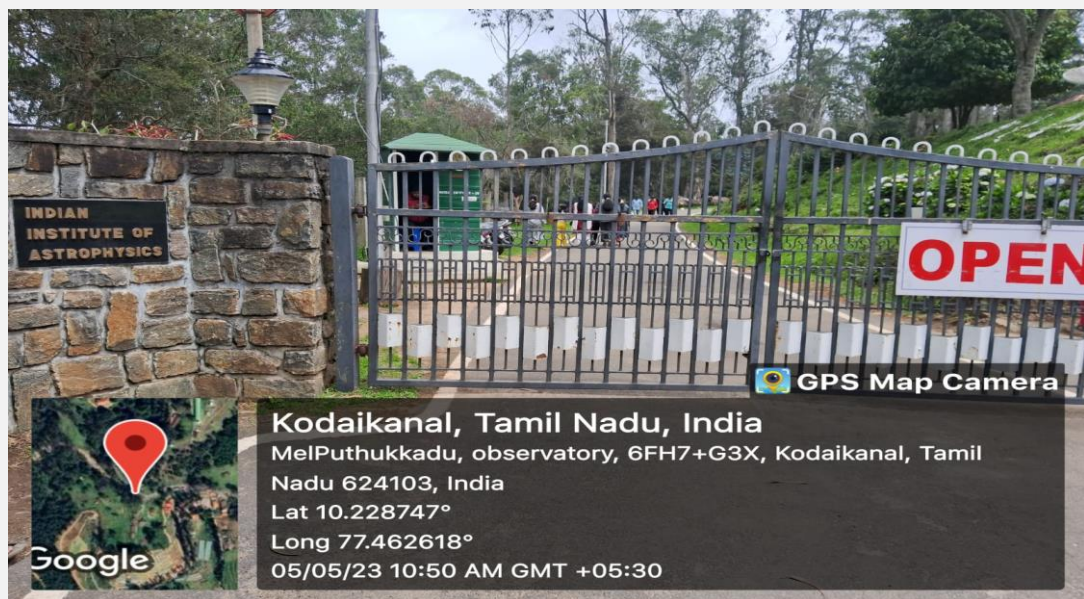
Chief guest delivering address to the students

INDUSTRIAL VISIT

A II Year/IV Semester industrial visit was organized to **Kodaikanal Solar Observatory Museum, Kodaikanal, Tamil Nadu**, on 05.05.2023. A total of 29 students participated in the visit and gained practical exposure to solar observation, astronomical instruments, and solar-related scientific applications.



Students visiting the company



Indian Institute of Astrophysics

- A III Year/VI Semester industrial visit was organized to Ooty for 2 days, from 24.02.2023 to 25.02.2023. A total of 50 students (40 boys and 10 girls) participated in the visit, accompanied by 3 faculty members (2 male and 1 female). The students visited the Radio Astronomy Centre, TATA Institute of Fundamental Research, Ooty, and All India Radio, Ooty, gaining practical exposure to radio astronomy, communication systems, broadcasting technologies, and related industrial applications.



PROJECTS OF STUDENTS

- The project titled “Self-Charging Electric Bike” was carried out by **Harish P (Register No. 812419105008)**, **Mohamed Irfan P (Register No. 812419105015)**, **Mohammed Anas C A (Register No. 812419105017)**, and **Sanjeeth M (Register No. 812419105025)** under the guidance of **B. Muthuslevi**.
- The project titled “Non-intrusive Load Monitoring Using Machine Learning for Household Appliances with IoT” was carried out by **Aaisha Sidhika H (Register No. 812419105001)**, **Janani T (Register No. 812419105011)**, and **Remina A (Register No. 812419105024)** under the guidance of **D. Tamilselvan**.

- The project titled **“Optimizing Substation Using PLC and SCADA”** was carried out by **Abinash S (Register No. 812419105002), Alen Joy E (Register No. 812419105004), Pugalendhi T (Register No. 812419105021), and Thameemrashdh R. (Register No. 812419105030)** under the guidance of **Dr. E. Muthukumaran**.
- The project titled **“Implementation of Modified SEPIC DC-DC Converter in DC Microgrid Application”** was carried out by **Hariharan S (Register No. 812419105007), Irudhaya Nelson S (Register No. 812419105010), Sebastin Alwinraj S (Register No. 812419105026), and Hariharan P (Register No. 812419105304)** under the guidance of **B. Muthuslevi**.
- The project titled **“IoT Based Energy Meter Reading for Auto Billing”** was carried out by **Priyadharshini G (Register No. 812419105020), Menaka G (Register No. 812419105702), and Vidhya V (Register No. 812419105705)** under the guidance of **Dr. V. Sivakami**.
- The project titled **“SEPIC PFC for Three Phase Induction Motor Drive under Normal and Abnormal Supply Voltage”** was carried out by **Charulatha G (Register No. 812419105303), Gayathri S P (Register No. 812419105501), and Dhivya Sri D (Register No. 812419105701)** under the guidance of **T. Jayanthi**.
- The project titled **“IoT Based Load Monitoring and Control System”** was carried out by **Anwar Basha A (Register No. 812419105710), Mohamed Musaraf B (Register No. 812419105307), Mohamed Ashik J (Register No. 812419105308), and Narayanamoorthi M (Register No. 812419105309)** under the guidance of **S. Pandiarajan**.
- The project titled **“Modernized Rail Flaw Detection Using Robot”** was carried out by **Jayaseelan K (Register No. 812419105305), Rohith R (Register No. 812419105310), Saktheswarar P (Register No. 812419105311), and Vijay R (Register No. 812419105704)** under the guidance of **K. Sarasvathi**.
- The project titled **“Two-Stage Converter Stand-alone PV Battery System Based on VSG Control”** was carried out by **Sudhakar A (Register No. 812419105703), Prabu K (Register No. 812419105708), and Vasikaran E (Register No. 812419105313)** under the guidance of **D. Jayaraj**.
- The project titled **“Battery Management in Electrical Vehicles Using Machine Learning Techniques”** was carried out by **Santhosh V (Register No. 812419105707), Vengatesh P (Register No. 812419105706), and Ajithkumar S (Register No. 812419105302)** under the guidance of **Dr. S. Sarojini Mary**.
- The project titled **“Power Generation Using Ball Perpetual Turbine”** was carried out by **Bagapriyan E (Register No. 812419105005), Kumaresan S (Register No. 812419105014),**

Nagarjune P (Register No. 812419105019), and Seenivasan S (Register No. 812419105027) under the guidance of **Dr. E. Muthukumaran**.

- The project titled **“Solar Tree-Based Energy Harvesting, Tracking, and Fault Detection System Using IoT”** was carried out by **Mohamed Riyas M (Register No. 812419105016), Ranjithkumar N (Register No. 812419105023), and Thirugnanam S (Register No. 812419105709)** under the guidance of **D. Tamilselvan**.

FACULTY INTERNSHIP / TRAINING / COLLABORATION

- **Dr. V. Sivakami** underwent training on **“Design of Photovoltaic Systems”** at **Hi Energy Batteries** from **22.02.2023 to 28.04.2023**. As an outcome of the training, a **Value Added Course** was conducted.

FACULTY PUBLICATION/CONFERENCE/BOOKPUBLICATIONS

1. **D. Tamilselvan** presented a conference paper titled **“Machine Learning Based Secure and Efficient Renewable Energy Model for Power Inverter Application”** at the **National Conference on Multidisciplinary Engineering Science and Technology (MEST-23)** in **June 2023**.
2. **Dr. V. Sivakami** presented a conference paper titled **“Multi Output DC-DC Converter for Electric Vehicle Application with Battery Protection and Monitoring”** at **MEST-23** in **June 2023**.
3. **Dr. E. Muthukumaran** presented a conference paper titled **“Design of Integrated SEPIC-CUK Converter for Renewable Energy Resources”** at **MEST-23** in **June 2023**.
4. **Dr. V. Sivakami** presented a conference paper titled **“Off Board Electric Vehicle Battery Charger Using PV Array”** at **MEST-23** in **June 2023**.
5. **Mrs. B. Muthuselvi** presented a conference paper titled **“PV Operated BLDC Based Modified SEPIC Converter”** at **MEST-23** in **June 2023**.
6. **Dr. S. Sarojini Mary** presented a conference paper titled **“Design and Implementation of an Intelligent Low-Cost IoT Solution for Energy Monitoring of Photovoltaic Stations”** at **MEST-23** in **June 2023**.

FACULTY PARTICIPATION IN NPTEL/MOOC COURSES

- **Dr. E. Muthukumaran**, who participated in the “NBA Accreditation and Teaching & Learning Engineering” programme organized by NPTEL, from **January 2023 to April 2023**.
- **Mr. D. Tamilselvan**, who participated in the “NBA Accreditation and Teaching & Learning Engineering” programme organized by NPTEL, from **January 2023 to April 2023**.
- **Mr. B. Muthuselvi**, who participated in the “Electric Vehicles” programme organized by NPTEL, from **January 2023 to April 2023**.
- **Mr. S. Pandiarajan**, who participated in the “Electric Vehicles” programme organized by NPTEL, from **January 2023 to April 2023**.
- **Mrs. T. Jayanthi**, who participated in the “Recent Trends and Innovation in Electric Vehicles” programme organized by **Sri Krishna College of Technology, Coimbatore**, from **30.01.2023 to 03.02.2023**.
- **Mrs. K. Sarasvathi**, who participated in the “Recent Trends and Innovation in Electric Vehicles” programme organized by **Sri Krishna College of Technology, Coimbatore**, from **30.01.2023 to 03.02.2023**.
- **Mrs. T. Jayanthi**, who participated in the “Design of Photo Voltaic System” programme organized by **Saranathan College of Engineering, Trichy**, from **06.02.2023 to 10.02.2023**.

EDITORIAL BOARD**CHIEF EDITOR:** Dr.E.Muthukumaran**CO-EDITOR :**Dr.V.Sivakami

Mrs. B.Muthuselvi

STUDENTS EDITORIAL

S. Sheik Abdullah	812422105018	II YEAR
R. Ushalini	812422105024	II YEAR
E. Nelson	812421105012	III YEAR
N. Ramyadharshini	812421105015	III YEAR
S.Thirumurugan	812420105017	IV YEAR
V.Varshini	812420105018	IV YEAR

