



Division of
**ELECTRICAL AND
ELECTRONICS ENGINEERING**



About Us

The Division of Electrical and Electronics Engineering (EEE) was established in 1994 and has equipped with highly commendable facilities and is effectively guided by a set of devoted and diligent faculty team. The EEE Division has a vision to produce globally competent electrical and electronics engineers for addressing the needs of humanity with ethical values. Electrical and Electronics Engineering is the hub for all latest technological breakthroughs in Smart Grids, Electric Vehicles, Artificial Intelligence, Robotics, Automation, Medical Electronics, Computer Networks, and Cyber Security.

The Division has also signed MoA with industries like SIEMENS to establish a Centre of Excellence for "Automation and Drives" which is a Siemens Authorized Training Centre for the entire southern zone of India. Tie-ups are also available with M/s, SALZER Electronics Limited (which is one of the leading industries in Electrical Protection Device and Modern Sensor Manufacturing in India) and recently with M/s. Selens India Pvt. Ltd (a pioneer in renewable energy) to provide Industrial Certification Training. Students are offered with innovative projects, in plant trainings and internships through this collaboration. The division has recently collaborated with Coimbatore based E-Vehicle Industry e-Royce Motors India Ltd., Coimbatore to provide required skills for the benefit of students towards Internship, In-plant training, Projects and Placement opportunities.

Our Vision

To produce globally competent electrical and electronics engineers for addressing the needs of humanity with ethical values.

Our Mission

- To empower the students with knowledge in recent trends in Electrical and Electronics Engineering
- To impart technical skills to resolve industrial problems through innovative teaching learning practices and research.
- To raise professionals, academicians, researchers and entrepreneurs with a passion for solving societal problems.

Programs Offered

- **B.Tech.** Electrical and Electronics Engineering - 4 Years Full-time
- **B.Tech.** Electrical and Electronics Engineering (Specialization in AI & ML) - 4 Years Full-time
- **Ph.D.** Electrical and Electronics Engineering - Full-time / Part-time

Areas of Academics & Research

- Electric Vehicles
- Fuel Cells
- Smart Grids
- IOT & Data Analytics
- Renewable Energy
- Bio-signal Processing
- Artificial Intelligence and Machine Learning
- Automotive Electronics

Career Prospects

- Battery Energy Management in Electric
- Smart Technology for Precision Farming Drone Technology for
- Smart Intelligent Buildings Agriculture
- Data Analytics & Block Smart. City Chain
- Green Energy Technology
- 3-D Printing & Additive Robotics in Everyday Life Manufacturing
- Medical Devices
- Cyber Security
- IoT for Industry Applications
- Technologies for Societal problems
- Assistive Devices
- Wearable devices

Laboratory Courses

- Electric Vehicle
- Electric machines & drives
- Engineering Simulation
- Smart Grid & Data Mining
- PLC and Automation
- Sensors and IoT
- Signal and Image Processing
- Industrial Practice
- Solar and Wind Energy
- Machine and Deep learning

Research Activities/ Funding Projects./Consultancies

The Division of EEE is working on funded on projects worth Rs.2.65 crores offered by various government and R&D organizations. The division also has numerous publications by the faculty and students in reputed journals, with publishers like IEEE, Elsevier, Springer, IET, etc.

Further, the faculty members have collaborations with universities and laboratories from Europe, Asia, United States of America and the Middle East.

Research Projects

- IEEE 802 series Protocol for Smart Grid Applications.
- Funded by University Grants Commission, New Delhi with the amount of 29.6 Lakhs.
- Valara MHP (15 kW) in Idukki District of Kerala funded by Ministry of New and Renewable Energy, New Delhi Enhanced Source Separation Algorithm for Neurological (seizure) Disorders funded by Ministry of Science & Technology, DST, New Delhi
- A Novel TiO_2 coated aluminium electrode (TiO_2/Al) for textile dyeing wastewater using real time controlled multichannel electro coagulation process funded by Ministry of Science & Technology, DST, New Delhi. Development of nanocrystalline materials for solid oxide fuel cells working at 600 degree C funded by CPRI, Bangalore
- Development and Assessment of a Portable Oxygen Concentrator for Patients with Mild Respiratory Failure funded by ICMR, New Delhi
- Block Chain Powered Smart Energy Meter funded by DST, New Delhi



Salient Features:

- Mini- Project-Expo /Symposiums
- W-fi connected Campus
- Seed money for Innovative student projects
- Entrepreneur / Higher Education / Career Guidance Cell
- Summer Internship / In-plant Training / Industry visits
- Specialization Electric Vehicles and Grid management, AI/ML and
- Energy Renewable technologies,
- Faculty - Student Awards / Recognitions
- Industry Based Training
- Students patents
- Abroad Internships with stipend through IAESTE
- Student Professional Chapters like, IEEE
- GATE / IES Coaching
- EEE Alumnus Visit

Why EEE?

- According to TCS head and vice president, the electrical wing in engineering would play a big role in the future world of automation in every industry.
- In India TCS is launching many projects keeping electrical and electronics engineering branches in mind
- US Bureau of Labor Statistics (BLS) predicts that demand for electrical engineers will grow exponentially over the coming decade.
- Urgent need for alternative and sustainable solutions for energy and transport
- Rapid technological growth, a revolution in information and consumer technology and digital media
- Development of advanced networks such as the Smart Grid
- The automated transport revolution
- Advances in medical science, aerospace, robotics and artificial intelligence
- Wide Scope in government jobs such as Power Grid Corporation limited, NHPC,BHEL, BEL,SAIL,IOCL and NTPC.



• Add-on / Certificate / Short term Courses

- Python Programming
- Computer Simulation of Electrical Systems
- PCB Design and Fabrication" using Autodesk EAGLE
- Solar PV System Design using PVsyst Software
- Real time Application in Electrical Engineering using LabVIEW
- Skill Development Certification Programme with Hands-on Training Workshop (Phase - 1) on
- "Embedded Systems"
- AVR Microcontroller Programming
- Hands on training on Python Programming
- Basic Automation
- Basics of PLC
- Skill Development Certification Programme with Hands-on Training Workshop (Phase - 2) on
- "Advanced Microcontroller"
- PLC and SCADA
- Basic AC/DC Drives
- Role of Data Analytics in the Internet of Thinking
- MATLAB programming

• Our Distinguished Alumni in Industries



Vinoliney
Alstom,



Ebenezer Samuel.Y
Hyundai Motor India Ltd.,
Sriperumpudur



Rony David Mathew
Applied Materials India



Christy C Varghese Abraham
Senior Consultant,
Mercedes Benz R&D, India



Aruna Lawrence
Borg Warner, German



Lidwin Diana Antony
Senior Engineer,
Schneider Electric, India

• Karunya Technology Business Incubation

Enable the pre-incubates / incubates to the next level of prototyping, validation, scale-up, technology transfer or entrepreneurship either in collaboration with industry or as startups.

Students are offered with innovative projects, in plant trainings and internships through this collaboration.

• Major Recruiters



The Head of Division

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