



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

NEWSLETTER- MARCH- 2019

About the Department:

The Department was started in the year 2008 with an objective of creating a leader in engineering education and research with the application of knowledge for uplifting the society globally. Initially, the Department was started with an intake of 60 students and later it was increased to 120 students in the year 2011. The Department inaugurated IEEE students' chapter in the year 2012. The faculty members are consistently doing well in teaching and research activities. The Department had well established and equipped laboratories like Electrical Machines Lab, Power Electronics Lab, Power System Simulation Lab, Microprocessor Lab & Measurements and Instrumentation Lab with equipment cost of Rs. 65 Lakhs. The Department provides exposure to the students with hands-on experience on various Electrical Engineering subjects to face the challenges of the modern corporate world and to mould them as responsible citizens of the country with a willingness to serve the society.

The Department established internal Library with 400 titles and IEEE volumes for the welfare of the Faculty members and students.

VISION

To create comprehensive electrical engineers to meet up the growing technological demands of the society.

MISSION

- To impart high quality education to help the students hone their professional skills.
- To improve the competencies of students and faculties on contemporary technologies through continuous improvement programs.
- To imbibe the spirit of innovation and entrepreneurship among the students.
- To undertake research on frontier areas of electrical and electronics engineering.

Program Educational Objectives (PEOs)

- Graduates will have the ability to demonstrate skills in developing innovative ideas, and in providing effective solutions to complex engineering problems thereby being productive and participative global citizens
- Our graduates will have the ability and confidence to pursue higher education or exhibit professionalism in the career or take up entrepreneurial accomplishments.

- Our graduates will have the technical competency to involve in multidisciplinary research within the suitable technological, global, societal, ethical, economical, environmental and organizational context.
- Our graduates will engage themselves in life-long learning thereby keeping themselves abreast of the contemporary issues.

Program outcomes (POs)

POs	DESCRIPTION
PO1	An ability to apply the knowledge of mathematics and engineering fundamentals to provide solutions to complex Electrical Engineering problems
PO2	An ability to identify and analyse the problems on electrical engineering, and formulate the solutions appropriate to the problem through structured approach
PO3	An ability to design and develop software solutions to the problem with due considerations on socio-economical and environmental sustainability
PO4	An ability to design and conduct experiments, analyse and interpret data to provide valid conclusions and recommendations.
PO5	An ability to use appropriate techniques and adapt modern electrical engineering simulation tools to solve intricate engineering problems
PO6	Apply logic informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and recognise their responsibility relevant to the profession and explore the human side of engineering.
PO7	Understand the role of electrical engineers in society regarding social, cultural, environmental and global responsibilities for sustainable development.
PO8	Ability to understand and practice the professional, legal and ethical principles involved in the area of electrical engineering-
PO9	An ability to function effectively as a team member or a leader focusing on a common goal in multi disciplinary settings
PO10	An ability to communicate effectively on technical activities both orally and in written form
PO11	An ability to apply the knowledge of engineering and management principles to manage projects in multi disciplinary environments
PO12	An ability to undertake self learning of contemporary issues and engage in lifelong learning

Programme Specific Outcome (PSO)

PSOs	Description
PSO1	An ability to design, analysis and to implement power electronics converters in renewable energy applications.
PSO2	A capability to design and examine the power system and to solve the unit commitment with various constraints.

1. Staff Activities

- Dr.C.Shanmugasundaram, Professor & HOD/EEE and Ms.R.Priya, Assistant Professor/EEE, has attended FDP on “Student Induction Programme” at Eswari Engineering College on 26th -28th Nov 2018.
- Mr.D.Balaji, Assistant Professor/EEE has attended two days National Seminar on “Emerging Trends in the Operation and Control of Wind Energy Systems” at Annamalali University on 8th, 9th Dec2018.
- Dr.G.Renuka Devi, Associate Professor/EEE and Ms.R.Muhunagai, Assistant Professor/EEE has attended FDP on “DC-Microgrids Opportunities and Challenges” at VIT-Chennai on 15th Dec 2018.
- Dr.G.Renuka Devi, Associate Professor/EEE, has attended one week AICTE- STC on “Innovative Techniques for Smart Grid Operation and Control” at Pondicherry Engineering College on 11th to 16th Mar 2019.
- Dr.G.Renuka Devi, Associate Professor/EEE, has attended Mentoring Workshop on “Fulbright Fellowships” at IIT Chennai on 22nd Mar 2019.
- Mr.P.L.Santhanakrishnan, Assistant Professor/EEE has coordinated value added course on “Testing of Substation Equipments” for the third year students on 17th Dec 2018 to 24th Dec 2018.
- Dr.K.Sedhuraman. Associate Professor/EEE has handled the comprehensive viva on “Power Electronics” for the final year students on 15th Dec 2018
- Dr.C.Shanmugasundaram, Professor & Head/EEE has delivered the special lecture titled “Optimization techniques using Unit Commitment” for the final year students on 17th Dec 2018.
- Mrs.R.Muthunagai, Assistant Professor/EEE has handled the comprehensive viva on “Utilization of Electrical Energy” for the final year students on 18th Dec 2018.
- Mr.D.Balaji, Assistant Professor/EEE has handled the comprehensive viva on “Measurement and Instrumentation” for the final year students on 19th Dec 2018
- Dr.K.Sedhuraman. Associate Professor/EEE has delivered the special lecture titled “Artificial Intelligence Techniques and neural networks” for the final year students on 24th Dec 2018.
- Mr.P.L.Santhanakrishnan, Assistant Professor/EEE has handled the comprehensive viva on “Transmission and Distribution” for the third year students on 29th Dec 2018.
- Mr.D.Balaji, Assistant Professor/EEE has delivered the special lecture titled “Recent trends in Special Machines and its applications” for the second year students on 31st Dec 2018.
- Mr.D.Muruganandhan, Assistant Professor/EEE has handled the comprehensive viva on “Pulse and Digital Circuits” for the final year students on 2nd Jan 2019.
- Mr.P.L.Santhanakrishnan, Assistant Professor/EEE has delivered the special lecture titled “Power Electronics controllers in HVDC Transmission” for the third year students on 05th Jan 2019.
- Mr.D.Muruganandhan, Assistant Professor/EEE has delivered the special lecture titled “Power restructuring and Deregulation concept in Indian Power system” for the second year students on 05th Jan 2019.

- Mr.S.Rajkumar, Assistant Professor/EEE has handled the comprehensive viva on “Basic Electrical & Electronics” for the third year students on 12th Jan 2019
- Mr.S.Rajkumar, Assistant Professor/EEE has delivered the special lecture titled “ANSYS software applications in Electrical Machine design” for the second year students on 19th Jan 2019.
- Dr.C.Shanmugasundaram, Professor& Head/EEE has handled the comprehensive viva on “Electrical Machines - I for the final year students on 23rd Jan 2019.
- Dr.G.Renukadevi, Associate Professor/EEE has handled the comprehensive viva titled “Analog and Digital Integrated Circuits” for the final year students on 30th Jan 2019.
- Mrs.R.Muthunagai, Assistant Professor/EEE has delivered the special lecture titled “Advanced Trends in Switchgear and circuit breaker” for the third year students on 02nd Feb 2019.
- Dr.G.Renukadevi, Associate Professor/EEE has delivered the special lecture titled “DC- Microgrids” for the final year students on 04th Feb 2019.
- Mrs.R.Priya, Assistant Professor/EEE has handled the comprehensive viva on “Electronics Devices and Circuits” for the final year students on 05th Feb 2019.
- Mrs.R.Priya, Assistant Professor/EEE has delivered the special lecture titled “Advanced power electronics converters in Renewable sector” for the third year students on 09th Feb 2019.
- Dr.G.Renuka Devi, Associate Professor/EEE has Presented the paper in ICSCAN 2019 titled “Performance Investigation of Hexagram Inverter for High Power Applications “ at Manakula Vinayagar Institute of Technology on 29th Mar 2019.
- Mr.D.Balaji, Assistant Professor/EEE has presented the paper in ICSCAN 2019 titled “Z-Source Multilevel Inverter based AFLC PV System” at Manakula Vinayagar Institute of Technology on 29th Mar 2019.
- Mrs.R.Priya, Assistant Professor/EEE has presented the paper in ICSCAN 2019 titled “Single Stage Dual Boost Inverter with Half Cycle Modulation Scheme for PV System Applications “ at Manakula Vinayagar Institute of Technology on 29th Mar 2019.
- Mr.S.Rajkumar, Assistant Professor/EEE has presented the paper in ICSCAN 2019 titled “Performance Analysis Of Hub BLDC Motor Using Finite Element Analysis “ at Manakula Vinayagar Institute of Technology on 29th Mar 2019.
- Mrs.R.Priya, Assistant Professor/EEE has presented the paper in ICSCAN 2019 titled “Advanced Multilevel Inverter Techniques for PV Applications with Reduced Switching Devices and THD with voltage balancing “ at Manakula Vinayagar Institute of Technology on 29th Mar 2019.
- Mr.D.Muruganandhan, Assistant Professor/EEE has presented the paper in ICSCAN 2019 titled “Improvement of Energy Storage in Lithium Polymer with Nano Composite Material (ZrO₂) at Manakula Vinayagar Institute of Technology on 29th Mar 2019.
- Mrs.R.Muthunagai, Assistant Professor/EEE has presented the paper in ICSCAN 2019 titled “Intelligent Control and Monitoring of Electrical Outlets and Appliances using IoT “ at Manakula Vinayagar Institute of Technology on 29th Mar 2019.

- Dr.K.Sedhuraman.Associate Professor/EEE has presented the paper in ICSCAN 2019 titled “Performance Evaluation of Smart Intelligent Circuit Breaker” at Manakula Vinayagar Institute of Technology on 29th Mar 2019.

Department Activities:



FSG-Electrical Drives and Control group has organized guest lecture on “Design and Develop Power transformer on par with industry standards” to II year EEE Students on 28th Dec 2018. Er. S.V. Sreeraj, EmCog Solutions, Chennai has delivered the session.



Department of EEE signed Memorandum of Understanding with “Voltech Energy India Pvt Ltd, Chennai” on 19th Dec 2018.



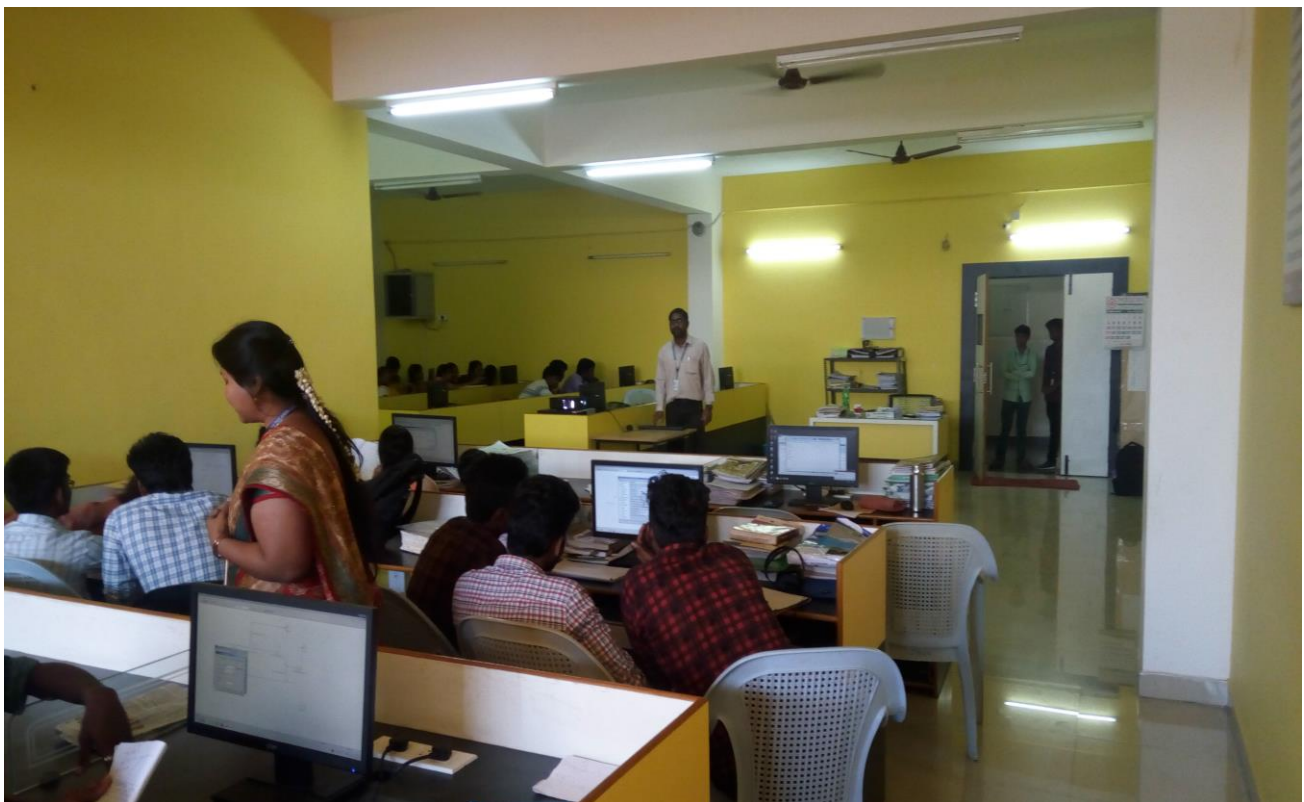
The second year EEE students visited to **“SWELECTS Energy Systems Pvt Ltd, Salem”** on 19th Jan 2019. The faculty members of EEE Mrs.R.Priya and Mr.P.L.Santhanakrihsnan has coordinated the Industrial visit



The third year EEE students visited to **“Continuum Wind Power Plant, Pollachi”** on 2nd Mar 2019. The faculty member of EEE Dr.G.Renuka Devi and Mr.D.Muruganandan has coordinated the Industrial visit.



Ms.R.Priya, Assistant Professor/EEE has organized Guest lecture titled “Wind energy Trends in Online monitoring system” for III year/EEE students on 25th Jan 2019. Mr.T.F.Jayasurya, Country Manager, WINDSIM Pvt Ltd, Chennai has delivered the session.



FSG-Power Electronics group has conducted one day internal workshop on “Hands on Session on Matlab” to the second year EEE students on 23rd Feb 2019.



FSG-Electrical Drives and Control group has conducted one day internal workshop on “Design and Implement a Transistor based Water Level Indicator using PCB” to II year EEE Students on 15th Feb 2019.

Student Participation:



S. Mohamed Assem, IV Year/EEE has won the best paper Award on Digital Business in the “Contemporary World Opportunities and Challenges” , held at Annamalai University on 01st Feb 2019

Runner up



K.Vengadesh, IV year/EEE and G.Jeeva, II Year/EEE has won runner up on “ Cricket Tournament” held at VIT Chennai on 21st April 2019



Rishabh.R, Ruthrakum.M, Ragupathy.M, Mohamed Fayaz.S and Roobasri.G has participated in Smart India Hackathon titled “ Air Monitoring System” held at IIT Bhilai, Raipur on 02nd, 03rd Mar 2019.Dr.K.Sedhuraman and Mr.D.Balaji coordinate the program.



Third Year Students participated the innovative ideas contest to solve the problems in the following themes- 1. Agriculture & Rural development 2. Health Care 3. Energy 4. Environment 5. Others on 23rd Mar 2019



Second Year Students participated mini-project review on 23rd Mar 2019