



ERODE SENGUNTHAR ENGINEERING COLLEGE



(Approved by AICTE, New Delhi Permanently Affiliated to Anna University - Chennai
Accredited by NAAC & National Board of Accreditation (NBA), New Delhi.)
PERUNDURAI, ERODE – 638 057

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Vision

- ✦ To provide competent and ethical electrical engineers finding solution to problem related to society, environment and industry using innovative technologies.

Mission

- ✦ To make a positive difference among electrical and electronics engineering students through innovative teaching learning methods
- ✦ To provide electrical and electronics engineering knowledge base at large for the upliftment of different background people
- ✦ To instill research oriented mindset and to develop well-furnished electrical and electronics engineering research labs
- ✦ To inculcate the moral and ethical values among students in order to make them competent and quality electrical and electronics engineers

Program Educational Objectives (PEOs)

- ✦ To impart fundamental electrical and electronics engineering knowledge through collaborative and case study methods of teaching learning process
- ✦ To produce quality electrical and electronics engineering graduates with in-depth technical knowledge including current issues and challenges in this field
- ✦ To develop and enhance research based facilities so as to address the industrial issues and challenges
- ✦ To imbibe effective communication, interpersonal and other managerial skills for the holistic development of EEE students

Program Outcomes (POs)

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSOs)

PSO1: Real World Knowledge- Apply the knowledge in solving the real time problems and solutions to issues and challenges in Electrical and Electronics Engineering technologies.

PSO2: Interdisciplinary Skill- Design and develop interdisciplinary and innovative system.

PSO3: Personality Development – Imparting effective communication, team work and leadership skills for a successful career in industry and R&D.

ASSOCIATION ACTIVITIES



Guest lecture on the topic “Artificial Intelligence” was conducted on 01.02.2019. Mr.Rijo George, Project Manager, Emglitz Technologies, Coimbatore was the resource person. More than 200 students were participated in this lecture.



Guest lecture on the topic “Substation maintenance and Automation” was conducted on 01.02.2019. Mr.N.Subramaniam, Assistant Executive Engineer, 230kV Substation, Thingalur was the resource person. More than 250 students were participated in this lecture.



Guest lecture and valedictory function on the topic “Energy Conservation” was conducted on 08.04.2019. Mr. S.Ashok BEE certified Energy Auditor, Coimbatore was the resource person. More than 250 students were participated in this lecture.

PAPER PRESENTED BY THE STUDENTS:

- S. Ajitha, V.Arthi and R.Sabarikirisan of II year EEE presented a paper on the topic “Mobile phones charged by the power of speech” conducted by Karpagam academy of higher studies, Coimbatore on 05.02.2019.

- C.Subhashini, C.Ponnumani and M.Santhosh of II year EEE presented a paper on the topic “SCADA using industrial automation in thermal power plant” conducted by Karpagam academy of higher studies, Coimbatore on 05.02.2019.
- S.Sathis kumar, C.Pooja and A.Santhosh of II year EEE presented a paper on the topic “Renewable sources of energy resources” conducted by Karpagam academy of higher studies, Coimbatore on 05.02.2019.
- Janakiraman.L, Keerthana.S, Priyathiarshini.K and Shobika.P.J of IV year EEE presented a paper on the topic “Standardisation and Stability Analysis of 11KV Distribution System in a Chemical Industry” conducted by Selvam College of Technology, Salem on 07.03.2019.
- Bharathiraja.B, Gowthami.S and Princy.C of IV year EEE presented a paper on the topic “Advanced Distribution Transformer Load Monitoring and Controlling” conducted by Sengunthar Engineering College., Tiruchengode on 08.03.2019.
- Vaishnavi.S, Yuvaraj.K, Vijayaragavan and Paranthaman.R of IV year EEE presented a paper on the topic “Auto Power Supply Control From Different Sources ” conducted by Sengunthar Engineering College., Tiruchengode on 08.03.2019.
- Gugan.S, Induja.H.J, Pavithran.N and Sabarinathan.B of IV year EEE presented a paper on the topic “Automatic Fruit Spoiled Detection System” conducted by Selvam College of Technology, Salem on 08.03.2019.
- Chandru Dass.M, Dhanasekaran.N, Jeevaganesh.A and Venkatesan.U of IV year EEE presented a paper on the topic “Common Ground Type Transformer less Inverter for Single Phase Solar Photovoltaic Systems” conducted by Selvam College of Technology, Salem on 08.03.2019.
- Aarthima.S, Elangovan.S, Uma Shankari.K and Arjunan.M of IV year EEE presented a paper on the topic “Detection and Prevention of Child Abuse Using IoT” conducted by Selvam College of Technology, Salem on 08.03.2019.
- Ayyappan.N, Mohansundaram.V, Poonkuzhali.B and Pradeep.S of IV year EEE presented a paper on the topic “Farmers Assistant Using Raspberry Pi” conducted by Selvam College of Technology, Salem on 08.03.2019.
- Gokul.E, Kirubakaran.R, Vinoth Kumar.S and Madhappan of IV year EEE presented a paper on the topic “Microcontroller Based Monitoring Generator Transformer 250 MVA Cooling System” conducted by Selvam College of Technology, Salem on 08.03.2019.

- Gokul.E, Kirubakaran.R, Vinoth Kumar.S and Madhappan of IV year EEE presented a paper on the topic “Microcontroller Based Monitoring Generator Transformer 250 MVA Cooling System” conducted by Selvam College of Technology, Salem on 08.03.2019.
- Bhuvaneshwaran.N, Dhanushya.R, Manisha.S and Loganathan.P of IV year EEE presented a paper on the topic “Threshold Voltage Level Maintaining Solar Tracker” conducted by Mangayarkarasi College of Engineering, Madurai on 15.03.2019.
- Sangeetha.L, Vinothkumar.B, Namachivayam.S and Kowsalya M of IV year EEE presented a paper on the topic “IoT Based Household Health Safety System” conducted by Mangayarkarasi College of Engineering, Madurai on 15.03.2019.
- Indhumathi.B, Poorani.P, Pradeepkumar.V and Nirmala.M of IV year EEE presented a paper on the topic “IoT Based Sensorless Speed Control of Induction Motor” conducted by Mangayarkarasi College of Engineering, Madurai on 15.03.2019.
- Gokulprasath.V, Vijay.K.A, and Yogeshwaran.S of IV year EEE presented a paper on the topic “Q Share - An Adaptive Way to Transfer Power between Devices in a Wireless Medium Using Flexible coils” conducted by KV Institute of Management and Information Studies, Coimbatore on 20.03.2019.
- Basakumar.B, Saravanakumar.R, Jeevanandham.K and Ranjitha.P of IV year EEE presented a paper on the topic “Smart Transient Eliminator” conducted by KV Institute of Management and Information Studies, Coimbatore on 20.03.2019.

WORKSHOP ATTENDED BY THE STUDENTS:

- S.Valarmathi, C.Vigneshwaran, V.Praveen, C.Hariprasath, A.Shalini, M.Sudharsan and M.Pavithra of III year EEE attended a workshop on the topic “PLC” conducted by P.S.G Institute of technology & applied research, Coimbatore on 12.02.2019 & 13.02.2019.
- M.MohanaPriya, E.Madheswaran, S.Gowtham, P.Hari Haran, U.Abinaya, S.Hemanth Kumar, P.Lingeshwaran and P.Akila of III year EEE a workshop on the topic “ROBOTRIX” conducted by P.S.G Institute of technology & applied research, Coimbatore on 12.02.2019 & 13.02.2019.

INTERNATIONAL CONFERENCE PAPER PRESENTED BY THE FACULTY MEMBERS:

- Mr. G .S. SatheeshKumar and Mrs. S. Tamil Selvi presented a paper on the topic “A Virtual Impedance Based Analysis of Dynamic Stability in a Micro-Grid System” IEEE Conference on

Emerging Devices and Smart Systems (ICEDSS 2018) conducted by Mahendra Engineering College, Tamilnadu, India.on 02.03.2019 & 03.03.2019.

- Mr. G .S. SatheeshKumar and Mrs. S. Tamil Selvi presented a paper on the topic “A Virtual Impedance Based Analysis of Dynamic Stability in a Micro-Grid System” IEEE Conference on Emerging Devices and Smart Systems (ICEDSS 2018) conducted by Mahendra Engineering College, Tamilnadu, India.on 02.03.2019 & 03.03.2019.
- Dr. R. Muthukumar presented a paper on the topic “Standardization and stability analysis of 11kV distributed system” International Conference on Information Sciences and Renewable Energy Sources (ICISRES-2019) conducted by Selvam College of Technology, Namakkal on 07.03.2019 & 08.03.2019.
- Mr. E. Immanuel Bright presented a paper on the topic “Farmers assistant using raspberry PI” Second International Conference on Nexgen Technologies conducted by Sengunthar Engineering College, Tiruchengode, Namakkal, Tamilnadu on 08.03.2019 & 09.03.2019.
- Mr. G. Gunasekaran presented a paper on the topic “Microcontroller Based Automatic Control of Generating Transformer 250 MVA Cooling System” Second International Conference on Nexgen Technologies conducted by Sengunthar Engineering College, Tiruchengode, Namakkal, Tamilnadu on 08.03.2019 & 09.03.2019.
- Mrs. S. Tamilselvi presented a paper on the topic “Advanced Distribution Transformer Load Monitoring and Controlling” Second International Conference on Nexgen Technologies conducted by Sengunthar Engineering College, Tiruchengode, Namakkal, Tamilnadu on 08.03.2019 & 09.03.2019.
- Mr. S. Vijayanand presented a paper on the topic “Common-Ground-Type Transformerless Inverters for Single-Phase Solar Photovoltaic Systems” Second International Conference on Nexgen Technologies conducted by Sengunthar Engineering College, Tiruchengode, Namakkal, Tamilnadu on 08.03.2019 & 09.03.2019.
- Mr. L. Vijay Anand presented a paper on the topic “Detection And Prevention Of Child Abuse Using IoT” Second International Conference on Nexgen Technologies conducted by Sengunthar Engineering College, Tiruchengode, Namakkal, Tamilnadu on 08.03.2019 & 09.03.2019.
- Mr. S. P. Dwarakesh presented a paper on the topic “Automatic Power Supply from Different Sources for E-Vehicles” Second International Conference on Nexgen Technologies conducted by

Sengunthar Engineering College, Tiruchengode, Namakkal, Tamilnadu on 08.03.2019 & 09.03.2019.

- Prof. M. Shyamalagowri presented a paper on the topic “Design of Micro Hydro Power Plant and Energy Recovery from Cooling Water Outlet 210MW LMW Turbine in MTPS” International Conference on Trending Technologies in Engineering Research (ICTER-2019) conducted by Mangayarkarasi College of Engineering, Madurai, Tamilnadu on 15.03.2019.
- Mr. L. Anbarasu presented a paper on the topic “IOT Based Sensorless Speed Control of Induction Motor” International Conference on Trending Technologies in Engineering Research (ICTER-2019) conducted by Mangayarkarasi College of Engineering, Madurai, Tamilnadu on 15.03.2019.
- Dr. P. Selvan presented a paper on the topic “Threshold Voltage Maintain Solar Tracker” International Conference on Trending Technologies in Engineering Research (ICTER-2019) conducted by Mangayarkarasi College of Engineering, Madurai, Tamilnadu on 15.03.2019.
- Mr. R. Senthil Kumar presented a paper on the topic “IoT Based Household Health Safety System” International Conference on Trending Technologies in Engineering Research (ICTER-2019) conducted by Mangayarkarasi College of Engineering, Madurai, Tamilnadu on 15.03.2019.
- Dr. P. Selvan presented a paper on the topic “Stability Improvement of DC Power Systems in AC all-electric ship using hybrid SMES / Battery” International Conference on Breakthrough in Engineering, Science & Technology – 2019 conducted by Dr. Kalam Institute of Engineering Research, Chennai on 29.04.2019.
- Dr. P. Selvan presented a paper on the topic “Electric Vehicle charging by using wireless power transfer method” International Conference on Breakthrough in Engineering, Science & Technology – 2019 conducted by Dr. Kalam Institute of Engineering Research, Chennai on 29.04.2019.
- Prof. M. Shyamalagowri presented a paper on the topic “Solar PV – battery based hybrid water pumping system using BLDC motor drive” International Conference on Breakthrough in Engineering, Science & Technology – 2019 conducted by Dr. Kalam Institute of Engineering Research, Chennai on 29.04.2019.
- Dr. R. Muthukumar presented a paper on the topic “Transformer Less Inverter with Zeta Converter to Reduce Leakage Current in Grid Connected PV Systems” International Conference

on Breakthrough in Engineering, Science & Technology – 2019 conducted by Dr. Kalam Institute of Engineering Research, Chennai on 29.04.2019.

PAPER PUBLISHED BY THE FACULTY MEMBERS

- Dr.P.Selvan published a journal paper on the topic “Stability Improvement of DC Power Systems in Fuzzy Logic” in International Journal on Applications in Electrical and Electronics Engineering, Volume 4: Issue 4: November 2018.
- Prof. M. Shyamalagowri published a journal paper on the topic “Solar PV-Battery Based Hybrid Water Pumping System Using BLDC Motor Drive” in International Journal on Applications in Electrical and Electronics Engineering, Volume 4: Issue 4: November 2018.
- Dr.R.Muthukumar published a journal paper on the topic “Transformer Less Inverter with Zeta Converter to Reduce Leakage Current in Grid Connected PV Systems” in International Journal on Applications in Electrical and Electronics Engineering, Volume 4: Issue 4: November 2018.
- L.Anbarasu published a journal paper on the topic “A novel bridged-insert cascaded five level inverter topology” in Journal of Measurements in Engineering. Volume 6, Issue 4, December 2018.
- Mr. E. Immanuel Bright published a journal paper on the topic “Farmers assistant using raspberry PI” in International Journal of Scientific Research and Review, Volume 07, Issue 03, March 2019, ISSN No.: 2279-543X, UGC Journal No.: 64650 (Page No. 251-257).
- Mr. G. Gunasekaran published a journal paper on the topic “Microcontroller Based Automatic Control of Generating Transformer 250 MVA Cooling System” in International Journal of Scientific Research and Review, Volume 07, Issue 03, March 2019, ISSN No.: 2279-543X, UGC Journal No.: 64650 (Page No. 258-261).
- Mrs. S. Tamilselvi published a journal paper on the topic “Advanced Distribution Transformer Load Monitoring and Controlling” in International Journal of Scientific Research and Review, Volume 07, Issue 03, March 2019, ISSN No.: 2279-543X, UGC Journal No.: 64650 (Page No. 489-494).
- Mr. S. Vijayanand published a journal paper on the topic “Common-Ground-Type Transformerless Inverters for Single-Phase Solar Photovoltaic Systems” in International Journal of Scientific Research and Review, Volume 07, Issue 03, March 2019, ISSN No.: 2279-543X, UGC Journal No.: 64650 (Page No. 269-273).

- Mr. L. Vijay Anand published a journal paper on the topic “Detection And Prevention Of Child Abuse Using IoT” in International Journal of Scientific Research and Review, Volume 07, Issue 03, March 2019, ISSN No.: 2279-543X, UGC Journal No.: 64650 (Page No. 471-475).
- Mr. S. P. Dwarakesh published a journal paper on the topic “Automatic Power Supply from Different Sources for E-Vehicles” in International Journal of Scientific Research and Review, Volume 07, Issue 03, March 2019, ISSN No.: 2279-543X, UGC Journal No.: 64650 (Page No. 1724-1727).
- Prof . M. Shyamalagowri published a journal paper on the topic “Design of Micro Hydro Power Plant and Energy Recovery from Cooling Water Outlet 210MW LMW Turbine in MTPS” in SSRG International Journal of Electrical and Electronics Engineering (SSRG – IJEEE), Special Issue ICTER, Mar 2019.
- Mr. L. Anbarasu published a journal paper on the topic “IOT Based Sensorless Speed Control of Induction Motor” in SSRG International Journal of Electrical and Electronics Engineering (SSRG – IJEEE), Special Issue ICTER, Mar 2019.
- Dr. P. Selvan published a journal paper on the topic “Threshold Voltage Maintain Solar Tracker” in SSRG International Journal of Electrical and Electronics Engineering (SSRG – IJEEE), Special Issue ICTER, Mar 2019.
- Mr.R. Senthil Kumar published a journal paper on the topic “IoT Based Household Health Safety System” in SSRG International Journal of Electrical and Electronics Engineering (SSRG – IJEEE), Special Issue ICTER, Mar 2019.
- Mr. L. Anbarasu published a journal paper on the topic “Implementation of Novel Bridged-Insert Cascaded Five Level Inverter Topology Optimized With Enhanced EPSO Algorithm for commercial applications” in Caribbean Journal Of Science, ISSN: 0008-6452, Volume 53, ISSUE 1 (JAN - APR), 2019;ISSN Authentication: ISSN UK Centre, Frequency: 1 Issue per year (Pages 152-174).

Pay package Details

Sl.No.	Name of the Company	No. of Students Placed	Salary per Annum (in Rs.)
1.	DHFL, Salem.	06	2,10,000
2.	Just Dial, Coimbatore.	02	2,00,000
3.	Alpha Associates, Coimbatore	13	1,98,000
4.	Raasi Constructions, Tiruppur	04	1,60,000
5.	Infratex, Perundurai.	11	1,20,000
6.	AB Academy, Coimbatore.	03	1,20,000
7.	Aagna Solutions, Chennai.	11	1,00,000
8.	e - Care India, Chennai.	01	1,00,000
9.	Indoshell Mould Ltd, Coimbatore.	08	1,00,000

L.ANBARASU, AP (Sr. Gr.) /EEE

Chief Editor, ESEC EEE Newsletter

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