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Namakkal - Trichy Main Road, Tholurpatti (Po), Thottiyam (Tk), Trichy (Dt) - 621 215.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

KNCET ELECTRUM

Common Activities

Department Advisory Committee Meeting

The Department Advisory Committee meeting for Even semester 2023-24 was held virtually on 06.01.2024 through Google Meet for discussion on Improvement in Research Publications, Funds, Consultancy works, Patents, Product development, submission of projects including students, FDP, Industrial Training, Awards, Students Value Added Courses and Skills for upgrading.

Board of Studies Meeting

The Seventh board of studies meeting was conducted on 9th March 2024 for discussing the change of curriculum and syllabi for students to be admitted from 2024 for specialized area in all the Engineering streams.

Parent – Teachers Meet

- Parent – Teachers Meet was conducted for III & II year on 11th & 12th March 2024 respectively. The prizes has been awarded to the students and staff members for their best performance.

- Triofest0-2024 was conducted for IV year on 13th May 2024. Mr.B.Bablu, Campus Hiring Lead-BPS, Tamilnadu & Pondicherry, Tata Consultancy Services, Chennai and Mrs.M.Kalaivani, Deputy Manager and HR, Adept Engineering Solutions Pvt. Ltd., Namakkal were the chief guest. The prizes and offer letters has been awarded to the students and staff members for their best performance.

Programme Conducted by the Department

(Workshop / Seminar/ Guest Lecture / Training / Webinar/ Others)

- Guest lecture on 'Career opportunities in the IT Industry' was organized on 9th March 2024. The resource person was Mr.S.Naveen, IVTL Infoview Technologies, Web Developer, Chennai.

- Guest lecture on 'Impact of DC-DC Converters in Electric Vehicle Technology' was organized on 23rd March 2024. The resource person was Dr.P.Elangovan, Assistant Professor/EEE, School of Electrical and Communication Sciences, B.S.Abdur Rahman Crescent Institute of Science and Technology, Chennai.

- Seventh National Conference on 'Electrical Power and Energy Systems (EPES-2024)' was organized on 23rd March 2024. The Chief Guest was Dr.P.Elangovan, Assistant Professor/EEE, School of Electrical and Communication Sciences, B.S.Abdur Rahman Crescent Institute of Science and Technology, Chennai.



- Project Expo 'EUREKA-2K24' was organized on 28th March 2024. The resource person was Mr.S.Vimal, Deputy Manager, Automation C & SP, Schneider Electric Infrastructure Ltd, Chennai.



- Six days online FDP on 'Opportunities and Challenges in Integrating Renewable Energy in EV Charging Infrastructure' was organized on 24th to 26th June 2024. The resource persons were Dr.S.Senthil Kumar, Professor/EEE, National Institute of Technology, Trichy, Dr.T.K.Santhosh, Assistant Professor-III, School of Electrical and Electronics Engineering, SASTRA-Deemed to be University, Thanjavur, Dr.Thiruvenkadam Srinivasan, Professor, School of Electrical Engineering, Vellore Institute of Technology, Vellore, Mr.Dhamodharan Selvaraj, Power System Control Engineer, M/s.Vestas Technology R&D Chennai Pvt Ltd, Chennai, Dr.P.Srinivasarao Nayak, Associate Professor/EEE, National Institute of Technology, Trichy, Dr.P.Elangovan, Assistant Professor/EEE, School of Electrical and Communication Sciences, B.S.Abdur Rahman Crescent Institute of Science and Technology (Deemed to be University), Chennai, Dr.L.Ashok Kumar, Professor/EEE, PSG College of Technology, Coimbatore, Dr.M.Sabarimuthu, Assistant Professor (Senior Grade)/EEE, Kongu Engineering College, Erode, Dr.P.Ponnambalam, Professor & Head, Department of Energy and Power Electronics, School of Electrical Engineering, Vellore Institute of Technology, Vellore. Dr.S.Ramesh, Professor and Head/EEE, Vel Tech Rangarajan Dr.Sagunthala R & D Institute of Science and Technology, Chennai, Dr.M.Suman, Assistant Professor, Department of Electrical Engineering, NIT, Trichy and Dr.M.Chakkarapani, Assistant Professor, Assam Energy Institute, Sivasagar, (Centre of Rajiv Gandhi Institute of Petroleum Technology, Jais, Amethi), Assam.

✿ Energy Club :

- Webinar on 'Energy Conservation using Automation in Solar, HVAC & Metro projects' was organized on 5th January 2024. The resource person was Er.B.Praveendass, CEO, L&P Renewable System Integrator, Erode.
- Seminar on 'Recent Trends in Wind Turbine Generators' was organized on 13th April 2024. The resource person was S.Udhayakumar, Senior Engineer, State Windmill Auditor, Suzlon Global Services Limited, Bangalore.

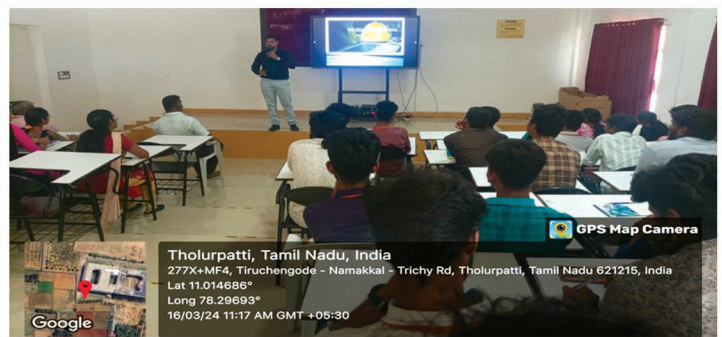
✿ Tamil Mandram :

- Conducted the Valedictory and Guest lecture on வாசிப்பு, எழுத்து மற்றும் அரசியல் by Mr.M.Mohammed Ali Jinna, Writer & Movie Director, Coimbatore in Tamil Mandram dated on 29th April 2024 at Kongunadu College of Engineering and Technology, Trichy.



✿ Centre for Excellence – Industrial Automation

- Two Days Workshop on 'Industrial Automation using Siemens PLC and SCADA' was organized on 08th March to 09th March 2024. The chief guest was Mr.F.Antony Shane Caris, Project Engineer, Basell Automation System Pvt Ltd, Chennai.
- Guest Lecture on 'Safety Integration in Industrial Automation' was organized on 16th March 2024. The chief guest was Mr.K Sathis Kumar, Managing Director, Innovative Solutions, Bangalore.



✿ Centre for Excellence – Internet of Things & Embedded Systems

- Workshop on 'Industrial Automation using Embedded Sensors with IoT Technology' was organized on 22nd & 23rd February 2024. The resource persons were Mr.M.Madhankumar & Mr.R.Venkatesan, Power Integrated Solutions, Trichy.
- Seminar on 'Assembling, Analyzing & Testing of EV Application Motors & Controllers' was organized on 11th March 2024. The resource person was Er.S.Dhanabal, EV-Operations Head, Lucas TVS Limited, Pondicherry.

✿ Staff Contribution

✿ Staff Achievements and Awards

- Mr.T.Rajamanikandan, AP, Electrical and Electronics Engineering department & Head (IPR & Product Development) & K.Karthik, AP, Electrical and Electronics Engineering department received a project grant of Rs.1,00,000/- for the project "Murukku Making Machine to Double the Income of Farmers through Millet Value Addition" under SEG Sustainable Agriculture System, Unnat Bharat Abhiyan (UBA 2.0), National Coordinating Institute, IIT, Delhi.
- Dr.T.Sengolrajan, ASP, Electrical and Electronics Engineering completed the NPTEL course on 'Biomass Conversion and Biorefinery' during January 2024 to April 2024.
- Mr.C.Gowrishankar, AP, Electrical and Electronics Engineering completed the NPTEL course on 'Introduction to Internet of Things' during January 2024 to April 2024.

✿ Staff as a resource person

- Mr.S.Ragul, AP, Electrical and Electronics Engineering department Acted as a Jury in National Level Technical Symposium 'KONGUNADU FEST 2K24' at Kongunadu Polytechnic college, Thottiam, Trichy on 16th February 2024.
- T.Rajamanikandan, AP, Electrical and Electronics Engineering department & Head (IPR & Product Development) has acted as resource person in celebration of World Environment Day organized by The Institution of Engineers (India), Thiruvallur Local Center on the topic 'Organic Agriculture' on 30th June 2024 in online mode.

✿ Faculty Industrial Training :

- ✿ Mrs.S.Revathi, AP, Electrical and Electronics Engineering has undergone the industrial training at Bharath Fushing, Coimbatore from 26th June to 28th June 2024.
- ✿ Mr.R.Gopalakrishnan and Mr.P.Tamilnesan, AP, Electrical and Electronics Engineering has undergone the industrial training at Innovative Solutions, Bengaluru from 27th June to 29th June 2024.
- ✿ Mr.J.Karthikeyan, AP, Electrical and Electronics Engineering has undergone the industrial training at Menaka Electricals Pvt. Ltd, Kancheepuram from 28th June to 30th June 2024.

❖ Mr.S.Ragul and Mr.K.Karthik, AP, Electrical and Electronics Engineering has undergone the industrial training at Jaiwing Electrical Engineers, Karur from 19th June to 21st June 2024.

❖ Dr.T.Sengolrajan, ASP and Mr.R.Manikandan, AP, Electrical and Electronics Engineering has undergone the industrial training at India Nippon Electricals Limited, Puducherry from 17th June to 19th June 2024.

❖ Mrs.R.Deebika, AP, Electrical and Electronics Engineering has undergone the industrial training at Padmavahini Transformers Private Limited, Coimbatore from 10th June to 12th June 2024.

🌸 Publication in Journals

• **Malathi Govindasamy, A.M.J.Zubair Rahman, S.D.Vijayakumar** and Karthikeyan Jayabalan, 'Machine Learning -Based Optimization of Wind -PV Solution for Grid Demand', Electric Power Components and Systems, Taylor & Francis, ISSN: 1532-5008, DOI: 10.1080/15325008.2023.2295363, SCIE,I.F:1.5, December 2023.

• Sengolrajan Thanasingh, **A.N.Sasikumar, K.Mahendran and R.Saranya**, 'Optimizing Distributed Generation Resources for Power Grid Quality Improvement using Hybrid Optimization Technique', Electric Power Components and Systems, Taylor & Francis, ISSN: 1532-5008, DOI: 10.1080/15325008.2023.2298280, SCIE,I.F:1.5, January 2024.

• **Malathi Govindasamy, O.Cyril Mathew, Mathan Kumar Boopathi** and Gowrishankar Chandran, 'IoT and AI-based MPPT Techniques for Hybrid Solar and Fuel cell', Electric Power Components and Systems, Taylor & Francis, ISSN: 1532-5008, DOI: 10.1080/15325008.2023.2298277, SCIE,I.F:1.5, January 2024.

• Shankar Rajukkannu, **Kavitha Maruthai, Gomathy Velmurugan and Ramkumar Pandian**, 'An Effective SST-FLC for Mitigation of Reactive Power Compensation of DFIG based Wind Energy conversion System', Electric Power Components and Systems, Taylor & Francis, ISSN: 1532-5008, DOI: 10.1080/15325008.2023.2295363, SCIE,I.F:1.5, January 2024.

• **V.Karthi, S.Revathi, Ramesh Kumaraswamy, Arun Anthonisamy, S.D.Vijayakumar and Ramkumar**, 'Blockchain Empowered Solar Energy Trading: A Decentralized Grid Integration Revolution', Electric Power Components and Systems, Taylor & Francis, ISSN: 1532-5008, DOI: 10.1080/15325008.2024.2316250, SCIE,I.F:1.5, February 2024.

• **Balaji.R, Boopathi.R, Dhilipraj.R** and Karthikeyan.J, 'Artificial Intelligent based Three Phase Fault Detection using Internet of Things', International Journal of New Innovations in Engineering and Technology, ISSN: 2319-6319, March 2024.

• Gopalakrishnan.R, **Harish.M, Kaviyan.E and Suresh.S**, 'Design and Implementation of a Motor-Generator Frequency Conversion System for Adjustable Power supply in Industrial Applications (Pump Testing Panel)', International Journal of New Innovations in Engineering and Technology, ISSN: 2319-6319, March 2024.

• **Venkatesh Kumar Pandiyan, Rajheshwari K.Chinnasamy, Karthik Kathan and Arulmurugan Loganathan**, 'Blockchain -Driven Demand Response System for Resilient and Sustainable Microgrids Integrating Wind Energy Conversion Systems', Electric Power Components and Systems, Taylor & Francis, ISSN: 1532-5008, DOI: 10.1080/15325008.2024.2340017, SCIE,I.F:1.5, April 2024.

• **Eswaramoorthi.R, Shankar.R, Karthik.G and Kavitha.S**, 'Frequency Offset Estimation for UWB-OFDM System using Weight and Exhaustiveness based Monarch Butterfly Optimization approach', Journal of Electrical Systems, ISSN: 112-5209, Scopus, I.F:0.17, April 2024.

• **Arul.P, B.Balraj, A.Sankaran and K.Dhayalini**, 'Enhancing the Energy Storage Performance of Titanium Dioxide Electrode Material by Green Doping of Nd2O3 Nanoparticles for Electrochemical Supercapacitors', Journal of the Indian Chemical Chemical Society, ISSN: 0019-4522, DOI: 10.1016/j.jics.2024.101177, SCIE,I.F:1.3, May 2024.

• **V.Shanmugha Sundaram, Srinivasan Gopalan, K.Krishnamoorthi** and K.Karthik, 'Integration of EGs in Capacitor Added Optimal DPS for FG Maximization', Ain Shams Engineering Journal, Elsevier, ISSN: 2090-4479, DOI: 10.1016/j.asej.2024.102900, SCIE, I.F:1.6, June 2024.

• R.Shankar and R.Gopalakrishnan, 'Performance Monitoring and Diagnostic System for Three-Phase Induction Motor', Tanz Journal, ISSN: ISSN.No:1869-7720, DOI: 10.61350/TJ5376, WoS, I.F:0.1, June 2024.

🌸 Publication in Conference

• **Kavin Kumar.K, Panneer Selvam.M, Thurai Raaj.V.B, Selvam.N, Manikandan.R and Divya Briya.S**, 'Implementation of Power Efficient Smart Helmet System for Road Safety and Rider's Convenience using Pico Board' IEEE Sponsored International Conference on Artificial Intelligence and Machine Learning Applications Theme: Healthcare and Internet of Things (AIMLA) at KS Rangasamy College of Technology, Namakkal, 15th to 16th March 2024.

• Dr.R.Shankar, **R.S.Keerthivasan, D.Prasanth and A.Sureshkumar**, 'Thermal Resilience Evaluation of Submersible Pumps in Hot Water System with Advanced Controls' International Conference on Engineering Technology and Science (ICETS'24) at Muthayammal College of Engineering, Rasipuram, 20th March 2024.

• K.Mohanraj, **R.S.Alageshwaran and P.Praveen Xavier**, 'Automatic Industrial Motor Safety Controller' International Conference on Engineering Technology and Science (ICETS'24) at Muthayammal College of Engineering, Rasipuram, 20th March 2024.

• J.Karthikeyan, **R.Dhilipraj, R.Boopathi and R.Balaji**, 'Artificial Intelligent based Three Phase Fault Failure Detection using Internet of Things' International Conference on Engineering Technology and Science (ICETS'24) at Muthayammal College of Engineering, Rasipuram, 20th March 2024.

• P.Tamilnesan, **A.Chandru, V.Pragatheeswaran and M.Vignesh**, 'Sensors Optimized Industry Electricity Management using Machine Learning' International Conference on Engineering Technology and Science (ICETS'24) at Muthayammal College of Engineering, Rasipuram, 20th March 2024.

• K.Karthik, **V.Deepak Kumar and B.Kishorekumar**, 'Implementation of Traceability in IFA Rectifier assembly Line' International Conference on Engineering Technology and Science (ICETS'24) at Muthayammal College of Engineering, Rasipuram, 20th March 2024.

• R.Gopalakrishnan, **M.Harish, E.Kaviyan and S.Suresh**, 'Design and Implementation of Motor-Generator Frequency Conversion System for Adjustable Power Supply in Industrial Applications (Pump Testing Panel)' International Conference on Engineering Technology and Science (ICETS'24) at Muthayammal College of Engineering, Rasipuram, 20th March 2024.

• C.Gowrishankar, **A.Hesingraj, R.Nishanth and P.Santhoshkumar**, 'Single Power Conversion Battery Chargers for Light Vehicles' International Conference on Engineering Technology and Science (ICETS'24) at Muthayammal College of Engineering, Rasipuram, 20th March 2024.

- R.Deebika, V.Nandhakishore, S.Sarathkumar and T.Thinagarajan, 'Safety System for Industrial Workers with EZ-Screen Type 2 System' International Conference on Engineering Technology and Science (ICETS'24) at Muthayammal College of Engineering, Rasipuram, 20th March 2024.
- T.Rajamanikandan, S.Adaikalraj, N.Gokul and P.Vijay, 'Investigation of Dielectric Properties of Lignocellulosic Materials' International Conference on Renewable and Sustainable Energy Technologies (RESET-2024) at Bannari Amman Institute of Technology, Sathyamangalam, 22nd to 23rd March 2024.
- T.Rajamanikandan, S.T.Sugitha, V.Harija and V.Deepana Sree, 'Stray Insulation Board using Musa Paradisiaca' International Conference on Renewable and Sustainable Energy Technologies (RESET-2024) at Bannari Amman Institute of Technology, Sathyamangalam, 22nd to 23rd March 2024.
- R.Manikandan, J.Thomas Maria Jones, S.Sarankumar and S.Jenith, 'AI based Cotton Roll Carrying Device for Spinning Industries' International Conference on Renewable and Sustainable Energy Technologies (RESET-2024) at Bannari Amman Institute of Technology, Sathyamangalam, 22nd to 23rd March 2024.
- J.Karthikeyan, S.Karthi, G.Karthikeyan and S.Sathishkumar, 'Crafting AI-Enhanced Herbal Mosquito Repellents' International Conference on Renewable and Sustainable Energy Technologies (RESET-2024) at Bannari Amman Institute of Technology, Sathyamangalam, 22nd to 23rd March 2024.
- Dr.T.Sengolrajan, A.Kirubananthan, C.Ragavendra and S.Praveen, 'AI based Vertical Axis Wind Turbine for Energy Generation' International Conference on Renewable and Sustainable Energy Technologies (RESET-2024) at Bannari Amman Institute of Technology, Sathyamangalam, 22nd to 23rd March 2024.
- Dr.P.Arul, S.Sanjay, V.Vaseekaran and M.Vignesh, 'IoT based Streamlined Communication Device for Official Broadcasting' International Conference on Renewable and Sustainable Energy Technologies (RESET-2024) at Bannari Amman Institute of Technology, Sathyamangalam, 22nd to 23rd March 2024.
- Dr.T.Sengolrajan, M.Dhivyadharshini and S.Kiruthika, 'Integration of Measurement Vision Camera in IC Welding' International Conference on Renewable and Sustainable Energy Technologies (RESET-2024) at Bannari Amman Institute of Technology, Sathyamangalam, 22nd to 23rd March 2024.
- S.Ragul, A.Swetha, M.Keerthana and P.Pavithra, 'Integration of New Automated Encapsulation Line for Regulator Assembly' International Conference on Renewable and Sustainable Energy Technologies (RESET-2024) at Bannari Amman Institute of Technology, Sathyamangalam, 22nd to 23rd March 2024.
- R.Manikandan, M.Winmathi and S.Sathya, 'Design and Development of Flash Test Rig for Optimizing High Speed Data Transfer' International Conference on Renewable and Sustainable Energy Technologies (RESET-2024) at Bannari Amman Institute of Technology, Sathyamangalam, 22nd to 23rd March 2024.
- T.Rajamanikandan, 'Empowering Farmers and Self help group Women for Sustainable livelihoods through the use of insulation sheets and furniture produced from BTR' International Conference on 'Entrepreneurship Innovation & Export-ICEIE2024' at SAITO University College, K2 School of Business and Design, Kuala Lumpur, Malaysia, 25th to 27th March 2024.
- P.Tamilnesan, A.Anas Mohamed, T.Infant steve and K.Matheshwaran, 'Automated AI-Enhanced Controller for Precision Agriculture with Autonomous Drone' International Conference on Computational Intelligence and Industry 5.0 (ICCI) 2024 at Velammal Institute of Technology, Chennai, 3rd April 2024.
- S.Ragul, B.Balaji, R.Jeeva and R.Sedhupathi, 'Fuzzy Logic Controller based non-isolated DC-Converter for Renewable energy Applications' International Conference on Computational Intelligence and Industry 5.0 (ICCI) 2024 at Velammal Institute of Technology, Chennai, 3rd April 2024.
- K.Karthik, A.Balamurugan, S.Dhayanithi and S.Sanjaikumar, 'Solar Integrated Power System for Energy Saving and Energy Efficiency Application using AI' International Conference on Computational Intelligence and Industry 5.0 (ICCI) 2024 at Velammal Institute of Technology, Chennai, 3rd April 2024.
- R.Deebika, J.Devadharshini, S.Dharshini and M.Malini, 'Dynamic Efficient Solar Panel Fault Detection with Optical wireless charging for Electric Vehicle' International Conference on Information Technologies and Smart Systems (ICITSS-2024) at JP College of Engineering, Tenkasi, 3rd to 4th April 2024.
- S.Revathi, J.Jagesh, B.Kishore and S.Vignesh, 'Dynamic Load Flow Analysis and Exploring and Exploring PV Unit Placement in RT-96 Bus System at various locations' International Conference on Information Technologies and Smart Systems (ICITSS-2024) at JP College of Engineering, Tenkasi, 3rd to 4th April 2024.
- S.Revathi, M.K.Kaviyadharshini, A.Sanfarrenosha and R.Thangamani, 'A Comprehensive Solution for Real-Time street Light Fault Detection, Precise Location Tracking and Efficient Maintenance' International Conference on Information Technologies and Smart Systems (ICITSS-2024) at JP College of Engineering, Tenkasi, 3rd to 4th April 2024.
- P.Pavithra, C.Kalaivanan, P.Ponmurugan, V.Latha Jothi, K.Karthik and Kavin Kumar, 'Implementation of EEG Signal Decomposition and Feature Extraction Through Efficient Wavelet Transforms' IEEE Sponsored International Conference on Communication, Computing and Internet of Things (IC3IoT) at Sri Sairam Engineering College, Chennai, 18th April 2024.
- Pavithra.M, Radhika.C, Annapoorani.B.T, Senthil.T, Karthikeyan.J and Archana.D, 'Boundary Confusion Alleviation and Multiscale-temporal Feature Extraction for VAG-based Fine-grained Multi-grade Osteoarthritis Deterioration Monitoring' IEEE Sponsored International Conference on Communication, Computing and Internet of Things (IC3IoT) at Sri Sairam Engineering College, Chennai, 18th April 2024.
- Sathyasree.K, Kavin Kumar.K, Sivaselvi.S, Santhosh Babu.A.V, Deebika.R and Banumithra.B, 'Low Power and Enhanced Data Retention Time in DRAM in FinFET Technology' IEEE Sponsored International Conference on Communication, Computing and Internet of Things (IC3IoT) at Sri Sairam Engineering College, Chennai, 18th April 2024.
- Malathi.D, Saranya.M.D, Ponmurugan.P, Revathi.S, Kavin Kumar.K and Malavika.S, 'Design of Content - Addressable Memory for Big Data Applications using 18nM FinFET Technology' IEEE Sponsored International Conference on Devices, Circuits and Systems (ICDCS'24) at Karunya Institute of Technology and Sciences, Coimbatore, 23rd to 24th April 2024.
- Arul.P, Ananda.M.H, Dhamodharan Selvaraj and Dhanalakshmi.R, 'BLDC Motor Control for EVs using Cuckoo search Algorithm in PI Controller Tuning' International Conference on Intelligent and Sustainable Power and Energy Systems, Scopus Indexed, SciTePress, May 2024.

🌸 Workshop/ Webinar/ FDP Attended

🌸 Webinar/Seminar :

- Mr.T.Rajamanikandan, AP, Electrical and Electronics Engineering department & Head (IPR & Product Development) attended an Entrepreneurship Development Program on 'Export potentials and Opportunities in Medicinal and Aromatic' at The Director of Agribusiness Development, TNAU, Coimbatore on 30th & 31st January 2024.

- Mr.K.Karthik, AP, Electrical and Electronics Engineering department attended a seminar on 'SCADA and Power Plant Engineering' at Paavai Engineering College, Namakkal on 22nd February 2024.

- Dr.T.Sengolrajan, ASP, Electrical and Electronics Engineering department attended SAMAVESHA'24 an awareness program on 'Uniting Minds & Igniting Innovation' on National Science day at National Institute of Technology, Trichy & Indian Science Technology and Engineering Facilities Map (I-STEM) at NIT Trichy on 28th February 2024.

- Mrs.R.Deebika, AP, Electrical and Electronics Engineering department attended a seminar on 'Research Opportunities and Challenges on Renewable Energy Technologies' at K.Ramakrishnan College of Engineering, Trichy on 29th February 2024.

- Mr.T.Rajamanikandan, AP, Electrical and Electronics Engineering department & Head (IPR & Product Development) attended the 6th International Conference associated with Malaysian Associated Indian Chambers of Commerce & Industry (MAICCI) Entrepreneurs & Business Meet cum Exhibition at Malaysia 25th March 2024.

🌸 FDP :

- Dr.T.Sengolrajan, ASP, Electrical and Electronics Engineering department attended

- FDP on 'Issues, Opportunities and Challenges in Smart Grid' organized by The Kavery Engineering College, Salem from 20th to 24th February 2024.

- FDP on 'Digital Tools for Teaching and Learning' organized by NITTR, Chandigarh from 11th to 15th March 2024.

- FDP on 'Biomass Conversion and Biorefinery' organized by NPTEL from 1st January 2024 to 30th April 2024.

- Mr.R.Gopalakrishnan, AP, Electrical and Electronics Engineering department attended

- FDP on 'Life Skills Management & Innovative Teaching Strategies' organized by National Institute of Technology, Nagaland from 4th to 8th March 2024.

- Mr.S.Ragul, AP, Electrical and Electronics Engineering department attended

- FDP on 'Emerging Trends in Artificial Intelligence and Deep Learning' organized by Sri Sai Ram Institute of Technology, Chennai from 26th to 30th December 2023.

- FDP on 'Exploring Teaching Strategies and Research Scope in Renewable Energy Sectors' organized by Hindusthan College of Engineering and Technology, Coimbatore from 2nd to 6th January 2024.

- FDP on 'Issues, Opportunities and Challenges in Smart Grid' organized by The Kavery Engineering College, Salem from 20th to 24th February 2024.

- Mr.R.Manikandan, AP, Electrical and Electronics Engineering department attended

- FDP on 'Cybersecurity' organized by Kongunadu College of Engineering and Technology, Trichy from 8th to 12th January 2024.

- Mr.K.Karthik, AP, Electrical and Electronics Engineering department attended

- FDP on 'Digital Tools for Teaching and Learning' organized by NITTR, Chandigarh from 11th to 15th March 2024.

- Mrs.S.Revathi, AP, Electrical and Electronics Engineering department attended

- FDP on 'Emerging Trends in Artificial Intelligence and Deep Learning' organized by Sri Sai Ram Institute of Technology, Chennai from 26th to 30th December 2023.

- FDP on 'Exploring Teaching Strategies and Research Scope in Renewable Energy Sectors' organized by Hindusthan College of Engineering and Technology, Coimbatore from 2nd to 6th January 2024.

- FDP on 'Curriculum Design for Outcome Based Education' organized by Curriculum Development Centre Department, NITTR, Chandigarh from 3rd to 7th June 2024.

- Mr.J.Karthikeyan, AP, Electrical and Electronics Engineering department attended

- FDP on 'Digital Tools for Teaching and Learning' organized by NITTR, Chandigarh from 11th to 15th March 2024.

- Mr.P.Tamilnesan, AP, Electrical and Electronics Engineering department attended

- FDP on 'Curriculum Design for Outcome Based Education' organized by Curriculum Development Centre Department, NITTR, Chandigarh from 3rd to 7th June 2024.

- Dr.P.Arul, Professor, Electrical and Electronics Engineering department attended

- FDP on 'Empowering Educators: Navigating Cutting -Edge Technologies in Industry 4.0' organized by Sree Sakthi Engineering College, Coimbatore from 1st to 6th January 2024.

- Mr.C.Gowrishankar, AP, Electrical and Electronics Engineering department attended

- FDP on 'Aiming Towards 3D's in Electrical Engineering' organized by Mahatma Gandhi Institute of Technology, Hyderabad from 11th to 15th March 2024.

- FDP on 'Introduction to Internet of Things' organized by NPTEL from 1st January 2024 to 30th April 2024.

🌸 Consultancy Details :

- Dr.R.Shankar, Professor & Head, Mr.R.Gopalakrishnan, AP, Electrical and Electronics Engineering department carried the consultancy work of Rs.2,36,000/- for 'Automation Control panel for Hydraulic Press Machine' funded by Innovative Solutions, Bengaluru.

- Dr.R.Shankar, Professor & Head, Mr.R.Manikandan, AP, Electrical and Electronics Engineering department carried the consultancy work of Rs.97,999/- for 'Design of Site plan (Schematic Layout of Solar Panel, S-SSB, Inverter and Lightning arrester of 200KW Roof top Solar Power Plant)' funded by Jaiwing Electrical Engineers, Karur.

- Dr.R.Shankar, Professor & Head, Mr.R.Manikandan, AP, Electrical and Electronics Engineering department carried the consultancy work of Rs.97,999/- for 'Design of Site plan (Schematic Layout of Solar Panel, S-SSB, Inverter and Lightning arrester of 350KW Roof Top Solar Power Plant)' funded by Jaiwing Electrical Engineers, Karur.

🌸 Patents Published :

- Dr.M.Vivekanandan, Dr.D.Jagadeesh, Dr.G.Saravanan, Dr.K.Periasamy, N.Kawin, S.Kumaravel, S.Mohankumar, RA.Aravind, J.Mahendran and T.Rajamanikandan, 'Enhancing Solar Air Heater Efficiency Through Innovative Flow Distribution Techniques Utilizing Guid', Application Number- 202441042464A filed on 31st May 2024 and published on 14th June 2024.

- Dr.R.Asokan, T.Rajamanikandan, Dr.P.Arul, Dr.T.Sengolrajan, K.Kumar, M.Geethalakshmi, S.Lalitha, T.Dineshkumar, S.Harikumar, Y.Vahidhabanu, R.Manikandan and R.Deebika, 'Method for Producing Electronic Circuit Dot Boards from Banana Tree Residues', Application Number - 202441044712 A filed on 10th June 2024 and published on 14th June 2024.

- T.Rajamanikandan, Dr.P.Arul, T.Ashok, K.Karthik, P.Valarmathi, R.Madanachitran, V.Srinath, K.Bashkaran, S.Saranya, P.Valakmathi, R.Palanikumar and C.Gowrishankar, 'Innovative Process for Manufacturing Banana Fiber-based Dielectric Capacitor', Application Number- 202441044697 A filed on 10th June 2024 and published on 14th June 2024.

- T.Rajamanikandan, Dr.P.Arul, Dr.R.Shankar, Dr.S.Kavipriya, Dr.R.Saravanan, Dr.P.Prabhu, Dr.N.Sridhar, S.Satheeshkumar, K.Yazhini, R.Gopalakrishnan, S.Revathi, C.P.Niranjana and K.M.Swarna Devi, 'Eco-Friendly Paint and Electrical Insulation Liquid from Lignin and Tannin Extracted from Banana Sheet', Application Number- 202441044698 A filed on 10th June 2024 and published on 14th June 2024.

- T.Rajamanikandan, J.Yogapriya, C.Saravanabhavan, S.Dhanabal, M.Arivukarasi, P.Preethi, C.Radhakrishnan, K.Karthick, R.Premkumar, P.Valarmathi, P.Tamilnesan, K.Lalitha and N.Sarmiladevi, 'Artificial Intelligence-based Angle Changing Parabolic Solar dryer with Automatic Sun Tracking Climate', Application Number - 202441044709 A filed on 10th June 2024 and published on 14th June 2024.

Industrial Designs

- T.Rajamanikandan, Dr.P.Arul, K.Karthik, S.Revathi, R.Baskar and A.Suresh Kumar, 'Baby Monitoring Electronic Device', Application Number- 418609-001 filed on 31st May 2024.

- T.Rajamanikandan, T.Ashok, Dr.R.Saravanan, M.Sakthivel, S.Gowtham, D.Dhavasankaran and A.Karthick, 'Medicine Tablet Holder Keychain', Application Number - 418610-001 filed on 31st May 2024.

- Dr.M.Dharmalingam, Dr.R.Shankar, Dr.T.Sengolrajan, K.Mohanraj, B.Sasivarman, P.Indhu, M.P.Iniya and P.Tamilnesan, 'Manual Seeding Machine', Application Number- 418611-001 filed on 31st May 2024.

- T.Rajamanikandan, Dr.P.Arul, Dr.S.Kavipriya, K.Anguraju, P.Thenmozhi and V.Dhanalakshmi, 'Soap and Odor Barholding stand', Application Number- 418614-001 filed on 31st May 2024.

Value Added Course

VACEE14-Autodesk AutoCAD Electrical

Students Contribution

NPTEL Completed :

- NPTEL Course on 'Biomass Conversion and Biorefinery' was completed by 58 students of II year Electrical and Electronics Engineering during January to April 2024.

- NPTEL Course on 'Biomass Conversion and Biorefinery' was completed by 35 students of III year Electrical and Electronics Engineering during January to April 2024.

Prize Won

1. V.Vijika, R.Vijayadharshini and N.Maha Lakshmi of III year Electrical and Electronics Engineering department won I Prize in the Technical Event on title 'Scramblers' in National Level Technical Symposium organized by Kongu Engineering College, Erode on 14th February 2024.

2. R.Arunkumar of II year Electrical and Electronics Engineering department won III Prize in the Technical Event on title 'Free Fire' in UDHAYAM'24 organized by Kalaigarkarunanidhi Institute of Technology, Coimbatore on 1st March 2024.

3. B.Srinivasan and A.Dhanasekaran of III year Electrical and Electronics Engineering department won III Prize in Paper Presentation on title 'Plastic Waste Pyrolysis' in National Level Technical Symposium organized by K.Ramakrishnan College of Technology, Trichy on 1st March 2024.

4. P.Siva, T.Abishek and P.Anandan of III year Electrical and Electronics Engineering department won II Prize in 'TEZARIO HACKATHON - 2024' organized by the department of Information Technology, Kongunadu College of Engineering and Technology, Trichy on 8th & 9th March 2024.

5. M.Vigneshwaran of II year Electrical and Electronics Engineering department won III Prize in Hackathon 'TECHSNAG 2K24' organized by the department of Electronics and Communication Engineering, Kongunadu College of Engineering and Technology, Trichy on 22nd & 23rd March 2024.

6. S.Kavya of III year Electrical and Electronics Engineering department won I Prize in Hackathon 'TECHSNAG 2K24' organized by the department of Electronics and Communication Engineering, Kongunadu College of Engineering and Technology, Trichy on 22nd & 23rd March 2024.

7. C.Keerthana Shivani of III year Electrical and Electronics Engineering department won II Prize in Hackathon 'TECHSNAG 2K24' organized by the department of Electronics and Communication Engineering, Kongunadu College of Engineering and Technology, Trichy on 22nd & 23rd March 2024.

8. M.Sowmiya of III year Electrical and Electronics Engineering department won III Prize in Hackathon 'TECHSNAG 2K24' organized by the department of Electronics and Communication Engineering, Kongunadu College of Engineering and Technology, Trichy on 22nd & 23rd March 2024.

9. S.Kavya, C.Keerthana Shivani and M.Sowmiya of III year Electrical and Electronics Engineering department won II Prize in Hackathon 'Agri Tech-2024' organized by the department of Agricultural Engineering, Kongunadu College of Engineering and Technology, Trichy on 25th & 26th March 2024.

- 10.T.Abishek of III year Electrical and Electronics Engineering department won III Prize & Best Performer in Hackathon 'SCHWAN TECH 2K24' organized by the department of Biomedical Engineering, Kongunadu College of Engineering and Technology, Trichy on 27th & 28th March 2024.

11. S.Sudhakar, N.Dharanidharan and P.Dinesh Murugan of III year Electrical and Electronics Engineering department won II Prize in Paper Presentation on title 'Smart Voting System' in National Level Technical Symposium EUREKA 2K24 organized by Kongunadu College of Engineering and Technology, Trichy on 28th March 2024.

12. M.Vigneshwaran of II year Electrical and Electronics Engineering department won III Prize in the Technical Event on title 'Quiz' in National Level Technical Symposium JFINAGLES 2024 organized by JCT College of Engineering and Technology, Coimbatore on 3rd April 2024.

13. S.Manikandan and M.Dhanush of II year Electrical and Electronics Engineering department won II Prize in Paper Presentation on title 'Wireless Power Transfer' in National Level Technical Symposium TECHFEST 2K24 organized by Paavai College of Engineering, Namakkal on 3rd & 4th April 2024.

14. V.Kokila of II year Electrical and Electronics Engineering department won II Prize in the Technical Event on title 'Minute To Win It' in National Level Technical Symposium organized by Excel Engineering College, Namakkal on 6th April 2024.

15. V.Balakrishnan of II year Electrical and Electronics Engineering department won II Prize in the Event Photography organized by Multimedia Club, Kongunadu College of Engineering and Technology, Trichy on 12th April 2024.

16. C.Kokilavani of II year Electrical and Electronics Engineering department won II Prize in the Technical Event on title 'Technical Quiz' in National Level Technical Symposium Symai - 2K24 organized by Muthayammal Engineering College, Namakkal on 30th April 2024.

✿ Internship

- Texmo Industries, Coimbatore
- Gateway Software Solutions, Coimbatore
- Aquasub Engineering, Coimbatore
- K.K.P. Spinning Mills Pvt Ltd, Namakkal
- The Salem Co-op. Sugar Mills Ltd., Namakkal
- THYDREAM TECH, Coimbatore
- Yuvanselin Engineering & CNC Centre
- 360 Group of Companies, Chennai

✿ Industrial Visit

- Ashok Textile Mills (Solar Site), Namakkal
- Lucas TVS, Nettapakkam, Pondicherry
- Mettur Thermal Power Station, Salem

✿ Placement Details:

S.No	Name of the Company	No of Students
1	Hexaware Technologies	1
2	Techvolt Software	1
3	Texmo Industries - Taro Pumps	33
4	Aquasub Engineering	11
5	Pegatron Technology India Pvt Ltd	25
6	Coapps	4
7	VR Della	1
8	PST Engineering Construction	4
9	Mitsuba India Pvt Ltd	5
10	Tessolve Semiconductor Pvt Ltd	1
11	Pinnacle Infotech Solutions	7
12	NY Systems	1

✿ Student Participation :

Event	Number of students Attended
International Conference	65
Paper Presentation	134
External Seminar	21
External Workshop	39
Internal Workshop	58
Technical events	78

✿ LIST OF TOPPERS NOVEMBER / DECEMBER - 2024

RANK 1  A.SWETHA [9.438 SGPA]	RANK 2  A.SANFARRENOSHA [8.688 SGPA]	RANK 3  S.DHARSHINI [8.438 SGPA]
(IV Year/ VII Sem)		
RANK 1  C.KEERTHANA SHIVANI [9.739 SGPA]	RANK 2  M.SOWMIYA [9.609 SGPA]	RANK 3  P.ANANDAN [9.304 SGPA]
(III Year/ V Sem)		
RANK 1  P.VINOTHINI [9.333 SGPA]	RANK 2  J.MOULEESWARAN [8.792 SGPA]	RANK 3  S.K.DHARSHANA [8.750 SGPA]
(II Year/ III Sem)		

✿ PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO 1 : Knowledge : Graduates will apply the knowledge of electrical drives and controls, embedded systems and power system engineering to solve the real world problems using modern engineering tools.

PEO II : Skills : Graduates will be able to design, analyze and interpret data for various investigations to meet the needs of the society and industry.

PEO III : Attitude/Behavior : Graduates shall develop ethical values and interpersonal skills to work as a part of teams on multidisciplinary projects.

✿ PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO 1 : Professional skills : Students shall have abilities to take challenges associated with electrical power and renewable energy generation, transmission, distribution and utilization.

PSO 2 : Competency : Students shall qualify at the State, National and International level competitive examination for employment, higher studies and research.

PROGRAM OUTCOMES (POs)

After completion of the course the graduates will have ability to:

PO 1: Engineering Knowledge : Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO 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.

PO 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.

PO 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.

PO 5: Modern Tool Usage : Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO 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.

PO 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.

PO 8: Ethics : Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 9: Individual and Team Work : Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO 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.

PO 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.

PO 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.

VISION

"To become an Internationally Renowned Institution in Technical Education, Research and Development by Transforming the Students into Competent Professionals with Leadership Skills and Ethical Values."

MISSION

- ❖ Providing the Best Resources and Infrastructure.
- ❖ Creating Learner-Centric Environment and Continuous Learning.
- ❖ Promoting Effective Links with Intellectuals and Industries.
- ❖ Enriching Employability and Entrepreneurial Skills.
- ❖ Adapting to Changes for Sustainable Development.

COLLEGE VISION & MISSION

VISION

"To be a pioneer in Electrical and Electronics Engineering and to create electrical engineering experts with social responsibilities, for global industry needs"

MISSION

- ❖ To facilitate the students continuous learning with best infrastructure and environment.
- ❖ To provide the students with skills, knowledge and opportunities to function as member of multi-disciplinary teams
- ❖ To empower the students towards popular needs of industry, research and development
- ❖ To enable the Student to learn ethics, values and contribution to the society

DEPARTMENT VISION & MISSION

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