KARPAGAM
COLLEGE OF ENGINEERING
Rediscover | Refine | Redefine
Coimbatore - 641 032
Autonomous | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade | NBA (ECE, EEE, CSE, MECH & IT)

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ELECTRO MEDIA

Department News Letter

Vision

- To provide innovative teaching and learning methodologies for excelling in a high-value career, higher education and research to the students in the field of Electronics and Communication Engineering to meet the needs of the industry and to be a part of the advancing technological revolution.

Mission

- To create engineers of high quality on par with international standards by providing excellent infrastructure and well qualified faculty.
- To enhance the collaborative and multidisciplinary activities to develop human and intellectual qualities.
- To provide technical expertise to carry out research and development.

PROGRAM EDUCATIONAL OBJECTIVES

PEO1: Graduates will be able to comprehend Mathematics, Science, Engineering fundamentals, laboratory and work based experience to formulate and solve problems related to the domain and shall develop proficiency in computer based engineering and the use of computational tools.

PEO2: Graduates will be prepared to communicate and work teambased on the multidisciplinary projects practicing the ethics of their profession with a great sense of social responsibility.

PEO3: Graduates will recognize the importance of lifelong learning to shine as experts either as entrepreneurs or as employees and thereby broadening their professional knowledge.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

DEPARTMENT ORGANIZED EVENTS

- ❖ Organized a Five day ATAL Faculty Development Program on "Artificial Intelligence, Machine Learning and Deep Learning" from 2nd to 6th February 2021.
- ❖ Organized a Virtual Seminar on "Impact of Industries after Covid'19 and future Scope of Automation Industries" on 6th March 2021.
- ❖ Organized two days National Level Workshop on "Machine Learning" from 26th and 27th March 2021.
- ❖ Organized a One Day National Level Workshop on "Digital System Design and its implementation using Xilinx" on 8th April 2021.
- ❖ Organized a One Day Online workshop on "Mobile Phone Trouble Shooting" on 10th May 2021.
- ❖ Organized International Conference on "Electronics, Communication and Computing Systems" on 26th May 2021.
- ❖ Organized Two Day Online Faculty Development Program on "Deep Learning for Computer Vision" from 29th to 30th June 2021.

FACULTY ACHIEVEMENTS

Seminar / Workshop / FDPs / STTPs – Presented / Attended

- ❖ **Dr.T.K.Sethuramalingam ,** Associate Professor attended six days AICTE Sponsored online STTP on Challenges and Opportunities in Implementing IoT and Machine Learning for Smart Grid Distribution System (Phase III) at Kongunadu College of Engineering and Technology,Trichy from 18th to 23rd January 2021.
- ❖ **Dr.T.K.Sethuramalingam,** Associate Professor attended one month workshop titled Automotive R & D Design supported by Motor Vikatan and Mahindra Rise from 16th January to 13th February 2021.

- **Mr.Jayadevan N.M,** Assistant Professor attended one month workshop titled Automotive R & D Design supported by Motor Vikatan and Mahindra Rise from 16th January to 13th February 2021.
- **Mr.G.Arun Francis,** Assistant Professor attended one week ATAL FDP on Artificial Intelligence, Machine Learning and Deep Learning at Karpagam College of Engineering, Coimbatore from 2nt to 6th February 2021.
- **Ms.L.Saranya,** Assistant Professor attended two day FDP on Deep Learning for Teaching at Sriranganathar Institute of Polytechnic,Coimbatore from 17th to 18th May 2021.
- **Ms.L.Saranya,** Assistant Professor attended five day online FDP on Innovative Research Prospects in Communication, Power System and Machine Learning Techniques at Jeppiaar Institute of Technology, Sriperumbudur from 17th May to 21st May 2021.
- **Mr.G.Arun Francis,** Assistant Professor attended five day online FDP on Innovative Research Prospects in Communication, Power System and Machine Learning Techniques at Jeppiaar Institute of Technology, Sriperumbudur from 17th May to 21st May 2021.
- **Ms.P.Archana,** Assistant Professor attended five day online FDP on Innovative Research Prospects in Communication, Power System and Machine Learning Techniques at Jeppiaar Institute of Technology, Sriperumbudur from 17th May to 21st May 2021.
- **Ms.L.Saranya,** Assistant Professor attended one week FDP on Future and Challenges in Engineering and Technology at Krishna Engineering College, Ghaziabad from 14th to 18th May 2021.
- **Ms.P.Archana,** Assistant Professor attended one week FDP on Future and Challenges in Engineering and Technology at Krishna Engineering College, Ghaziabad from 14th to 18th May 2021.
- **Mr.C.Mukuntharaj,** Assistant Professor attended three days workshop on System on Chip (SoC) design using EDA tools at Mepco Schlenk Engineering College,Sivakasi from 18th to 20th March 2021.
- **Mr.S.Ramprasath,** Assistant Professor attended three days workshop on System on Chip (SoC) design using EDA tools at Mepco Schlenk Engineering College,Sivakasi from 18th to 20th March 2021.
- **Ms.P.Archana,** Assistant Professor attended one week FDP on Future and Challenges in Engineering and Technology at Krishna Engineering College, Ghaziabad from 14th to 18th May 2021.
- **Dr.R.Vimalathithan,** Professor attended one week Faculty Training Programme on Finite Element Analysis on Electric Motors and Electric Vehicles at SRM Institute of Science and Technology, Chennai from 19th to 27th May 2021.
- **Mr.G.Arun Francis,** Assistant Professor attended one week Faculty Training Programme on Finite Element Analysis on Electric Motors and Electric Vehicles at SRM Institute of Science and Technology, Chennai from 19th to 27th May 2021.
- **Mr.R.Selvakumar,** Assistant Professor attended five day FDP on Recent Trends in Wireless Communication and 5G Technology at Narasu's Sarathy Institute of Technology,Salem from 24th to 28th May 2021.
- **Mr.Jayadevan N.M,** Assistant Professor attended three day FDP on AI & MI Skills Industry 4.0 at Er.Perumal Manimekalai College of Engineering, Nallaganakothapall from 3rd to 5th June 2021.
- **Dr.S.Deepa,** Associate Professor attended three day FDP on Advances in VLSI, Embedded,Signal Processing at Er.Perumal Manimekalai College of Engineering, Nallaganakothapalli from 4th to 6th June 2021.
- **Ms.L.Saranya,** Assistant Professor attended three day FDP on Advances in VLSI, Embedded,Signal Processing at Er.Perumal Manimekalai College of Engineering, Nallaganakothapalli from 4th to 6th June 2021.
- **Mr.R.Selvakumar,** Assistant Professor attended three day FDP on Advances in VLSI, Embedded,Signal Processing at Er.Perumal Manimekalai College of Engineering, Nallaganakothapalli from 4th to 6th June 2021.
- **Mr.R.Suguna,** Assistant Professor attended three day FDP on Advances in VLSI, Embedded,Signal Processing at Er.Perumal Manimekalai College of Engineering,Nallaganakothapalli from 4th to 6th June 2021.
- **Mr.Jayadevan N.M,** Assistant Professor attended three day FDP on Advances in VLSI, Embedded ,Signal Processing at Er.Perumal Manimekalai College of Engineering,Nallaganakothapalli from 4th to 6th June 2021.
- **Ms.P.Archana,** Assistant Professor attended three day FDP on Advances in VLSI, Embedded ,Signal Processing at Er.Perumal Manimekalai College of Engineering,Nallaganakothapalli from 4th to 6th June 2021.
- **Dr.V.Saminathan,** Associate Professor attended three day FDP on Advances in VLSI, Embedded ,Signal Processing at Er.Perumal Manimekalai College of Engineering,Nallaganakothapalli from 4th to 6th June 2021.
- **Ms.T.Happila,** Assistant Professor attended three day FDP on Advances in VLSI, Embedded ,Signal Processing at Er.Perumal Manimekalai College of Engineering,Nallaganakothapalli from 4th to 6th June 2021.
- **Dr.T.K.Sethuramalingam,** Associate Professor attended online FDP on Research Funding Projects and IPR (Part II) at K.C. College of Engineering and Management Studies and Research,Thane from 7th to 9th June 2021.
- **Ms.P.Archana,** Assistant Professor attended three day National Level Workshop on Cloud Computing Technologies at Annai Velankanni College of Engineering, Kanyakumari from 9th to 11th June 2021.
- **Dr.A.Rajendran,** Professor attended and completed Online Orientation Programme for Mentors organized by NITTTR and AICTE New Delhi from 14th to 18th June 2021.
- **Dr.S.Deepa,** Associate Professor attended and completed Online Orientation Programme for Mentors organized by NITTTR and AICTE New Delhi from 14th to 18th June 2021.
- **Dr.S.Deepa,** Associate Professor attended 5 day online International workshop on Creating Interactive E Assesment Tools at Universal Teaching Academy,Puducherry from 14th to 18th June 2021.

- ❖ **Dr.T.K.Sethuramalingam,** Associate Professor attended one week online FDP on Embedded System Design at K.C. College of Engineering and Management Studies and Research,Thane from 14th to 19th June 2021.
- ❖ **Ms.R.Suguna,** Assistant Professor attended one week STTP on Emerging Trends in VLSI Technology at Malla Reddy Engineering College,Secunderabad from 14th to 19th June 2021.
- ❖ **Ms.T.Happila,** Assistant Professor attended six days online International FDP on Research Innovations and Emerging Advances in Electrical Engineering at Easwari Engineering College,Chennai from 14th to 19th June 2021.
- ❖ **Dr.T.K.Sethuramalingam,** Associate Professor attended two week online International FDP on Communication Skills at Integral University,Lucknow from 14th to 25th June 2021.
- ❖ **Ms.R.Suguna,** Assistant Professor attended five day Online Training Programme on Embedded Systems using 8051 Microcontroller organized by NITTTR,Chennai from 21st June to 25th June 2021.
- ❖ **Ms.L.Saranya,** Assistant Professor attended one week FDP on Emerging Trends in Automation and e-Communication Technologies at SATHYABAMA (Deemed to be University), Chennai from 24th to 30th June 2021.
- ❖ **Ms.T.Happila,** Assistant Professor attended one week FDP on Emerging Trends in Automation and e-Communication Technologies at SATHYABAMA (Deemed to be University), Chennai from 24th to 30th June 2021.
- ❖ **Dr.V.Saminathan,** Associate Professor has successfully completed an NPTEL course entitled Digital System Design.
- ❖ **Ms.T.Happila,** Assistant Professor has successfully completed an NPTEL course entitled Sensors and Actuators and awarded with Elite.
- ❖ **Ms.T.Happila,** Assistant Professor has successfully completed an NPTEL course entitled Microprocessors and Microcontrollers and awarded with Elite.
- ❖ **Dr.A.Rajendran,** Professor has successfully completed an NPTEL course entitled Digital System Design and awarded with Elite.
- ❖ **Ms.S.Malini,** Assistant Professor has successfully completed an NPTEL course entitled Computer Networks and Internet Protocol.
- ❖ **Ms.P.Archana,** Assistant Professor has successfully completed an NPTEL course entitled Antennas.

Journal Publication – International/National

Dr.P.Karthigaikumar, Professor and Head / ECE
- ❖ Published a paper titled "Development of hand gesture recognition system using machine learning", Journal of Ambient Intelligence & Humanized Computing, Vol.12, No.6, pp.6793-6800, 2021.

Dr.A.Rajendran, Professor / ECE
- ❖ Published a paper titled "Fuzzy controller based THD reduction and performance improvement of PMBLDC motor Using MMLI", Tehnički vjesnik – Technical Gazette, Vol.28, No.2, pp.439-446, 2021.
- ❖ Published a paper titled "Drowsy Driver Detection Using Viola Jones Algorithm", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9953-9961, 2021.
- ❖ Published a paper titled "Emergency Vehicle Traffic Controller", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9946-9952, 2021.
- ❖ Published a paper titled "Anti Theft Vehicle Security System with Facial Recognition", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9940-9945, 2021.
- ❖ Published a paper titled "Advanced Li-Fi Technology for Data and Voice Transmission with Device Control", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9946-9950, 2021.
- ❖ Published a paper titled "IoT Based Health Monitoring and Pill Dispenser System", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9951-9956, 2021.

Dr.C.Priya, ASP/ECE
- ❖ Published a paper titled "Robust and Secure Video Watermarking Based on Cellular Automata and Singular Value Decomposition for Copyright Protection", Circuits, Systems, and Signal Processing, Vol.40, No.5, pp.2464-2493, 2021.
- ❖ Published a paper titled "GARBAGE BIN MANAGEMENT SYSTEM", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3593-3600, 2021.
- ❖ Published a paper titled "BLOOD BANK MANAGEMENT USING RFID TAGS", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3519-3524, 2021.
- ❖ Published a paper titled "IoT BASED COVID PATIENT MONITORING", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3616-3622, 2021.
- ❖ Published a paper titled "TRAFFIC ORGANIZER BASED ON DENSITY OF VEHICLES", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3714-3720, 2021.

- ❖ Published a paper titled "GSM BASED WIRELESS NOTICE BOARD USING GRAPHICAL LCD", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3601-3607, 2021.

Dr.S.Deepa, ASP/ECE
- ❖ Published a paper titled "IMPLEMENTATION OF CROP PROTECTION SYSTEM AGAINST WILD ANIMALS ATTACK", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3638-3646, 2021.
- ❖ Published a paper titled "SMART SHOPPING TROLLEY USING RFID", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3647-3655, 2021.
- ❖ Published a paper titled "TRAFFIC CONTROLLER FOR AMBULANCE AND VIP VEHICLES", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3656-3676, 2021.
- ❖ Published a paper titled "ENGINE SPEED CONTROLLING MECHANISM WITH ALCOHOL DETECTOR", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3667-3676, 2021.
- ❖ Published a paper titled "DEVELOPMENT OF ELECTRONIC STICK FOR BLIND WITH PANIC BUTTON ALERT", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3677-3685, 2021.

Dr.V.Saminathan, ASP/ECE
- ❖ Published a paper titled "Impact of High-K and Gate-to-Drain spacing in InGaAs/InAs/InGaAs based DG-MOS-HEMT for low-leakage and High-frequency applications", IETE Journal of Research, Vol.1, No.1, pp.1-11, 2021.
- ❖ Published a paper titled " Animal Monitoring System Using Internet of Things", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9962-9967, 2021.
- ❖ Published a paper titled "Implementation of 16-Bit Vedic Multiplier in Alu Using Verilog", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9968-9975, 2021.
- ❖ Published a paper titled "Portable Camera Based Assistive Text and Product Label Reading from Hand-Held Objects for Blind People Using Raspberry Pi", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9976-9981, 2021.
- ❖ Published a paper titled " Face Mask Detection Using Raspberry Pi", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9982-9988, 2021.
- ❖ Published a paper titled " Distance Analysis of Atm and Cybersecurity in Financial Sector Using Embedded System Design", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9989-9994, 2021.

Mr.G.Arun Francis, AP/ECE
- ❖ Published a paper titled "Pulsed Electric Field based Vegetable Fresher", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9918-9926, 2021.
- ❖ Published a paper titled "Embedded System based Smart Automation for Elderly and Disabled People", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9909-9917, 2021.
- ❖ Published a paper titled "Charging Time Control Lerusingarduino", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9886-9894, 2021.
- ❖ Published a paper titled "Home Automation Using Iot", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9902-9908, 2021.
- ❖ Published a paper titled "Density based Traffic Light Control Using Retransmitted and Receiver", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9895-9901, 2021.

Ms.R.Suguna, AP/ECE
- ❖ Published a paper titled "Hybrid spectrum sensing architecture Using LLCBC MAC for CR-WSN applications", Analog Integrated Circuits & Signal Processing , Vol.1, No.1, pp.389-398, 2021.

Mr.R.Selvakumar, AP/ECE
- ❖ Published a paper titled "A 16ns, 28fJ Wide-Range Subthreshold Level Converter using Low-voltage Current Mirror", Circuits, Systems, and Signal Processing, Vol.40, No.3, pp.1479-1495, 2021.
- ❖ Published a paper titled ""Energy-Efficient CMOS Voltage Level Shifters with Single-VDD for Multi-core Applications", Analog Integrated
- ❖ Circuits & Signal Processing , Vol.107, No.3, pp.629-635, 2021."
- ❖ Published a paper titled "A Research Perspective on CMOS Current Mirror Circuits: Configurations and Techniques", Recent Advances in Electrical & Electronic Engineering, Vol.14, No.4, pp.377-397, 2021.
- ❖ Published a paper titled "Fast and Energy-Efficient Level Shifter Using Split-Control Driver for Mixed-Signal Systems", Arabian journal for Science and Engineering, Vol.1, No.1, pp.346-356, 2021.

Ms.L.Saranya, AP/ECE

- ❖ Published a paper titled "POWER GENERATION USING PIEZOELECTRIC & THERMOELECTRIC FROM FOOTSTEP TECHNIQUE", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3570-3575, 2021.
- ❖ Published a paper titled "DROWSINESS DETECTION AND ALERT SYSTEM USING OPEN CV", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3608-3615, 2021.
- ❖ Published a paper titled "BIOELECTRICAL FAT ANALYZER USING MICROCONTROLLER ATMEGA328", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3623-3627, 2021.
- ❖ Published a paper titled "GREENHOUSE MONITORING CONTROL SYSTEM USING IOT", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3628-3633, 2021.
- ❖ Published a paper titled "SHUTTLING METRO TRAIN USING RFID", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.3721-3727, 2021.

Ms.T.Happila, AP/ECE

- ❖ Published a paper titled "A Novel based Approach on Shopping for Visually Impaired People", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.10003-10012, 2021.
- ❖ Published a paper titled "COVID-19 Indoor Safety Monitoring System", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.235-244, 2021.
- ❖ Published a paper titled "Smart Agriculture System Using IoTforSensing andSurveillance ofCrops", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.664-672, 2021.
- ❖ Published a paper titled "A Design of Agricultural GreenhouseMonitoring System using Iot", Turkish Journal of Computer and Mathematics Education, Vol.12, No.10, pp.2059-2065, 2021.
- ❖ Published a paper titled "Sensor Based Quality and Safety Ensured Agriculture Followed by Neural Network Based Plant Disease Management", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.2524-2528, 2021.
- ❖ Published a paper titled "Communicational Aiding System for Mute People", Annals of the Romanian Society for Cell Biology, Vol.25, No.4, pp.9476-9483, 2021.
- ❖ Published a paper titled "Machine learning based predictive modelling to analyses the moisture level of soil followed for effective drought control", International Journal of Advanced Research in Engineering and Technology, Vol.11, No.9, pp.126-133, 2021.

Ms.P.Archana, AP/ECE

- ❖ Published a paper titled "Solar power Remote Monitoring Using IoT", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.216-222, 2021.
- ❖ Published a paper titled "Automatic Fire Extinguisher", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.245-250, 2021.
- ❖ Published a paper titled "Automatic Pet Feeder using Iot", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.235-247, 2021.
- ❖ Published a paper titled "High speed with Secured data Communication using light fidelity (Li-Fi) System", Annals of the Romanian Society for Cell Biology, Vol.25, No.5, pp.225-234, 2021.
- ❖ Published a paper titled "Arduino microcontroller Based Real time Air pollution Monitoring system", Turkish Journal of Computer and Mathematics Education, Vol.12, No.10, pp.2052-2058, 2021.

Conference Publication – International/National

- ❖ Mr.Arul Murugan C., presented a paper titled "COVID Detection device using Arduino", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Mr.Arun Francis G., presented a paper titled "Simulation of charging time controller using Arduino", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Dr.R.Vimalathithan., presented a paper titled "Simulation of Density based traffic light control using RF Transceiver", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Dr.C.Arvind., presented a paper titled "Simulation of embedded and IOT based Smart automation system for elderly and disabled people", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Dr.T.K.Senthuramalingam., presented a paper titled "Simulation of IOT based home automation using Arduino", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Mr.G.Rajarathinam., presented a paper titled "Simulation of pulsed electric field based vegetable fresher", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Ms.Archana P., presented a paper titled "Real – time Air Pollution Monitoring System ", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Mr.G.Premananthan., presented a paper titled "Automatic Fire Extinguisher During Emergency Situations", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.

- Mr.C.Arulmurugan., presented a paper titled "Arduino IOT based Automati Pet Feeder System", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Dr.R.Selvakumar., presented a paper titled "Data communication using Light Fidelity system", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.V.Mithya., presented a paper titled "Remote monitoring using IOT", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Dr.Rajendran.A., presented a paper titled "Identification of sleepiness of driver using Face Detection Technique", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.R.Deepika., presented a paper titled "Vehicle Protection Technique using Facial Reognition", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Mr.S.Ramprasath., presented a paper titled "IOT Based Health Monitoring and Pill Dispenser System", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.R.Suguna., presented a paper titled "Data Transmission Through Light Fidility", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Mr.C.Mukunthraj., presented a paper titled "Smart Traffic Controller for Emergency vehicle", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Dr.C.Priya., presented a paper titled "A Survey paper on Wireless Notice Board using GSM Module", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.Adeline Daisy. R., presented a paper titled "Garbage management system using IOT", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Mr.N.M.Jayadevan., presented a paper titled "IOT Based COVID Patient Monitoring", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.K.Kousalya., presented a paper titled "Study on RFID Based Blood Bank Management System", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.A.Vasumathi., presented a paper titled "Density based Traffic Organiser using Raspberry Pi", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Dr.Deepa S., presented a paper titled "Development of Electronic Stick for Blind With Panic Button Alert", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.S.Malini., presented a paper titled "Traffic controller for Ambulance and VIP Vehicles", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.S.Shyamala., presented a paper titled "Implementation of Crop Protection System Against Wild Animals Attack", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Dr. Anita Antony., presented a paper titled "Smart Shopping Trolley using RFID", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.Sivasathya.S., presented a paper titled "Engine speed Controlling Mechanism With Alcohol Detector", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.Saranya L., presented a paper titled "Survey on Methodologies of Bioelectrical Fat Analyzer using Microcontroller ATMEGA328", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.Agripriya.A., presented a paper titled "Survey on Greenhouse Monitoring Control System using IOT", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.S.Nivedha., presented a paper titled "Survey on Power Generation using Piezoelectric & Thermoelectric from Footstep Technique", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.S.Niroshadevi., presented a paper titled "Survey on Drowsiness Detection and Alert System using Open CV", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.K.Sudha., presented a paper titled "Analysis of Shuttling Metro Train Using RFID", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Dr.Saminathan V., presented a paper titled "Identification of Face Mask Using Raspberry Pi", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Ms.M.Malathi., presented a paper titled "Implementation of 16- Bit Multiplier in ALU Using Vedic Mathematical Sutras", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- Dr.Saminathan V., presented a paper titled "Tracking of Animal Health Using IOT", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.

- ❖ Dr.Saminathan V., presented a paper titled "Obstacles Detection and Text Reading AID for Blind people Using Raspberry Pi ", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Dr.Saminathan V., presented a paper titled "Analysis of Distance And Cyber Security in Financial Sector using Embedded System Design", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Ms.Happila.T., presented a paper titled "Sensing and Surveillance of Crops Based on IOT for Smart Agriculture System", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Ms.Happila.T., presented a paper titled "Embedded Solution for Smart Shopping for Visually Impaired People", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Ms.Happila.T., presented a paper titled "Contactless Monitoring of COVID – 19 Affected People", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Ms.Happila.T., presented a paper titled "IOT based Green House Monitoring System for Smart Agriculture", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Ms.Happila.T., presented a paper titled "Smart communicational AID System for Mute People", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Dr.S.Deepa., presented a paper titled "Smart Voting Machine using Face Recognition", International Conference on Electronics, Communication and Computing Systems'2021, Karpagam College of Engineering on 26.05.2021.
- ❖ Ms.Saranya L., presented a paper titled "Power analysis in 4T Dram Cell Using Sleep and Self Controllable Voltage Level Topologies", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Ms.Saranya L., presented a paper titled " Drowsiness Detection and Alert System using Open CV ", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Ms.L.Saranya., presented a paper titled "Bioelectrical Body fat Analyser using ATMEGA", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Ms.L.Saranya ., presented a paper titled "Shuttling Metro Train Using RFID", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Ms.L.Saranya., presented a paper titled "Power Generation using Piezoelectric & Thermoelectric From Footstep Technique ", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Dr.C.Priya., presented a paper titled "Density Based Traffic Organizer Using Raspberry Pi", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Dr.C.Priya., presented a paper titled "IOT Based Covid Patient Monitoring", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Dr. C.Priya., presented a paper titled "Smart Garbage Monitoring System using IOT ", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Dr. C.Priya., presented a paper titled "Blood Bank Management Using RFID ", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Dr. C.Priya., presented a paper titled "GSM Based Wireless Notice Board using Graphical LCD", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Ms. L.Saranya., presented a paper titled "Greenhouse Monitoring Control System using IOT", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Mr.Arun Francis G., presented a paper titled "Charging time Controller Using Arduino ", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Mr.Arun Francis G., presented a paper titled "Home Automation Using IOT ", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Mr.Arun Francis G., presented a paper titled "Density Based Traffic light Control Using RF Transmitter and Receiver ", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.
- ❖ Mr.Arun Francis G., presented a paper titled "Embedded System Based Smart Automation for Elderly and Disabled People ", International Conference on Information, Communication and Networking, Easwari Engineering College from 9.4.2021 to 10.4.2021.

Patent Granted

- ❖ Dr.S.Deepa has awarded patent titled "Atmospheric Air Filtration Chamber" on 5th February 2021 [Patent No: 306729].
- ❖ Dr.S.Deepa has awarded patent titled "Foot rester for traveler" on 5th February 2021 [Patent No: 306736].

STUDENTS ACHIEVEMENTS

Co-Curricular Activities

- ❖ Anusri A from III ECE participated and won III Prize (Bronze) in National Level Design Contest at Institute of Road and Transport Technology, Erode on 25.01.2021.

- Jeya Lekshmi I from III ECE participated and won III Prize (Bronze) in National Level Design Contest at Institute of Road and Transport Technology, Erode on 25.01.2021.
- Kishore.N and Mythereyan M from III ECE participated and won III Prize (Bronze) in National Level Design Contest at Institute of Road and Transport Technology, Erode on 25.01.2021.
- Dhanya P, LOVELY.M from III ECE participated in NATIONAL LEVEL WORKSHOP ON ARTIFICIAL INTELLIGENCE at PANTECH E-LEARNING, CHENNAI from 30.04.2021 to 01.05.2021.
- GAYATHRI.A from III ECE participated in TI EMBEDDED SYSTEM DESIGN USING MSP430 training program at PANTECH E-LEARNING, CHENNAI from 28.06.2021 to 30.07.2021.
- Dhanya P, LOVELY.M from III ECE participated in WORKSHOP ON ROBOTIC VISION at PANTECH E-LEARNING, CHENNAI from 07.05.2021 to 05.05.2021.
- LOVELY.M from III ECE participated in WORKSHOP ON APPLICATIONS OF AI TECHNIQUES TO POWER SYSTEM PROBLEMS at PANTECH E-LEARNING, CHENNAI from 01.05.2021 to 02.05.2021.
- Dhanya P, LOVELY.M, KIRUTHIKA.N.V from III ECE participated in WORKSHOP ON AI & MACHINE LEARNING at PANTECH E-LEARNING, CHENNAI on 29.05.2021.
- Dhanya P, LOVELY.M from III ECE participated in WORKSHOP ON COGNITIVE RADIO COMMUNICATION at PANTECH E-LEARNING, CHENNAI on 24.05.2021.
- YAMUNA PRIYA DHARSHINI K, VARSHINI S from III ECE participated in WORKSHOP ON WEB DESIGN at APPIN TECHNOLOGY LAB, COIMBATORE on 24.05.2021.

Chief Editor(s):

Mr. G.ARUN FRANCIS,
ASSISTANT PROFESSOR, DEPARTMENT OF ECE.
Mr.C.MUKUNTHARAJ,
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19L241 SINDHUJA B

Programme Outcomes:

The following are the program outcomes of the department of Electronics and Communication Engineering. At the end of the program the students will have

PO1:	**Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2:	**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.
PO3:	**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.
PO4:	**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
PO5:	**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.
PO6:	**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.
PO7:	**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.
PO8:	**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9:	**Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10:	**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
PO11:	**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.
PO12:	**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.

The Program Specific Outcomes:

The program specific outcomes are defined as

PSO1:	Good knowledge and hands-on competence to solve emerging real-world problems related to Electronic Devices and Circuits, Communication Systems, Digital Systems, and Electro-magnetics.
PSO2:	Demonstrate proficiency in specialized software packages and computer programming useful for the analysis/design of electronic engineering systems and profession.