

KCE EEE NEWS

JAN 22- JUNE 22



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

2021-2022

Vision and Mission of the Department:

Vision:

To provide students with sound knowledge of Electrical and Electronics Engineering, that they become capable of facing the current and impending challenges to extend their expertise in the global arena.

Mission:

- Impart high quality education and training to the students in the field of Electrical and Electronics Engineering
- Transforming our students into enterprising technologies by giving them excellent facilities by qualified, committed members of faculty.
- Motivating them to contribute immensely for the benefit of the entire humanity.

Program Educational Objectives (PEOs)

PEO1: Graduates will be able to synthesize mathematics, science, engineering fundamentals, laboratory and work-based experiences to formulate and solve problems in Electrical and Electronics engineering and the related domains and will develop proficiency in Computer-based engineering and the use of computational tools.

PEO2: Graduates will be prepared to communicate and work team-based on the multidisciplinary engineering projects in the allied fields of Electrical Science and will practice the ethics of their profession.

PEO3: Graduates will realize the importance of self-learning and engage in lifelong learning to become experts either as an entrepreneur or an employee so as to broaden their knowledge in the domain.

Programme Outcomes (POs)

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 conclusions.

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 effective presentations, and give and receive clear instructions.

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.

Program Specific Outcomes (PSOs):

PSO 1: Apply the knowledge in the field of electrical and electronics engineering to analyse, design and develop solutions for real world problems.

PSO 2: Demonstrate the skill in core and allied domain to work in interdisciplinary teams.

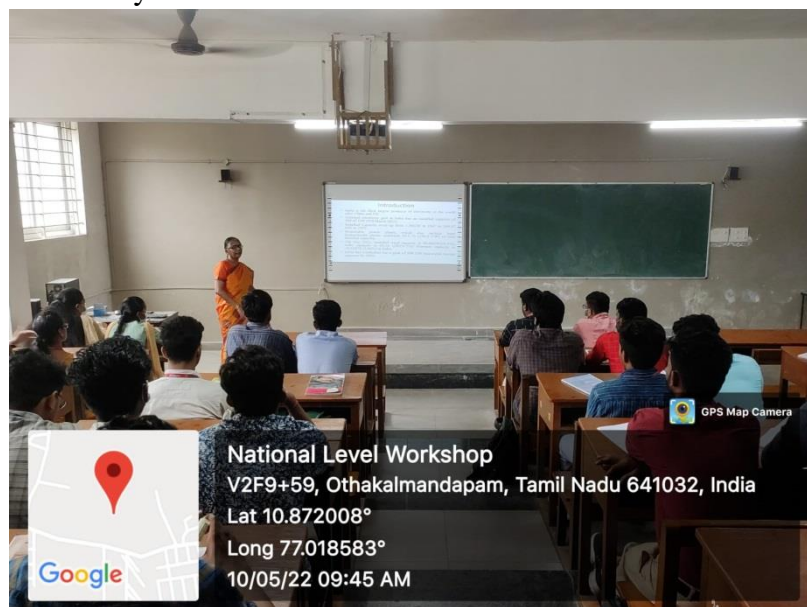
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

WARM WELCOME TO

- ❖ Dr.Vimalraj S joined as Professor on 12th Feb 2022
- ❖ Dr.Vanitha. V joined as Professor on 30th March 2022

DEPARTMENT ACTIVITIES

- ❖ Organized a Value Added Course on "Python for Electrical Engineering" from 22nd February to 6th April 2022.
- ❖ Organized the Thomas Alva Edison Memorial Lecture on 11th February 2022.
- ❖ Organized a Guest Lecture on "Next Generation Industrial Automation using IoT" on 12th February 2022
- ❖ Organized a Guest Lecture on "Career Opportunities in Electrical Engineering" on 12th February 2022
- ❖ Organized the Career Awareness Program for second-year students on 13th February 2022.
- ❖ Organized the webinar on "Career Opportunities in Renewable Energy Sector" on 18th February 2022.
- ❖ Organized the Career Awareness Program in "Virtual instrumentation and Power system analysis and power quality" on 2nd March 2022
- ❖ Organized the Student Contest on "Technical Quiz" on 4th March 2022.
- ❖ Organized the Career Awareness Program in "Power Electronics" on 5th March 2022
- ❖ Organized the National Safety Week from 4th March to 10th March 2022.
- ❖ Inaugurated the EV club on 17th March 2022.
- ❖ Organized the STTP on "Power quality measurement and application note for HT Industries" on 18th March 2022.
- ❖ Organized the Guest lecture on "Recent trends in Automotive Industries" on 18th March 2022.
- ❖ Organized the Career awareness program "DC and Synchronous machines" on 22nd March 2022
- ❖ Organized a National level Workshop on "Towards Sustainable Future: Design of Renewable Energy Systems" on 10th May 2022.



- ❖ Organized the Seminar on “IP and Youth: Innovating For A Better Future” on 26th April 2022.



- ❖ Organized the International Conference on Advances and Developments in Electrical and Electronics Engineering-2K22 from 23rd May to 24th May 2022.
- ❖ Organized the Workshop on “Cyber-Physical System: Focus towards Smart Energy Management” on 3rd June 2022
- ❖ Organized the Workshop on “Artificial intelligence in electronic innovation” on 3rd June 2022
- ❖ Organized the Workshop on “Energy Audit and Management” on 3rd June 2022
- ❖ Organized the Workshop on “E-Mobility” on 3rd June 2022
- ❖ Organized the Workshop on “IoT based Python Programming using Raspberry PI” on 3rd June 2022
- ❖ Organized the Workshop on “PLC Based Industrial Automation and Control” on 3rd June 2022
- ❖ Organized the Workshop on “ECON” on 3rd June 2022
- ❖ Organized the Workshop on “LabView for Graphical System Design” on 3rd June 2022
- ❖ Organized the Workshop on “EMAGE Finder” on 3rd June 2022
- ❖ Organized the Workshop on “Quiz Builder” on 3rd June 2022
- ❖ Organized the Workshop on “Waste2Mass” on 3rd June 2022
- ❖ Organized the Workshop on “HoldOn” on 3rd June 2022

FACULTY ACHIEVEMENTS

Journal Publication– International/ National conferences

Dr.P.Vijayakumar, Principal

- ❖ Published a paper titled “Frequency Control Approach and Load Forecasting Assessment for Wind Systems”, Intelligent Automation & Soft Computing, Vol. 35, No. 1, pp. 12530-12547, 2022.

Dr.S.Sivasubramanian, Professor

Published a paper titled “A hybrid technique based energy management in hybrid electric vehicle system”, International Journal of Energy Research, Vol. 46, No. 11, pp. 15499-15520, 2022.

Published a paper titled “A Bridgeless LUO Converter with Glow-worm Swarm Optimized Tuned PI Controller for Electrical Applications”, International Journal of Energy Research, Spl.Vol.2022, pp. 1-8, 2022.

Dr.V.Tamilselvan,Professor

Published a paper titled “A hybrid technique based energy management in hybrid electric vehicle system”, International Journal of Energy Research, Vol. 46, No. 11, pp. 15499-15520, 2022.

Published a paper titled “Study of Various Epoxy-Based Surface Coating Techniques for Anticorrosion Properties”, Advances in Materials Science and Engineering, Spl.Vol.2022, pp. 1-8, 2022.

Dr.S.Vimalraj, Professor

Published a paper titled “Influence of Gd₃O₃ on ZnO Nanomaterials for the Enhancement of Catalytic Behaviour”, Journal of Super Conductivity and Novel Magnetism, Vol.35, No.7, pp 1909-1919, 2022.

Dr.V.Vanitha, Professor

- ❖ Published a paper titled “A hybrid approach for optimal energy management system of internet of things enabled residential buildings in smart grid”, International Journal of Energy Research, Vol. 46, No. 5, pp. 12530-12547, 2022.

Dr.M.Sivaramkrishnan, Assistant Professor

Published a paper titled “A Bridgeless LUO Converter with Glow worm Swarm Optimized Tuned PI Controller for Electrical Applications “, International Journal of Energy Research, Spl.Vol.2022, pp. 1-8, 2022.

Published a paper titled “The potential role of PV solar power system to improve the integration of electric energy storage system “, International Journal of Photo energy, Vol. 2022, pp. 1-11, 2022.

Ms.A.Anci Manon Mary, Assistant Professor

Published a paper titled “IoT based carbon Monoxide monitoring model for transportation vehicles “, [Proceedings of International Conference on Computational Intelligence and Data Engineering](#), Vol. 109, pp. 65-74, 2022

Paper Presentation– International/ National conferences**Dr.M.Sivaramkrishnan, Assistant Professor**

- ❖ Presented a paper titled “Improved Speed Control of A Solar based BLDC Motor Drive using Luo Converter” in the 2022 International Conference on Sustainable Computing and Data Communication Systems (ICSCDS) at Erode, from 7th to 9th April 2022.
- ❖ Presented a paper titled “DC-DC Converters based Integration of Grid Stability Estimation for PV Systems” in the 2022 International Conference on Sustainable Computing and Data Communication Systems (ICSCDS) at Erode, from 7th to 9th April 2022.
- ❖ Presented a paper titled “Soft Switching Techniques for R- Converter for Domestic Induction by using MATLAB” in the 2022 6th International Conference on Computing Methodologies and Communication (ICCMC).at Erode, from 29th to 31st March 2022.

- ❖ Presented a paper titled “A Diagnostic Study on Prediction of Covid-19 by Symptoms Using Machine Learning.” in the 2022 6th International Conference on Computing Methodologies and Communication (ICCMC) at Tuticorin, from 16th to 18th March 2022.
- ❖ Presented a paper titled “Machine Learning Approaches for Smart Agriculture.” in the 2022 6th International Conference on Computing Methodologies and Communication (ICCMC).at Erode, from 29th to 31st March 2022.
- ❖ Presented a paper titled “GSM based smart energy meter with Opt coupler” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore, in May 2022.
- ❖ Presented a paper titled “Three phase line Transmission line Fault detection and analysing system” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore, in May 2022.
- ❖ Presented a paper titled “Electronic Voting machine using microcontroller” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore, in May 2022.
- ❖ Presented a paper titled “Simulation of PV and WECS using CUK and SEPIC converter” in the 2021 5th International Conference on Intelligent Computing and Control Systems (ICICCS) at Vaigai College of Engineering, in May 2022.

Dr.V.Tamilselvan,Professor

- ❖ Presented a paper titled “cloud and iot based disease and quality identification of tomato leaf using image processing” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore, in May 2022.
- ❖ Presented a paper titled “Brain Gate“in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore, in May 2022.

Dr.S.Vimalraj, Professor

- ❖ Presented a paper titled “Automatic Main power and control” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatorein May 2022.
- ❖ Presented a paper titled “Electronic Senses for Visually Impaired Persons ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Library Management System” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatorein May 2022.
- ❖ Presented a paper titled “Automatic Room Lighting system and Timing Stamp” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatorein May 2022.

- ❖ Presented a paper titled “Wireless Information Display Board” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022

Dr.V.Vanitha, Professor

- ❖ Presented a paper titled “Fruits Identification using Digital Video Processing” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Grid based Electric Vehicle charging using online and coin based payment” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022
- ❖ Presented a paper titled “Underground cable fault detection using Fuzzy Logic” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.

Dr.C.S.Sundar Ganesh, Assistant Professor

- ❖ Presented a paper titled “Glucose Bottle level trip indicator” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Sun tracking solar panel ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Voice control Robot car” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.

Mr.A.Nagarajan, Assistant Professor

- ❖ Presented a paper titled “Power factor improvement on Three Phase Induction Motor using advanced DC-DC Converters” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Temperature controlled DC fan using microcontroller” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Gesture controlled wheel chair for physically disabled person” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.

Mr.V.Govindaraj, Assistant Professor

- ❖ Presented a paper titled “Fault detector in three phase supply system using Arduino ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “IoT-based Garbage Monitoring System ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.

- ❖ Presented a paper titled “Microcontroller based moving message display on LCD ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Industrial shock prevention system using IoT” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.

Ms.P.S.Sumy, Assistant Professor

- ❖ Presented a paper titled “Artificial Prosthetic Hand-an Aid for physically challenged people” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Password based Circuit breaker ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Automatic plant watering system ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.

Ms.S R Sruthi, Assistant Professor

- ❖ Presented a paper titled “Automatic Railway gate control using 8051 Microcontroller ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Digital Voltmeter using 8051 Microcontroller ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.

Mr.P.Gajendran, Assistant Professor

- ❖ Presented a paper titled “IoT based health care system for elderly people ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “One Touch Alarm women safety system using 8051 Microcontroller ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Arduino Blind shoes ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Temperature controlled DC fan using microcontroller ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.

Mr.T.Gowthamraj, Assistant Professor

- ❖ Presented a paper titled “LPG gas detector with sensor using microcontroller ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Vehicle movement based street lights ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.

Ms.A.Anci Manon Mary, Assistant Professor

- ❖ Presented a paper titled “IoT based Voting Machine ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Fire Alert System using Microcontroller ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.

Ms.R.Vidyalakshmi, Assistant Professor

- ❖ Presented a paper titled “Automated solar powered lawn mower using IoT ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “IoT based LPG leakage detection system ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “Contactless Digital Tachometer using Microcontroller ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.
- ❖ Presented a paper titled “IoT based Smart fire extinguisher system ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.

Ms.R.Jegadeesh Kumar, Assistant Professor

- ❖ Presented a paper titled “Comprehensive review of the usage of Supercapacitors as hybrid energy storage system in hybrid micro grids ” in the 2K22 International Conference on Advances and Developments in Electrical and Electronics Engineering at Coimbatore in May 2022.

Seminar / Workshop / FDPs / STTPs – Presented / Attended

- ❖ Dr.V.Tamilselvan completed the NPTEL One and Half week FDP on “NBA Accreditation and Teaching Learning in Engineering (NATE)”
- ❖ Dr.S.Sivaubramanian completed the NPTEL One and Half week FDP on “NBA Accreditation and Teaching Learning in Engineering (NATE)”
- ❖ Dr.M.Sivaramkrishnan completed the NPTEL Half week FDP on “Electric Vehicles- Part I”
- ❖ Ms.S.R.Sruthi completed the NPTEL One week on “Electronic Equipment Integration and Prototyping Building”
- ❖ Ms.R.Vidyalakshmi completed the NPTEL One and Half week FDP on “Fuzzy sets, logic and Systems & Applications”
- ❖ Ms.R.Vidyalakshmi completed the NPTEL Half week FDP on “Electric Vehicles- Part I”
- ❖ Dr.C.S.Sundar Ganesh completed the NPTEL One week on “Digital Protection of Power System”
- ❖ Mr.P.Gajendran completed the NPTEL One week on “Digital Protection of Power System”
- ❖ Mr.A.Nagarajan Completed the NPTEL One and Half week FDP on “Electrical Machines-II”
- ❖ Dr.S.Sivasubramanian attended the FDP on “Machine Learning and IoT applications in VLSI application” at Bangalore from 10th May to 14th May 2022.
- ❖ Dr.C.S.Sundar Ganesh attended the FDP on “Biomedical Image and Signal Processing “ at NITTR Chandigarh from
- ❖ Dr.C.S.Sundar Ganesh attended the FDP on “Industry 4.0 “ at NITTR Chandigarh from

- ❖ Dr.C.S.Sundar Ganesh attended the AICTE - ISTE Sponsored One week Induction Program on “Digital Safety & Wellbeing: Tools & Techniques “ at NITTR Chandigarh from 21st to 27th January 2022.
- ❖ Dr.M.Sivaramkrishnan attended the FDP on “Cyber Crime and Forensic Tools “ at NITTR Chandigarh from 23rd May to 27th May 2022
- ❖ Dr.M.Sivaramkrishnan attended the FDP on “ Free Software and Resources for Technical Education through ICT” at NITTR Chandigarh from 21st March to 25th March 2022
- ❖ Mr.V.Govindaraj attended the FDP on” ICT based STC on free Software and Resources for Technical Education” at NITTR Chandigarh from 21st March to 25th March 2022.
- ❖ Mr.A.Nagarjan attended the FDP on” ICT based STC on free Software and Resources for Technical Education” at NITTR Chandigarh from 21st March to 25th March 2022
- ❖ Dr.V.Vanitha, Professor attended Six days of FDTP on EE8501 at Sri Ramakrishna Engineering College, Coimbatore from 11th to 16th July 2022.
- ❖ Ms.P.S.Sumy attended the FDP on” TOT in Energy Efficiency & Solar Energy” from 27th to 29th January 2022
- ❖ Ms.R.Vidyalakshmi attended the FDP on “Cyber Crime and Forensic Tools “ at NITTR Chandigarh from 23rd May to 27th May 2022
- ❖ Mr.M.Muthukumaran, Assistant Professor, attended the AICTE recognized Short Term Course Free Software and Resources for Technical Education through ICT at Karpagam College of Engineering Coimbatore from 21st to 25th March 2022.

Patent Granted

- ❖ Mr.P.Gajendran has awarded a patent titled “Gas leakage detection and Alert System in safety control of Industry 4.0 using IoT Technology” on 21st June 2021 [Patent No: 2021103493].

STUDENTS ACHIEVEMENTS

Co-Curricular Activities

- ❖ Venkatesan C, Manikandan R, Sridhar S and Jayakumar E from IV EEE received fund Rs 7500/- to carry out the project titled” Glucose level trip Indicator” from Tamilnadu State Council for Science and Technology (TNSCST), Chennai.

Extra Curricular Activities

- ❖ Collin Kuruvilla and Vyshak M of IV EEE won in the Karpagam Super League Football tournament held from 4th May to 5th May 2022.
- ❖ Manigandan G,Velmurugan K of IV EEE and Navin Sachithanantham.G, Vaithesh.R of III EEE won in the Karpagam pro Volley ball League (Men) Tournament held from 19th April to 20th April 2022
- ❖ Prasanth S of IV EEE won in the Kabaddi Alumni Trophy held at Park College of Engineering from 28th May 2022 to 29th May 2022
- ❖ Santhoshkumar G of II EEE won in the Cricket CIT Alumni Trophy held at Coimbatore Institute of Technology from 18th April to 24th April 2022.

The Editorial Board:

- 1) Chief Editor : Dr.V.TamilSelvan, Professor and Head
- 2) Editor : Dr.C.S.Sundar Ganesh, Professor
- 3) Faculty Coordinator : Ms.R.Vidyalakshmi, Assistant Professor
- 4) Student Council :

Mr.Hariharan S (III EEE B)

Mr.Arun Pandiyan P B (II EEE A)

Ms. Reema Mansora (II EEE A)

Mr.Arvinth S (II EEE B)

