

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ELECTRO MEDIA

Department News Letter

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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 team-based 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.

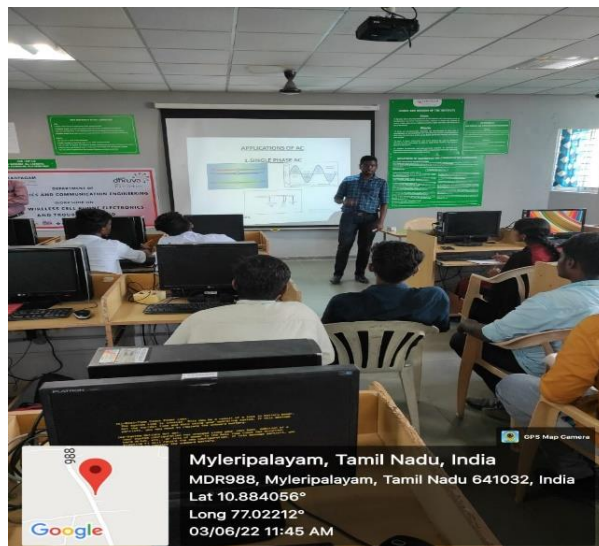
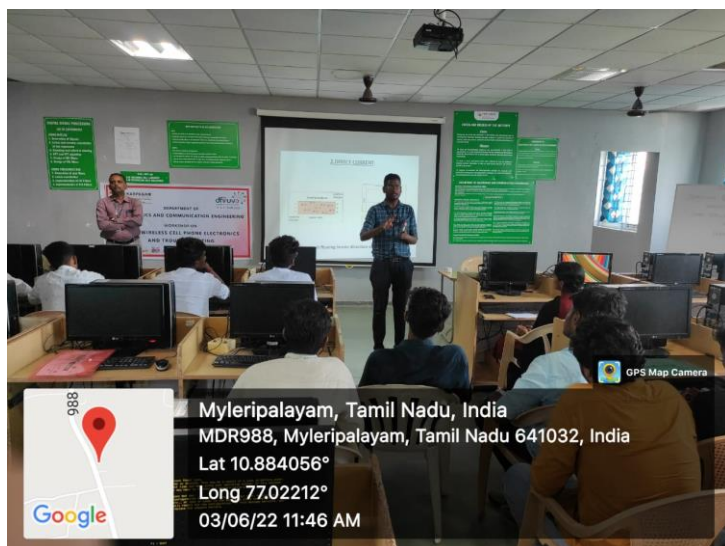
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

WARM WELCOME TO

- ❖ Dr.Sobana S joined as Associate Professor on 1st June 2022.

DEPARTMENT ACTIVITIES

- ❖ Organised a One day Seminar on “Understanding IPRs” on 2nd May 2022.
- ❖ Organised a One day workshop on “Artificial Intelligence Technology in Agriculture - Dhruva 2022” on 3rd June 2022.
- ❖ Organised a One day workshop on “Exploring Cadence Tool for VLSI Design - Dhruva 2022” on 3rd June 2022.
- ❖ Organised a One day workshop on “Smart Wireless Cell Phone Electronics and Trouble Shooting - Dhruva 2022” on 3rd June 2022.



Mr.Karthi. R, Resource person of the event delivering lecture to the participants

- ❖ Organised a One day workshop on “Industrial Internet of Things- Dhruva 2022” on 3rd June 2022.
- ❖ Organised a Technical Event “Paper Jieshao – Paper Presentation event - Dhruva 2022” on 3rd June 2022.
- ❖ Organised a Technical Event “Decircuitz – Circuit debugging event - Dhruva 2022” on 3rd June 2022.



Students Participation in the technical event “Decircuitz”

- ❖ Organised a Technical Event “Electroiz – Electronic Quiz event - Dhruva 2022” on 3rd June 2022.
- ❖ Organised a Technical Event “Project Jieshao – Project Presentation event - Dhruva 2022” on 3rd June 2022.
- ❖ Organised a Technical Event “Circuit Rapido – Circuit Assembler event - Dhruva 2022” on 3rd June 2022.
- ❖ Organised a Technical Event “Arduino Project Expo Rapido – Arduino Project Presentation event - Dhruva 2022” on 3rd June 2022.
- ❖ Organised a Technical Event “Techie Treasure – Technical Treasure Hunt event - Dhruva 2022” on 3rd June 2022.

FACULTY ACHIEVEMENTS

Journal Publication– International/ National conferences

Dr. Karthigaikumar. P, Professor and Head

- ❖ Published a paper titled "Implementation of a High-Speed and High-Throughput Advanced Encryption Standard", Intelligent Automation & Soft Computing, Vol.31, No.2, pp.1025-1036, 2022.
- ❖ Published a paper titled "Efficient morphological Segmentation of Brain Hemorrhage Stroke Lesion Through MultiResUNet", Computers, Materials & Continua, Vol.70, No.3, pp.5233-5249, 2022.
- ❖ Published a paper titled "An effective software based method to analyze SCA countermeasures for Advanced Encryption Standard", Wireless Personal Communications, Vol.23, No.3, pp.2937-2958, 2022.

Dr.Rajendran A, Professor

- ❖ Published a paper titled "An automatic brain tumor segmentation using Inception module based U-Net model", Journal of Intelligent & Fuzzy Systems, Vol.42, No.3, pp.2743-2754, 2022.
- ❖ Published a paper titled "Cross Layer QoS Aware Scheduling based on Loss-Based Proportional Fairness with Multihop CRN", Computer Systems Science and Engineering, Vol.42, No.3, pp.1063-1077, 2022.
- ❖ Published a paper titled "Selfish Node Detection for Effective Data Transmission Using Modified Incentive Sorted Pathway Selection in Wireless Sensor Networks", Wireless Communications and Mobile Computing, Vol.2022, No.1, pp.1-11, 2022.

Dr.Selvakumar R, Assistant Professor

- ❖ Published a paper titled "A split-input driver enabled high-speed and energy-efficient level shifter using hybrid pull-up network", Circuits, Systems and Signal Processing, Vol.41, No.4, pp.2308-2321, 2022.
- ❖ Published a paper titled "High-speed and energy-efficient subthreshold level converter for wider voltage conversion", Analog Integrated Circuits and Signal Processing, Vol.110, No.3, pp.583-594, 2022."

Ms.S.Malini, Assistant Professor

- ❖ Published a paper titled "An Improved Retransmission Timeout Prediction Algorithm for Enhancing Data Transmission on Internet of Vehicles Network", Wireless Networks, Vol.28, No.97, pp.2424-2436, 2022.

Ms.L.Saranya, Assistant Professor

- ❖ Published a paper titled "Internet of things embedded in health care Applications", 2022 6th International Conference on Computing Methodologies and Communication (ICCMC), Vol.1, No.1, pp.382-389, 2022.

Seminar / Workshop / FDPs / STTPs – Presented / Attended

- ❖ Mr.Arun Francis G, Assistant Professor attended one week Faculty Development Program on "Recent Research Issues on Embedded System Design using Intel SoC FPGAs" at Sri Sivasubramaniya Nadar College of Engineering from 1st to 5th February 2022.
- ❖ Dr.Selvakumar R, Assistant Professor attended one week Faculty Development Program on "Recent Research Issues on Embedded System Design using Intel SoC FPGAs" at Sri Sivasubramaniya Nadar College of Engineering from 1st to 5th February 2022.
- ❖ Ms.Happila T, Assistant Professor attended one week Faculty Development Program on "Recent Research Issues on Embedded System Design using Intel SoC FPGAs" at Sri Sivasubramaniya Nadar College of Engineering from 1st to 5th February 2022.
- ❖ Dr.Rajendran A, Professor attended one week Refresher Program on "Innovative Teaching and OBE" at Dhrajlal Gandhi College of Technology from 7th to 12th February 2022.
- ❖ Ms.Archana P, Assistant Professor attended one week Faculty Development Program on "Recent Research Issues on Digital Image Processing" at Sri Ramakrishna Institute of Technology from 23rd to 27th May 2022.
- ❖ Mr.Arun Francis G, Assistant Professor attended one week Faculty Development Program on "Recent Research Issues on Digital Image Processing" at Sri Ramakrishna Institute of Technology from 23rd to 27th May 2022.

Patent Granted

- ❖ Dr.S.Deepa has awarded patent titled "AIR FILTER TESTING" on 4th February 2022 [Patent No: 357932-001].
- ❖ Dr.S.Deepa has awarded patent titled "BIODEGRADABLE HEPA FILTER" on 7th February 2022 [Patent No: 358039-001].
- ❖ Dr.S.Deepa has awarded patent titled "FOOT RELAX PEDAL" on 31st March 2022 [Patent No: 306730].

STUDENTS ACHIEVEMENTS

Co-Curricular Activities

- ❖ Sivabharathi S from III ECE has successfully completed an NPTEL course entitled "Enhancing soft skills and Personality" and awarded with SILVER 8%.
- ❖ Nithish Selva M from III ECE has successfully completed an NPTEL course entitled "Enhancing soft skills and Personality" and awarded with GOLD 10%.
- ❖ Nityaroopini S from III ECE has successfully completed an NPTEL course entitled "Java Programming" and awarded with SILVER 1%.

Extra-Curricular Activities

- ❖ Nithyaroopini S from III ECE participated and won Second Prize in Dance Competition in "Women's Day Celebrations 2022" at Karpagam College of Engineering on 08.03.2022.
- ❖ Barath K from III ECE participated and won Third Prize in "CIT Cricket Tournament" held at Coimbatore Institute of Technology on 28.03.2022.
- ❖ Barath R from III ECE participated and won First Prize in "Kabbadi Tournament" held at Park College of Engineering on 18.04.2022.
- ❖ Sanjay S from III ECE participated and won First Prize in "Pro Volley Ball Tournament" held at Karpagam College of Engineering from 19.04.2022 to 20.04.2022.
- ❖ Lingash Kumar U from III ECE participated and won First Prize in "Pro Volley Ball Tournament" held at Karpagam College of Engineering from 19.04.2022 to 20.04.2022.
- ❖ Ragul R from III ECE participated and won First Prize in "Pro Volley Ball Tournament" held at Karpagam College of Engineering from 19.04.2022 to 20.04.2022.

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 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.

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.