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EEE NEWS

JULY '21 - DEC '21



**DEPARTMENT OF ELECTRICAL & 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 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 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.

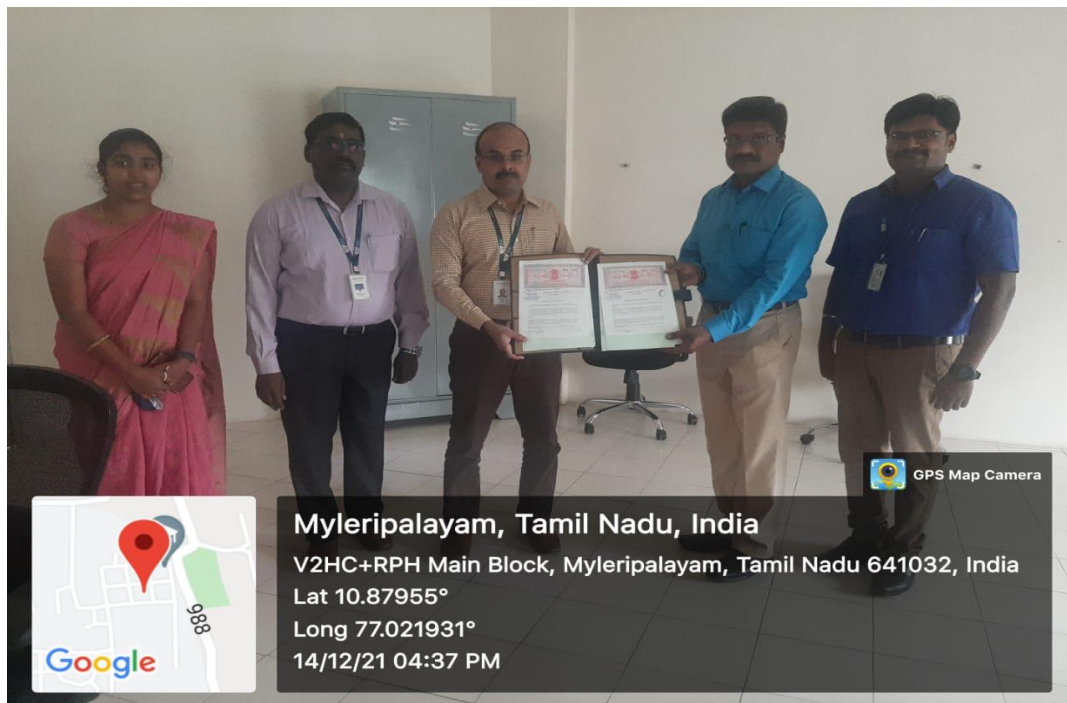
PSO 2: Demonstrate the skill in core and allied domain to work in interdisciplinary teams.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

(JULY 2021 – DEC 2021)

DEPARTMENT ACTIVITIES

- ❖ Conducted Career Awareness Program in Electrical and Electronics Engineering by KCEians to KCEians (III Year students) from 5th August to 8th August 2021.
- ❖ Conducted Career Awareness Program in Electrical and Electronics Engineering by KCEians to KCEians (II Year students) from 13th August to 21st August 2021.
- ❖ Conducted Webinar on “Study opportunities for electrical and electronics engineering at international university” on 25th August 2021.
- ❖ Conducted webinar on “Solar PV and Inverter - Design Criteria” on 9th September 2021.
- ❖ Conducted two days webinar on “Start up and Innovation national level workshop” during 15th September 2021.
- ❖ Signed a MoU with A2E Power System,Coimbatore on 18th September 2021.
- ❖ Organised “Value added course on Arduino programming for mechanical engineers” on 4th October 2021.
- ❖ Organised “Value added course on Electrical Wiring and Winding” on 4th October 2021.
- ❖ Conducted Webinar on “A Vision for Electrical Power Robotics Standardization” on 9th October 2021.
- ❖ Conducted workshop on “digital circuits design using tinker cad (OPEN SOURCE TOOL)” on 8th November 2021.
- ❖ Conducted Webinar on “Circuit Designing using Arduino” on 8th November 2021.
- ❖ Conducted “Guest Lecture on Energy Conservation” and during 12th December 2021.
- ❖ Signed MoU with Ramkalam Centre for Energy consultancy and training,Coimbatore on 14th December 2021.



- ❖ Celebrated “National Conservation week” from 14th December to 20th December 2021.



TECHNICAL & NON TECHNICAL EVENT

- ✓ Organised “Carrom Contest” for second year on 11.12.2021.



- ✓ Organised “Debate (English)” for second students on 22.12.2021.



FACULTY ACHEIVEMENTS

Journal Publications – International/ National

Dr.S.Sivasubramanian, Professor

- ❖ Published a paper titled “A Comprehensive Examination of Bandgap Semiconductor Switches” “,in Advances in Materials Sceince and Engineering ,Vol.2021, Article ID 3188506, ,pp.1-8,2021.

Ms. A.AnciManon Mary, Assistant Professor

- ❖ Published a paper titled “MATLAB based design and performance analysis of electronically commutated BLDC motor “,Indonesian Journal of Electrical Engineering and Computer Science Vol. 24, Issue No. 1, pp. 22-28,ISSN: 2502-4752, October 2021.

Paper Presentation– International/ National conferences

Dr.V.Tamilselvan, Professor & Head

- ❖ Presented a paper titled “PMBLDC Drive with Z Source Inverter” in International conference on Automation in Electrical, Electronics, Communication, Computing and Automation (ICAECA) on 8th October 2021,ISBN:978-981-16-7771-7.

Dr.S.Sivasubramanian, Professor

- ❖ Presented a paper titled “PMBLDC Drive with Z Source Inverter” in International conference on Automation in Electrical, Electronics, Communication, Computing and Automation(ICAECA) on 8th October 2021,ISBN:ISBN: 978-981-16-7771-7.

Dr.M.SivaramKrishnan, Assistant Professor

- ❖ Published a book titled “Recent Trends in Power Electronics, Volume 1,Xpress Publications, January 2022,ISBN:979-8885695572.
- ❖ Published a chapter titled “Analysis of Thyristor – Controlled Series Capacitor (TCSC)”,in the Book named “The opportunities of Uncertainties: Flexibility and Adaption Needed in Current Climate, Volume 2, Lulu Publications,1st July 2021.ISBN: 978-1-300-39582-9.

- ❖ Published a chapter titled “Static VAR Compensator and It’s Applications”, in the Book named “The opportunities of Uncertainties: Flexibility and Adaption Needed in Current Climate, Volume 2, Lulu Publications, 1st July 2021.ISBN: 978-1-300-39582-9.
- ❖ Presented a paper titled “PMBLDC Drive with Z Source Inverter” in International conference on Automation in Electrical, Electronics, Communication, Computing and Automation(ICAECA) on 8th October 2021,ISBN:ISBN: 978-981-16-7771-7.
- ❖ Presented a paper titled “Unmanned Automated Railway Level Crossing System Using Zigbee “on International Journal of Electronics Engineering Research,Vol.9,Issue No.9,pp.1361-1371.
- ❖ Presented a paper titled “Super Capacitor based Solar and Wind Grid Connected Storage System” 2021 on Third International Conference on Inventive Research in Computing Applications (ICIRCA),pp. 218-225,on 2nd September 2021.
- ❖ Presented a paper titled “IoT based Design and implementation of Low cost Monitoring System for Hybrid Solar-Wind Power Generation System” in 2nd International Conference on Smart Electronics and Communication (ICOSEC)2021,pp.1-6 on 7th October 2021.
- ❖ Presented a paper titled “Variable Speed Control of PMSG Based WT with Impedance Source Inverter ” in 2nd International Conference on Smart Electronics and Communication (ICOSEC)2021,pp.718-725 on 7th October 2021.
- ❖ Presented a paper titled “A Hybrid AI Based and IoT Model Generation of Non-conventional Resource of Energy ” in 2nd International Conference on Smart Electronics and Communication (ICOSEC)2021,pp.1-6 on 7th October 2021.
- ❖ Presented a paper titled “SEPIC-Converter Based BLDC-Motor with Power-Factor-Correction and Minimization in Torque Ripple” in 2nd International Conference on Smart Electronics and Communication (ICOSEC) 2021, pp.726-732 on 7th October 2021.
- ❖ Presented a paper titled “Design and Investigation of Bio-inspired Optimization Based I-PD Controller for p H Neutralization Process” in 2nd International Conference on Smart Electronics and Communication (ICOSEC) 2021, pp.739-744 on 7th October 2021.
- ❖ Presented a paper titled “A Multicenter Study on the safety and Efficacy of Bronchial Thermoplasty in Adults with severe Asthma” in Lung India: Official Organ of Indian Chest Society 2021, Vol.38,Issue No.6,pp.524 on November 2021.

Mr.V.Govindaraj, Assistant Professor

- ❖ Presented a paper titled “A Study on Energy Efficiency of Agriculture Pumpsets in India ”in 2021 Innovations in Power and Advanced Computing Techniques (i-PACT) from 27th to 29th November 2021.
- ❖ Presented a paper titled “A Review of Indian Scenario on Energy Conservation in Ceiling Fans Powered by BLDC Motors”in 2021 Innovations in Power and Advanced Computing Techniques (i-PACT) from 27th to 29th November 2021.

Ms.Vidyalakshmi.R, Assistant Professor

- ❖ Published a chapter titled “An overview of Switched Reluctance Motor” in the Book named “The Opportunities of Uncertainties: Flexibility and Adaption Needed in Current Climate, Volume 2, Lulu Publications,1st July 2021.ISBN: 978-1-300-39582-9.
- ❖ Published a paper titled “Power flow management in hybrid renewable Sources”, in IOP Conference series: Materials Science and Engineering, from 10th October to 14th October 2021,ISSN: 1757-8981.

Seminar / Workshop / FDPs / STTPs – Presented / Attended

- ❖ Dr.V.Tamilselvan, Professor attended NPTEL one week FDP on “DC Microgrid and Control System” from July 2021 to September 2021.
- ❖ Dr.V.Tamilselvan, Professor attended NPTEL one week FDP on “Introduction to Industry 4.0 and Industrial Internet of Things” from July 2021 to October 2021.
- ❖ Dr.S.Sivasubramanian, Professor attended NPTEL one week FDP on “Introduction to Industry 4.0 and Industrial Internet of Things” from July 2021 to October 2021.

- ❖ Dr.C.S.Sundar Ganesh, Assistant Professor attended Faculty Development Programme on AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "System Engineering" from 21st July to 25th July 2021.
- ❖ Dr.C.S.Sundar Ganesh, Assistant Professor attended online Faculty Development Program on AICTE Training And Learning (ATAL) Academy Online Elementary FDP on " Virtual and Augmented Reality for Robotics" at Vimal Jyothi Engineering College,Kannur from 12th to 16th July 2021.
- ❖ Dr.C.S.Sundar Ganesh, Assistant Professor attended FDP on AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Implementation of Industry 4.0 & its challenges at New Horizon College of Engineering, Bengaluru from 5th to 7th July 2021
- ❖ Dr.C.S.Sundar Ganesh, Assistant Professor attended Five day FDP on " Recent Trends in Power Systems" at Karpagam College of Engineering & Technology, Coimbatore from 5th to 9th July 2021.
- ❖ Dr.C.S.Sundar Ganesh, Professor attended NPTEL one week FDP on “Automation in Manufacturing” from July 2021 to September 2021.
- ❖ Dr.M.Sivaramkrishnan, Assistant Professor attended Five day FDP on “Recent Trends in Power Systems” at Karpagam College of Engineering & Technology, Coimbatore from 5th to 9th July 2021.
- ❖ Dr.M.Sivaramkrishnan, Assistant Professor attended FDP on “Publishing in Top –Tier Journals” at SKCT, Coimbatore on 12th July 2021.
- ❖ Dr.M.Sivaramkrishnan, Professor attended NPTEL one week FDP on “Accreditation and outcome Based Learning “from July 2021 to September 2021.
- ❖ Dr.M.Sivaramkrishnan, Professor attended NPTEL one week FDP on “Ethics in Engineering Practice “from August 2021 to September 2021.
- ❖ Mr.V.Govindaraj, Assistant Professor attended Five day FDP on “Recent Trends in Power Systems" at Karpagam College of Engineering & Technology, Coimbatore from 5th to 9th July 2021.
- ❖ Mr.R.JagatheeshKumar, Assistant Professor attended NPTEL one week FDP on “DC Microgrid and Control System” from July 2021 to September 2021.
- ❖ Mr.Gajendran.P, Assistant Professor attended webinar on “Techniques in Research and Innovation” at Karpagam College of Engineering & Technology, Coimbatore from 5th to 9th July 2021.
- ❖ Mr.Gajendran.P, Assistant Professor attended online FDP on “Sensors fabrication and its applications in IoT” at Graphic Era from 2nd July to 5th July 2021.
- ❖ Mr.Gajendran.P, Assistant Professor attended online FDP on “AI, Machine Learning and Deep Learning and Automation Application in electrical datasets, Theory to hands on practice “ at Saai Institute of Technology & Engineering, Andhra Pradesh from 5th July to 10th July 2021.
- ❖ Ms.Vidyalakshmi, Assistant Professor attended online workshop on “Advanced Solar Technology” at Cares Renewable Private Limited, Coimbatore from 14th July to 16th July 2021.
- ❖ Ms.Vidyalakshmi ,Assistant Professor attended AICTE Training and Learning (ATAL) Academy Online Elementary FDP on “Electric Vehicles (EV) Technologies” AT Government Engineering College,BHUJ from 28th June 2021 to 2nd July 2021.
- ❖ Ms.Vidyalakshmi, Assistant Professor attended online FDP on “MATLAB:An Effective Tool for Academics and Research” at Laxminarayan Institute of Technology,R,T.M,Nagpur University from 5th July to 10th July 2021.
- ❖ Ms.Sumy.P.S,Assistant Professor attended online FDP on “Strategies and outcomes to enhance sustainable green environment” at University College of Engineering ,Tiruchirappalli from 19th July 2021 to 23rd July 2021.
- ❖ Ms.Sruthi.S.R, Assistant Professor attended online FDP on “Strategies and outcomes to enhance sustainable green environment” at University College of Engineering, Tiruchirappalli from 19th July 2021 to 23rd July 2021.

Student Activities

Extra-curricular Activities

- ❖ Abisiddhu.M.S from III EEE participated and won second place in Photography Contest at Karpagam College of Engineering, Coimbatore on 21.09.2021.

- ❖ Divya Priya.R from III EEE participated and won first place in Essay Competition at Karpagam College of Engineering, Coimbatore on 04.10.2021.
- ❖ Subash.V.K from II EEE participated and got third place in Debate –Tamil at P.S.G College of Engineering and Technology,Coimbatore on 30.10.2021.
- ❖ Muneiswaran.V from II EEE participated and won first place in Carrom contest at Karpagam College of Engineering, Coimbatore on 11.12.2021
- ❖ Praveen Kumar.M from II EEE participated and won first place in Carrom contest at Karpagam College of Engineering, Coimbatore on 11.12.2021.
- ❖ Sanjai.S II EEE participated and won second place in Carrom contest at Karpagam College of Engineering, Coimbatore on 11.12.2021.
- ❖ Pradeep.R.K II EEE participated and won second place in Carrom contest at Karpagam College of Engineering, Coimbatore on 11.12.2021.
- ❖ Sreeram from II EEE participated and won first place in Debate-English at Karpagam College of Engineering, Coimbatore on 22.12.2021.
- ❖ Vijaianand.P from II EEE participated and won first place in Debate-English at Karpagam College of Engineering, Coimbatore on 22.12.2021.

The Editorial Board:

- 1) Chief Editor : Dr. V. Tamilselvan, Professor and Head
2) Editor : Dr. S. Vimalraj Professor
3) Faculty Coordinator : Mrs. S. R. Sruthi, Assistant Professor.

- 4) Student Council :

Mr. Rupan N (IV EEE A)
Ms. Jeevitha S (IV EEE A)
Mr. Robinson G W (IV EEE B)
Ms. Suji M (IV EEE B)
Mr. Shabarish Shetty G (III EEE A)
Ms. Divyapriya R (III EEE A)
Mr. Jothi Prasath S (III EEE B)
Ms. Sivasankari D (III EEE B)
Mr. Naveen M (II EEE A)
Ms. Sreevarshini S (II EEE A)
Mr. Subash V K (II EEE B)
Ms. Swarna Shankari V (II EEE B)

