



Sairam NEWSLETTER EEE



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Sri
SAI RAM ENGINEERING COLLEGE

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VISION

To inculcate discipline, good quality education, research and training, wide knowledge to meet the global standards, opportunities to gain practical knowledge in the laboratories, awareness in emerging technologies in students to render their services for the betterment of the society with ethics.

MISSION

To provide a platform in acquiring knowledge in the field of Electrical and Electronics Engineering with highest quality in technical education and services to the society. To fulfill the needs:

TEACHING AND MENTORING - To provide best teaching and mentoring through ethical and moral values.

PROFESSIONAL GROWTH- To provide quality education for Electrical and Electronics Engineers that prepares them for exemplary life-long career and professional growth.

CUTTING-EDGE TECHNOLOGIES- To develop cutting edge technologies through research that meets the needs of industry, government and the scientific community.

HIGHER STUDIES- To guide our graduates to pursue their formal education further, including PG and PhD programmes.

SOLUTION PROVIDERS- To excel in student learning activities, to produce them as problem solvers as a team or individual by active interaction and effective communication with peers and stakeholders.





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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

PROGRAM EDUCATIONAL OBJECTIVES

PEO I: Graduate will apply the principles of basic science, mathematics and engineering fundamentals necessary to formulate, solve and analyze engineering problems.

PEO II: Graduate will expertise in the field of Electrical and Electronics Engineering.

PEO III: Graduate will acquire the knowledge for pursuing advanced degrees in Engineering, Science, Management, Research and Development.

PEO IV: Graduate will achieve professionalism, leadership qualities, self and continuous learning.

PEO V: Graduate will fulfill the needs of the society by working as Engineers, Entrepreneurs in core as well as inter-disciplinary areas in an ethical and responsible manner.

PROGRAM SPECIFIC OUTCOMES

PSO1. Students gain proficiency in analyzing and resolving complex issues related to Power and Energy, Power Electronics and Embedded Systems.

PSO2. Students gain the knowledge to design and control electrical machines and drives for applications in transportation and industrial sectors.

From the HoD's desk...



Dr. R. Azhagumurugan M.E., Ph. D
Head of the Department
Electrical and Electronics Engineering

We are pleased to share the highlights of the Department of Electrical and Electronics Engineering from January 2022 to June 2022. The department successfully conducted the IGEN ENSAVCON 713 2022 Conference, promoting research, knowledge sharing, and innovation among students and faculty members.

A series of technical sessions were organized, including the Inauguration of the IEEE Power Electronics Society Student Branch, providing students with opportunities for professional networking and advanced learning in power electronics. Several technical sessions were conducted, including webinars on Green Entrepreneurship and Electric Vehicles for Beginners, promoting sustainable innovation and awareness of emerging technologies. The department also organized a Seminar on IPR with Patent Drafting and Filing Tips and webinars on Open-Source Tools for Embedded Systems and Robotics and Internet of Things to strengthen students' technical knowledge.

Furthermore, awareness and innovation-driven initiatives such as the Smart India Hackathon 2022 Awareness Program and the SAIRAM SDG Ideathon 2.0 Orientation Programme motivated students to actively participate in national-level innovation challenges and develop solutions for real-world problems. We are also proud to highlight that our faculty members actively engaged in various internships and professional development activities, enhancing their industrial exposure and enabling them to deliver a richer learning experience for students. As we move forward, we encourage our students and faculty to continue their journey of innovation, research, and excellence in Electrical and Electronics Engineering.

Dr. R. Azhagumurugan
Head of the Department
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"The future belongs to those who believe in the beauty of their dreams."



CONFERENCE

IGEN ENSAVCON 713 2022

IGEN ENSAVCON 713
UN SDG GOALS 713 CONFERENCE
SLOT NO. 18

Project expo	Introduction	Connexion
Video Presentation	SDG EVENTS	News Mode Presentation
Quiz	Pledge	EnSav Presentation

PROGRAM CO-ORDINATORS
DR. AZHAGUMURUGAN HOD/EEE
MS. M. HEMALATHA ASST. PROF
MR. C. JEEVA ASST. PROF
MR. R. DHANASEKAR ASST. PROF

The EnSAv Club of Sri Sairam Engineering College in association with Sri Sairam Institute of Engineering and Technology organized IGEN ENSAVCON 713 (Slot No.18) on 15 May 2022. During this one-hour conference session, students and faculty from the Department of Electrical and Electronics Engineering presented activities and ideas focused on UN Sustainable Development Goals 7 (Affordable and Clean Energy) and 13 (Climate Action). The event included project expo, presentations, quiz, and a pledge to promote sustainability and environmental awareness.



GUEST LECTURE /WORKSHOP

INAUGURATION OF IEEE POWER ELECTRONIC SOCIETY STUDENT BRANCH-12/01/2022



The Department of Electrical and Electronics Engineering organized the inauguration of the IEEE Power Electronics Society (PELS) Student Branch Chapter on 12 January 2022 through an online session on Zoom. The inaugural address was delivered by Dr. R. Seyezhai, Associate Professor in the Department of EEE at SSN College of Engineering and Chair of IEEE Power Electronics Society (Madras Section). During the session, she shared valuable insights on the importance of power electronics and the opportunities available for students through IEEE PELS.

WEBINAR ON GREEN ENTREPRENEURSHIP - 21/01/2022

The Department of Electrical & Electronics Engineering, in association with IEEE Women in Engineering Affinity Group, hosted an inspiring session on Green Entrepreneurship. Dr. Atul Mishra, Associate Professor at NITTTR Bhopal, shared insights on sustainable innovation and eco-friendly business practices. The event brought together faculty, students, and professionals to explore how entrepreneurship can drive a greener future.



GUEST LECTURE /WORKSHOP

WEBINAR ON ELECTRIC VEHICLES FOR BEGINNERS – 22.01.2022



The poster for the webinar features a green background with a yellow car and a charging station. It includes logos for Sairam Engineering College, IEEE, and PELS. The text reads: 'WEBINAR ON ELECTRIC VEHICLES FOR BEGINNERS' and '22.01.2022, Saturday @ 1.20 pm - 2.20 pm'. The resource person is Dr. K. Deepa, Associate Professor at Amrita School of Engineering, Bangalore. A QR code and registration link are also provided.

The Department of Electrical and Electronics Engineering, in association with SEC IEEE PELS SBC, organized a webinar on “Electric Vehicles for Beginners.” The session was delivered by Dr. K. Deepa from Amrita School of Engineering, Bangalore, who shared insights on electric vehicle technology and its future.

QUIZ ON GREATE INDIAN WOMEN LEADERS - 26/01/2022

The Department of Electrical and Electronics Engineering at Sri Sairam Engineering College, in association with the IEEE Women in Engineering (WIE) Affinity Group, organized an online quiz titled “The Great Indian Women Leaders” on 26 January 2022. The quiz was conducted through Google Forms to create awareness about the achievements and contributions of inspiring women leaders of India.



The poster for the quiz features a purple background with illustrations of women. It includes logos for Sairam Engineering College, IEEE, and WIE Affinity Group. The text reads: 'QUIZ ON THE GREAT INDIAN WOMEN LEADERS' and '26.01.2022, Wednesday @ 8.00 AM to 8.00 PM'. The registration form link is provided as <https://forms.gle/8FvMyLs4zBfcSQSa6>. A QR code and a note about e-certificates are also present.



GUEST LECTURE /WORKSHOP

SAIRAM SDG IDEATHON 2.0 ORIENTATION PROGRAMME - 28/01/2022



The Department of Electrical and Electronics Engineering organized the Sairam SDG Ideathon 2.0 Orientation Programme for first-year students on 28 January 2022 through Zoom. The session was delivered by Dr. A. Sanjeevi Gandhi, Associate Professor in the Department of EEE, who guided students on the objectives and opportunities of the Ideathon initiative.

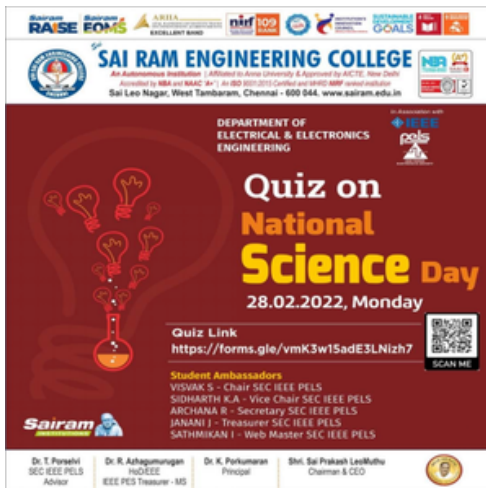
AWARENESS PROGRAM ON SMART INDIA HACKATHON 2022 – 26.02.2022

The Department of Electrical and Electronics Engineering and IEEE EDS Student Branch Chapter conducted an online awareness program on “Smart India Hackathon 2022.” Mr. L. Jebin Joshua, SIH 2020 Hardware Edition winner and SEC alumnus, guided students on innovation and hackathon participation.



GUEST LECTURE /WORKSHOP

QUIZ ON NATIONAL SCIENCE DAY - 28/02/2022



The Department of Electrical and Electronics Engineering, in association with IEEE PELS, organized an online Quiz on National Science Day through Google Forms. The event was conducted by Dr. T. Porselvi, SEC IEEE PELS Advisor, encouraging students to test and enhance their scientific knowledge in a fun and engaging way.

WOMEN OF ROYAL AND NOBLE STATUS -09/03/2022

The IEEE and IEEE WIE Affinity Group of the Department of EEE, Sairam Engineering College organized an online session titled “Women of Royal and Noble Status – Part 1” on 9 March 2022 via Google Meet.

The session featured Ms. A.V. Mary Thomas (GE T&D India Ltd.) and Ms. Akshina Thomas M (Hitachi Energy Switzerland Ltd.), who shared their career journeys and insights on opportunities and challenges for women in engineering.



GUEST LECTURE /WORKSHOP

SEMINAR ON IPR IN FOCUS WITH PATENT DRAFTING AND FILING TIPS - 27/04/2022



The Department of Electrical and Electronics Engineering, in association with IEEE and the WIE Affinity Group, conducted a seminar on “IPR in Focus with Patent Drafting and Filing Tips.” The session was handled by Dr. G. Puthilibai, Professor and Captain of IPR Cell at SEC, Chennai, and MoE’s IIC Innovation Ambassador, who explained the importance of intellectual property and guided students on patent drafting and filing procedures.

WEBINAR ON OPEN-SOURCE TOOLS FOR EMBEDDED SYSTEMS AND ROBOTICS - 28/04/2022

The Department of Electrical and Electronics Engineering, in association with the IEEE PELS Student Branch Chapter, organized a webinar on “Familiarization of Massive Online Open-Source Tool for Embedded Systems and Robotics” at Alpha Hall. The session was delivered by Mr. Kanagaraj Venusamy, who introduced students to open-source tools used in embedded systems and robotics.



GUEST LECTURE /WORKSHOP

WEBINAR ON ROLE OF POWER ELECTRONICS IN ELECTRIC VEHICLES – 07/05/2022



The Department of Electrical and Electronics Engineering, in association with SEC IIEEE PELS SBC, conducted a webinar on “Role of Power Electronics in Electric Vehicles” on 7th May 2022. The session was delivered by Mr. Sriram Rangarajan, a 2014 batch SEC EEE alumnus and Research Scholar at IIT Bombay. He shared valuable insights on the importance of power electronics in electric vehicle technology and its future scope, making the session informative and engaging for students.

POSTER DESIGNING & QUIZ CONTEST – 07/05/ 2022

The Department of Electrical and Electronics Engineering, in association with IIEEE EDS SBC SEC, organized a Poster Designing & Quiz Contest on the theme “Earth Day with Slogan” on 7th May 2022 at 7:00 p.m. The event encouraged students to creatively express ideas about environmental awareness and sustainability. Participants designed posters and shared impactful slogans highlighting the importance of protecting our planet.



GUEST LECTURE /WORKSHOP

WORKSHOP ON UI/UX DESIGNING – 13 /05/2022



The Department of Electrical and Electronics Engineering, in association with IEEE EDS SEC SBC, organized a workshop on UI/UX Designing on 13th May 2022 at GAMA Hall. The workshop was conducted by student trainers Ms. Akshaya A. and Ms. Abhiniya K. from II Year EEE-A. They introduced participants to the basics of UI/UX design and guided them through practical concepts, helping students understand the importance of user-friendly digital design.

VIRTUAL ALUMNI MEET – 14/05/2022



The Department of Electrical and Electronics Engineering at Sri Sairam Engineering College organized a Virtual Alumni Meet on 14 May 2022 via Google Meet. The event brought alumni and faculty together to reconnect, share experiences, and strengthen the bond with the institution.



GUEST LECTURE /WORKSHOP

WEBINAR ON INTERNET OF THINGS – 04 /06/2022

The poster is for a webinar titled "WEBINAR ON Internet of things" held on 04.06.2022, Saturday, from 2:00 PM to 3:00 PM. It is hosted on G-Meet with a link: <https://meet.google.com/njm-bisq-kyv>. The event is organized by the Department of Electrical and Electronics Engineering in association with SEC IEEE PELS SBC & WIE Affinity Group. The speaker is Dr. Sasikumar P., Associate Professor and Head, Department of Embedded Technology, School of Electronics Engineering (SENSEI), Vellore Institute of Technology, Vellore 632014, India. The poster also lists several members of the IEEE PELS SBC & WIE Affinity Group, including Dr. B. Manojkumar, Dr. T. Prasad, Dr. R. Aranganathan, Dr. R. Parthasarathi, and Mrs. Raj Prakash Lakshminarayana.

The Department of Electrical and Electronics Engineering, in association with **IEEE Power Electronics Society (PELS) SEC SBC and **IEEE Women in Engineering (WIE), conducted a webinar on Internet of Things on 04 June 2022. The session was delivered by Dr. P. Sasikumar from Vellore Institute of Technology, providing valuable insights into IoT and its applications.



FACULTY PUBLICATIONS

(January-June 2022)

Faculty Name : Dr.R.AZHAGUMURUGAN

Journal/Conference :

- 1.Sustainable Computing: Informatics and Systems (Mar 2022)
- 2.Oceans Conference Record (IEEE) (February 2022)
- 3.2022 1st International Conference on Computational Science and Technology (ICCST 2022)

Title :

1. Towards a High Precision in AMI-Based Smart Meters and New Technologies in the Smart Grid
2. Predictive Modelling for Healthy Marine Life and Ecosystem Using Ensemble Techniques
3. Machine Learning Based Classification and Modelling of Underwater Acoustic Communication
4. IoT Based Agricultural Drones for Pest Control

Faculty Name : Dr.B.MEENAKSHI

Journal/Conference :

1. IC3IoT 2022 (Mar 2022)

Title :

1. Designing and Commissioning of Heat Pumps for Hybrid Heating Using Solar Panels

Faculty Name : Dr.P.SHANMUGAPRIYA

Journal/Conference :

1. 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT 2022) – March 2022

Title :

1. Power Plant Automation Using SCADA in a Gas Insulated Substation



FACULTY PUBLICATIONS

(January-June 2022)

Faculty Name : Dr.PORSELVI.T

Journal/Conference :

1. 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT 2022) – Mar 2022

Title :

1. PV Based Multilevel Inverter with 15 Levels Using POD Control Method

Faculty Name : Dr.PRATHIBANANDHI K

Journal/Conference :

1. Intelligent Automation and Soft Computing – 2022
2. 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT 2022) – March 2022

Title :

1. Analysis of Brushless DC Motor Using Enhanced FOPID Controller with ALO Algorithm
2. Smart Sprinkler System Using Raspberry Pi

Faculty Name : RAJKUMAR K

Journal/Conference :

1. 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT 2022) – March 2022

Title :

1. IoT Based Battery Thermal Monitoring in E-Vehicle System



FACULTY PUBLICATIONS

(January-June 2022)

Faculty Name : HEMALATHA M

Journal/Conference :

1. 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT 2022) – Mar 2022

Title :

1. PV Based Multilevel Inverter with 15 Levels Using POD Control Method

Faculty Name : Dr.SASWATI KUMARI BEHERA

Journal/Conference :

1. ICAIS 2022 (Feb 2022)

Title :

1. AquaBot – Water Bodies Cleaning and Monitoring Bot



FACULTY PATENT (January-June 2022)

Faculty Name : Dr. B. MEENAKSHI

Title :

1. Design of Pulse Oxygen Meter using IoT

Application Number : 202141060100

Date of Filing : 22-12-2021

Date of Publication : 28-01-2022

Status : Published

Co-Inventors :

Jhanani Shree U, Bharathy R, Anitha Mary M, Dr. B. Meenakshi, Dr. S.K. Nandha Kumar, Dr. S. Vijayanand, B. Deepa, Dr. Murugananth, Gopal Raj

Faculty Name : Dr. B. MEENAKSHI

Title :

1. Automatic Retrieval of Electronic Products using Artificial Intelligence System

Application Number : 202241005975

Date of Filing : 04-02-2022

Date of Publication : 11-02-2022

Status : Published



STUDENT ACHEIVEMENTS

OCEAN 2022 CONFERENCE – STUDENT HACKATHON AT IIT MADRAS

The Department of Electrical and Electronics Engineering proudly congratulates our students for their outstanding accomplishments. Mr. C. S. Saiganesh received a certificate along with a cash prize of ₹15,000 in recognition of his remarkable performance. Aouthithiye Barathwaj was also honored with a certificate and a cash prize of ₹1,500 for his achievement.



NCC ACHIEVEMENT – REPUBLIC DAY PARADE



Ms. Sandra Antony proudly represented the institution by participating in the prestigious Republic Day Parade – Prime Minister’s Rally held in New Delhi. Her participation reflects dedication, discipline, and commitment through the National Cadet Corps (NCC), bringing pride and recognition to the department and the institution.





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Assistant Professor

Electrical and Electronics Engineering

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III Year

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NITHISH S

III Year

Electrical and Electronics Engineering





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