

# NEWSLETTER

## S.A.ENGINEERING COLLEGE (AUTONOMOUS)

ACCREDITED BY NAAC WITH 'A' GRADE & ISO 9001:2015 CERTIFIED INSTITUTION  
POONAMALLEE AVADI MAIN ROAD, CHENNAI-77

TOP NEWS OF THE MONTHS



### DEPARTMENT OF ELECTRICAL AND ELECTRONICS



The electrical engineer has an enormous advantage over other engineers; everything lends itself to exact calculation, and a completed machine or any of its parts may be submitted to the most searching electrical and magnetic tests, since these tests, unlike those applied by other engineers, do not destroy the body tested.

- John Perry

JAN2020 - MAR2020

## **VISION**

**Conferring Excellent Technical Education with Greater Emphasis on Quality Systems, Moulding Persons for the National Development.**

## **MISSION**

- **To Enhance the Quality Education by Providing State-of-Art Infrastructure with Committed Faculty.**
- **To Provide Prerequisite Skills For the Needs of Higher Education, Industries and Research Establishments.**
- **To Handle Socio Economic Challenges of Society by Instilling Human Values and Ethical Responsibilities.**

## PROGRAM EDUCATIONAL OBJECTIVES

### **Graduates will be able**

**PEO 1:** To demonstrate enhanced competence for successful career in the core and allied fields of Electrical & Electronics Engineering.

**PEO 2:** To explore challenges in higher education and research with a multidisciplinary perspective and effective communication for lifelong learning.

**PEO 3:** To inculcate entrepreneurial skills, upholding professional ethics, cultural aspects, societal and environmental factors for sustainable development.

**PEO 4:** To adapt evolving technologies and stay contemporary to cultivate leadership quality through effective collaboration.

## PROGRAM OUTCOMES

Engineering Graduates will be able to:

- 1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.**
- 2. 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.**
- 3. 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.**
- 4. 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.**
- 5. 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.**
- 6. 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.**
- 7. 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.**
- 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.**
- 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.**
- 10. 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.**
- 11. 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.**
- 12. 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 (PSO)**

### **Students will be able to:**

1. Utilize coherent theoretical and practical methodologies to design and implement Electrical and Electronics systems.
2. Assimilate facts of basic Electronics to Power Electronics and recent embedded technologies for governing, consistent and workable Electrical and Electronics Systems.
3. Apply computing platform and developing software for power grids and hybridizing the new renewable energy to overcome the power demand.

### **EDITORIAL BOARD**

- **Dr.G.Rohini** Editor In Chief
  - **Mr.R.Kamalakannan** Editor
  - **Mr.S.Vignesh** Editor
  - **Ms.H.Monika** Editor
  - **Mr.S.Vishwanath** Web and Graphics Editor
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<b>3</b>	<b>09.01.2020</b>	<b>SCIENCE QUIZ</b>	<b>All years</b>
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<b>10</b>	<b>26.02.2020</b>	<b>BOS MEETING</b>	<b>All staffs</b>
<b>11</b>	<b>26.02.2020</b>	<b>INDUSTRIAL VISIT</b>	<b>3rd year</b>
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<b>13</b>	<b>06.03.2020</b>	<b>GUEST LECTURE</b>	<b>Final year</b>
<b>14</b>	<b>13.03.2020</b>	<b>VALUE ADDED COURSE</b>	<b>3rd year</b>

04/01/2020

## GUEST LECTURE



The department of EEE has organized the Guest Lecture on “**ELECTRIC RELAYS & CIRCUIT BREAKERS**” on 04.02.2020. The head of the department, Dr.G.Rohini felicitated the chief guest **Mr.M.GOPINATH, SENIOR ENGINEER, VOLTECH MANUFACTURING PVT., LTD., CHENNAI.** with the memento. The guest delivered the lecture in The Relay is a switching and sensing device, but the Circuit breaker is an isolating or disconnecting device. Relays operate on low power input voltage. The Circuit breaker is an automatic on load device. The Relay is used to control or select one among many circuits, whereas Circuit Breaker is one per circuit.

06/01/2020

## IEEE AWARENESS



The Department of EEE has organized “**IEEE AWARENESS PROGRAM**” on 06.02.2020. 41 students participated in the programme. The Head of the Department, Dr. G. Rohini felicitated the chief guest **Mr.B.ASHVANTH, SYSTEM ENGINEER, TATA CONSULTANCY SERVICES, CHENNAI.** with the memento. The guest delivered the lecture in Membership broadens the opportunities with additional member-only resources: Network, engage, and collaborate with others in computer science and other technologies.

09/01/2020

## SCIENCE QUIZ



The department of EEE conducted the Science Quiz on **09.01.2020 at 10.00 am** in the college premises. The event started with the invocation and lighting the traditional lamp. **Dr.G.Rohini, HEAD OF THE DEPARTMENT/EEE** welcomed the gathering. **Dr.G.S.Kumarasamy, Principal** illuminated the occasion with his presence and delivered the special address insisting the significance of science. A **quiz** is a form of game or mind sport in which players attempt to answer questions correctly on one or several specific topics. Quizzes can be used as a brief assessment in education and similar fields to measure growth in knowledge, abilities, and skills, or simply as a hobby. They can also be televised for entertainment purposes, often in a game show format.

26/01/2020

## ALUMNI MEET



The department of EEE has organized an “Alumni meet” interacted with the students to enhance our department and college on alumni day. The aim is to help college staff recognize the contribution of their ex-students in the professional world. This meeting gives ex-students the chance to gel with the people whom they have not met in years. Also, they can get connected with the principals and other staff.



05/02/2020

## GUEST LECTURE



The department of EEE has organized the Guest Lecture on “**Transmission and Distribution**” on 05.03.2020. The head of the department, Dr.G.Rohini felicitated the chief guest **Er.C. PRASATH, Assistant Executive Engineer/MRT, North Chennai Power Station, Chennai.** with the memento. The guest delivered the lecture in the Power transmission is the large scale movement of electricity at high voltage levels from a power plant to a substation. Whereas power distribution is the conversion of high voltage electricity at substations to lower voltages that can be distributed and used by private, public, and industrial customers.

08/02/2020

## SYMPOSIUM



S.A. Engineering college has organized the symposium on 8<sup>th</sup> February 2020. College Symposiums enhance the technical knowledge of students and provide them a platform to exhibit their talents. It help students to identify and understand the various aspects of their domain which provides opportunities for them to develop their versatility and charisma in the divergent facet of their growth.

**10/02/2020**

## **VALUE ADDED COURSE**



**Our third year students attended value added course in S.A. Engineering college conducted on 10/02/2020.**

**18/02/2020**

## **INDUSTRIAL VISIT**



The department of EEE has organized Industrial visit for 2nd year students at Sri Perumbudur 400kV Substation On 16/02/2020. A substation is a high-voltage electric system facility. It is used to switch generators, equipment, and circuits or lines in and out of a system. It also is used to change AC voltages from one level to another, and/or change alternating current to direct current or direct current to alternating current.

**22/02/2020**

## **GRADUATION DAY**



S.A. Engineering college has organized the 18<sup>th</sup> Graduation day on 22/02/2020. The graduation ceremony is sometimes called commencement, congregation, convocation or invocation. Graduation day marks the beginning of your academic journey and the start of your future. Countries like the US, Canada, Australia and the United Kingdom etc. celebrate this occasion in many ways.

**26/02/2020**

## **BOS MEETING**



The department of EEE has organized Board of Studies Meeting on 26/02/2020. The Board of Studies (BoS) is the basic constituent of the academic system of an Institute. Its functions will include framing the content of various courses, reviewing and updating the content from time to time, introducing new courses of study etc.

26/02/2020

## INDUSTRIAL VISIT



The department of EEE has organized Industrial visit for Third year students at PANICKKER SWITCHGEAR is situated in Sriperumbudur, a suburb of Chennai. The Company has been in existence since 1974 and is engaged in manufacturing indoor & outdoor air & vacuum load break switches and manual and motor operated VCB's & isolators . We also manufacture LT,HT,PT and semi-conductor fuses. The range covers dropout fuse, expulsion fuse cutout and high voltage fuses extending up to 38 KV.

02/03/2020

## GUEST LECTURE



The department of EEE has organized the Guest Lecture on “**RENEWABLE ENERGY SOURCE**” on 02.03.2020. The head of the department, Dr.G.Rohini felicitated the chief guest **Mr.K.BOOPATHI, DIRECTOR & DIVISION HEAD – RESEARCH & DEVELOP- MENT, RESOURCE DATA ANALYTICS & FORECASTING, ENERGY (NIWE), CHENNAI - 600100.** with the memento. The guest delivered the lecture on renewable energy is energy that comes from a source that won't run out. They are natural and self-replenishing, and usually have a low- or zero-carbon footprint. Examples of renewable energy sources include wind power, solar power, bioenergy (organic matter burned as a fuel) and hydroelectric, including tidal energy.

06/03/2020

## GUEST LECTURE



The department of EEE has organized the Guest Lecture on “**Emerging Trends in Embedded Systems**” on 11.03.2020. The head of the department, Dr.G.Rohini felicitated the chief guest **Mr.S.Thirumalaikumaraswamy, Software Specialist, Hitachi, Chennai** with the memento. The guest delivered the lecture on recent trends in embedded systems include adding multiple cores (dual core quads and quads). This research deals with the integration of all components on a single chip (SOC). There is also a trend based on reconfigurable processes associated with the processor. This design involves an FPGA core and an ASIC core.

13/03/2020

## GUEST LECTURE



The department of EEE has organized the Guest Lecture on “**Barriers in Communication**” on 13.03.2020. The head of the department, Dr.G.Rohini felicitated the chief guest **Ms.I.VIDYA, MAINTENANCE SUPERVISOR, CATERPILLAR IN- DIA PVT., LTD., THIRUVALLUR** with the memento. The guest delivered the lecture on Communication barriers can be defined as obstacles that one may face when attempting to effectively communicate with another person. These barriers can be anything that can misrepresent and/or avert someone during the communication process. This process involves a sender, receiver, and message.