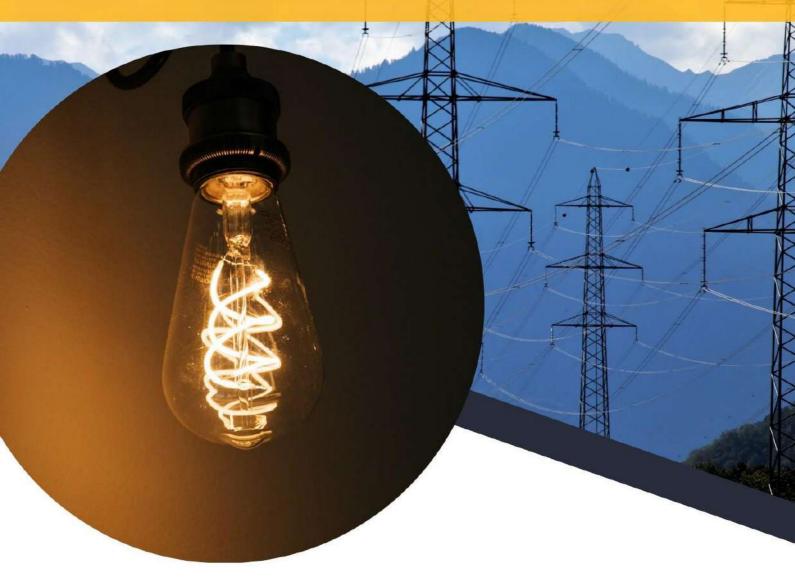
# NEWSLETTER

#### S.A.ENGINEERING COLLEGE (AUTONOMOUS)

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



## DEPARTMENT OF ELECTRICAL AND ELECTRONICS

Information theory began as a bridge from mathematics to electrical engineering and from there to computing.

-James Gleick

TOP NEWS OF THE MONTHS

MAY2022-AUG2022

#### **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.P.Vishwanath Web and Graphics Editor

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05/05/2022



The department of EEE has organized the Guest Lecture on "Recent Trends in AC Machines" on 05.05.2022. The head of the department, Dr.G.Rohini felicitated the chief guest Mr.J.Srivasan, Partner Director, ACE Enablers LLP. The guest delivered the lecture on the applications for modern machinery demand extraordinary performance characteristics, such as high power density, integrated functionality, and better thermal, mechanical, and electromagnetic properties.



The department of EEE has organized Industrial visit for 3rd year students at Core Industrial Place- ment Training on Factory and Process Automation - Phase 1 on 05/05/2022. The company was established in the year 2013, Macpro Automation Private Limited has been continuously excelling in manufacturing, exportering and importering of high performing Die Casting Machine, Trimming Press Machine, Assembly Station, Jet Cooling Machine and much more. Our products stand entirely different from our competitors because of the optimal strength, uniformity, dimensional accuracy and fatigue resistant. The goodwill of our company is encouraged by our technological adeptness and accurate research and development activities.

#### 07/05/2022

### **GUEST LECTURE**



The department of EEE has organized the Guest Lecture on "Modern Tools for Electrical Machine Design" on 07.05.2022. The head of the department, Dr.G.Rohini felicitated the chief guest Dr.A.Depak, Design Engineer, Epropelled Engineer Centre, Chennai. The guest delivered the lecture on the electric technology has become the cornerstone of contemporary society as it provides the most adaptable, costefficient, and mechanism for energy generation, transmission, and consumption among the various energy systems. Even after 200 years of its invention, <u>electrical technology</u> is still evolving. There is a constant demand for new and innovative electrical machinery across all market segments; therefore, technology is continuously advancing to meet emerging needs. The Modern machines are undergoing pressure to perform better, reduce emissions, have better functionality, and be safer and more reliable. This has created a demand for more accurate calculation-optimization techniques and opened the door for newer varieties of electrical equipment.

10/5/2022



The department of EEE has organized the Guest Lecture on "**Implementation of AMR in Indian Utility for Re Generators**" on 10.05.2022. The head of the department, Dr.G.Rohini felicitated the chief guest Mr.C.Nallasivan, Assistant Executive Engineer, Office of the Chief Engineer/IT, 144 Anna Salai, Chennai 02. The guest delivered the lecture on the AMR billing software has been implemented in TANGEDCO through Open Access Energy Accounting Software for Wind Electric Generators 1st of February 2019, solar energy generator (SEG) from • For Thermal generators from 1st of August 2019,and Bio-Mass, Bagasse generators from Sep 2020. • Successful implementation has resulted in the Economic and Operational benefits

**ANNUAL DAY** 

27/5/2022



S.A. Engineering college has organized the Annual day on 27/05/2022. Our department final year student Mr.sanakara narayanan got the best out going student award in year 2022.

27/5/2022

## **CULTURALS DAY**



S.A. Engineering college has organized the Cultural day on 27/05/2022. Various events were conducted like dance, singing etc.

27/5/2022



S.A. Engineering college has organized the group photo session for final year students on 27/05/2022.

#### 30/05/2022

## **GUEST LECTURE**



The department of EEE has organized the Guest Lecture on **"STABILITY ANALYSIS IN CONTROL SYSTEM"** on 30.05.2022. The head of the department, Dr.G.Rohini felicitated the chief guest Dr.D.Vasanthi, Asso.Professor, MIT, Chennai. The guest delivered the lecture on stability analysis in control systems is typically done by analyzing the system's transfer function or state-space representation. Various stability criteria and techniques, such as the Routh-Hurwitz stability criterion, Nyquist criterion, and Bode plots, can be used to determine the stability of a control system.

30/05/2022

## FAREWELL DAY





S.A. Engineering college has organized the farewell day for final year students on 30/05/2022

31/5/2022



The department of EEE has organized the Guest Lecture on "IMPLEMENTATION RECENT TRENDS IN POWER SYSTEM PROTECTION & RELAY COORDINATION " on 31.05.2022. The head of the department, Dr.G.Rohini felicitated the chief guest Mr.M.MOHAMED ABDUL KALAM, POWER SYSTEM ENGINEER, POWER PROJECTS, CHENNAI. The guest delivered the lecture on the recent trend in protection has been a shift to Numerical Protection Techniques, thanks to the development of single chip digital signal pracessiors with high number crunching capability, which has made it possible to design digital filters in real time.

23/7/2022

## **ONLINE SEMINAR**





The department of EEE has organized the ISTE Sponsored One Day National Online Seminar On "**WIRELESS POWER TRANSFER**" on 23.07.2022. The head of the department, Dr.G.Rohini felicitated the chief guest **Dr.R.NARAYANAMOORTHI**, Associate Professor, Department Of EEE, Electric Vehicles Research Centre,Srm Institute Of Technology, Chennai Campus, India. And **Dr. KRITHIGA S**. IEEE Member,Former Associate Professor, School Of Electrical Engineering, VIT, Chennai Campus. The guest delivered the lecture on the wireless power transfer (WPT) systems allow power to be transferred from one electrical network to another without the need for wires or exposed contacts. For a large number of diverse applications, this feature is highly advantageous, and in certain cases has enabled new applications to be realized.

01/8/2022

#### WORKSHOP





The department of EEE has organized the One Day National Workshop in association with ISTE On " **FI-NITE ELEMENT ANALYSIS FOR ELECTRICAL MACHINES**" on 01.08.2022. The head of the department, **Dr.G.Rohini felicitated the chief guest Dr.N.C. Lenin,** Professor, School Of Electrical Engineering, VIT.

21/7/2022



Dr.G.Rohini and Mr.Kamalakannan Attented the IIC Meeting on 21/07/2022 held at Sathyabama University.





10/8/2022



The department of EEE has organized the Guest Lecture On "DIGITAL SIGNAL PROCESSING" on 10.08.2022. The head of the department, Dr.G.Rohini felicitated the chief guest DR.SABITHA RAMAKRISHNAN, A S - SO.PROFESSOR, MIT, CHENNAI. The Guest delivered the lecture on the purpose of digital signal processing is, as mentioned before, to filter analog signals from current time and space. It is used in a wide variety of technological equipment but is an especially critical aspect of noise suppression and voice enhancement communication equipment. 17/8/2022 - 30/8/2022

## VALUE ADDED COURSE



The department of EEE has organized the Value added course On "POWER SYSTEM ANALYSIS USING ETAP" from 17.08.2022 to 30.08.2022. The head of the department, Dr.G.Rohini felicitated the chief guest Mr.S.SELVAKUMAR and Mr.HARIKRISHNAN, POWER PROJECTS, chennai.

18/8/2022



The department of EEE has organized the Guest Lecture On "**MICROPROCESSOR AND MICROCON-TROLLER**" on 18.08.2022. The head of the department, Dr.G.Rohini felicitated the chief guest Dr.MEYYAPAN, ASSO.PROFESSOR, MIT,CHENNAI. The Delivered the lecture on the main difference between a microprocessor and a microcontroller is: Microprocessor: A microprocessor is a processing unit used for only processing purposes. Microcontroller: The microcontroller is a complete computer system that is embedded on a single chip.

18/8/2022

#### IIC ORGANIZES EVENTS ON INNOVATION AND ENTREPRENEURSHIP IN HEIS FOR AATMANIRBHAR





The department of EEE and IIC jointly has organized **ORGANIZES EVENTS ON "INNOVATION AND ENTREPRENEURSHIP IN HEIS FOR AATMANIRBHAR BHARAT AND CELEBRATING 75 YEARS OF INDEPENDENCE—AZADI KA AMRIT MAHOTSAV"** on 17.08.2022. Various department students were participated in this.

## 22/8/2022 - 27/8/2022 VALUE ADDED COURSE

Our College NSS Committee, in association with Traffic enforcement, Avadi Police Commissionerate, has



The department of EEE has organized the Value added course On "PROBLEM SOLVING IN C PRO-GRAMMING" from 22.08.2022 to 27.08.2022 for 3rd year EEE.