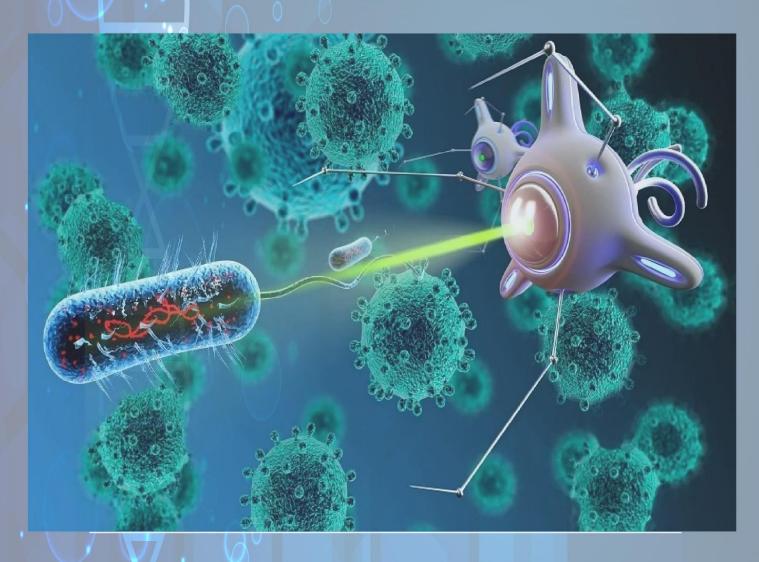


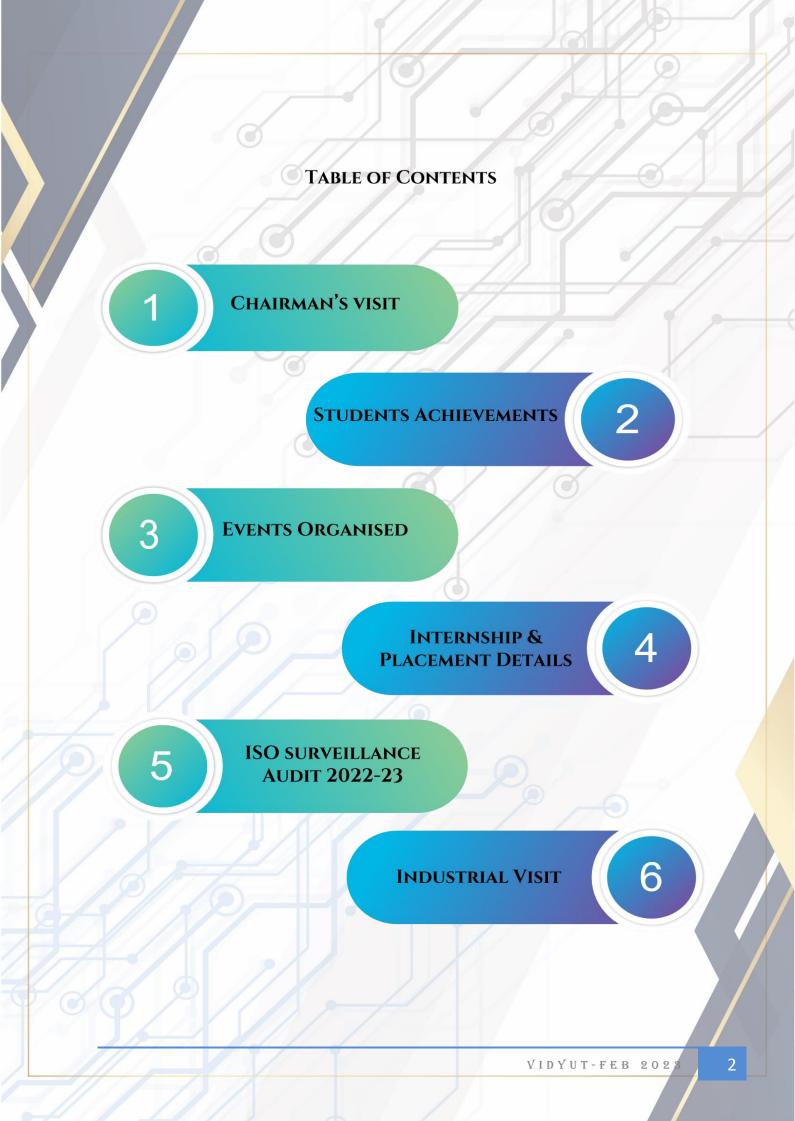
# WIDYUT

Volume-1 | Issue-2 | Feb-2023

Department of Electrical and Electronics Engineering
Official Newsletter







#### SRI VENKATESWARA COLLEGE OF ENGINEERING

#### **DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

#### Vision of the Institution

To be a leader in Higher Technical Education and Research by providing the state of the art facilities to transform the learners into global contributors and achievers.

#### Mission of the Institution

To develop SVCE as a "CENTRE OF EXCELLENCE" offering Engineering Education to men and women at undergraduate and postgraduate degree levels, bringing out their total personality, emphasizing ethical values and preparing them to meet the growing challenges of the industry and diverse societal needs of our nation.

#### Vision of the Department

The vision of Electrical and Electronics Engineering Department is to provide a high standard of education in Electrical and Electronics Engineering so as to meet the industry standards through domain.

#### Mission of the Department

M1: To create state of the art facilities such that the students excel in Electrical and Electronics Engineering education.

**M2:** To equip students with a well defined curriculum to meet the requirements of industries and society.

**M3:** To promote a culture of research, innovation and entrepreneurship in the thrust and allied areas of Electrical and Electronics Engineering.

**M4:** To inculcate soft skills and foster ethical values and shape the total personality of the students.

#### **Program Educational Objectives (PEOs) UG-EEE**

**PEOI:** Graduates of EEE transformed to engineering contributors in the fields of Electrical, Electronics and Computer Engineering.

**PEO2**: Succeed in becoming entrepreneurs through human centered design thinking and innovation.

**PEO3:** Become eligible to pursue higher studies in their chosen areas of engineering or management

**PEO4:** Effective, conscious and ethical team player in the field of green energy management and sustainability

#### **Program Outcomes (POs) for UG-EEE**

- 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 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 lead.
- 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 (PSOs) for UG-EEE**

**PSO1**: The ability to build, implement, test and maintain analog and/or digital systems and implement Electronic control of Drives for Industrial automation and Electric Vehicle.

PSO2: The ability to analyze Power System network encompassing stability,

control and protection and interconnection of Renewable Energy Sources with Micro and smart grid.

# **Program Outcomes (POs) for PG-PED**

**PO1**: An ability to independently carry out research/investigation and development work to solve practical problems.

**PO2:** An ability to write and present a substantial technical report/document.

**PO3:** Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.

#### Program Specific Outcomes (PSOs) for PG-PED

**PSO1:** The ability to design and analyze Power Electronic converters and control of Electric drives for Industrial applications.

**PSO2:** The ability to apply Power Electronic Circuits in Transmission and distribution network of Power System and interconnection of Renewable Energy.

#### Chairman's Visit

Chairman's Visit to Interdisciplinary Nano research centre (iNRC)

Our Chairman Dr A. C. Muthiah, with Governing Council members visited the DST FIST Sponsored Interdisciplinary Nano research centre, on 8<sup>th</sup> February 2023. Dr. Sudhakar K Bharathan, AHOD, presented about the facilities available through GST-FIST, RPS and SVCE management. He briefed about the research activities carried out and research papers published.













#### **Students Achievements**

Narendran K of III year EEE has attended INUP-i2i Familiarization Workshop, on **2D Semiconductor Nano devices & Simulations** at the Centre for Nanotechnology, IIT Guwahati, 08<sup>th</sup> to 10<sup>th</sup> Dec, 2022 as first step for applying proposal for executing project under INUP scheme.

Further he has been shortlisted for attending the workshop on **Nano transistors** and **Energy Devices Technology** as step two Familiarization Workshop at the Centre for Nanotechnology, IIT Guwahati to be held from 21<sup>st</sup> to 23<sup>rd</sup> Feb, 2023.

S.Harini, III year student won in Badminton Women doubles match organized by Sports development Authority of Tamil Nadu, CM Trophy at Kanchipuram District stadium on 18<sup>th</sup> Feb 2023.



Irish Varun, IV year student was team player of the basket ball team that participated and were runner up in the match organized by Sports development Authority of Tamil Nadu, CM Trophy at Kanchipuram District stadium on 18<sup>th</sup> Feb 2023.



# **Events Organised**

# Special Talk Organized by Women's Empowerment Cell (WEC)

A special talk on "Crime against Women and Children & Cyber Crime Awareness" was organized by the WEC-SVCE on February 7<sup>th</sup>, 2023. Mr. R. Chandrasekaran, ADSP, and Mr. M. Rajagopal, inspector, Cyber Crime, Kancheepuram, Tamilnadu police, presided over the event. Around 160 participants including female faculty members and girl students attended and benefited. The event was presided over by Dr. KR.Santha, Vice-Principal, HoD of Electrical and Electronics Engineering department and the WEC Chairperson. She addressed the gathering about the WEC cell's operation and the safety of women.

Mr. R. Chandrasekaran, ADSP, TN police outlined the roles and responsibilities of cybercrime division of TN police. He cited a few recent incidents happened in this region to highlight his point. His speech revealed the audacity of women in dire circumstances.

Cybercrimes in social media and online transactions were discussed by Mr. John Albert N. C. He goes into detail regarding the effects of cyber attacks and how to address or prevent such crimes. Mr. M. Rajagopal, the Inspector, provided the website and phone number for reporting cybercrime and issues relating to women's safety.

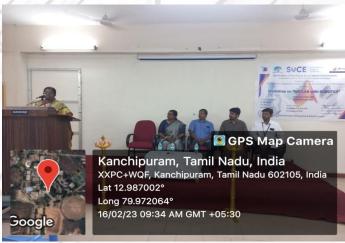




#### National level workshop on "MATLAB with Robotics"

National Level Workshop on Matlab with Robotics was organized on Feb 16<sup>th</sup> to 17<sup>th</sup>, 2023 at Function Hall, SVCE, by Harbour Technologies in association with elan wision IIT Hyderabad, visited SVCE (nodal centre) and provided hands-on sessions to the 51 registered participants (II year and III year EEE & ECE students).









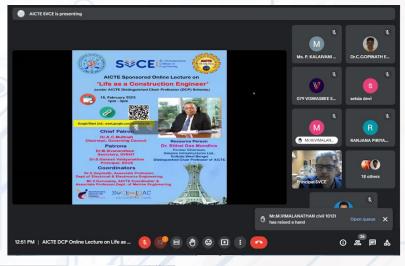


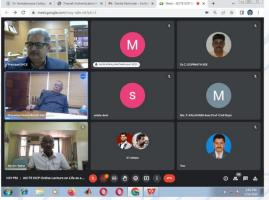
# **AICTE sponsored Guest Lecture**

Dr.C.Gopinath, Associate Professor,EEE organized the AICTE Sponsored Online Lecture on "Life as a Construction Engineer" under the Distinguished Chair Professor Scheme on 16<sup>th</sup> February 2023, 1 pm - 3 pm.

SVCE has got a grant under AICTE Distinguished Chair Professor Scheme (DCP) and Dr.Bithal Das Mundhra, Distinguished Chair Professor, Former Chairman, Simplex Infrastructures Ltd., Kolkata, West Bengal is nominated as Distinguished Chair Professor.

The Distinguished Chair Professor fellowship intends to utilize the expertise of highly qualified and experienced Superannuated Professionals who have made an undoubtedly, unchallengeable, unparalleled, and exceptional contribution to society in their respective fields in any discipline in professional for the benefit of students/faculty of host institutes & of institutes located in the adjoining areas.







#### **Events Conducted By Professional Societies:**

#### Guest Lecture On 'Power Transformer Operation And Conditional Assessment'

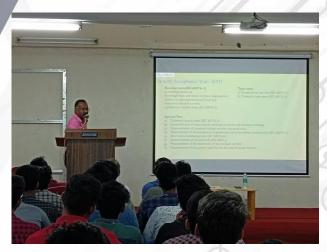
The guest lecture on 'Power Transformer Operation And Conditional Assessment' was presented by Mr. M. Babu, Director - Operations, Voltech Manufacturing Company Limited, Chennai on 9<sup>th</sup> Feb, 2023 from 10.30 AM to 12.15 PM in the Video hall. Second and third year students (a total of 122) and faculty from EEE department participated in this guest lecture event.

The event started with welcome address by Ms. Sanjana Suresh kumar of II year EEE. Dr.M.Sankar, Assistant Professor/EEE gave a brief introduction of the guest speaker. The guest speaker started his presentation with one presentation focusing on the core topic. Later he presented another presentation which briefed on importance of electrical domain and core placement opportunities.



The core topic presentation elaborated on power transformers operation highlighting on each component in the transformer assembly with on the floor images. It gave an impact of as though attending an industrial visit. He briefed on the manufacturing and assembling procedure standards followed in transformers manufacturing industries. He also briefed on the HVDC transmission importance

and role play of size and operation of transformers with photographs of the projects he was a part of. He also elaborated on the conditional assessment methods and procedures.





#### Institution Innovation Council (IIC)

As a part of IIC Calender (Level-1) activity, a seminar was organized on "Motivational Story of an Inspiring Entrepreneur" on 17<sup>th</sup> February 2023 at 10.00 am. Around 50 students from all branches of SVCE interested in entrepreneurship were addressed by Mr. Akash. S , Founder and CEO Muphile labs (Alumni Enterepreneur)







# **Inaugural Function and Memorandum of Understanding with Indian Society for Training And Development (ISTD) Student Chapter**

On 23<sup>rd</sup> February, 2023, the Indian Society for Training & Development Student Chapter of SVCE conducted its inauguration in the Function Hall of Sri Venkateswara College of Engineering, Sriperumbudur. The program began with a prayer which was followed by a formal welcome address by Dr. S.G.Bharathidasan, Faculty Coordinator of the ISTD Student Chapter. The Vice Principal of SVCE, Dr. KR. Santha highlighted the importance of Human Resource development with reference to her position in the college administration.

Followed by, the Chief Guest Mr. J.Vijayakumar, Chairman of the ISTD Chennai Chapter, addressed the gathering where he recalled the circumstances that led to the establishment of the organization and emphasized the foundations on which it was built. Additionally, he threw light on the functioning of the organization and declared his support for all future management development activities. Following his address, the audience was introduced to the newly appointed board members and the audiences interacted with the chief guests on many aspects with respect to ISTD and the current trends in the industry.







# **Internship & Placement Details**

The following final year students are undergoing paid internship

S. No	Student Name	Year of Study	Name of Company	Starting Date	Ending Date	Internship Stipend (if Available)
1	Pauline Vennila P	IV Year	LIT Mindtree	21.02.23	03.05.23	20000/-
2	M.B.Diviya Bhavaani		Cognizant	28.02.23	06.06.23	12000/-
3	Mohamed Ashiq Ilahi M.A		Aspire System	18.01.23	31.03.23	22500/-
4	Murugavelan B		SonaComstar	01.02.23	31.06.23	///-
5	Venkadesh B		Joy Technologies	03.02.23	05.02.23	7000/-
6	Sathish G		Hibiz Solution Pvt Ltd	01.02.23	01.05.23	12000/-

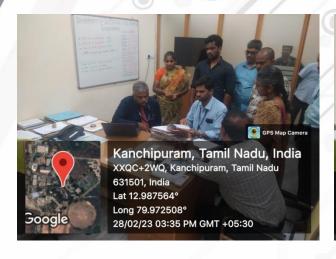
# Intramural grant for the AY 2022-2023

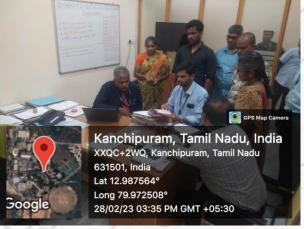
Two UG student projects were granted an amount of rupees 10,000 under intramural grant scheme for the academic year 2022-23.

Name of the students (Batch 2019-23)	Project Title	Name of Supervisor with Designation	
Mr. T. Hemanth	CNN based control of	Ms. K S Pavithra	
Mr. R J Jayachandiran	Autonomous vehicle.	<b>Assistant Professor</b>	
Mr. R. Ranganathan		// / /	
Ms. S . Radhika	IoT enabled	Mr. DS.	
Ms. T Shalini	integration of	Purushothaman	
Ms. M. Sujina	Renewable energy	Assistant Professor	
11 111 0 1	sources for EV		
66 9 //	charging applications.	F	

#### ISO surveillance Audit 2022-23

The ISO surveillance audited by K.Nagarajan (KN) Team Leader & T.K.Srivatsan (TKS) Team Member on 28.2.2023 with 2015 version, of industrial objective file at HOD/EE office with EEE faculty members.





#### **Industrial Visit**

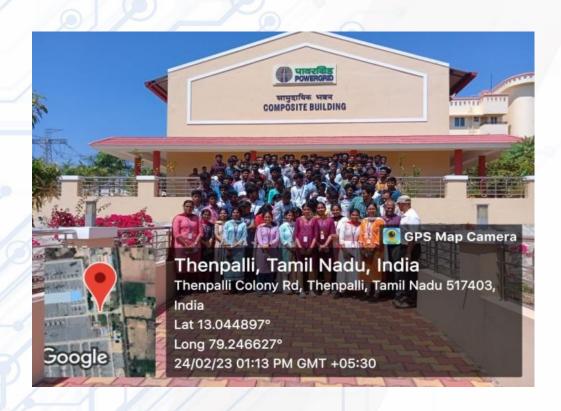
III Year A and B students (2020–24 Batch), visited the Thiruvellam Ranipet 756KV Gas Insulated Substation on 24<sup>th</sup> February 2023. Dr. N K Mohanty, Professor, Dr. C. Venkatesan, Asst. Professor, Dr. M Rajalakshmi, Asst. Professor, accompanied students to the site.











# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

# **NEWSLETTER**

#### **EDITORIAL TEAM**

Dr. KR. Santha, Vice Principal & HOD Dr. Sudhakar K Bharatan, AHOD Dr. R. Karthikeyan, Associate Professor Ms. S. Sinthamani, Assistant Professor Mr. S. Bharadwaj, Assistant Professor

Mr. S. Sabari & Ms. N. Harini, III year