SVCE | Sri Venkateswara College of Engineering

VIDYUT
OFFICIAL NEWSLETTER

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

NEWSLETTER EDITORIAL TEAM

Dr. KR. Santha, Professor & Head

Dr. Sudhakar K Bharatan, Professor

Dr. R. Karthikeyan, Associate Professor

Ms.S. Sinthamani,Assistant Professor

Mr.S.Bharadwaj, Assistant Professor

Ms. B. Pavithra, II year

Mr. L. Hrtish Calvin, II year

Mr. W. Sherwin Bino, II year

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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 therequirements of Industries and society.

M3: To promote a culture of research, innovation and entrepreneurship inthe 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.

An Article by Ms. B. Rajeswari (Research Scholar) on "Recent Developments in Renewable Energies"

Watt Power unveils state-of-the-art solar PV factory inChennai

WattPower, a solar photovoltaic solution provider based in Germany, has inaugurated its cutting-edge production facility in Chennai, Tamil Nadu. This development comes in response to the escalating demand for sustainable energy solutions in India, the company said in a release. The 3.5-acre facility, which boasts 40 percent dedicated green space, is not merely a production hub but a symbol of hope for a greener future, according to a company release. With an initial investment of $172 million and an annual production capacity of 10 GW, WattPower said it is set to elevate India's solar PV industry to unprecedented heights. Furthermore, this venture will create approximately 180 direct and indirect job opportunities, contributing to the growth of India's employment sector.

WattPower's technology, specializing in advanced string inverters for solar power systems, promises to revolutionize India's renewable energy landscape. With a presence in 17 countries across Central & Western Europe and South Asia, WattPower has delivered over 17 gigawatts of clean, green, and carbon-neutral energy.

Reference:https://www.cnbctv18.com/business/wattpower-unveils-state-of-the-art-solar-pv-factory-in-chennai-17879671.htm **Published: Sept 25, 2023**

Student Achievements

- Mr. **ASHWANTHRAM T IV/EEE** participated in Badminton (Men) and Mr.**VASANTH III/EEE** participated in Ball Badminton (Men) teams showed a stunning performance and clinched the following positions in Anna University zonal tournament 2023.

1. Badminton (Men) - Winners (Organized by SVCE on 16th&17th Oct 23)

2. Ball Badminton (Men) - Third (Organized by CEG on 13th Oct 23)

Participation in International Conference

Ms. Abiramavallli M, Ms. M B Diviya Bhavaani, Ms Loganayagi students (from 2019-23 batches) and Ms. S.Arulmozhi presented a paper titled "IoT Enabled E-Vechicle Charging System with Battery Monitoring and Charge Scheduling" at the International Conference on "Cyber-Physical Systems, Power Electronics, and Electric Vehicles" organized by Mahindra University, Hyderabad, from 28- 30th September, 2023.

Ms. M B Diviya Bhavaani, presenting the paper in international conference

- **Ms. Hemavathi S** and **Ms. Mega Shee M** participated and won 2nd place with a cash prize of Rs.1000 in the "D-Sim" event in the Incvente'23 – a national level tech-fest organized bySSN College of Engineering & Shiv Nadar University, Chennai. The first round is about quiz and the second round is about simulation of circuit


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CERTIFICATE

OF ACHIEVEMENT

This is to certify that

HEMAVATHI . S

of SVCE

has been placed IInd in the event D- SIM

conducted at Invente'23 - a national level tech-fest organized by

SSN College of Engineering, Chennai & Shiv Nadar University, Chennai.

Dr. V. S. Nagarajan
Faculty Coordinator

Dr. V. Rajini
Head of the Department

AEF


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OF ACHIEVEMENT

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MEGA SHREE . M

of SVCE

has been placed IInd in the event D- SIM

conducted at Invente'23 - a national level tech-fest organized by

SSN College of Engineering, Chennai & Shiv Nadar University, Chennai.

Dr. V. S. Nagarajan
Faculty Coordinator

Dr. V. Rajini
Head of the Department

AEF


TMB

Chennai-Thiruvanmiyur Branch,
3, Thiruvalluvar Salai Thiruvanmiyur
Chennai 600 041
IFS Code : TMBL0000158

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Authorised Signatory

Please sign above

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- **Mr. Aswin Raj M P, Mr. Hritish Calvin** and **Mr. Haridharan M R** participated and won 2nd place with a cash prize of Rs.1500 in the "Enigma" event in the Incvente'23 – a national level tech-fest organized by SSN College of Engineering & Shiv Nadar University, Chennai. The first round is about quiz and the second round is about simulation of circuit.

- **Mr. Sakthivel D, Mr. Vishnukanth L** and **Mr. Tharun B** of 2nd year participated and won 1st place with a cash prize of Rs.1500 in the "Bit Rise" event in the Incvente'23 – anational level tech-fest organized by SSN College of Engineering & Shiv Nadar University, Chennai. The first round is about quiz and the second round is about simulation of circuit.


SHIV NADAR UNIVERSITY

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Innovation Incarnated

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OF ACHIEVEMENT

This is to certify that

SAKTHIVEL . D

of SVCE

has been placed Ist in the event BITRISE

conducted at **Invente'23** – a national level tech-fest organized by
SSN College of Engineering, Chennai & **Shiv Nadar University**, Chennai.

Dr. V. S. Nagarajan
Faculty Coordinator

Dr. V. Rajini
Head of the Department


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VISHNUKANTH . L

of SVCE

has been placed Ist in the event BITRISE

conducted at **Invente'23** – a national level tech-fest organized by
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Dr. V. S. Nagarajan
Faculty Coordinator

Dr. V. Rajini
Head of the Department


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THARUN . B

of SVCE

has been placed Ist in the event BITRISE

conducted at **Invente'23** – a national level tech-fest organized by
SSN College of Engineering, Chennai & **Shiv Nadar University**, Chennai.

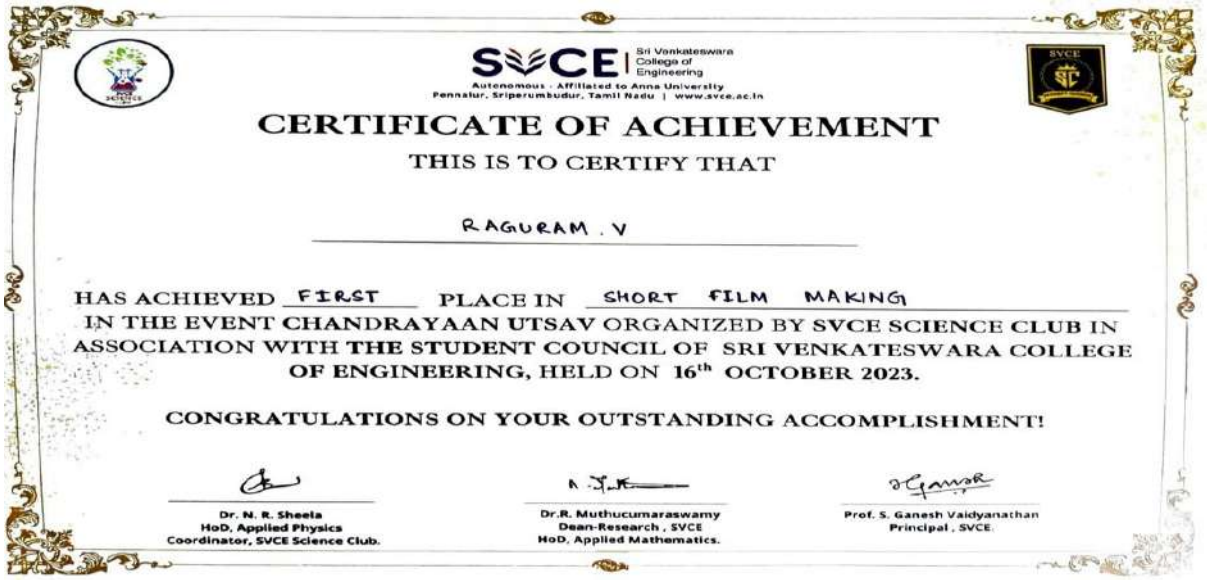
Dr. V. S. Nagarajan
Faculty Coordinator

Dr. V. Rajini
Head of the Department

- SVCE Science club in association with Students Council hosted an event "Chandraayan utsav-3" on 16th October, 2023.

Sri V. Kumbakarnan, former Scientist/Engineer-H from Satish Dhawan Space Centre (SDSC) SHAR, ISRO, Sriharikota, was the esteemed guest of honour. He shared his expertise and insights on, "ISRO's LAUNCH COMPLEX -An OVERVIEW". This event promised to be a valuable opportunity for the students to gain a deeper understanding of the intricate workings of ISRO's launch facilities.

In that a team of I year students from EEE (Raguram.V), AIDS, INT won the first place in short film making competition.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CERTIFICATE OF ACHIEVEMENT

THIS IS TO CERTIFY THAT

RAGURAM . V

HAS ACHIEVED FIRST PLACE IN SHORT FILM MAKING IN THE EVENT CHANDRAYAAN UTSAV ORGANIZED BY SVCE SCIENCE CLUB IN ASSOCIATION WITH THE STUDENT COUNCIL OF SRI VENKATESWARA COLLEGE OF ENGINEERING, HELD ON 16th OCTOBER 2023.

CONGRATULATIONS ON YOUR OUTSTANDING ACCOMPLISHMENT!

Dr. N. R. Sheela
HoD, Applied Physics
Coordinator, SVCE Science Club.

Dr.R. Muthucumaraswamy
Dean-Research , SVCE
HoD, Applied Mathematics.

Prof. S. Ganesh Vaidyanathan
Principal , SVCE.

- **Mr. Sree Harrissh P, NCC(Air Wing)** participated in All India Vayu Sainik Camp (AIVSC) 2023 and has been presented with a medal and memento for his participation by Deputy Director General

Faculty Achievements

Invited talk at DRDO

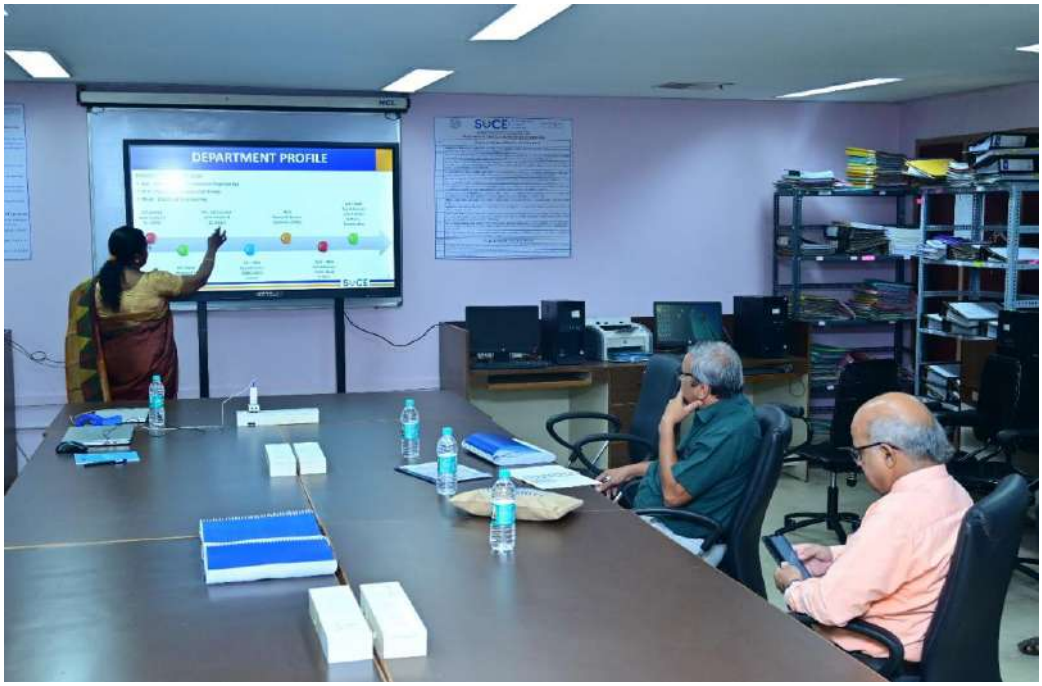
- Dr. Sudhakar K Bharatan, Professor/EEE, received an invitation to visit Solid State Physics Laboratory (SSPL), DRDO, New Delhi. He gave a Guest lecture titled “MBE Molecular-beam Epitaxy Growth and Characterization of III-V Semiconductor for defense application and fabrication of thin film-based nano structures" on 31st October, 2023. The highlights of the lecture were showcasing the DST-FIST capabilities at SVCE and possibilities of research collaboration between SVCE and SSPL, DRDO, through projects and consultancy. Various departments at SSPL, such as MBE, MOCVD, Fabrication and Characterization attended the lecture.

National Board of Accreditation (NBA) Peer Team Visit

National Board of Accreditation (NBA) peer team visited department of EEE department on 13th and 14th October, 2023.

Day 1: 13th October 2023

Moment captured during peer team entering the campus



Presentation by Dr.KR.Santha, Professor and Head of the Department, to the peer teammembers

Discussion with peer team members

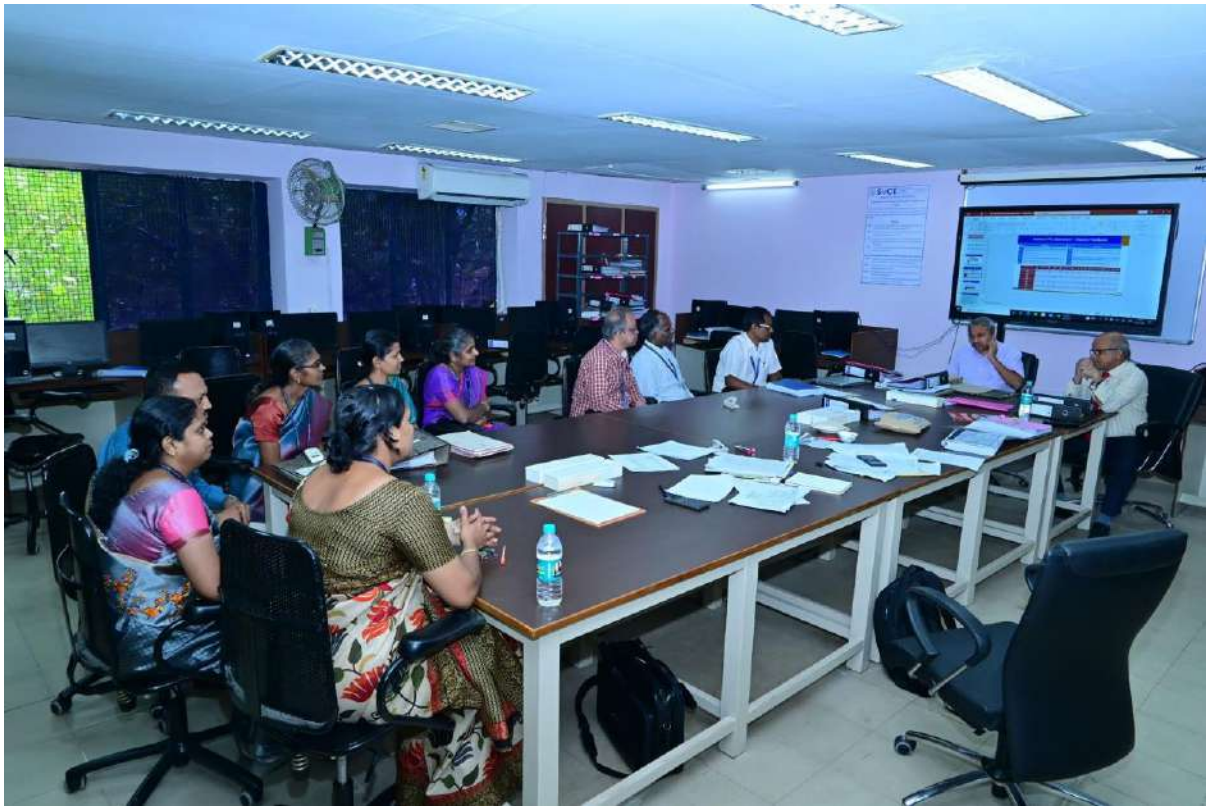
Peer team visit to DC Machines Laboratory

Day 2:14th October 2023

Project demonstration by the students in Microprocessors laboratory

Project demonstration by students in Micro Processor Laboratory

Project Demonstration by students at Power Electronics Laboratory



Faculty Interaction with peer team

Ayudha Pooja Celebrations

Ayudha pooja celebration at department of EEE at DC Machines laboratory, on 20th October, 2023. Dr.KR.Santha, Professor and Head lighted the villaku. Prayer song sung by students. Prasadam was distributed to all staffs.

Placement Details

The following final year students were placed during the campus drive conducted during the month of September and October, 2023.

NAME	COMPANY
Ajay Rohith	NEWGEN
Aniruddh Sakthivel	Tata Elsxi
Augustin A	NEWGEN
Augustin A	Accenture
Bharathwaj P	Tata Elsxi
Deepak H	Mcdermott
Dhaanya Kumar G	Tata Elsxi
Dharini K N	Worley
Dhivya B	Accenture
Harini N	EmbedUR
Mrithuna Rashmi	Expeditors
Mohammed Kaif	NEWGEN
Mohammed Kaif	Accenture
Mohammed Kaif	J G C India EPC Pvt Ltd
Mohanishwar	Musigma
Naveen Kumar R A	Celestica
Nikhil R Rathi	NEWGEN
Rajeshkumar M	NEWGEN
Ramana R P	Tata Elsxi
Sakthivelu K M	NEWGEN
Sharath Kumar V	Mcdermott
Sharon Monisha	Mobichip
Sudharsan N	Tata Elsxi

Alumni Feedback

Mouli B (2018-2022 batch)

Electrical Engineer, Siemens technology and services private Ltd

SVCE had guided me for creating excellent foundation for my future with my beloved teaching staffs and friends both in terms of academic and extracurricular activities. I am very much proud to be an alumnus of SVCE.