

SRI VENKATESWARA COLLEGE OF ENGINEERING

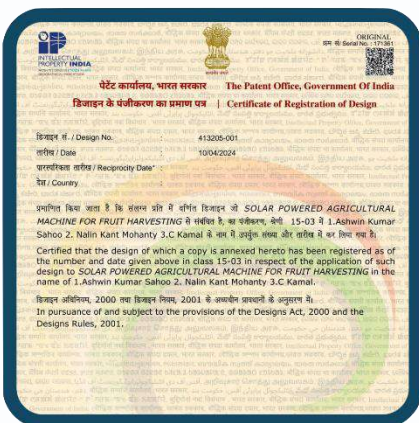
VIDYUT

NEWSLETTER

MAY 2024

Volume II - Issue 5

**DEPARTMENT OF
ELECTRICAL AND ELECTRONICS ENGINEERING**



NEWSLETTER EDITORIAL TEAM

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

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III Year



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II Year



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II Year

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ABOUT THE DEPARTMENT

Welcome to the Department of Electrical & Electronics

Engineering (EEE) at Sri Venkateswara College of Engineering (SVCE) in Sriperumbudur.

Established in 1985, the department was created to address the curriculum requirements of Electrical engineering subjects within Electronics and Communication Engineering, Mechanical Engineering, and Computer Science Engineering. Initially admitting 60 students, the department now accommodates 120 students, reflecting the growing demand for its programs.

The department holds permanent affiliation with Anna University and has been accredited by the National Board of Accreditation (NBA) for five consecutive years. Additionally, it offers a postgraduate program (M.E) in Power Electronics and Drives since 2002, with an intake capacity of 6 students.

Equipped with state-of-the-art laboratories, the department is recognized as a nodal research center by Anna University. Its faculty and staff members are highly qualified and experienced, possessing proven abilities and skills.

Graduates of the department have been successfully placed in renowned companies, while a significant number pursue advanced studies abroad.

The Department goes beyond the curriculum to nurture young minds by fostering technical clubs that promote technical events, community development, societal impact, and programs on universal values and ethics.

In line with this commitment, the Department of Electrical & Electronics Engineering has established the Institute of Electrical and Electronics Engineers (IEEE) and the Association of Electrical and Electronics Engineers (AEEE) to support students' innovations.

EEE – WE LIGHT THE WORLD



VIDYUT – May 2024

VISION AND MISSION OF THE INSTITUTION AND DEPARTMENT

Vision of the Institution

To gain acclaim as an institution of eminence on a national and global scale, through the contributions and accomplishments of the individuals, nurtured by the facilities and support.

Mission of the Institution

M1. To establish a motivational framework through provision of infrastructure and resources that actively engages the individuals in core activities of learning, education, research and innovation

M2. To advance the competency of the individuals to comprehend the requirements of the society and fulfill them, through honing of their skills and virtues.

M3. To provide engineering and technological solutions for challenges identified at national and global levels.

Vision of the Department

To become a premier Department in Electrical and Electronics Engineering through quality education, research and innovation, to address contemporary societal challenges with cutting-edge technologies.

Mission of the Department

M1: To periodically upgrade the facilities and resources such that the students excel in Electrical and Electronics Engineering education.

M2: To equip students with a well-defined domain specific curriculum thereby achieve industry standards and sustainable development of the society.

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

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

PROGRAM EDUCATIONAL OBJECTIVES AND

PROGRAM OUTCOMES – UG(EEE)

Program Educational Objectives (PEOs) UG-EEE

PEO1: 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

PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES – UG(EEE)

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)

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 EDUCATIONAL OBJECTIVES AND **PROGRAM OUTCOMES – PG(EEE)**

Program Educational Objectives for PG Program (PEOs)

- I. Contribute professionally in fields of Power Electronic and related domains.
- II. Manage and execute research and development projects leading to technological solutions that address industries and society.
- III. Succeed in pursuing higher studies in engineering domains.

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.

BEST YRC UNIT AWARD 2024

10th MAY 2024



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YRC-SVCE Unit has been selected for BEST INSTITUTE AWARD & Best YRC Programme officer Award among the Engineering colleges in integrated Kancheepuram & Chengalpattu Districts.

On behalf of SVCE **Dr.KR Santha, Vice Principal** received the award, given in the venue SHIV NADAR UNIVERSITY, CHENNAI, on 10.05.2024.

VIDYUT - May 2024

DEPARTMENT ACTIVITY

MAY 2024

Core placement training conducted

Core placement training for the Final year students (2021-25 Batch) intended for the campus recruitment in Samsung India Electronics Pvt Ltd was conducted. The training was scheduled from 24.4.2024 to 30.4.2024 & 9.5.2024 to 10.5.2024 in the domains of PLC, HMI, Robotics and Industrial drives.

A total of 49 interested students participated in the program. Faculty who handled the training session are **Dr.S.Kumaravel, Dr.N.Shanmugavadivu, Dr.D.Amudhavalli, Dr.M.Sankar and Mr.S.Thamizmani.**

Four students trained in the Core placement training for the Final year students (2021-25 Batch) program and got placed in the placement drive conducted by Samsung on 13.5.2024.



Viswasree S



Dinesh C



Tharun Balaji



Mohana Krishnan

FACULTY ACHIEVEMENTS

Guest Lecture Delivered

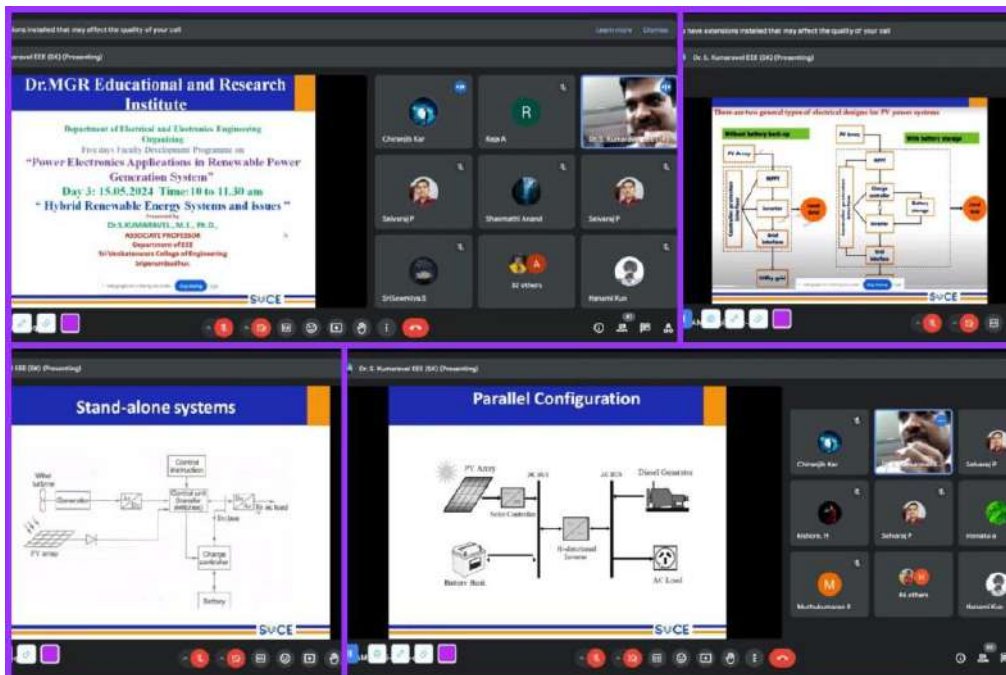
13th – 17th MAY 2024



Dr.S.Kumaravel
Associate Professor



Dr.C.Kamal
Assistant Professor



Dr. S.Kumaravel, Associate Professor and Dr.C.Kamal, Assistant Professor delivered an expert lecture in the Five days Faculty Development Programme on “Power Electronics Applications in Renewable Power Generation System” scheduled from 13.5.2024 to 17.5.2024 at Dr M.G.R Educational and Research Institute (Deemed to be University), Chennai.

FACULTY ACHIEVEMENTS

Proposal Submitted

24th MAY 2024



Dr. Sudhakar K Bharatan
Professor



Dr. KR. Santha
Professor & Head

Proposal submitted on 24.05.2024 for Six Days Faculty Development Program on “Advanced Semiconductor Devices and AI Chips – Research Opportunities and Challenges” 16th -21st December 2024 supported by AICTE Training and Learning(ATAL) Academy by **Dr. Sudhakar K Bharatan** as Co ordinator and **Dr. KR Santha** as Co Co ordinator.

This program(FDP) will help in understanding of the design and processing of reconfigurable processors. Additionally, the FDF will provide hands-on training in the fabrication of thin film transistors, photodetectors and solar cells in the DST FIST sponsored Interdisciplinary Nano Research Centre facility at SVCE.

FACULTY ACHIEVEMENTS

Best Paper Award

24th – 26th MAY 2024



Dr. S. G Bharathidasan
Professor



Dr. M. Sankar
Associate Professor



Dr. S. G. Bharathidasan, Dr. M. Sankar and students Girija D M, Akshaya K, Deebika J B from batch (2019-2023) under their guidance has presented a paper titled **“Optimal siting of EV high power charging spot infrastructure with PV for power system contingency management – Paper ID 75”** in the 5th international conference on “Electric Power and Renewable Energy – EPREC 2024” organized by Department of Electrical Engineering, NIT, Jamshedpur, Jharkhand, India during 24th to 26th May 2024. Also this Paper ID 75 has been selected as the best paper in this 3 days International Conference.

FACULTY ACHIEVEMENTS

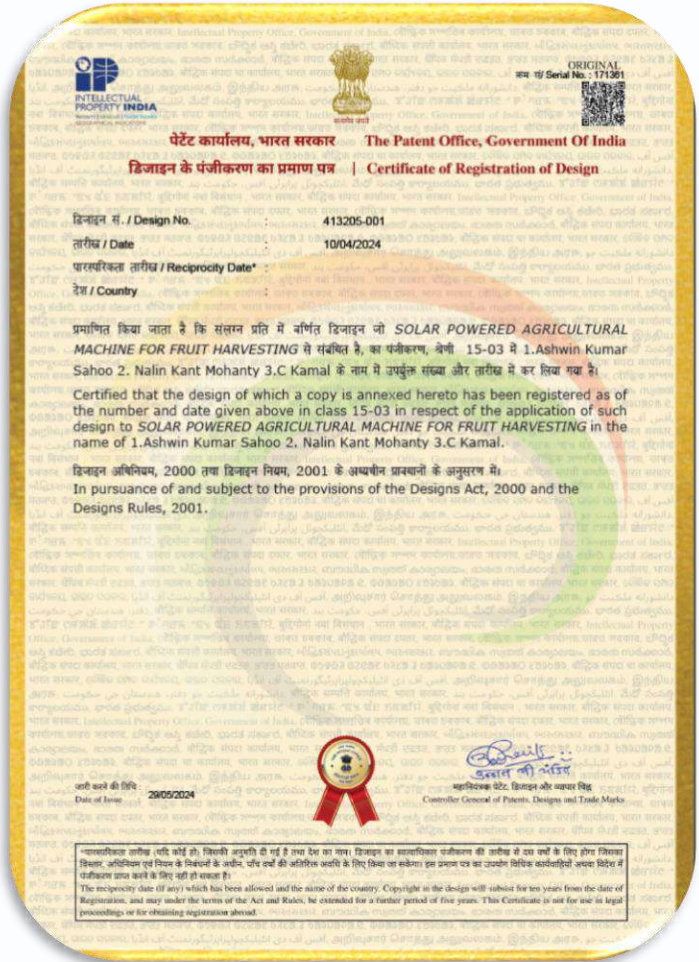
Patent Granted 29th MAY 2024



Dr. Nalin Kant Mohanty
Professor



Dr. C. Kamal
Assistant Professor



Dr. Nalin Kant Mohanty and Dr. C. Kamal has successfully registered a patent design titled 'SOLAR POWERED AGRICULTURAL MACHINE FOR FRUIT HARVESTING' with Design number 413205-001 dated 10-04-2024 in Intellectual Property India, Government of India on 29-05-2024.

FACULTY PARTICIPATION

Participation in "Lab to market conclave"

10th MAY 2024



A team of 11 students from SVCE participated in "Lab to market conclave", an exhibit of start-up ideas organised by PALs at IIT Madras Research Park on 10-5-24.

The students showcased their start-up ideas along with their prototypes to the panel members. The students were guided by Entrepreneurship Development Cell of SVCE headed by Dr. S Ilayavel, **Dr. N K Mohanty**, Dr. Anand Babu and others.

FACULTY PARTICIPATION

Participation in “Two Days Training and Exposure Visit”

21st and 22nd MAY 2024



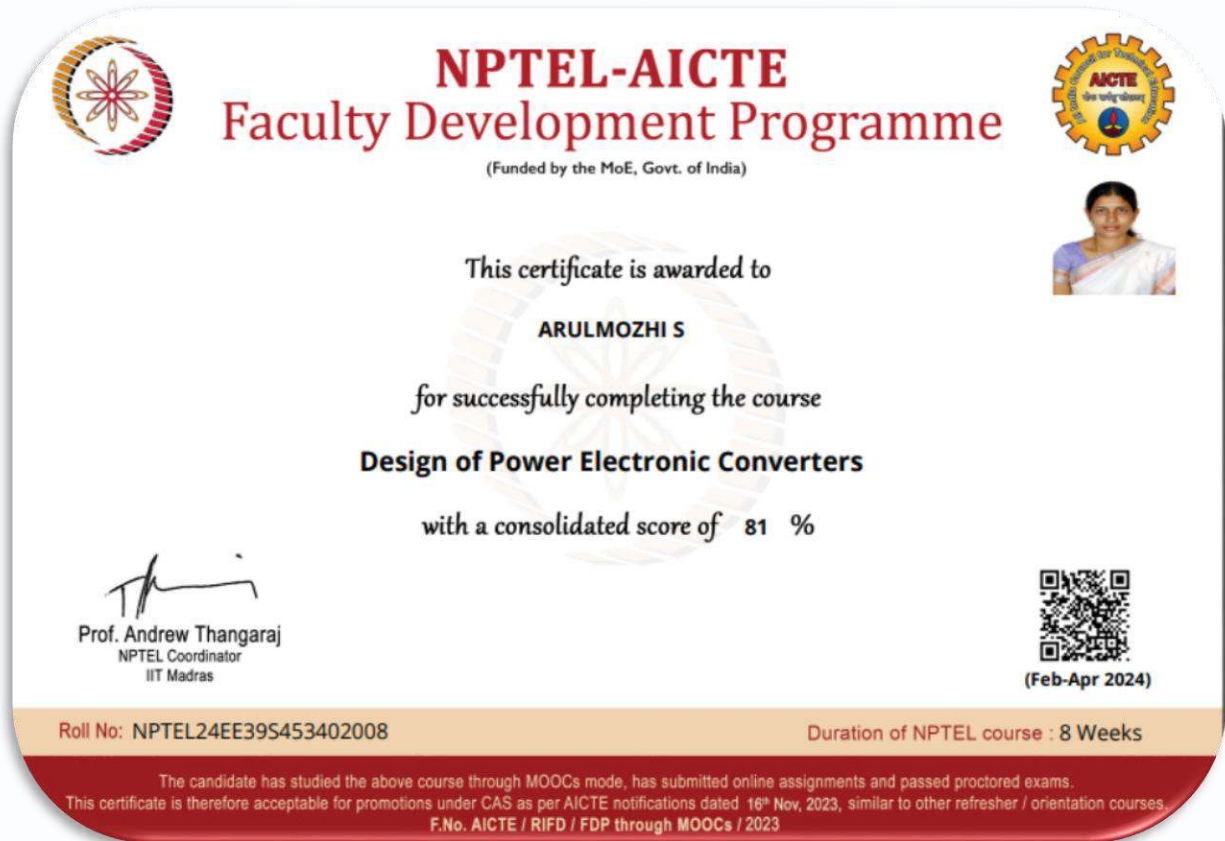
Institution Innovation Council of SVCE (IIC SVCE Sripurambudur) Organizing Two Days Training and Exposure Visit from 21-05-2024 to 22-05-2024 at IITM Research Park, Anna University Center for Entrepreneurship Development and Incubation Center, FORT Innovation Center, SVCE EPIC Incubation Center, Nano Technology center and Center for Excellence in Additive manufacturing, SVCE.

This Training and Exposure Visit is Sponsored by the Ministry of Education Innovation Cell, AICTE, Govt of India Under the Mentor Mentee Scheme.

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FACULTY PARTICIPATION

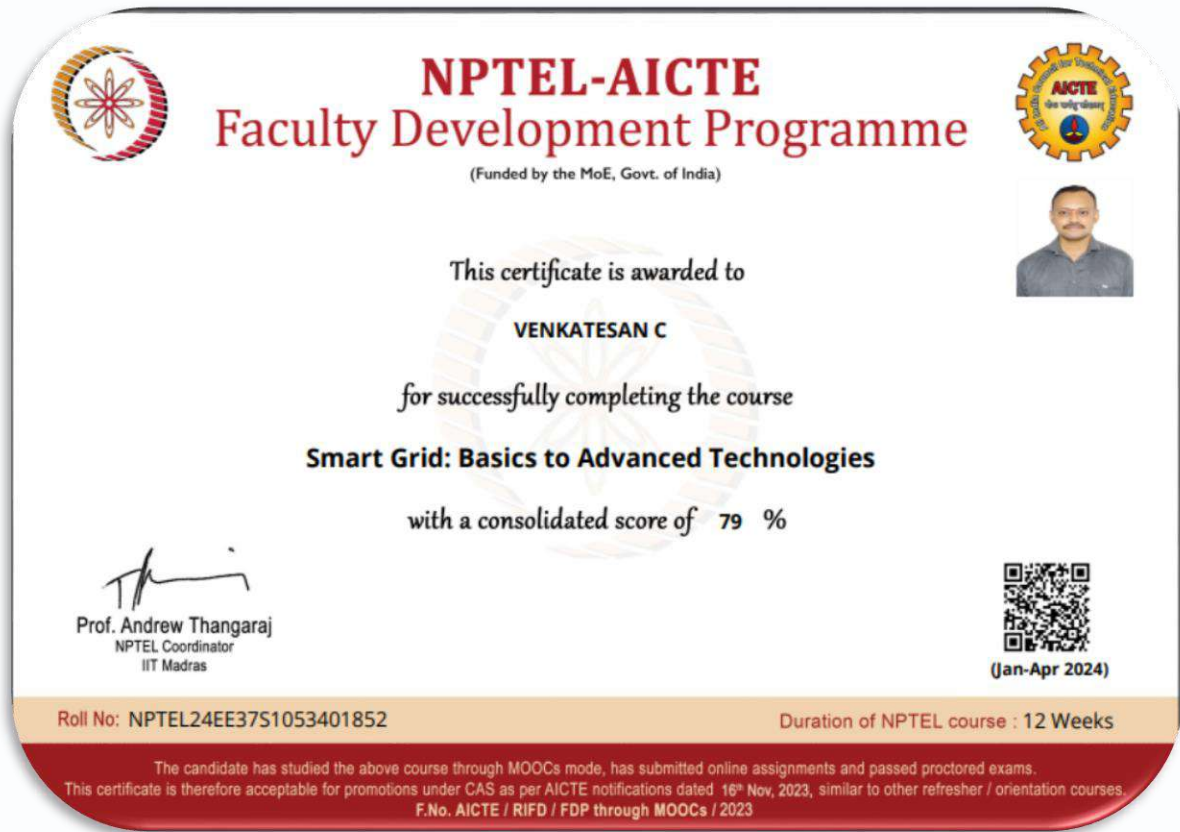
NPTEL – Courses Completed



Dr.S.Arulmozhi, Associate Professor has successfully completed a course titled “Design of Power Electronic Converters” with a consolidated score of 81% in the faculty development programme organized by NPTEL-AICTE funded by MoE, Govt. of India.

FACULTY PARTICIPATION

NPTEL – Courses Completed



Dr.C.Venkatesan, Associate Professor has successfully completed a course titled “Smart Grid: Basics to Advanced Technologies” with a consolidated score of 79% in the faculty development programme organized by NPTEL-AICTE funded by MoE, Govt. of India.

FACULTY PARTICIPATION

Participation in FDP/ STTP/ Workshop

Participation in FDP
6th – 11th MAY 2024



Dr. Nalin Kant Mohanty
Professor, EEE

Dr. Nalin Kant Mohanty, Professor has successfully completed the ISTE approved Self-Financing Faculty Development Program on “Research Proposal Writing & AI Tools in Education and Research” held during 06.05.2024 to 11.05.2024 organized by P.R. Pote Patil College of Engineering & Management, Amravati, Maharashtra.



FACULTY PARTICIPATION

Participation in FDP “Design of IoT applications for smart city infrastructure” 13th – 17th MAY 2024



Dr.S.Sethuraman
Associate Professor, EEE

Dr.S.Sethuraman, Associate Professor has participated in the DST SERB sponsored one week faculty development programme on “Design of IoT applications for smart city infrastructure” organized by Department of Computer Science and Engineering, Mepco Schlenk Engineering college during 13th – 17th May 2024.



FACULTY PARTICIPATION

Participation in STTP
“Process Modelling, Simulation and Control”
23rd - 29th MAY 2024



Dr. KR. Santha
Professor & Head



Dr. S. G Bharathidasan
Professor



Dr.C.Kamal
Assistant Professor



Mrs.M.Sasikala
Assistant Professor



Mr. D S Purushothaman
Assistant Professor



Mrs. S. Sinthamani
Assistant Professor

Faculty members participated in the Training Program (STTP) on Process Modelling, Simulation and Control from 23rd to 29th May 2024, conducted by Department of Chemical Engineering, SVCE.

STUDENTS PARTICIPATION IN
INTERNATIONAL CONFERENCE

2nd MAY 2024



MADHUMITHA B



POORANI B

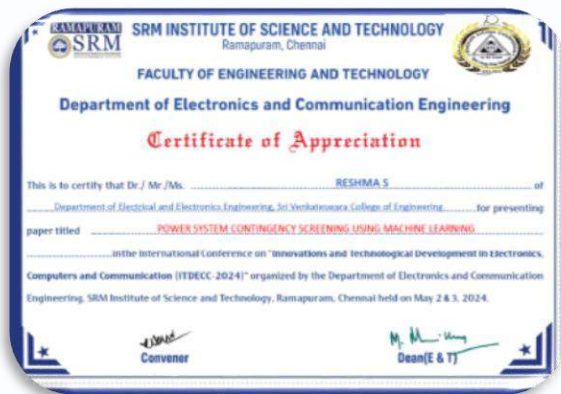


RESHMA S

IV year EEE Students **MADHUMITHA B, POORANI B , RESHMA S** has presented the paper titled "**POWER SYSTEM CONTINGENCY SCREENING USING MACHINE LEARNING**" under the guidance of **Dr.S.Kumaravel, Associate Professor** in the International Conference on "Innovations and Technological Development in Electronics, Computers and Communication (ITDECC- 2024)" at SRMIST, Ramapuram on 2nd May 2024.

The certificates are attached below.

STUDENTS PARTICIPATION IN INTERNATIONAL CONFERENCE



STUDENTS PARTICIPATION IN
INTERNATIONAL CONFERENCE

10th MAY 2024



DEEPAK H



AUGUSTIN A

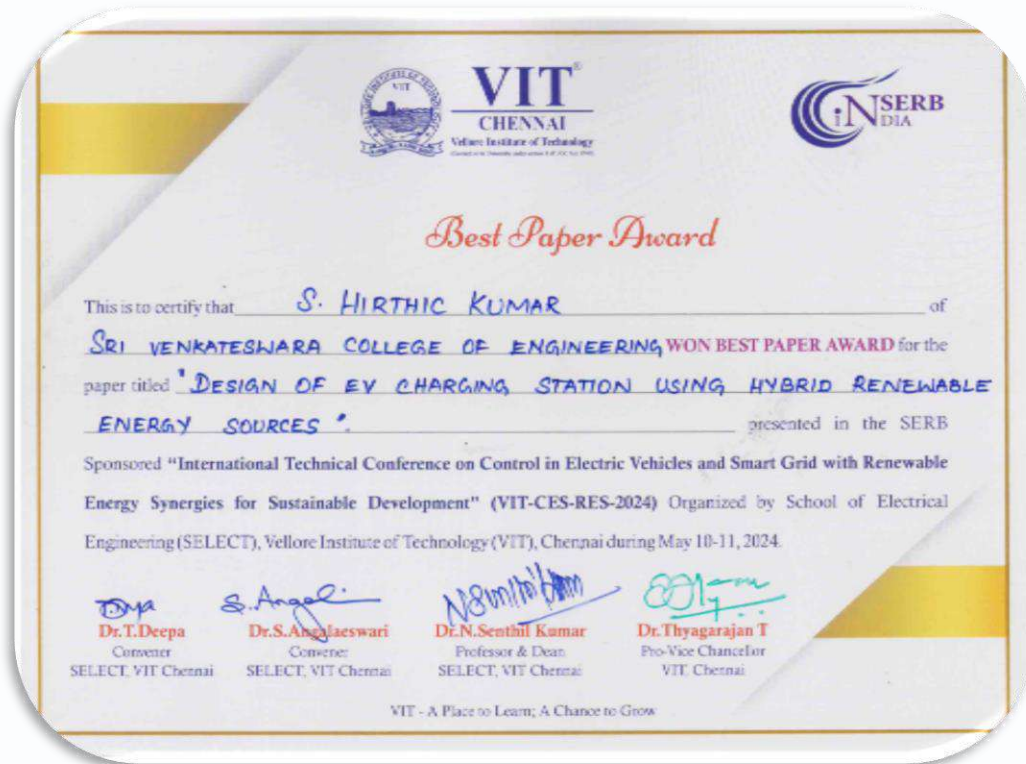
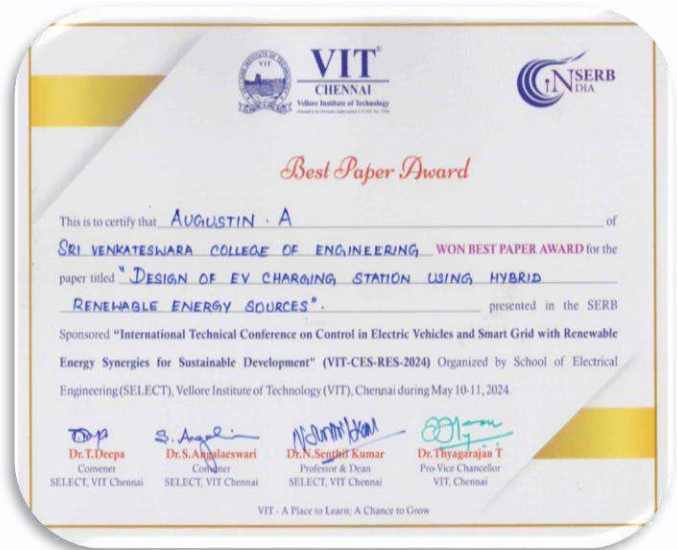
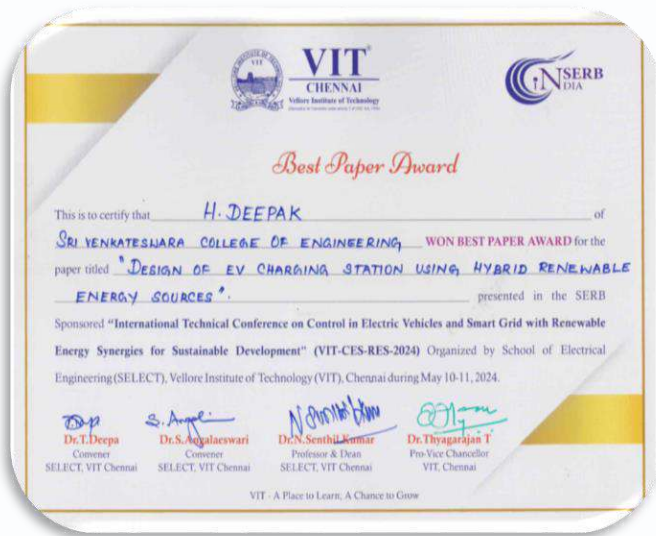


HIRTHIC KUMAR S

Our IV year EEE Students **DEEPAK H, AUGUSTIN A, HIRTHIC KUMAR S** has received Best Paper Award for the paper titled "**DESIGN OF EV CHARGING STATION USING HYBRID RENEWABLE ENERGY SOURCES**" under the guidance of **Dr.S.Kumaravel, Associate Professor** in the Two days International Conference on Control in Electric Vehicles and Smart grid with Renewable Energy Synergies for Sustainable Development (VIT-CES-RES) conducted by the School of Electrical Engineering, Vellore Institute of Technology, Chennai on 10th May 2024.

The certificates are attached below.

STUDENTS PARTICIPATION IN INTERNATIONAL CONFERENCE



STUDENTS PARTICIPATION IN
INTERNATIONAL CONFERENCE

10th MAY 2024



B. Akash Narayana



V B Barath Baasu



J P Gobi Krishna

IV year EEE Students (2023 Passed Out) **B. Akash Narayana, V B Barath Baasu, J P Gobi Krishna** has presented the paper titled "**Dynamic Wireless Charging for Electric Vehicles**" under the guidance of **Dr.S.Kumaravel, Associate Professor** in the Two days International Conference on Control in Electric Vehicles and Smart grid with Renewable Energy Synergies for Sustainable Development (VIT-CES-RES) conducted by the School of Electrical Engineering, Vellore Institute of Technology, Chennai on 10th May 2024.

The certificates are attached below.

STUDENTS PARTICIPATION IN INTERNATIONAL CONFERENCE

