



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)



School of Electrical and Communication

Department of Electrical and Electronics Engineering



ANNUAL REPORT

2024-2025

Foreword



**Col. Prof. Vel. Dr. R. Rangarajan Founder
President & Chancellor**



**Dr. Mrs. Sagunthala Rangarajan
Foundress President**

Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology has been on the path of delivering quality education by developing the young vibrant student fraternity with ethical and moral values, while boosting their research culture and innovative technical skills.

Our infrastructure is vast with well-equipped laboratories, highly qualified and motivated faculty, who work with commitment and dedication for the cause of education and research. At Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, research and innovation are regarded as pillars of our success. Most of the faculty members are involved in academic activities, research publications and Intellectual Property Rights.

We deeply appreciate that the Department of Electrical and Electronics Engineering has brought the annual report for the academic year 2024-25 highlighting the faculty and student accomplishments, funded projects and industry interactions etc. Updating with recent trends in technology is very important in the life of an educationalist and all are supported as well as encouraged in the department.

We congratulate all the faculty members and students of the Department of EEE for their worthy efforts and wish them the very best in all imminent endeavors.

Foreword

Mrs. Rangarajan Mahalakshmi Kishore
Chairperson & Managing Trustee



It is with much delight that I pen down a few words about annual report of the Electrical and Electronics Engineering department for the academic year 2024-25. I am very happy to witness the achievements of the faculty members and students in various academic and research activities.

I congratulate the entire team for the smart work they have put forth to stretch this annual report accomplishments to its much-needed color and vigor. It brings me great pleasure to commend the department for turning out talented-driven, and innovative engineers whom the society needs to meet new and challenging issues. My best wishes go out to everyone who had contributed and looking forward to another year of success.

Foreword

Prof. Dr. Rajat Gupta
Vice Chancellor

Vel Tech Rangarajan Dr.Sagunthala
R&D Institute of Science and
Technology



Dear Esteemed Faculty, Staff, and Students,

As we embark on this reflective journey, I am immensely proud of the remarkable accomplishments and advancements that have defined our trajectory over the past year.

In the pursuit of academic excellence, our dedicated faculty members have continued to uphold the highest standards of teaching, research, and mentorship. Their unwavering commitment to fostering a dynamic learning environment has undoubtedly shaped the next generation of brilliant minds in the field of Electrical and Electronics Engineering. Our students have showcased exceptional brilliance and ingenuity in their academic pursuits and extracurricular activities. Their enthusiasm, determination, and passion for innovation continue to be a source of inspiration for all of us.

Throughout the year, the department of Electrical and Electronics Engineering has made significant strides in cutting-edge research and development, contributing to groundbreaking discoveries and technological advancements. We have actively engaged in initiatives aimed at promoting sustainable development, technological literacy, and social responsibility.

I extend my heartfelt gratitude to each and every member of the department for their unwavering dedication and hard work. Your relentless efforts have been instrumental in making our department a beacon of excellence in the realm of Electrical and Electronics Engineering. Together, let us embrace the opportunities that lie ahead and strive to create a brighter, more sustainable future through our collective endeavors.

Message from Dean's Desk

Prof. Dr. R.S. Valarmathi

**Dean – School of Electrical
and Communication**



Dear Colleagues, Friends, and Supporters,

I am pleased to extend a warm welcome to you all as we present the Annual Report of the department of EEE for the academic year 2024-25. As the Dean of this esteemed school, it is my privilege to offer you a glimpse into the remarkable journey and achievements we have embarked upon in the past year. The School of Electrical and Communication has always been at the forefront of pioneering research, innovation, and education in the fields of electrical and electronics engineering, electronics and communication engineering, Biomedical Engineering and Bio-technology and related inter-disciplines. This report serves as a testament to our unwavering commitment to excellence and progress in these domains.

Throughout academic year 2024-25, we have seen our faculty, students, and staff rise to new heights, surpassing boundaries, and making significant contributions to both academia and industry. The pages of this report will take you on a journey through our groundbreaking research projects, collaborative initiatives, academic programs, and community engagement efforts. Our faculty members have continued to push the boundaries of knowledge, producing cutting-edge research that has the potential to reshape industries and improve the quality of life for people around the world. Our students, the future leaders of our fields, have demonstrated exceptional dedication and creativity, leaving an indelible mark on our school and society.

The School of Electrical and Communication is committed to advancing the frontiers of knowledge, nurturing the talents of our students, and serving as a beacon of excellence in our field. I invite you to explore the contents of this report and gain a deeper understanding of the transformative work that has taken place within our school. Together, we can continue to push the boundaries of innovation and education in electrical and electronics engineering. Thank you for your continued trust and support as we embark on another year of progress and growth. I am confident that the School of Electrical and Communication will continue to lead the way in shaping the future of our disciplines.

MESSAGE FROM THE DEPARTMENT HEAD - EEE

Dr. S. Ramesh

HoD & Professor

**Department of Electrical and
Electronics Engineering**



Dear Esteemed Colleagues, Stakeholders, and Friends,

It is with great pleasure and a deep sense of pride that I present the Annual Report of the Department of Electrical and Electronics Engineering for the academic year 2024-25. As the Head of this department, it is my distinct honor to present this comprehensive overview of our achievements, progress, and endeavors over the past year.

Our department has always strived for excellence in research, education, and innovation, and I am thrilled to report that academic year 2024-25 has been another remarkable year for us. We have continued to push the boundaries of knowledge in electrical and electronics engineering, while also making a meaningful impact on society through our work.

In this report, you will find detailed insights into our research initiatives, collaborations, academic programs, and community engagement efforts. Our dedicated faculty members, talented students, and committed staff have collectively contributed to our department's success, and their hard work and dedication shine through the accomplishments we've achieved. Our B.Tech. program graduates who have preferred placements through the campus placement program have received 100% placement.

I want to express my heartfelt gratitude to all our faculty members, students, staff, alumni, industry partners, and supporters who have played a pivotal role in our department's continued growth and success. Your unwavering support and collaboration have been instrumental in our journey, and I look forward to our continued partnership in the years to come.

I encourage you to delve into the pages of this report to gain a deeper understanding of the remarkable work that has taken place within our department. Together, we can look forward to an even brighter future filled with groundbreaking research, transformative education, and meaningful contributions to the field of electrical and electronics engineering.

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DEPARTMENT TIMELINE

OUR JOURNEY

MILESTONES & ACHIEVEMENTS

Building Excellence Since Day One

2023



B.Tech, EEE programme is accredited
by NBA for 3 years from
2023-24 to 2025-26

2020



AICTE - SPDC

2019



AICTE - MODROBS
Power Electronics Lab

2009



Deemed to be University
B. Tech. EEE
M. Tech. - Power Electronics
Ph.D. Programme

2006



B.E. EEE
NBA Accreditation
3 years

2001



B.E. EEE
(Anna University)

1997



B.E. Electrical and Electronics Engineering
(Madras University)

DEPARTMENT PROFILE

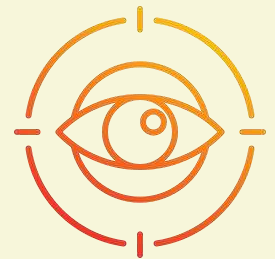
- ❑ The department of Electrical and Electronics Engineering has been started in the year 1997. The department offers B.Tech.-Electrical and Electronics Engineering (EEE), B.Tech Electrical and Electronics Engineering with Specialization in Computer systems, M.Tech.-Power Electronics and Ph.D. programmes.
- ❑ The B.Tech. EEE program has been accredited by National Board of Accreditation (NBA) under Tier-I category for three academic years from 2023-24 to 2025-26. The department has been strengthened by its passionate and research focused faculty members from reputed universities in India.
- ❑ Faculty members having wide range of specializations include Power Systems Engineering, Power Electronics & Drives, Embedded System, VLSI Design and Energy Engineering. The department has well equipped laboratories and state of the art facilities for research and development. The key areas of academic research are Electric Vehicle, Smart Grid, Battery Management System, Industrial Drives, Industrial Automation and Renewable Energy systems.
- ❑ The students of our department are involved in nationally significant projects namely SIH, small satellite projects in collaboration with international industries in France, Germany etc. The faculty and students have won awards from KASA, Korea Creative Technology Award, L&T Techgium Best Innovator Award. The department is having 53 active MoUs with CDAC, ARAI, NIWE, Kwaliti Photonics Ltd etc.

Programmes Approved by AICTE



VISION

To provide intellectual curiosity in the field of Electrical and Electronics engineering that produces skilled interdisciplinary engineers to serve the society



MISSION

M1: To inculcate knowledge among the students through comprehensive curriculum.

M2: To enrich the academic experience in terms of flexibility, teamwork, design skills, practice and industrial trainings.

M3: To produce competent graduates suitable for a successful career in Industry and Research.



PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO₁: Design and analyse electrical and electronic systems by applying the knowledge of mathematics and engineering.

PEO₂: Provide practical solution to multidisciplinary societal problems through innovative ideas.

PEO₃: Secure positions and continue as valued, creative and proficient employees in a wide variety of fields and industries for a rewarding career.

PROGRAMME OUTCOMES (POs)

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 (PSOs)

PSO1: Apply fundamental of mathematics, physical sciences and Electrical & Electronics engineering to analyze and solve complex real-world problems.

PSO2: Design, develop and implement Electrical, Electronics and Allied engineering systems to meet the demands of industry and suggest solutions for social needs.

LABORATORY FACILITIES



Electrical Machines Laboratory

Major Equipment/Software

- ❑ DC Shunt, Series and Compound Motors
- ❑ 1 ϕ and 3 ϕ Induction Motors
- ❑ 3 ϕ Synchronous Motor
- ❑ Alternators
- ❑ 1 ϕ and 3 ϕ Transformers
- ❑ Differential Protection Trainer for 3 ϕ Transformer



Power Electronics Laboratory

Major Equipment/Software

- ❑ 1 ϕ /3 ϕ Half & Fully Controlled Bridge Converter
- ❑ 1 ϕ Cyclo-Converter
- ❑ 3 ϕ IGBT Based PWM Inverter
- ❑ 4 Channel Digital Storage Oscilloscope
- ❑ 1 ϕ and 3 ϕ Electro Mechanical Type Over Current Relay
- ❑ Under Voltage Relay module for Electro Mechanical Type Relay



Power System Simulation Laboratory

Major Equipment/Software

- ❑ Computers and Accessories
- ❑ MATLAB (Campus License)
- ❑ DigSILENT Power Factory
- ❑ ANSYS software



Control and Instrumentation Laboratory

Major Equipment/Software

- ❑ Function Generator
- ❑ DC and AC Servo Motor
- ❑ Stepper Motor
- ❑ AC & DC Position Control System
- ❑ Stepper Motor and DC Motor Interfacing
- ❑ ADC and DAC Interfacing
- ❑ 8253 Timer Interfacing

DEPARTMENT LEVEL ACHIEVEMENTS

The B.Tech, Electrical and Electronics Engineering is accredited by **National Board of accreditation (NBA)** for the first time under Tier 1 categories from the academic year **2023-24 to 2025-26**.

राष्ट्रीय प्रत्यायन बोर्ड NATIONAL BOARD OF ACCREDITATION

बी० टी० ई०, ईस्ट टावर, एन. बी. सी. प्लेस, भीष्म पिल्लमह मार्ग, प्रगति विहार, लोधी रोड, नई दिल्ली - 110003

F.No- 33-295/2013-NBA
To

Date: 29-05-2023

The Vice Chancellor
Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology,
No. 42, Avad-Veltech Road, Avadi,
Chennai-600062, Tamil Nadu

Subject: Accreditation status of programs applied by Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, No. 42, Avad-Veltech Road, Avadi, Chennai-600062, Tamil Nadu.

Sir,

This has reference to your application I.D. No. 6227-29/12/2021 seeking accreditation by National Board of Accreditation to UG Engineering programs applied by Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, No. 42, Avad-Veltech Road, Avadi, Chennai-600062, Tamil Nadu.

2. An Expert Team conducted onsite evaluation of the programs from 3rd to 5th March, 2023. The report submitted by the Expert Team was considered by the concerned Committees constituted for the purpose in NBA. The Competent Authority in NBA has approved the following accreditation status to the programs as given in the table below:

Sl. No.	Name of the Program(s) (UG)	Basis of Evaluation	Accreditation Status	Period of validity	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
1.	Mechanical Engineering	Tier-I January 2016 Document	Accredited	Academic Years 2022-2023 to 2024-2025 i.e. upto 30-06-2025	Accreditation status granted is valid for the period indicated in Col.5 or till the program has the approval of the Competent Authority, whichever is earlier
2.	Aeronautical Engineering		Accredited		
3.	Electrical & Electronics Engineering		Accredited	Academic Years 2023-2024 to 2025-2026 i.e. upto 30-06-2026	

3. It may be noted that only students who graduate during the validity period of accreditation, will be deemed to have graduated with an NBA accredited degree.

4. The programs have been granted accreditation for 3 years. Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, No. 42, Avad-Veltech Road, Avadi, Chennai-600062, Tamil Nadu should submit the Compliance Report at least six months before the expiry of validity of accreditation mentioned above so as to be eligible for consideration by the concerned Committee in NBA for further processing of the accreditation status.

5. The accreditation status awarded to the programs as indicated in the above table does not imply that the accreditation has been granted to Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, No. 42, Avad-Veltech Road, Avadi, Chennai-600062, Tamil Nadu as a whole. As such the Institution should nowhere along with its name including on its letter head etc. write that it is accredited by NBA because it is program accreditation and not institution accreditation. If such an instance comes to NBA's notice, this will be viewed seriously. Complete name of the program(s) accredited, level of program(s) and the period of validity of accreditation, as well as the Academic Year from which the accreditation is effective should be mentioned unambiguously whenever and wherever it is required to indicate the status of accreditation by NBA.

Contd./...

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Website: <https://www.nbaind.org> | Email: memberssecretary@nbaind.org

FACULTY DETAILS

S.NO	FACULTY ID	NAME	DESIGNATION	QUALIFICATION
1	TTS 2784	Dr. S. RAMESH	PROFESSOR & HEAD	B.E., M.E., Ph.D.
2	TTS 2736	Dr. K. KARUNANITHI	PROFESSOR	AMIE., M.E., Ph.D.
3	TTS 351	Dr. P. K. DHAL	PROFESSOR	AMIE., B.E., M.E., Ph.D.
4	TTS 1326	Dr. S. SIVAKUMAR	PROFESSOR	B.E., M.E., Ph.D.
5	TTS 2085	Dr. P. CHANDRASEKAR	PROFESSOR	B.Tech., M.E., Ph.D.
6	TTS 2611	Dr. K.VINOTH	PROFESSOR	B.E., M.Tech., Ph.D.
7	TTS 2666	Dr. NIDAGHA KUMAR RAYAGURU	PROFESSOR	AMIE., M.Tech., Ph.D.
8	TTS 3065	Dr. K. KARTHIKUMAR	PROFESSOR	B.E., M.E., Ph.D.
9	TTS 2026	Dr. S. VINOTH JOHN PRAKASH	ASSOCIATE PROFESSOR	B.E., M.E., Ph.D.
10	TTS 3517	Dr. S. AMOSEDINAKARAN	ASSOCIATE PROFESSOR	B.E., M.Tech., Ph.D.
11	TTS 3550	Dr. PRIYA. R.A	ASSOCIATE PROFESSOR	B.E., M.Tech., Ph.D.
12	TTS 1495	Dr. P. SIVARAJ.	ASSISTANT PROFESSOR	B.E., M.E., Ph.D.
13	TTS 2652	Dr. R. SREEDHAR	ASSISTANT PROFESSOR	B.E., M.Tech., Ph.D.
14	TTS 3514	Dr. P. RAJAKUMAR	ASSISTANT PROFESSOR	B.E., M.E., Ph.D.
15	TTS 3529	Dr. HARI CHARAN NANNAM	ASSISTANT PROFESSOR	B.Tech., M.Tech., Ph.D.
16	TTS 3545	Dr. BABURAO PASUPULETI	ASSISTANT PROFESSOR	B.Tech., M.Tech., Ph.D.
17	TTS 2325	Ms. PRISCILLA WHITIN	ASSISTANT PROFESSOR	B.E., M.Tech.,
18	TTS 2394	Mr. CHITHRAS. T	ASSISTANT PROFESSOR	B.E., M.E.,
19	TTS 3161	Ms. KASTHURI. D	ASSISTANT PROFESSOR	B.E., M.E.,

FACULTY RESEARCH PUBLICATIONS

S.No.	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
1	Dr. K Karunanithi	An energy-management and scheduling of EV charging stations with solar PV - Fuel cell hybrid renewable energy resources using artificial intelligence technique	AIP Conference Proceedings	Conference	Scopus
2		A hybrid multi layer perceptron extreme gradient boost approach for precise state of charge and state of health assessment	e-Prime - Advances in Electrical Engineering, Electronics and Energy	Article	Scopus
3		Generation Expansion Planning considering env. impact and sustainable development for an Indi. state using the LEAP platform	Utilities Policy	Article	WoS
4		Measurement of State of Charge of Lithium Nickel Manganese Cobalt Battery using Artificial Neural Network and NARX Algorithm	International Journal of Electrical and Computer Engineering Systems	Article	WoS
5		Joseph, Deepthi, "Optimized Deep Belief Network for Efficient Fault Detection in Induction Motor	ADCAIJ-Advances in Distributed Computing and Artificial Intelligence Journal	Article	WoS
6	Dr. S Ramesh	MFO hyper parameter tuned machine learning algorithm for crack length severity classification	AIP Conference Proceedings	Conference	Scopus
7		Electricity and hydrogen fuel generation based on wind, solar energies and alkaline fuel cell: A hybrid IWGAN-AVOA approach	Energy and Environment	Article	WoS
8		Design and FEA analysis of hub based dual rotor ma. for optimal energy gen in 4 wheeled EV application	International Journal of Ambient Energy	Article	WoS

FACULTY RESEARCH PUBLICATIONS

S.No	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
9	Dr. S Ramesh	Measurement of State of Charge of Lithium-Nickel Manganese Cobalt Battery using Artificial Neural Network and NARX Algorithm	International Journal of Electrical and Computer Engineering Systems	Article	WoS
10		Implementation of Neural Network Controller for Grid Connected Wind-Solar PV Charging Station	International Conference on Sustainable Computing and Smart Systems, ICSCSS	Conference	Scopus
11		Maximizing Li-Ion Battery Packs Thermal Performance through Cell-to-Cell Variation	International Conference on Artificial Intelligence and Machine Learning Applications: Healthcare and Internet of Things	Conference	Scopus
12	Dr.P.K. Dhal	Meta-heuristic optimization for enhancing the thermal performance of solar energy devices	Metaheuristics Algorithm and Optimization of Engineering and Complex Systems.	Article	Scopus
13		Multi-objective economic load dispatch using hybrid NSGA-II and PVDE techniques	International Journal of Power Electronics and Drive Systems	Article	Scopus
14		Impact of load flow and network reconfiguration for unbalanced distribution systems	Measurement: Sensors	Article	Scopus
15		Comparison of Crow Search and Practice Swarm Algorithm for Minimization of Losses in Unbalanced Radial Distribution System	Mathematical Modelling of Engineering Problems	Article	Scopus
16		Multi-objective economic and emission dispatch problems using hybrid honeybee simulated annealing	Measurement: Sensors	Article	Scopus

FACULTY RESEARCH PUBLICATIONS

S.No	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
17	Dr.P.K. Dhal	Photovoltaic-wind-battery and diesel generator-based hybrid energy system for residential buildings in smart city Coimbatore	Environmental Science and Pollution Research	Article	WoS
18		Cloud-Integrated Deep Learning for Predictive Emergency Braking in Autonomous Vehicles	International Conference on Sustainable Communication Networks and Application.	Conference	Scopus
19		Mindful Breathing Coaches Using IoT-Integrated AI Systems for Personalized Anxiety Relief	International Conference on Innovations in Communication s, Electrical and Computer Engineering	Conference	Scopus
20		Development of efficient power electronics converter for integrating renewable energy into grid	ARNP Journal of Engineering and Applied Sciences	Article	Scopus
21		RBFNN Enhanced Relift Luo Converter for PV Grid-Tied EV Charging with ANN Based Harmonic Reduction	International Conference on Smart Power Control and Renewable Energy.	Conference	Scopus
22		Advancements in EMI Shielding Strategies and Innovations with a Focus on Energy Storage Solutions	Introduction to Functional Nanomaterials.	Conference	Scopus
23		Analysis of Implication of Phase Change Material Enclosed Design on Thermal Performance of Solar Collector	Journal of Physics: Conference Series	Conference	WoS
24		Implementation of Smart Solar Power System Monitoring and Automated Cleaning Mechanism with Python based Embedded Technology	International Conference on Intelligent Technologies	Conference	Scopus

FACULTY RESEARCH PUBLICATIONS

S.No	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
25	Dr.P.K. Dhal	A Novel Interleaved Quadrature Boost Converter based Analysis of Grid-Tied BLDC Motor in EV Application	International Conference on Intelligent Technologies	Conference	Scopus
26		Deep Fore: A Deep Reinforcement Learning Approach for Power Forecasting in Renewable Energy Systems	Electric Power Components and Systems.	Article	WoS
27		Integration of dispersed renewable energy generating in power distribution network	ARPJ Journal of Engineering and Applied Sciences.	Article	scopus
28		Analysis of Radial Distribution Systems Using Particle Swarm Optimization under Uncertain Conditions	Contemporary Mathematics	Article	scopus
29		Synergistic Optimization of Unit Commitment Using PSO and Random Search	Contemporary Mathematics	Article	scopus
30		An intelligent optimization technique for performance improvement in radial distribution network	International Journal of Intelligent Unmanned Systems	Article	scopus
31		Recompense Load Demand and Improve Power Quality in Wind Connected System Using JNN Based FACTS Device	Optoelectronics, Instrumentation and Data Processing	Article	Scopus
32		Automated Drone Detection for Surveillance and Security Enhancement	Communications in Computer and Information Science	Conference	Scopus

FACULTY RESEARCH PUBLICATIONS

S.No	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
33	Dr.P. Chandra sekar	A Novel DC-DC Boost Converter with Coupled Inductors for High Gain and Smooth Switching	Journal of Advanced Research in Applied Sciences and Engineering Technology	Article	Scopus
34		Efficient Energy Management System for AC-DC Microgrid and Electric Vehicles Utilizing Renewable Energy With HCO Approach	Energy Storage	Article	Scopus
35		Adaptive Electric Vehicle Charge Controllers Using Deep Reinforcement Learning for Real-Time Optimization	AIP Conference Proceedings	Conference	Scopus
36		Enhancing power quality in distribution networks using three-phase unified power quality conditioner (UPQC)	Environment Development and Sustainability	Article	Scopus
37		Evaluating a novel bidirectional soft-switching DC-DC converter for electric vehicles	International Journal of Applied Power Engineering	Article	Scopus
38		Fabrication of biopolymer based on cellulose acetate for rechargeable coin cell battery	AIP Conference Proceedings	Conference	Scopus
39		Design, fabrication and testing of dyesensitized solar cell using cyclic voltammetry	AIP Conference Proceedings	Conference	Scopus
40	Dr.S.Sivakumar	Switching loss and temperature analysis of MPWM controller for solar PV inverter	International Journal of Power Electronics and Drive Systems	Article	Scopus

FACULTY RESEARCH PUBLICATIONS

S.No.	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
41	Dr.S.Siva kumar	Gaussian filter and CNN based framework for accurate detection of brain tumor by analyzing MRI images	Bulletin of Electrical Engineering and Informatics	Article	Scopus
42		Mask FORD-NET: Efficient Detection of Digital Image Forgery using Hybrid REG-NET based Mask-RCNN	International Journal of Electrical and Computer Engineering Systems	Article	Scopus
43		Internet of things and optimized KNN based intelligent transportation system for traffic flow prediction in smart cities	Measurement: Sensors	Article	Scopus
44		Generative AI: Two Layer Optimization Technique for Power Source Reliability and Voltage Stability	Journal of Theoretical and Applied Information Technology	Article	Scopus
45		Enhanced efficiency in smart grid energy systems through advanced AI-based thermal modeling	Thermal Science and Engineering Progress	Article	Scopus
46		Analysis of Voltage Source Inverter with Photovoltaic Renewable Energy Source for Improving Power Quality in Solar	International Journal of Intelligent Systems and Applications in Engineering	Article	Scopus
47		Real-time smart vehicle-to-vehicle communication system for dynamic energy providers using distributed transformer-based V2V communication protocol	AIP Conference Proceedings	Conference	Scopus
48		NSTLBO-Based Approach for Optimal Scheduling of Hydrothermal Generating Units in Regulated Environment	Lecture Notes in Electrical Engineering	Conference	Scopus

FACULTY RESEARCH PUBLICATIONS

S.No.	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
49	Dr.S.Siva kumar	Development of Green Computing through Power Management in Wireless Networks using Machine Learning	International Conference on Inventive Computation Technologies	Conference	Scopus
50		Development of a Hybrid System to Make the Decision and Optimization of Renewable Energy Sources	Sustainable Smart Homes and Buildings with Internet of Things	Book Chapter	Scopus
51		Development of a Framework to Integrate Smart Home and Energy Operation Systems to Manage Energy Efficiency Through AI	Sustainable Smart Homes and Buildings with Internet of Things	Book Chapter	Scopus
52		IoT-Based Renewable Energy Management Systems in Apartment	Sustainable Smart Homes and Buildings with Internet of Things	Book Chapter	Scopus
53		Improving the efficiency of IoMT using fuzzy logic methods	Advances in Fuzzy-Based Internet of Medical Things	Book Chapter	Scopus
54		Velocity Control of DC Motor Using Smart Voice Announcement System	International Conference on Communication and Electronics Systems	Conference	Scopus
55	Dr.K. Vinoth	Reinforcement Learning Driven Smart Charging Algorithms to Enhance Battery Lifespan and Grid Sustainability	International Conference on Advances in Modern Age Technologies for Health and Engineering Science	Conference	Scopus
56		Enhanced Predictive Model for Grid Stability Using Hybrid GBM-LSTM Approach	International Journal of Renewable Energy Research	Conference	Scopus

FACULTY RESEARCH PUBLICATIONS

S.No.	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
57	Dr.K. Vinoth	Integrated Renewable Energy System for Electric Vehicles Utilizing a PV-Fed Three-Phase Synchronous Reluctance Motor and High Gain DC-DC Converter	International Journal of Electrical and Electronics Engineering	Article	WOS
58		Smart Grid Load Prediction with Advanced Metering Infrastructure Using Relational Bi-Level Aggregation Graph Convolutional Network and Coronavirus Mask Protection Algorithm	4th International Conference on Sustainable Expert Systems	Article	Scopus
59		Power Quality Improvement in Transmission System Using Optimal Location System with Integration of Distributed Power Flow Controller	1st International Conference on Trends in Engineering Systems and Technologies	Conference	Scopus
60		Implementation of Neural Network Controller for Grid Connected Wind-Solar PV Charging Station	2nd International Conference on Sustainable Computing and Smart Systems	Conference	Scopus
61		Design and implementation of fuzzy logic controller-based bidirectional power control for super capacitor ESS using MMC DC-DC converter	AIP Conference Proceedings	Conference	Scopus
62		An approach of dynamic wireless charging structure for an electric vehicle based on mutual inductance calculation	International Journal of Power Electronics and Drive Systems	Conference	Scopus
63		Fast Charging System of Electric Vehicle Using Optimized Isolated Multi-Port DC-DC Converter based on Modified Coati Optimization Algorithm	International Journal of Electrical and Electronics Research	Article	Scopus
64		A Novel Approach to Smart Grid Energy Management Using the Osprey Optimization Algorithm	4th International Conference on Sentiment Analysis and Deep Learning	Article	Scopus

FACULTY RESEARCH PUBLICATIONS

S.No.	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
65	Dr. K. Karthi kumar	A new optimal space vector modulation with DTC switching strategy for induction motor control	International Journal of applied power engineering	Article	Scopus
66		A hybrid methodology based battery power management and torque control of open-end winding induction motor drive for electric vehicles	Journal of Energy Storage	Article	WoS
67		Harnessing digitalization and internet of things for sustainable energy: A comprehensive study	Navigating the Circular Age of a Sustainable Digital Revolution	Book Chapter	Scopus
68		An efficient power management control strategy for grid-independent hybrid renewable energy systems with hybrid energy storage: Hybrid approach	Journal of Energy Storage	Article	WoS
69		Optimising direct torque control with battery power management for open-end winding induction motor drive in electric vehicles using the light spectrum optimiser algorithm	International Journal of Electric and Hybrid Vehicles	Article	Scopus
70		Advanced Energy Management System for Hybrid AC/DC Microgrids with Electric Vehicles Using Hybridized Solution	International Journal of Electrical and Electronics Research	Article	Scopus
71		Analysis of Cascaded H-Bridge Multilevel Inverter for Three-Phase Induction Motor Drive	International Journal of Electrical and Electronics Research	Article	Scopus
72		Cascaded H Bridge Inverter Fed Motor Drive for Electric Vehicle Applications	International Conference on Electrical Energy Systems.	Conference	Scopus 24

FACULTY RESEARCH PUBLICATIONS

S.No.	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
73	Dr. K. Karthi kumar	A Hybrid Approach to Optimal Power Allocation in MIMO-NOMA: Integrating DGNN and Tyrannosaurus Optimization	International Conference on Sustainable Expert Systems.	Conference	Scopus
74	Dr.S. Vinoth John Prakash	Implementation of Automatic Braking System in Electric Vehicles	International Students' Conference on Electrical, Electronics and Computer Science.	Conference	Scopus
75		Sustainable microgrid system for Easter Island with the least cost and GHG emission-free approach	Environmental Progress and Sustainable energy	Article	WoS
76		Techno-economic assessment of hybrid renewable energy system based electric vehicle charging station in Hyderabad, India	AIP Conference Proceedings	Conference	Scopus
77		Green Power EV Charging Station Design and Analysis for Electric Vehicles	International Journal of Electrical and Electronics Research	Article	Scopus
78		Reliability effects in solar and wind system during load forecasting uncertainty	International Conference on Electrical Energy Systems	Conference	Scopus
79		Techno-Economic Assessment of Green Energy System for Remote Location in Rajasthan	International Conference on Electrical, Electronics and Computing Technologies	Conference	Scopus
80		Optimization of renewable system for assessing reliability and cost	International Conference on Networking and Communications	Conference	Scopus

FACULTY RESEARCH PUBLICATIONS

S.No.	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
81	Dr.P. Raja kumar	Optimization of Distributed Generation in Radial Distribution Network for Active Power Loss Minimization using Jellyfish Search Optimizer Algorithm	International Journal of Electrical and Computer Engineering Systems	Article	WoS
82		Jellyfish search optimizer algorithm based multiple distributed generation placements	Majlesi Journal of Electrical Engineering	Article	Scopus
83		Performance of Fuzzy MPPT for a Distributed Photovoltaic System Under Changing Environmental Condition	Lecture Notes in Electrical Engineering	Conference	Scopus
84		Optimal Positioning and Sizing of Distributed Energy Sources in Distribution System Using Hunter-Prey Optimizer Algorithm	Advances in Distributed Computing and Artificial Intelligence Journal	Article	WoS
85	S. Amose dinakaran	Prediction of Electric Consumption Based On Economic Coefficients Using Walrus Optimization Techniques	International Conference on Computational Intelligence for Green and Sustainable Technologies	Conference	Scopus
86		Hydro-Thermal-Wind-Photo Voltaic Energy Scheduling Optimized With the Osprey Optimization Technique	International Conference on Electrical Energy Systems	Conference	Scopus
87		Simulink and real-time implementation of the E-cycle for measuring the reliability of the model using sensors	Measurement Sensors	Article	Scopus
88		Performance Analysis for Battery Stability Improvement using Direct Air Cooling Mechanism for Electric Vehicles	e-Prime- Advances in Electrical Engineering, Electronics and Energy	Article	Scopus

FACULTY RESEARCH PUBLICATIONS

S.No.	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
89	Dr. S. Amose dinakaran	Performance analysis of battery E-vehicle system using open loop and closed loop application	Measurement Sensors	Article	Scopus
90	Dr.Priya. R.A	A Human Activity Determination Predicting Abnormality Using SVM Approach for Mining Field Workers	International Conference on Circuit Power and Computing Technologies	Conference	Scopus
91		Electrooculography based automated wheel chair for paralyzed person	Proceedings of the 8th International Conference on Electronics, Communication and Aerospace Technology	Conference	Scopus
92		IoT driven transformer condition assessment	International Students' Conference on Electrical, Electronics, and Computer Science	Conference	Scopus
93		Optimization charging infrastructure for electric vehicle adoption in urban environment	Hybrid and Advanced Technologies, Proceedings of the International Conference on Hybrid and Advanced Technologies	Book Chapter	Scopus
94		Exploring the integration of renewable energy sources for sustainable charging infrastructure in electric vehicles		Book Chapter	Scopus
95		Current-Mode Fuzzy Logic Controlled Cascaded Quadratic Boost Converter fed DC Drive System	International conference on advances in physical sciences and materials	Conference	Scopus
96	Dr. Hari Charan	Experimental Evaluation of a Proposed LQR-LU Optimal Grid Controller in the Applications of Grid-Tied PV Systems	Jordan Journal of Electrical Engineering	Article	WoS 27

FACULTY RESEARCH PUBLICATIONS

S.No.	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
104	Dr. Hari Charan	An Experimental Investigation of Space-Vector Pulse Width Modulated Vienna Rectifier With a Proposed Adaptive Neutral Point Voltage Regulator	International Journal of Circuit Theory and Applications	Article	WoS
105		A Single-Phase Cascaded H-Bridge Multilevel Inverter With Voltage Boost Ability: Modulation and Analysis	IEEE Transactions On Industry Applications	Article	WoS
106		Performance Evaluation of Single-Phase Boost-Type Cascaded H-Bridge Inverter in the Applications of Grid-Tied Photovoltaic Systems	IEEE Journal Of Emerging And Selected Topics In Power Electronics	Article	WoS
107	Dr P Baburao	Investigation and performance of high niobium alloy: Noval approach of tribological behaviour and microstructural evolution	International Conference on Materials, Analysis and Advanced Manufacturing.	Conference	Scopus
108		Wind power uncertainty is taken into consideration while using the Osprey Optimization Algorithm for hydro-thermal-wind complementary scheduling	International Conference on Electrical, Electronics, Information and Communication Technologies.	Conference	Scopus
109		MFO Algorithm-Based Profit Maximization of Distribution Companies by Optimal Placement and Sizing of DGs Under Deregulated Environment	International Conference on Electrical and Electronics Engineering.	Conference	Scopus
110		NSTLBO-Based Approach for Optimal Scheduling of Hydrothermal Generating Units in Regulated Environment	International Conference on Electrical and Electronics Engineering	Conference	Scopus
111		An Intelligent approach for the short-term generation scheduling of a hydrothermal power system employing the Osprey Optimization Algorithm	International Conference on Computational Intelligence for Green and Sustainable Technologies.	Conference	Scopus
112		Integrated PLC & SCADA to optimize the Train Cave Airflow model and Safeguard system	International Conference on Electrical Energy Systems.	Conference	Scopus

FACULTY RESEARCH PUBLICATIONS

S.No.	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
113	Dr P Baburao	Hot Deformation Characteristics and Tool Wear Morphology of GH4169 Super Alloy: A Frugal Usage of Cryogenic Cooling During Turning Process	Journal of The Institution of Engineers (India): Series D	Article	Scopus
114		Preparation and Development of Polymer-Based Dielectric Composite: Influence of Agro-Waste Materials	International Conference on Industrial Electronics: Developments and Applications	Conference	Scopus
115		Assessment of mechanical and tribological behavior of Mg-4Zn-1RE-0.7Zr alloy: Novel mixture of Si ₃ N ₄ /TiC/MoS ₂ utilizing casting technique	Composites and Advanced Materials	Article	WoS
116	Priscilla Whitin	Enhanced regulation and optimization techniques for isolated fourth-order l ₃ c resonant converters in solar PV to battery pack conversions	Journal of Energy Storage.	Article	WoS
117		Mask FORD-NET: Efficient Detection of Digital Image Forgery using Hybrid REG-NET based Mask-RCNN	International Journal of Electrical and Computer Engineering Systems	Article	Scopus
118		Velocity Control of DC Motor Using Smart Voice Announcement System	International Conference on Communication and Electronics Systems	Conference	Scopus
119		IDOL: IoT based intrusion detection using Conv-BiLSTM	Australian Journal of Electrical and Electronics Engineering	Article	Scopus
120		An Intelligent approach for the short-term generation scheduling of a hydrothermal power system employing the Osprey Optimization Algorithm	International Conference on Computational Intelligence for Green and Sustainable Technologies.	Conference	Scopus

FACULTY RESEARCH PUBLICATIONS

S.No.	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
121	T. Chithras	An approach of dynamic wireless charging structure for an electric vehicle based on mutual inductance calculation	International Journal of Power Electronics and Drive Systems	Article	Scopus
122		Fast Charging System of Electric Vehicle Using Optimized Isolated Multi-Port DC-DC Converter based on Modified Coati Optimization Algorithm	International Journal of Electrical and Electronics Research	Article	Scopus
123		Efficient liver disease diagnosis using infrared image processing for enhanced detection and monitoring	Journal of Environmental Protection and Ecology	Article	Scopus
124		Energy-Efficient Communication Protocols for IoT Devices	International Conference on Science, Technology, Engineering and Mathematics	Conference	Scopus
125		Cyber-Physical Attack Detection in Additive Manufacturing: An LSTM-Based Autoencoder Approach Using Reconstruction Error Analysis from Side Channel Monitoring	International Women in Engineering Conference on Electrical and Computer Engineering	Conference	Scopus
126		Solar based fast charging for an electric vehicle with sun tracking system	AIP Conference Proceedings	Conference	Scopus
127	R.Sreedhar	High Speed Neural Network MPPT Algorithm For DFIG Based Wind Energy Conversion System	International Conference on Circuit Power and Computing Technologies	Conference	Scopus
128		A Novel Hybrid SPWM and SHEPWM based Three Phase Inverter for Induction Motor Control	International Conference on Computational Intelligence for Green and Sustainable Technologies	Conference	Scopus

FACULTY RESEARCH PUBLICATIONS

S.No.	Authors	Title	Journal/ Conference Name	Article / Conference / Book Chapter	Indexed by Scopus/ WoS
129	R.Sreedhar	An Intelligent approach for the short-term generation scheduling of a hydrothermal power system employing the Osprey Optimization Algorithm	International Conference on Computational Intelligence for Green and Sustainable Technologies	Conference	Scopus
130		Prediction of Electric Consumption Based On Economic Coefficients Using Walrus Optimization Techniques	International Conference on Computational Intelligence for Green and Sustainable Technologies	Conference	Scopus
131		Optimizing grid connected photovoltaic systems using elementary LUO converter and GWO-RBFNN based MPPT	Electrical Engineering	Article	WoS
132		Enhanced Solar PV System with Battery Storage and Grid Integration Using Cascaded ANFIS-Based MPPT and Self-Lift Luo Converter	3rd International Conference on Device Intelligence, Computing and Communication Technologies	Conference	Scopus

FACULTY - BEST PAPER AWARD

- ❑ **Dr. P. Rajakumar, Assistant Professor/EEE**, was presented Best Paper Award for the paper presentation in the 1st International Conference on Recent Innovations and Trends in Electrical & Electronics Engineering and Computing (RITEEC 2025), held on 22nd –23rd May 2025 at NIT Patna.
- ❑ **Dr. P. Baburao Assistant Professor/EEE** has won the Best Paper Award in the International Conference RAEEUCCI-2025, technically co-sponsored by IEEE, held during 23rd - 25th April 2025, organized by the Department of ECE, SRMIST, Kattankulathur – 603203.



FACULTY INNOVATIONS

The faculty members have published several patents in various research domains.

Sl.No.	Name of the Inventor	Title of the patent	Status	Year of Filing/Published/Award of patent	Published/awarded Patent Number
1	Dr.P.K.Dhal	Digital cordless drilling machine	Granted	2024	404265-001
2		An advanced neural network-based predictive maintenance system for autonomous systems with adaptive learning and real-time analytics	Published	2024	202441004209
3		IoT based network for monitoring and assessing water table in agricultural terrain	Published	2024	202341041472
4		An Intelligence Sensor Based Biodegradable Waste Collection Unit	Granted	2024	6338623
5		System and Method for Optimizing Control of Induction Motors	Published	2025	202441104644
6		Microbial Fuel Cell and Solar Hybrid Power System for Sustainable Energy Generation	Published	2025	202541049896
7	Dr. P. Chandra sekar, Dr. K. Karthi kumar	Tyre Fit Band	Published	2024	202341058822
8	Dr.S.Siva kumar	System for Determining and Monitoring Parking Slot Occupancy Using Networked Sensor Technology	Published	2024	202441093355

FACULTY INNOVATIONS

Sl.No.	Name of the Inventor	Title of the patent	Status	Year of Filing/Published/ Award of patent	If published/ awarded Patent Number
9	Dr.S.Siva kumar	Smart AI-enabled high voltage gain BLDC motor system with duty cycle optimization for next-generation electric vehicles	Published	2024	202441076347
10		A smart home automation and fire detection system and its method thereof	Published	2024	202441096340
11	Dr.Hari Charan	Single-phase voltage enhanced inverter with single input-dual output at high voltage gain	Published	2025	202541020045
12		A boost-type multilevel inverter with reduced component count	Published	2025	202541020046
13		A single-phase capacitor-interleaved multilevel inverter	Published	2025	202541020047
14		A Novel Dual Source Split Source Inverter for Single-phase Applications	Published	2025	202341089376
15		Multi-load power conversion system and its method thereof	Published	2025	202541044301
16		A modified single-phase split source inverter to mitigate the commutation problem	Published	2025	202541036421
17	Mr.T.Chithras	Object detection system for improving safety at railway crossings	Published	2024	202441034245

FACULTY TEXT BOOK PUBLICATIONS

Faculty members are actively involved in textbook publication in the areas of Electrical and Electronics Engineering. Their textbooks provide comprehensive and up-to-date knowledge aligned with university curriculum. The publications support students, researchers, and practicing engineers with clear concepts and practical applications.

Sl. No.	Name of the Faculty	Title of the Textbook	Publisher Name	ISBN Number	Month & Year of Publication
1	Dr.S. Sivakumar	Embedded Systems and IoT	GCS Publication	978-81-97-818677	September & 2024
2	Dr. P. Chandrasekar	Automatic Voltage Stabilizers: Design, Fabrication & Testing	LAP LAMBERT Academic Publication	978-620-7-47329-8	August & 2024
3	Dr. P. Chandrasekar	Inspection of Wind Turbine System	LAP LAMBERT Academic Publication	978-620-7-48571-0	September & 2024
4	Dr. P. Chandrasekar	fabrication of Next Generation Solar cells	LAP LAMBERT Academic Publication	978-620-6-78433-3	January & 2025
5	Dr.P.K.Dhal	A Text book of basic electrical technology	RK Publication	978-81-971218-1-4	2024
6	Dr .N.K. Rayaguru	Basic Electrical & Instrumentation Engg	Pearson education Pvt Ltd	978-81-198-9681-3	2024

FACULTY ENRICHMENT - EVENT PARTICIPATIONS

Sl. No.	Name of Faculty who attended	Title of the program (FDP, Short Term Course, Workshop, seminar)	Nature of the program	Mode	From (DD-MM-YYYY)	To (DD-MM-YYYY)
1	Dr.S. Sivakumar	Mastering Module Development: A Guide to the Four Quadrant Approach	Webinar	Online	29.08.2024	29.08.2024
2		Solar Cell and OLED Devices Modelling and Simulation using Setfos Software	Workshop	Online	27.09.2024	27.09.2024
3		Harnessing Open Source Tools for Power Systems Research	Workshop	Online	29.01.2025	31.01.2025
4		Entrepreneurial Perspectives on Green Energy and Electric Vehicle Innovation	FDP	Online	21.05.2024	26.05.2024
5		IoT Future Connectivity – Insights, Implementation and Security	FDP	Online	04.03.2025	08.03.2025
6		Design of EV, PV and Wind Power Plants and Applications of IoT: Hands on Practice	FDP	Online	28.04.2025	03.05.2025
7		Power Electronics and Drives: Shaping the Future of Electric Vehicles	FDP	Online	10.03.2025	16.03.2025
8		Inculcating Universal Human Values in Technical Education	FDP	Offline	20.02.2025	22.02.2025
9	Dr.P.K. Dhal	PV-Fuel cell microgrid : A sustainable energy solution (PVFCMGSES-2024)	FDP	Hybrid mode	26-12-2024	30-12-2024
10		transformative AI tools for research writing : comprehensive techniques and best practices	FDP	online	30-9-24	5-10-24

FACULTY ENRICHMENT - EVENT PARTICIPATIONS

Sl. No.	Name of Faculty who attended	Title of the program (FDP, Short Term Course, Workshop, seminar)	Nature of the program	Mode	From (DD-MM-YYYY)	To (DD-MM-YYYY)
11	Dr.P.K. Dhal	AI/MI based controllers design and their applications in real time platform	FDP	Hybrid mode	28-9-24	2-10-24
12		Recent Advances in Computer Vision: Applications and Implementation	FDP	Hybrid mode	6-12-24	10-12-24
13		Applications of Machine Learning Techniques in Sustainable Technologies	FDP	Hybrid mode	24-01-24	28-01-24
14		I-Driven Cyber-Physical Systems-A Hands on Course(AI-CPS)	FDP	Online	18-02-25	22-02-25
15	Dr.K. Vinoth	Research Perspectives on Smart and Sustainable Energy Management Solutions	FDP	Online	16-12-2024	21-12-2024
16	Dr. K. Karthi kumar	Transducers for Instrumentation	FDP	Online	01-01-2025	30-04-2025
17		Electrical Distribution System Analysis	FDP	Online	01-06-2024	30-10-2024
18		Research Perspectives on Smart and Sustainable Energy Management Solutions	FDP	Online	16-12-2024	21-12-2024
19	Dr.N.K. Rayaguru	Power Electronics and Drives: Shaping the Future of Electric Vehicles	GIAN COURSE	Online	10.03.2025	16.03.2025
20		Capacity Building Programme Leveraging AI Tools for Accelerating Research: Demonstration & Hands-on Experience	FDP	On line	21.4.2025	26.04.25

FACULTY ENRICHMENT - EVENT PARTICIPATIONS

Sl. No.	Name of Faculty who attended	Title of the program (FDP, Short Term Course, Workshop, seminar)	Nature of the program	Mode	From (DD-MM-YYYY)	To (DD-MM-YYYY)
21	Dr N K Rayaguru	Hybrid Renewable Energy Systems in Microgrids	GIAN COURSE	On Line	20-02-2025	25-02-25
22	Dr.S. Vinoth John Prakash	Research Perspectives on Smart and Sustainable Energy Management Solutions (RPS2EMS) (ATAL)	FDP	Online	16-12-2024	21-12-2024
23	Dr.P.Rajakumar	OBE & NEP 2020	FDP	Online	10-06-2024	14-06-2025
24	Dr S Amose dinakaran	Modelling Simulation and Control of Electric Vehicles	FDP	Online	09-12-2024	13-12-2024
25		AI-Driven Solutions for Enhancing Electric Vehicle Performance and Sustainability	FDP	Online	16-12-2024	21-12-2024
26		Enhancing Cyber Threat Detection through Digital Technologies	FDP	Online	09-12-2024	14-12-2024
27		Advanced Technologies for Smart Power Systems	FDP	Online	10-02-2025	15-02-2025
28		Introduction to Internet of Things (NPTEL- 12 week course)	FDP	Online	01-06- 2024	30-10-2024
29		Introduction To Industry 4.0 And Industrial Internet Of Things (NPTEL - 12 week course)	FDP	Online	01-01- 2025	30-04-2025
30	Dr.Priya. R.A	AICTE Training And Learning (ATAL) Academy Faculty Development Program on Opportunities and challenges of Electric vehicles in India	FDP	Offline	26/08/2024	31/08/2024

FACULTY ENRICHMENT - EVENT PARTICIPATIONS

Sl. No.	Name of Faculty who attended	Title of the program (FDP, Short Term Course, Workshop, seminar)	Nature of the program	Mode	From (DD-MM-YYYY)	To (DD-MM-YYYY)
31	Dr.Priya R.A	Optimising Assessment and Evaluation for OBE Excellence	Webinar	Online	08.02.2025	08.02.2025
32		NPTEL(8 weeks) - Dc Microgrid and Control System	FDP	Online	02.01.2025	03.04.2025
33	Dr.Hari Charan	Recent Trends in Electrical and Electrical Engineering	FDP	online	21.04.2025	26.04.2025
34	Dr.R. Sreedhar	Introduction to Internet of Things	FDP	Online	01-06- 2024	30-10-2024
35		Introduction To Industry 4.0 And Industrial Internet of Things	FDP	Online	01-01- 2025	30-04-2025
36	Mr.T. Chithras	Enhancing Sustainability and Manufacturing Efficiency	FDP	Online	16-12-2024	21-12-2024
37		Introduction To Internet of Things	FDP	Online	01-01-2025	30-04-2025

FACULTY REWARDS

Department of EEE, faculty members received rewards for their outstanding contributions towards Publications / Funded Projects / Consultancy / Patents. The awards were presented by **Shri. Sudheer Kumar, Director of Capacity Building & Public Outreach Office (CBPO) at ISRO HQ, Bangalore.**



S.No.	Name of Faculty	Designation	Purpose of Reward (Publications, Patent, Book, Funding..)	Amount (Rs)
1	Dr.P.K.Dhal	Professor	Publication	69000
2	Dr. P. Chandrasekar	Professor	R&D Incentive & Patent	57933
3	Dr.S.Sivakumar	Professor	Publication, Patent & Text book	5750
4	Dr. K. Karthikumar	Associate Professor	Publications & Patent	46666
5	Dr.K.Vinoth	Associate Professor	Publication	12500
6	Dr.S.Vinoth John Prakash	Assistant Professor	Publication	2500
7	Dr .S. Amosedinakaran	Assistant Professor	Publication & Patent	6666
8	Dr.P.Rajakumar	Assistant Professor	Publication	10000
9	Dr.Hari Charan Nannam	Assistant Professor	RDF Fund	50000
10	Mr.T.Chithras	Assistant Professor	Publication	18333 ⁴⁰

FACULTY MOOC CERTIFICATION (NPTEL)

Faculty members actively participated in NPTEL Faculty Development Programmes (FDPs) to enhance their subject knowledge and teaching competencies.

S. No.	Name of Faculty who attended	Title of the program	Nature of the program	Mode	From (DD-MM-YYYY)	To (DD-MM-YYYY)
1	Dr .S. Amosedinakaran	Introduction to Internet of Things	FDP	Online	01-06-2024	30-10-2024
2		Introduction To Industry 4.0 And Industrial Internet Of Things	FDP	Online	01-01-2025	30-04-2025
3	Mr.T.Chithras	Introduction to Internet of Things	FDP	Online	01-01-2025	30-04-2025
4	Dr.R.Sreedhar	Introduction to Internet of Things	FDP	Online	01-06-2024	30-10-2024
5		Introduction To Industry 4.0 And Industrial Internet Of Things	FDP	Online	01-01-2025	30-04-2025
6	Dr. K. Karthikumar	Transducers for Instrumentation	FDP	Online	01-01-2025	30-04-2025
7		Electrical Distribution System Analysis	FDP	Online	01-06-2024	30-10-2024
8	Dr.Priya.R.A	DC Microgrid and Control System	FDP	Online	22 Jul 2024	13 Sep 2024
9	Dr .P. Baburao	Introduction to Internet of Things	FDP	Online	01-06-2024	30-10-2024
10		Introduction To Industry 4.0 And Industrial Internet Of Things	FDP	Online	01-01-2025	30-04-2025
11	Priscilla Whitin	Python for Data Science	FDP	Online	01-01-2025	30-04-2025

Dr. K. Karthikumar, Professor/EEE has secured a position in the top 5% of learners in the 12-week NPTEL FDP course "Transducers and Instrumentation."



RESEARCH DEVELOPMENT FUND (RDF)

The 7 faculty members have been sanctioned Research Development Fund (RDF) worth Rs 4,00,000 for their outstanding research contributions across various domains. This recognition reflects their consistent efforts towards strengthening the research culture and academic excellence of the department. The sanctioned fund will support further research activities, innovation, and development of impactful projects. It also encourages faculty members to pursue advanced research and contribute to high-quality scholarly outcomes.

Faculty Name	Faculty ID	RDF in INR
Dr.P.K.Dhal	TTS351	75,000
Dr.P.Chandrasekar	TTS2085	75,000
Dr.K.Karthikumar	TTS3065	50,000
Dr.S.Sivakumar	TTS1326	50,000
Dr.S.Ramesh	TTS2784	50,000
Dr.Hari Charan Nannam	TTS3529	50,000
Dr.K.Karunanithi	TTS2736	50,000

FACULTY AS RESOURCE PERSON

Dr. P. Chandrasekar, Professor/EEE, delivered a keynote talk on the topic **"Solar Impacts on Wildlife and Ecosystems in India"** in the 2024 FCU Sustainability Festival held on 6th December 2024 at Feng Chia University, Taiwan.



FACULTY AS RESOURCE PERSON

Following faculty members delivered keynote speaker as Resource Person in STTPs/FDPs.

S No.	Name	Topic	Date	Location	Organization
1	Dr. S. Ramesh	FDP on AI-Driven Innovations in Power Converters for Optimized Renewable Energy Utilization	28.06.2025	Trichy	Kongunadu College of Engineering and Technology
2	Dr.P. Chandrasekar	International USR Workshop Solar Impacts on Wildlife and Ecosystems in India	05.12.2024	Taiwan	Feng Chia University
3	Dr. S. Vinoth John Prakash	FDP on Electric Vehicle Revolutionizing Powertrains	24.06.2025	Chennai	Vel Tech Multi Tech Dr.Rangarajan Dr. Sakunthala Engineering College
4	Dr. R Sreedhar	FDP on Electric Vehicle Revolutionizing Powertrains	25.06.2025	Chennai	Vel Tech Multi Tech Dr.Rangarajan Dr. Sakunthala Engineering College

SPONSORED RESEARCH PROJECT

Dr. P. Chandrasekar, Professor/EEE (Principal Investigator) and Dr. Hari Charan Nannam, Assistant Professor/EEE (Co-Principal Investigator) have received financial assistance worth of **Rs 27.028 Lakh** from **Department of Science and Technology** for a research proposal titled “Real –Time Implementation of Cost-effective Solar Powered 6.6 kW Standalone DC Microgrid System in Tribal Remote Areas of Aliyar Region, Coimbatore District” under Climate, Energy and Sustainable Technology scheme.

**Vel Tech**
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University) Estd. 2003 of UGC Act, 1956



School of Electrical and Communication
Department of Electrical and Electronics Engineering

Hearty Congratulations

FOR RECEIVING FINANCIAL ASSISTANCE WORTH OF ₹ 27.03 LAKHS



Dr. CHANDRASEKAR. P
PROFESSOR
Principal Investigator



Dr. HARI CHARAN NANNAM
ASSISTANT PROFESSOR
Co-Principal Investigator

TITLE OF THE PROJECT: REAL-TIME IMPLEMENTATION OF COST-EFFECTIVE SOLAR POWERED 6.6 KW STANDALONE DC MICROGRID SYSTEM IN TRIBAL REMOTE AREAS OF ALIYAR REGION, COIMBATORE DISTRICT

Funding Agency: Department of Science and Technology-Climate, Energy and Sustainable Technology (DST-CEST)

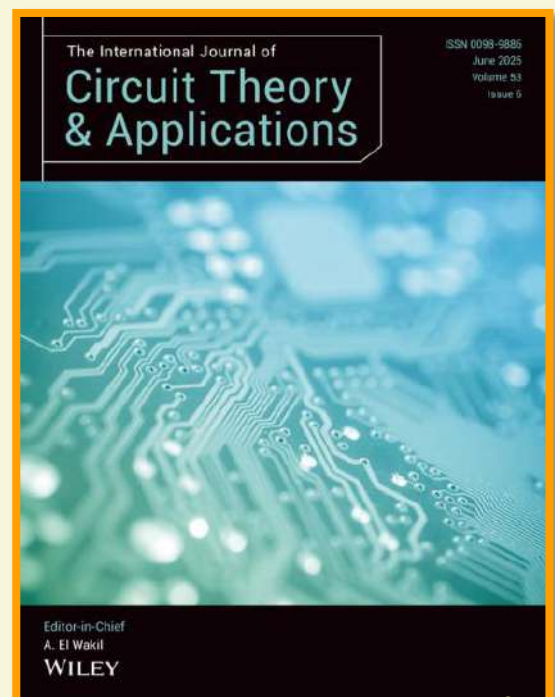
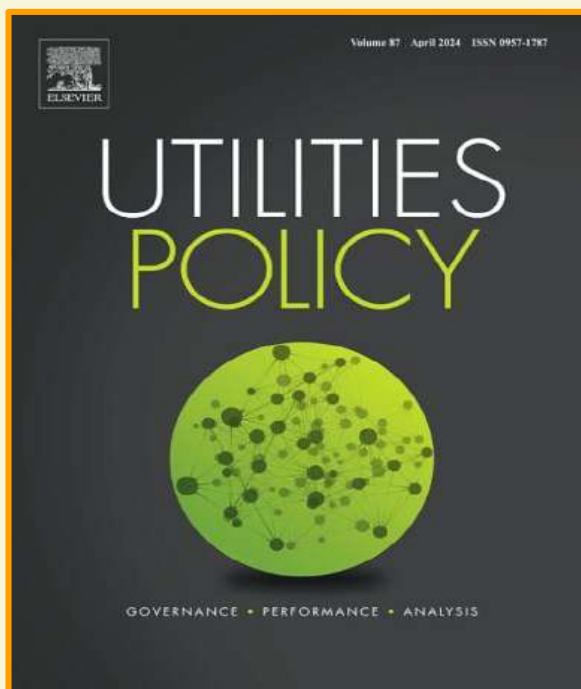


विज्ञान एवं प्रौद्योगिकी विभाग
DEPARTMENT OF
SCIENCE & TECHNOLOGY

STUDENT'S- PUBLICATIONS

Department of EEE, UG and PG students have presented their project findings in 15 peer reviewed Scopus Indexed International Conferences contributing a total of 19 Publications.

- Department of EEE, final year student, **Pranav Kumar Rowlo (VTU17929), Batch 2020-2024**, published his research findings in a peer reviewed SCI Indexed Journal "Utilities Policy (Elsevier)" with Impact Factor of 4.
Mentor: Dr. K. Karunanithi (TTS 2736)
- Department of EEE, Pre-final year student, **Majji Sai Manohar (VTU 23879), Batch 2021-2025** and **PG Final year student, Angel Babita. Muppidi (VTP 3866)** have published their research findings in a peer reviewed SCI Indexed Journal "International Journal of Circuit Theory and Applications" (Impact Factor: 1.8).



STUDENT'S INNOVATIONS

The students members have granted 3 patents in various research domains.

S.No.	Name of the Inventor	Title of the patent	Status	Year of Filing/ Published/ Award of patent	If published/ awarded Patent Number
1	Ankita Parida, K. Chandana, Dr. P. Chandrasekar	Artificial Intelligence-based Electric Vehicle	Granted	2024	423023-001
2	N. Kavitha, Dr. P. Chandrasekar	Wireless Charging Gadget for Electric Vehicle	Granted (Design)	2024	410485-001
3	Harish Zade Dr.P. Chandrasekar	AI-based Security Surveillance Devices	Granted	2024	6384805



PROFESSIONAL SOCIETY MEMBERSHIP

S.No.	Name of the Student	VTU No.	Society Name
1	Gurunathan.T	VTU21361	IEEE student membership
2	Rajesh	VTU27176	IEEE student membership
3	Habibu Murtala Abdullahi	VTU1225	IEEE student membership
4	Harini.C	VTU24247	IEEE student membership
5	Sandhya	VTU21385	IEEE student membership
6	Vamitha L	VTU24263	IEEE student membership
7	Salipindi Venkata Avinash	VTU28391	IEEE student membership
8	Sujay M	VTU23857	IEEE student membership
9	Varshini Bandlamudi	VTU22378	IEEE student membership
10	G.Ramya Keerthana	VTU22189	IEEE student membership
11	Lakshmi Prasanna	VTU26997	IEEE student membership
12	Shaik Mastan Vali	VTP4212	IEEE student membership
13	Ankita Parida	VTU24241	IEEE student membership
14	Kottapalli Vishnu Vardhan Reddy	VTU28791	IEEE student membership
15	Sharavanan	VTP4170	IEEE student membership

STUDENT'S PARTICIPATION

- ❑ Pre-final year students, T. Gurunathan (VTU 21361) and A. Surya (VTU 24218), Batch 2021-2025, have participated in the International USR Workshop held on 5th and 6th December 2024 at Feng Chia University, Taiwan.
- ❑ Department of EEE, M.Tech. Power Electronics, Final Year student, **Angel Babita. Muppidi (VTP 3866)** won the Best Poster Award in the IEEE 4th International Conference on Sustainable Energy and Future Electric Transportation (SEFET-2024), organized by Department of Electrical & Electronics Engineering, GRIET, Hyderabad during 31st July – 3rd August 2024.



STUDENT'S PARTICIPATION

Students actively participated in various national and international-level events, competitions, conferences, and technical forums, showcasing their academic and technical excellence. They secured notable positions, including Best Paper Awards, Winner and other prestigious recognitions in their respective events. These achievements reflect their research aptitude, innovation, technical knowledge, and competitive spirit. Their accomplishments have brought recognition to the department and motivated other students to actively participate in academic and professional events.

S.No.	Name of the Student	Title of the Event	Nature of Event	Organized by	Date of the Event
1	T. Gurunathan	International USR Workshop	Work shop	Feng Chia University, Taiwan.	5&6 /12/ 2024
2	A. Surya	International USR Workshop	Work shop	Feng Chia University, Taiwan.	5&6/ 12/2024
3	R. Pandi Gujan	A national level intercollegiate fest JUNO 2K25	Paper Pinnacle	Gurunanak College	6&7/03 /2025
4	N. Kavitha	Investigations on Hybrid Energy System for DC Microgrid	ICEES - 2025	KL University	9-4-2025 & 10-4-2025
5	Ankita Parida	Transforming Substation Automation Through Deep Learning and Machine Learning	ICDSCNC 2024	Sri Krishna Institute of Technology	20-10-2024 & 21-10-2024
6	Shaik Masthan Valli	Transforming Substation Automation Through Deep Learning and Machine Learning	ICDSCNC 2024	Sri Krishna Institute of Technology	20-10-2024 & 21-10-2024

STUDENT'S PARTICIPATION

S.No.	Name of the Student	Title of the Event	Nature of Event	Organized by	Date of the Event
7	N. Kavitha	Adaptive Electric vehicle charge Controllers using Deep Reinforcement	CE2CT - 2025	Graphic Era Hill University	21-02-2025 & 22-02-2025
8	K. Chandana	AI - Driven optimization of EV Charging: Enhancing Efficiency Grid Stability	IEEE Conf.	Dr. T. Thimmaiah Institute of Technologies, Kolar	6-9-2024 & 7-9-2024
9	Sohaib Siddiq	Artificial Intelligence and Machine Learning for Smart Waste Management-	Paper Presentation	Sri Sai Ram Engineering College	14.09.2024
10	S. Praveen Kumar	Online Research Level Webinar Series on "Enabling Sustainable Progress: Power Engineering Driving Green Energy and EV Revolution in India"	Online Research Level Webinar	SSN College of Engineering, Chennai	05.10.2024
11	K. Guhan	2 nd International Conference on Renewable Energy, Green Computing & Sustainable Development(ICREGCSD-2025)	IEEE Conf.	CVR College of Engineering, Hyderabad	21.02.2025 to 22.02.2025

STUDENT'S MOOC CERTIFICATION

S.No.	Name of the Student	VTU No.	Name of the Course offered by NPTEL	Grades
1	Sohaib Siddiq	VTU27334	Human Computer Interaction (In English)	Elite+gold
2	Anuja Kumari	VTU27077	Human Computer Interaction (In English)	Elite+gold
3	Steevenson Sohtun	VTU27145	Introduction To Internet Of Things	Elite+Silver
4	Gandhaveeti Uma Mahesh Reddy	VTU2700	Introduction To Internet Of Things	Elite+Silver
5	Ganesh Thavidaboina	VTU24113	Introduction To Internet Of Things	Elite+Silver
6	Harini C	VTU2710	Introduction To Internet Of Things	Elite+Silver
7	Pandi Gujan R	VTU24806	Introduction To Internet Of Things	Elite+Silver
8	V Prasanth Kumar	VTU23239	Introduction To Internet Of Things	Elite+Silver
9	Mailavarapu Sai Kiran	VTU24072	Introduction To Internet Of Things	Elite+Silver
10	Kavitha N	VTP4233	Introduction To Internet Of Things	Elite+Silver
11	Sharavanan M	VTP4170	Introduction To Internet Of Things	Elite+Silver
12	Padmacharan V	VTU27356	Introduction To Internet Of Things	Elite+Silver
13	Jillela Sanjeeva Sunil Kumar	VTU27023	Introduction To Internet Of Things	Elite+Silver
14	Akula Banniswara Reddy	VTU27033	Introduction To Internet Of Things	Elite+Silver
15	Akash R	VTU27035	Introduction To Internet Of Things	Elite+Silver
16	Tadipathri Harshavardhan Reddy	VTU27155	Introduction To Internet Of Things	Elite+Silver
17	Vurimi Gowtham Sai Kumar	VTU27120	Introduction To Internet Of Things	Elite+Silver
18	Mohammad Haseeb	VTU26705	Introduction To Internet Of Things	Elite+Silver
19	Koduru Venkata Narayana Reddy	VTU26699	Introduction To Internet Of Things	Elite+Silver
20	Petlu Venkata Narasimha	VTU27018	Introduction To Internet Of Things	Elite+Silver

STUDENT 'S MOOC CERTIFICATION

S.No.	Name of the Student	VTU No.	Name of the Course offered by NPTEL	Remarks
21	Bhumireddy Venkata Harish	VTU29632	Introduction To Internet Of Things	Elite+Silver
22	I Mallikarjuna Reddy	VTU27031	Introduction To Internet Of Things	Elite+Silver
24	Ravuri Manjunadh	VTU27174	Sensors and Actuators	Elite+Silver
25	Gundoji Keerthi	VTU24058	Air Pollution and Control	Elite
26	Satya Sai Rama Manikanta Yarramsetti	VTU21329	Sensors and Actuators	Elite
27	A Shashank	VTU23334	Sensors and Actuators	Elite
28	I Mallikarjuna Reddy	VTU27031	Sensors and Actuators	Elite
29	Areddula Rajesh	VTU27176	Introduction To Industry 4.0 And Industrial Internet Of Things	Elite
30	Ravuri Manjunadh	VTU27174	Introduction To Industry 4.0 And Industrial Internet Of Things	Elite
31	Gotluru Manideepreddy	VTU30417	Introduction To Internet Of Things	Elite
32	Ramya Keerthana	VTU22189	Introduction To Internet Of Things	Elite
33	Y Yaswanth	VTUE2782	Basic Construction Materials	Elite
34	G Mohit	VTU23880	Basic Construction Materials	Elite
35	Sibyala Vikas	VTU29637	Introduction To Internet Of Things	Elite
36	D Prudhviraaj	VTU23992	Introduction To Internet Of Things	Elite
37	Mohammed Ismail Ahmed	VTU24044	Introduction To Internet Of Things	Elite
38	Bandaru Bulli Venkata Sai	VTU30418	Introduction To Internet Of Things	Elite
39	A Surya	VTU24218	Introduction To Internet Of Things	Elite

STUDENT'S MOOC CERTIFICATION

S.No.	Name of the Student	VTU No.	Name of the Course offered by NPTEL	Remarks
41	Vamitha L	VTU2732	Introduction To Internet Of Things	Elite
41	Satya Sai Rama Manikanta Yarramsetti	VTU21329	Introduction To Internet Of Things	Elite
42	Gurunathan	VTU2701	Introduction To Internet Of Things	Elite
43	Dev Sharma	VTU24242	Introduction To Internet Of Things	Elite
44	Nithin sai chowdary	VTU27293	Introduction To Internet Of Things	Elite
45	Likithiswar Adavala	VTU2703	Introduction To Internet Of Things	Elite
46	Chitaranjan Nongmaithem	VTU27317	Introduction To Internet Of Things	Elite
47	Yarragudi muktheswara reddy	VTU27146	Introduction To Internet Of Things	Elite
48	Panga veera prathap	VTU27152	Introduction To Internet Of Things	Elite
49	Kamatham charan	VTU27164	Introduction To Internet Of Things	Elite
50	Gottimukkula Koushik	VTU29681	Introduction To Internet Of Things	Elite
51	Seelam rama dhanunjaya reddy	VTU2703	Introduction To Internet Of Things	Elite
52	Tanga pavan kumar	VTU27197	Introduction To Internet Of Things	Elite
53	Kanaparthi Bharath chandra sai	VTU28353	Introduction To Internet Of Things	Elite
54	Salipindi venkata avinash	VTU28391	Introduction To Internet Of Things	Elite
55	Chappidi Bhargavi	VTU29725	Introduction To Internet Of Things	Elite
56	Perarasu E	VTU30618	Introduction To Internet Of Things	Elite
57	Sujay M	VTU2704	Introduction To Internet Of Things	Elite
58	Areddula Rajesh	VTU27176	Introduction To Internet Of Things	Elite
59	Ravuri Manjunadh	VTU27174	Introduction To Internet Of Things	Elite

STUDENT'S MOOC CERTIFICATION

S.No.	Name of the Student	VTU No.	Name of the Course offered by NPTEL	Remarks
60	Pedalanka Phanindra	VTU27161	Introduction To Internet Of Things	Elite
61	Visveshvar S	VTU27376	Introduction To Internet Of Things	Elite
62	Sujay M	VTU27041	Sensors and Actuators	Elite
63	Dev Sharma	VTU24242	Sensors and Actuators	Elite
64	Vamitha L	VTU24263	Sensors and Actuators	Elite
65	YYaswanth	VTU24290	Sensors and Actuators	Elite
66	Mohammed Ismail Ahmed	VTU24044	Introduction To Industry 4.0 And Industrial Internet Of Things	Elite
67	G Mohit	VTU23880	Sensors and Actuators	Elite
68	Jaswanth Reddy	VTU27147	Introduction To Industry 4.0 And Industrial Internet Of Things	Elite
69	C S Shubham	VTU24288	Sensors and Actuators	Elite
70	Majji Sai Manohar	VTU23879	Signals and Systems	Elite
71	D Prudhviraj	VTU23992	Introduction To Industry 4.0 And Industrial Internet Of Things	Successfully completed
72	Ankita Parida	VTU24241	Deep Learning	Successfully completed
73	Ganesh Thavidaboina	VTU24113	Basic Construction Materials	Successfully completed
74	C S Shubham	VTU24288	Basic Construction Materials	Successfully completed
75	Harini Adiseti	VTU28796	Machine Learning for Engineering and science applications	Successfully completed
76	Kamatham Charan	VTU27164	Network Security	Successfully completed

STUDENT'S MOOC CERTIFICATION

S.No.	Name of the Student	VTU No.	Name of the Course offered by NPTEL	Remarks
77	Sandhya A	VTU21385	Introduction To Internet Of Things	Successfully completed
78	Jaswanth Reddy	VTU27147	Introduction To Internet Of Things	Successfully completed
79	Paradarami Vamsi Dhar	VTU27012	Introduction To Internet Of Things	Successfully completed
80	B Benarji Naidu	VTU27370	Introduction To Internet Of Things	Successfully completed
81	Kotte Chandana	VTU27044	Introduction To Internet Of Things	Successfully completed
82	Vurimella Ranjith	VTU27028	Introduction To Internet Of Things	Successfully completed
83	Malle Saikiran	VTU27154	Air Pollution and Control	Successfully completed
84	Sandhya A	VTU21385	Sensors and Actuators	Successfully completed
85	Thanveer Ahamed	VTU21581	Sensors and Actuators	Successfully completed
86	Pavan S	VTU27912	Sensors and Actuators	Successfully completed
87	Vurimella Ranjith	VTU27028	Sensors and Actuators	Successfully completed
88	Jaswanth Reddy	VTU27147	Sensors and Actuators	Successfully completed
89	Chitaranjan Nongmaithem	VTU27317	Sensors and Actuators	Successfully completed
90	Vurimi Gowtham Sai Kumar	VTU27120	Sensors and Actuators	Successfully completed
91	Vamitha L	VTU24263	Signals and Systems	Successfully completed
92	A Surya	VTU24218	Cloud Computing	Successfully completed
93	Satya Sai Rama Manikanta Yarramsetti	VTU21329	Sensors and Actuators	Elite
94	Ganesh Thavidaboina	VTU24113	Basic Construction Materials	Successfully completed

STUDENT'S EXTRACURRICULAR ACHIEVEMENT

- ❑ Department of EEE, second year student, **A. Surya (VTU 24218)**, Batch 2021-2025 Won First Prize in Tamil Nadu State Open Archery Championship 2024 organized by Thoothukudi District Archery Association and Focus Archery Academy on 25.02.2024.



STUDENT'S ACADEMIC ACHIEVEMENT

- Department of EEE, final year student, **Pranav Kumar Rowlo (VTU 17929)**, Batch 2020-2024 successfully qualified in GATE 2024 with Dual GATE Scores in Electrical Engineering (EE) and Electronics and Communication Engineering (EC)

Category	Gate Score	All India Rank
Electrical Engineering	354	7584
Electronics and Communication Engineering	360	7824

Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
Established in the University Year as 2nd UGC AICTE 1996

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CATEGORY 1
UGC

School of Electrical and Communication
Department of Electrical and Electronics Engineering

Congratulations
to

GATE 2024
#ISC Bengaluru

Mr. PRANAV KUMAR ROWLO,
(VTU 17929) B.Tech. Final Year,
EEE (Batch 2020 - 2024)

For his Great Achievement in **GATE 2024**
With **Dual GATE Scores**
In
Electrical Engineering (EE)
&
Electronics and Communication Engineering (EC)

Electrical Engineering (EE)
GATE Score: **354**
All India Rank: **7584**

Electronics and Communication Engineering (EC)
GATE Score: **360**
All India Rank: **7824**

Tollfree
1800 212 7669

Website
www.veltech.edu.in

No: 42, Avadi - Vel Tech
Road, Vel Tech, Avadi,
Chennai - 600 062

EVENTS ORGANIZED

Value-Added Course



Department of EEE in association with Centre of Excellence for IoT and Smart Factory Initiatives organized a Value Added Course on "Internet of Things" during 8th – 10th August 2024.

Department of EEE in association with Office of Industry Relations offered a Value-Added/Program Elective course titled "Power System Automation" during January to April 2025. The course was conducted by Prof. N. Murugesan, Professor of Practice, CEO of Ohm Energy Services, and Former Director General of the Central Power Research Institute (CPRI).

Value-Added Course



Seminar



Department of EEE organised a seminar on "Smart Grid Protection" on 26th September 2024. The session was delivered by Dr. K. Selvajyothi, Associate Professor, Department of ECE, IIITDM Kancheepuram. The expert provided valuable insights into the principles, technologies, and challenges associated with smart grid protection systems.

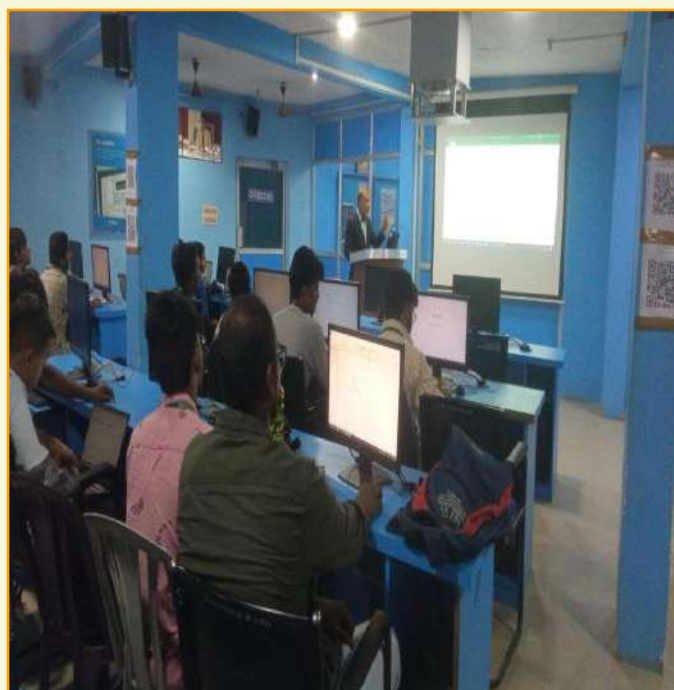
SEMINAR

- ❑ The Department of Electrical and Electronics Engineering (EEE), in association with the Institution's Innovation Council (IIC) – Vel Tech and National Innovation and Startup Policy (NISIP), organised an Seminar on “Emerging Electrical Technologies and Innovative Approaches to Societal Problems” on 15th February 2025 at the Video Conference Hall.
- ❑ The session focused on emerging developments in electrical technologies and their potential applications in addressing real-world societal challenges. The expert interaction provided students with valuable insights into innovation, problem-solving, entrepreneurship, and technology-driven solutions. The programme encouraged students to develop innovative ideas and explore opportunities for converting technical concepts into impactful solutions.



SPECIALIZED CREDIT COURSES

- Department of EEE in association with Office of Industry Relations conducted an one credit specialized course on “Wind Resource Assessment” to the 3rd year students during 29th-31st August, 2024. Dr. Kumaravel Rathinavel, Managing Director of Deutsche WindGuard handled the session for the students.
- Department of EEE in association with Office of International Relations conducted an one credit specialized course on “Energy Storage Systems” for the students during 3rd – 5th March, 2025. Dr. Shuichi Torii, Professor, Kumamoto University, Japan handled the course.



INDUSTRIAL VISIT

- ❑ Department of EEE organized an industrial visit to Satish Dhawan Space Centre (SDSC), SHAR, Sriharikota, on 28th February 2025 (IV-1254) as part of the curriculum activity. A total of 115 students and 5 faculty members participated in the visit.
- ❑ Department of EEE organized an industrial visit to Dellner India Pvt. Ltd., Chennai, on 18th March 2025 (IV-1262). A total of 51 students and 3 faculty members participated in the visit.
- ❑ Department of EEE organized an industrial visit to North Chennai Thermal Power Station on 28th March 2025 (IV-1270). A total of 53 students including 2nd, 3rd, and 4th year, and 3 faculty members participated in the visit.



WORKSHOP

- ❑ The Department of EEE, in association with the Institution's Innovation Council (IIC) – Vel Tech and National Innovation and Startup Policy (NISIP), organised a workshop on "Entrepreneurship & Innovation as Career Opportunity" on 19th September 2024 at the Video Conference Hall.
- ❑ The workshop highlighted the importance of entrepreneurship and innovation in shaping successful career pathways. It provided students with insights into startup development, opportunity identification, and converting innovative ideas into viable ventures. The session motivated students to explore entrepreneurial opportunities and develop an innovation-driven mindset.



ALUMNI INTERACTION

- ❑ An alumni interaction session was conducted on 20th March 2025 with **Mr. Vyshak**, an alumnus from the 2017–2018 batch. He is currently working at Fractal Analytics. He addressed 49 students on the topic “Introduction to AI and ML for Electrical Engineering.”
- ❑ An alumni interaction session was conducted on 17th April 2025 with **Ms. Nikita Shankar**, a distinguished alumna from the 2016–2017 Batch. She is currently employed at Hitachi Energy. She addressed around 40 students on the topic “Future Trends in Renewable Energy”



IHL COURSES

- ❑ Various meaningful courses has been organized by the department with experts from reputed international institute and top product solution based organization.
- ❑ Three value added courses has been handled by the international reputed faculty and resources person in the academic year .
- ❑ The details is showcased in the following table.

Sl. No.	Name	Designation/ Department	Name of the Course	Date
1	Prof. Dr. Shuichi Torii	Professor, Kumamoto University , Japan	Energy Storage Systems	(01-03-2025 to 03-03-2025)
2	Dr. N. Murugesan	Professor of Practice, Ohm Energy Services, Former Director General - CPRI	Power System Automation	(Jan -Apr 2025)
3	Dr. Kumaravel Rathinavel	Managing Director Deutsche WindGuard India	Wind Resource Assessment using Windographer	(29-08-2024 to 31-08-2024)

COMMUNITY SERVICE PROJECT ACTIVITY

Department of EEE in association with Unnat Bharat Abhiyan 2.0 installed two nos. of solar PV light post with automatic on-off facility at Arakkambakkam Village as part of curriculum activity.

அரக்கம்பாக்கம் ஊராட்சி
வில்லிவாக்கம் ஊராட்சி ஒன்றியம், திருவள்ளூர் மாவட்டம்.
செ. சீதாவித்தாராஜன்
ஊராட்சி மன்ற தலைவர்
ஊராட்சி மன்ற அலுவலகம்: எண். 71, பெரியார் சாலை, அரக்கம்பாக்கம் திராமம்.
(வழி) ஆவடி I.A.F சென்னை-600055.
செல்: 8072238477 / 9176777778

LETTER OF APPRECIATION

The office of the Village president, Arakkambakkam village panchayat is happy to issue this letter of appreciation to team of faculty members and students involved in the installation of two (2) nos. of solar PV light post with automatic on-off facility at Arakkambakkam village, Villivakkam block near the bus stops free of cost. This was a long term request from the local people, which got supported by the dept of EEE in association with Unnat Bharat Abhiyan 2.0 of Vel Tech Rangrajan Dr. Sagunthala R&D Institute of Science and Technology, Avadi Chennai.

On behalf of the village people I wish all the best to the team involved for their future endeavors

FACULTY MEMBERS

1. Dr S Ramesh , Professor & HoD, EEE Dept.
2. Dr K Karunanithi Professor, EEE Dept.
3. Dr. R Gowri Shankar Rao , Professor, Physics Dept. & Coordinator UBA
4. Dr. N K Rayaguru, Associate Professor , EEE Dept. & Co-Coordinator UBA


தலைவர் / செயல் அலுவலர்
அரக்கம்பாக்கம் ஊராட்சி
சென்னை - 600 055



PLACEMENT DETAILS

The Department continues to maintain a **100% placement** record among students **who have opted** for campus placement opportunities. This achievement reflects the department's strong industry engagement, effective placement support, and consistent efforts towards students' career development.


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 Rangarajan Dr. Sagunthala
 R&D Institute of Science and Technology
(Deemed to be University) Estd. in 2003 of UGC Act, 1956




School of Electrical and Communication
 Department of Electrical and Electronics Engineering

Hearty Congratulations
Rishith Medaravoina **Batch 2021-2025**
 VTU 24030

We are pleased to announce that our student has been selected by


Illumine-i
 with a CTC of Rs. 4.00 LPA




Vel Tech
 Rangarajan Dr. Sagunthala
 R&D Institute of Science and Technology
(Deemed to be University) Estd. in 2003 of UGC Act, 1956




School of Electrical and Communication
 Department of Electrical and Electronics Engineering

Hearty Congratulations **Batch 2021-2025**



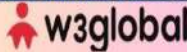
T V Karthik
 VTU 24088



Bhavan B
 VTU 19090

CTC INR 3.60 LPA

We are pleased to announce that our students have been selected by


w3global


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 R&D Institute of Science and Technology
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School of Electrical and Communication
 Department of Electrical and Electronics Engineering

Hearty Congratulations
Guhan K **Batch 2021-2025**
 VTU 20248

We are pleased to announce that our student has been selected by

WELKINRIM TECHNOLOGIES PVT. LTD 
 with a Stipend of Rs.15,000 per month




Vel Tech
 Rangarajan Dr. Sagunthala
 R&D Institute of Science and Technology
(Deemed to be University) Estd. in 2003 of UGC Act, 1956




School of Electrical and Communication
 Department of Electrical and Electronics Engineering

Hearty Congratulations
Chandra Bhushan **Batch 2021-2025**
 VTU 21303

We are pleased to announce that our student has been selected by


L&T Technology Services
 with a CTC of Rs. 4.00 LPA



PLACEMENT DETAILS

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RD Institute of Science and Technology
Approved by the Government of Tamil Nadu, Act 1978

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UVC

School of Electrical and Communication
Department of Electrical and Electronics Engineering
Hearty Congratulations
Batch 2021-2025




Uggumudi Geetha VTU 21325
Gangnapalli Sai Tejaswini VTU 21247

We are pleased to announce that our students have been selected by
Vestas
with a Stipend of Rs.30,000 per month

Vel Tech
Rangarajan Dr. Sagunthala
RD Institute of Science and Technology
Approved by the Government of Tamil Nadu, Act 1978

NAAC A++
CATEGORY-1
UVC

School of Electrical and Communication
Department of Electrical and Electronics Engineering
Hearty Congratulations
Batch 2021-2025




Pavan S VTU 24067
Upendra Nakkadoddi VTU 24108

We are pleased to announce that our students have been selected by
OHMS TECH ENGINEERS
with a CTC of Rs.3.00 LPA

Vel Tech
Rangarajan Dr. Sagunthala
RD Institute of Science and Technology
Approved by the Government of Tamil Nadu, Act 1978

NAAC A++
CATEGORY-1
UVC

School of Electrical and Communication
Department of Electrical and Electronics Engineering
Hearty Congratulations
Batch 2021-2025






Keerthi Gundaji VTU 24058
Shashidhara Chary VTU 24002
Pasam Venkat Susanth VTU 23976
Ajay Kumar K VTU 24006

We are pleased to announce that our students have been selected by
FOXCONN
with a CTC of Rs. 3.00 LPA

Vel Tech
Rangarajan Dr. Sagunthala
RD Institute of Science and Technology
Approved by the Government of Tamil Nadu, Act 1978

NAAC A++
CATEGORY-1
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School of Electrical and Communication
Department of Electrical and Electronics Engineering
Hearty Congratulations
Batch 2021-2025





S Adesh VTU 19723
Shaik Abubakar Siddique VTU 21057
Harish Zade VTU 21324

We are pleased to announce that our students have been selected by
meil
MEGHA ENGINEERING & INFRASTRUCTURES LIMITED
with a CTC of Rs. 3.00 LPA

Vel Tech
Rangarajan Dr. Sagunthala
RD Institute of Science and Technology
Approved by the Government of Tamil Nadu, Act 1978

NAAC A++
CATEGORY-1
UVC

School of Electrical and Communication
Department of Electrical and Electronics Engineering
Hearty Congratulations
Batch 2021-2025






Keerthi Gundaji VTU 24058
Shashidhara Chary VTU 24002
Pasam Venkat Susanth VTU 23976
Ajay Kumar K VTU 24006

We are pleased to announce that our students have been selected by
FOXCONN
with a CTC of Rs. 3.00 LPA

Vel Tech
Rangarajan Dr. Sagunthala
RD Institute of Science and Technology
Approved by the Government of Tamil Nadu, Act 1978

NAAC A++
CATEGORY-1
UVC

School of Electrical and Communication
Department of Electrical and Electronics Engineering
Hearty Congratulations
Batch 2021-2025







Abhishek Kumar VTU 19785
Mulumudi Hareesh VTU 24084
M V Karthikeya VTU 20418
Kalavaiapudi Akhil VTU 24078
Shaik Mansoor VTU 24081

We are pleased to announce that our students have been selected by
NISSI
Energy Interlinked
with a CTC of Rs. 3.60 LPA

HIGHER STUDIES DETAILS

Students are encouraged and supported to pursue higher studies in reputed institutions, enabling them to advance their academic knowledge, research capabilities, and professional expertise.

S.No.	Name of Student	VTU No.	Degree	Name of Institute
1	R S Aswinkumar	VTU11999	M.Tech. (Laser and Electro Optic Communication)	Defense Institute of Advanced Technology, Pune
2	Pranav Kumar Rowolo	VTU17929	M.Tech (Smart Manufacturing)	Indian Institute of Science (IISc)
3	Dakymen Kongri	VTU17037	M.Tech (Power Electronics)	Vel Tech Rangarajan Dr Sagunthala R&D Institute of Science and Technology

ACADEMIC SECTION
ADMISSIONS UNIT
INDIAN INSTITUTE OF SCIENCE
BANGALORE - 560012

Telephone : (080) 2293-3726/2977
Email: admission.acad@iisc.ac.in

Date : 16/05/2025

Name: PRANAV KUMAR ROWLO Application No. : 258309121

Sub : Provisional Admission Offer Letter for M Tech Programme

Dear Mr / Ms / Mrs. PRANAV KUMAR ROWLO,

You have been provisionally selected for admission to the M Tech Programme in Smart Manufacturing in the Department of Design and Manufacturing, under the GN category. Your provisional selection is based on your GATE score (867.08 score) and performance in the interview/ written test (as applicable).

The terms and conditions in respect of the provisional admission are enclosed herewith. In addition, the COAP Guidelines available on the official COAP 2025 website may also be seen before initiating further action relating to admission process. You have to complete the necessary formalities by accessing the COAP portal (<https://gate.iisc.ac.in/coap2025/>) within the specified timeline indicated on the COAP 2025 website.

Upon acceptance of this offer on the COAP portal, please complete the admission formalities by logging into the IISc Applicant's Interface and remitting the Admission Fees from May 27 to June 15, 2025.

You may reach out to the department if you require any further information about the program. The department contact details can be accessed from the Department website or you may refer: <https://iisc.ac.in/admissions/overview/department-contact-details/>

In case of any queries or clarifications, you may write to admission.acad@iisc.ac.in or get in touch with the admission unit over phone at 080 2293-3726/2977.

We look forward to your joining this program.
Best wishes,

ASSISTANT REGISTRAR
(ACADEMICS)

Encl: Terms and conditions.
Guidelines for admission and other pre-enrollment requirements

NOTE: This is a computer generated Offer Letter and requires no signature.

उत्तरत प्रोद्योगिकी रक्षा संस्थान
(मम-विश्वविद्यालय)
DEFENCE INSTITUTE OF ADVANCED TECHNOLOGY
(Deemed to be University)
24-16-03

DIAT

आर.एस. अस्विन कुमार
R.S. Aswin Kumar
Department : Applied Physics
Course : M.Tech
Duration : 2024-2026

Valid Up To : 31-07-2026

आधिकारी प्राधिकारी
Issuing Authority

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THANK YOU

Any Query, Kindly Contact to:

hodeee@veltech.edu.in

**Vel Tech Rangarajan Dr.Sagunthala R&D Institute of
Science and Technology, Avadi, Chennai**