VIT®
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

School of Electrical Engineering (SELECT)

VISION

To offer an education in electrical engineering that provides strong fundamental knowledge, skills for employability, cross-disciplinary research and creates leaders who provide technological solutions to societal and industry problems.

MISSION

M-1: Provide personalized experiential learning in industry sponsored labs to prepare students in electrical engineering with strong critical thinking and employability skills.

M-2: Foster design thinking, creativity and cross-disciplinary research with highly qualified faculty to create innovators and entrepreneurs in the broad area of electrical engineering.

M-3: Collaborate with national and international partners to provide innovative solutions to societal and industry challenges.

QS WORLD UNIVERSITY RANKINGS

Milestones: Electrical and Electronics Engineering is within 151-200 in the QS World ranking and 7-10 in India ranking

CONTENTS

DEAN'S MESSAGE

Dr. Kowsalya M
Professor and Dean/ SELECT

Since its inception in 2009, the School of Electrical Engineering has carved a path of distinction and innovation. From humble beginnings, we have grown into a nationally and globally recognized institution with our Electrical and Electronics Engineering (EEE) program now ranked among the top 10 in India by QS, and globally placed in the 151–200 band in 2025, marking a leap of over 50 positions in recent years.

Our journey is anchored in academic rigor, industry relevance, and an unrelenting pursuit of excellence. Both our flagship programs EEE and Electronics and Instrumentation Engineering (EIE), have been awarded the prestigious NBA accreditation for six years (2025-2031), a testament to the quality, impact, and vision embedded in our curriculum and pedagogy.

Our infrastructure reflects our ambition: 15 academic laboratories, 4 industry-sponsored labs, and 5 advanced research labs form the backbone of our hands-on, future-ready education. The Adaptive Curriculum for Excellence (ACE) is constantly refreshed with valuable insights from leading academic and industry partners to ensure our students are always ahead of the curve.

We believe in nurturing more than just engineers we shape innovators and leaders. Over 80% of our students take up multiple Value-Added Programs, acquiring next-generation skills that set them apart in the global job market. An industry-sponsored hackathon recently challenged our students to tackle real-world problems with creativity and technical prowess.

At the heart of our academic ecosystem lies a dedicated, dynamic faculty. In just nine months from January to September 2025 our faculty members have published **159** journal papers, and **29** research scholars have successfully completed their oral examinations. Alongside this, we have conducted numerous Faculty Development Programs, hands-on workshops, and industrial connectivity to embrace emerging pedagogical trends in the teaching and learning process.

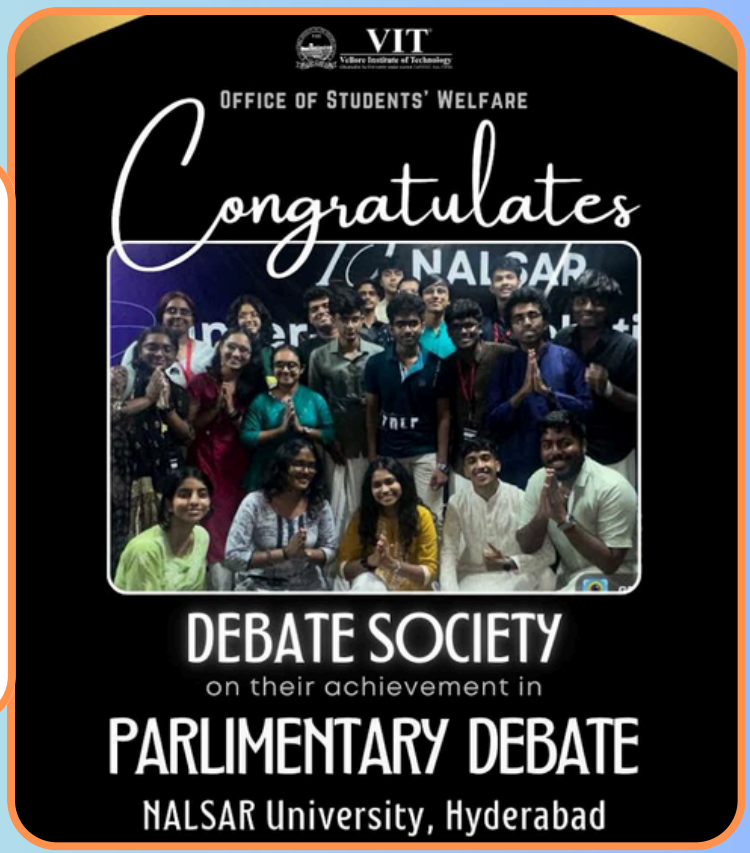
Our story is one of passion, progress, and purpose. We invite you to be a part of this journey to follow our achievements, engage with our community, and witness the legacy we are building. Stay connected with us through our official social media channels listed at the end of this message.

SCAN HERE
For more Details about SELECT

STUDENT ACHIEVEMENTS

Team PowerCode, comprising Mr. Advik Vijay (22BEE0206), Ms. Prachi Kumari (22BEE0132), and Mr. Nitin Mutyala (22BEI0017) from the IEEE PELS Student Chapter, secured the 1st University Rank in the global IEEEXtreme 18.0 competition.

The Debate Society achieved a phenomenal outing at the NALSAR University Parliamentary Debate Tournament 2025. Among the participants were Mr. Aadithyan S A (23BEE0012), who reached the Open Pre-Quarter-Finals , and Ms. Navya Kukreja (22BEE0093), who served in an Adjudication Role.



STUDENT ACHIEVEMENTS

The VIT Men's Hockey Team emerged as the Winners of the District Level Inter-Collegiate Tournament, part of the Tamil Nadu Chief Minister's Trophy 2025. This victory featured stellar performances by Mr. Kavin P (22BEE0361) and Mr. Gokulnath V (25BEE0150), bringing great honor to the institution.

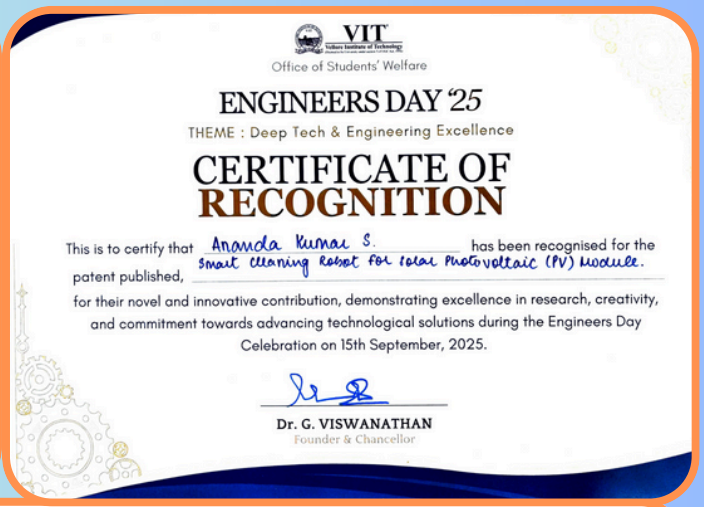
The VIT Men's Basketball Team showcased their dominance by securing the Winners position at the Tamil Nadu Chief Minister's Trophy for Men – 2025 Basketball tournament on September 6. Mr. Srijan Shankar Singh (24BEE0190) was a key member of the victorious winning team in the competition.

Mr. Vijay Kumar Meena (22BEE0348), part of Team Kshatriya, secured the 2nd Runner-up position in the Drag Race event at the Mega ATV Championship 2025. Additionally, Anuja Mishra (22BEE0109) was a Winner with the Women's Football Team at the Tamil Nadu Chief Minister's Trophy 2025.

RESEARCH SCHOLAR ACHIEVEMENTS

Mr. SRINIVASAN S (24PHD0244) is qualified for Assistant Professorship in the subject of Electronic Science through UGC – NET examination conducted in June 2025.

Mr. BALA DURAI KANNAN P I D T (24PHD0083) is qualified for Assistant Professorship in the subject of Electronic Science through UGC – NET examination conducted in June 2025.



VIT
Office of Students' Welfare

ENGINEERS DAY '25

THEME : Deep Tech & Engineering Excellence

CERTIFICATE OF RECOGNITION

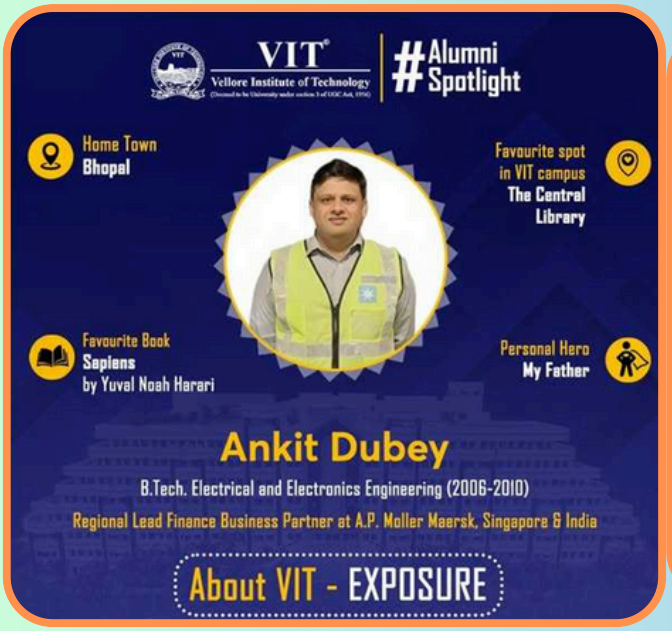
This is to certify that Ananda Kumar S. has been recognised for the patent published, Smart Cleaning Robot for Solar Photovoltaic (PV) Module.

for their novel and innovative contribution, demonstrating excellence in research, creativity, and commitment towards advancing technological solutions during the Engineers Day Celebration on 15th September, 2025.

Dr. G. VISWANATHAN
Founder & Chancellor

Mr. Ananda Kumar S(23PHD0520) his outstanding achievement, receiving recognition at the Engineers Day 2025 celebration. His patent published is a novel and innovative contribution for a smart cleaning robot for a solar photovoltaic (PV) module.

ALUMNI SPOTLIGHT



Mr. Ankit Dubey, an alumnus of B.Tech - Electrical and Electronics Engineering (2006-2010) from Vellore Institute of Technology (VIT), is currently the Regional Lead Finance Business Partner at A.P. Moller Maersk, Singapore and India. Hailing from Bhopal, Mr. Ankit Dubey is a proud VITian whose journey is marked by dedication and passion.

Ms. Saoni Banerjee, an alumnus of B.Tech.- Electrical and Electronics Engineering (2006-2010) from Vellore Institute of Technology (VIT), is currently the Management Consultant -PwC India. Hailing from Kolkata, Ms. Saoni Banerjee is a proud VITian whose journey is marked by dedication and passion.

Ms. Nikita Mishra, an alumnus of B.Tech.- Electrical and Electronics Engineering (2006-2010) from Vellore Institute of Technology (VIT), is currently the Field Application Engineer, India. Hailing from Mumbai, Ms. Nikita Mishra is a proud VITian whose journey is marked by dedication and passion.

HIGH IMPACT FACTOR PUBLICATIONS –JULY 2025

National Collaboration: 01
Foreign Collaboration: NIL
UG/PG students: 01

- *M., Golla, Mallikarjuna; D.V., Sudarsan Reddy, Duttaluri Venkata; S., Thangavel, S., A unified single-controller approach of an MPPT and droop control for solar PVs in DC microgrid under unequal and partial shading conditions, Renewable Energy, I.F. 9.1*
- *V., Yuvaraju, V.; S., Thangavel, S.; M., Golla, Mallikarjuna, Optimal placement of phasor measurement unit for implementation of WAMS in a grid system, Swarm and Evolutionary Computation, I.F. 8.5*
- *A.V., Jose, Arun V.; S.K., Shrivastava, Sonam K., An analytical examination of the performance assessment of CNN-LSTM architectures for state-of-health evaluation of lithium-ion batteries, Results in Engineering, I.F. 7.9*
- *D.L., M, Dhinu Lal; R., Varadarajan, Ramesh, Optimised autoencoder-based ensemble deep learning approaches for cyber physical event classification utilizing synchrophasor PMU data, Results in Engineering, I.F. 7.9*
- *S., R, Shyni; K., M, Kowsalya, LSTM-based PMS for HESS in DC microgrid, Results in Engineering, I.F. 7.9*
- *S., L, Saranathan; I., Vairavasundaram, Indragandhi; A., Bragadeshwaran, Ashok, Navigating the spectrum of battery health management in electric vehicles: A comprehensive review, Results in Engineering, I.F. 7.9*
- *K., C.P, Kandasamy; V.K., Elumalai, Vinodh Kumar; B., E, Balaji, EEG driven seizure classification framework leveraging variational mode decomposition technique and entropy features based Bayesian optimized SVM, Chaos, Solitons and Fractals, I.F. 5.6*
- *E., Sangeetha, Elango; V.P., Ramachandran, Vijaya Priya, Speed and current harmonics reduction using an adaptive proportional integral resonant controller for PMSM based electric vehicle drives, Scientific Reports, I.F. 3.9*
- *J., Dheeba, J.; V., Oberoi, Vansh; R.R., Singh, R. Raja; V.G., Karthik, V. Gautam, Securing Electrical Drive Systems Against Man-in-the-Middle Attacks Using S-Box Optimized AES Encryption, IEEE Access, I.F. 3.6*
- *P., Srikanth, Pulipaka; G., Arunkumar, G., Analysis, Design, and Hardware Implementation of Phase shifted Isolated DC-DC Converter for Low Voltage Electric Vehicle Battery Charging Applications, IEEE Access, I.F. 3.6*

HIGH IMPACT FACTOR PUBLICATIONS – AUGUST 2025

National Collaboration: 02
Foreign Collaboration: 02
UG/PG students: NIL

- *S.M., Hunachal, Santoshkumar M.; G., Arunkumar, G., Modified Quasi-Z-Source Resonant Converter Based Concurrent CC-CV Charging in a Dual-Port Charger for EV Applications, IEEE Transactions on Transportation Electrification, I.F. 8.3*
- *P.A.V., Prasad, P. Anjaneya Vara; C., Dhanamjayulu, Chittathuru, Implementation of voltage self-balanced 17-level switched capacitor MLI topology for solar PV systems, Results in Engineering, I.F. 7.9*
- *A., V, Alex; A., Rammohan, A., Performance Optimization of Synchronous Reluctance Motor using Adaptive MTPA Curve Fitting with Anti-Windup Current Control, Results in Engineering, I.F. 7.9*
- *A.V., Jose, Arun V.; S.K., Shrivastava, Sonam K., A comprehensive review of digital twin applications in electric vehicles: Evolution, classification, and future directions towards Industry 5.0, Results in Engineering, I.F. 7.9*
- *A., Keerthi, Azza; C., Dhanamjayulu, Chittathuru, A thorough review of energy management and an advanced control techniques for Bi directional DC-DC converters in electric vehicle applications, Results in Engineering, I.F. 7.9*
- *R.V., K, Ravindra Varma; C., Dhanamjayulu, Chittathuru, Innovative perspectives on energy management strategies for bidirectional DC DC converters with hybrid storage integration in HEVs, Results in Engineering, I.F. 7.9*
- *L., Susmitha, L.; A.S., Ebenezer, A. Shamila; J.S., Priya, Jeba S.; n.S.P., Subathra, null S.P.; S., Thomas George, S.; G., Peter, Geno; A.A., Stonier, Albert Alexander, An effective multi-modality analysis for stress classification: A signal-to-image conversion using local pattern techniques, Computers in Biology and Medicine, I.F. 6.3*
- *S., Kodeeswaran, S.; A., Kannabhiran, A.; D., Elangovan, Devaraj, A comparative study of energy sources, docking stations and wireless charging technologies for certain quadrotor unmanned aerial vehicles, Aerospace Science and Technology, I.F. 5.8*
- *M., Saravanan, M.; G.K.R., Rajini, Gaddam Kesava Reddy, Automatic detection of triples rider violations using an optimized mask R-CNN framework, Systems Science and Control Engineering, I.F. 4.4*
- *N., Munusamy, Nagarajan; I., Vairavasundaram, Indragandhi, Advanced vehicle-to-grid control: enhancing energy exchange and power quality with grey wolf optimized, Systems Science and Control Engineering, I.F. 4.4*

HIGH IMPACT FACTOR PUBLICATIONS – SEPTEMBER 2025

National Collaboration: 01
Foreign Collaboration: 01
UG/PG students: NIL

- *K., Anand, K.; T., Prakash, Tapan, Computational Methods in Power System State Estimation: A Recent Critical Review, Current Challenges and Future Research Directions, Archives of Computational Methods in Engineering, I.F. 12.1*
- *R., Saravanakumar, R.; N., Sivakumar, N.; V.S.K., Devi, V. S.Kirthika; C., Shanthini, C.; D., Jena, Debashisha; E., Ibaceta, Efrain; M., Diaz-D, Matias; J.R., Rodr?guez, Jos? R., Condition Monitoring of Submodule Capacitors in Modular Multilevel Converters?A Review, Journal of Energy Storage, I.F. 9.8*
- *M.K., Nallakaruppan, M. K.; R.K., Dhanaraj, Rajesh Kumar; S., Shukla, Shubhi; S., Krishnamoorthi, Saravanan; R.K., Kaushal, Rajesh Kumar; M.K., Goyal, Mayank Kumar; S., Basheer, Shakila; M.T., Quasim, Mohammad Tabrez, A Federated Autoencoder Framework With Explainable AI for Intelligent 6G-IoT Infrastructure Optimization, IEEE Internet of Things Journal, I.F. 8.9*
- *P.K., Sinha, Piyush Kumar; M., R, Marimuthu, Comparative study of quantum and classical algorithms for renewable energy sources, Results in Engineering, I.F. 7.9*
- *S., Ramshankar, S.; M., Manimozhi, M., Integration of digital twin technologies for state estimation in electric vehicle batteries: A review, Results in Engineering, I.F. 7.9*
- *A.V., Jose, Arun V.; S., Shrivastava, Sonam, The advancements and research trends in state of health estimation for lithium-ion batteries over the last two decades: A bibliometric examination of prospective trends, Sustainable Futures, I.F. 4.9*
- *M., Chankaya, Mukul; M., Aijaz, Masiha; M., Panda, Mrutunjaya; I., Hussain, Ikhlaq; B.P., Singh, B. P., Chaotic Grey Wolf Optimized DC-DC Bi directional Converter for a Single-Phase Grid-Tied PV-BES System, IEEE Transactions on Industry Applications, I.F. 4.5*
- *T., Paulraj, T.; Y.P., Obulesu, Yeddula Peda, Comprehensive Performance Evaluation of 60 kW PMSM, EESM, and SynRM for Electric Vehicle Traction Under Steady State and Drive Cycle Conditions, IEEE Access, I.F. 3.6*
- *L., Nikita Chanu, Laishram; S., Balaji, S., An Extensive Overview and Analysis of Recent Advancements in Multiport Converter Topologies and Control Techniques, IEEE Access, I.F. 3.6*
- *P.S., Sam, Paul Sathiyan; B.P., Chandran, Benin Pratap; A.A., Stonier, Albert Alexander; G., Peter, Geno; V., Arun, Vijayakumar; V., Ganji, Vivekananda, An Extensive Review and Analysis on Performance Improvement of Grid Tied Multilevel Inverter Using Optimisation Techniques, IET Power Electronics, I.F. 1.9*

PATENTS PUBLISHED JULY – SEPTEMBER

Faculty Name: *Dr.Rashmi Ranjan Das*
Title: *Integrated Smart Charging System*
Application number : *202541062114*
Date: *11-July-25*
Coordinators: *Dr.Rashmi Ranjan Das, Dr.Sumit Kumar Jindal, Dr.Deepika Rani Sona, Ms. Shreyashi, Om Patel, Mr. Bhaargav Rathor*

Faculty Name: *Dr. S. Balaji*
Title: *A Microcontroller-Based Fault Detection and Automated Communication System for Monitoring and Notifying Operational Faults in a Building or Installation*
Application number : *202541071722*
Date: *01-Aug-25*
Coordinators : *Dr. S. Balaji, Mr. Ujjwal Tiwari, Mr. Dhruv Chaudhary*

Faculty Name: *Dr. Raju J*
Title: *System and Method for Fraud Prevention During Land Registration Transactions*
Application number : *202541054186*
Date: *01-Aug-25*
Coordinators : *Dr.P Balakrishnan, Dr.A Anny Leema, Dr.Priya M, Dr.Raju J, Dr.Mythili T*

Faculty Name: *Dr. R Thirumalaivasan*
Title: *Adaptive Dual-Loop Control Device For Torque Regulation In Electric Drive Systems*
Application number : *202541082634*
Date: *05-Sep-25*
Coordinators : *Dr. Ashok B, Dr. R.Thirumalaivasan, Mr. N.Prabhu*

Faculty Name: *Dr. V Indragandhi*
Title: *A Shunt Active Power Filter (SAPF) System For Real-Time Harmonic Distortion And Reactive Power Compensation In Electrical Networks*
Application number : *202541080095*
Date: *05-Sep-25*
Coordinators: *Dr V. Indragandhi, Ms. Sanwariyia S, Ms. SubbaLakshmi R K*

CONSULTANCY/FUNDED PROJECTS


Dr. Yeddula Pedda Obulesu, Dr. Kowsalya

Title: ***Testing of Power Converters***
Cost : 94,000/-
Consultant: ***Dr. Yeddula Pedda Obulesu***
Co-Consultant: ***Dr. Kowsalya***
Funding Agency: ***Amara Kosha Technologies Pvt. Ltd., Bangalore.***


Dr. R Raja Singh, Dr. N Arun

Title : ***Development of Energy Harvesting Tiles***
Cost : ***5,90,000/-***
Consultant : ***Dr. Raja Singh R***
Co-Consultant : ***Dr. Arun N***
Funding Agency : ***Holm Energy Pvt. Ltd., New Delhi***


Dr. K Selvakumar, Dr. Mathew M Noel

Title : ***Development of Compressed and Explainable CNN Models for Industrial Application***
Cost : ***2,95,000/-***
Consultant : ***Dr. Selvakumar K***
Co-Consultant : ***Dr. Mathew M Noel***
Funding Agency : ***Yantra Vision Software Pvt. Ltd., Bangalore***

Title : ***Innovative Strategies Empowering Sustainable Livelihoods-AI driven Smart Approaches for Poly Generation, Innovative Farming and Bio-pharmaceutical Research.***
Cost : ***2,30,00,000/-***
Principal Investigator : ***Dr. N. Rajasekar and team***
Funding Agency : ***Anusandhan National Research Foundation (ANRF) in 'Partnership for Accelerated Innovation and Research (PAIR)' scheme.***



Dr.M.Monica Subashini, Dr.I.Jacob Raglend, Dr.Belwin Edward

Title : ***Smart Health Monitoring Chair***
Cost : ***3,00,000/-***
Consultant : ***Dr.M.Monica Subashini, Dr.I.Jacob Raglend & Dr.Belwin Edward***
Funding Agency : ***Institution's Innovation Council, VIT, Vellore***

CONSULTANCY/FUNDED PROJECTS

Title : ***Development of a Standalone Vehicle-to-Load Power System for Electric Vehicles***
Cost : ***3,00,000/-***
Principal Investigator: ***Dr. J Vanishree***
Industry Partner: ***Mr G Prabhu, Director, Warar Energy***
Funding Agency: ***Women Empowerment, VIT, Vellore***

Title : ***AI based FOTSMC for stability control and suspension enhancement of drones***
Cost : ***3,00,000/-***
Principal Investigator: ***Dr. T Yuvapriya***
Funding Agency: ***Women Empowerment, VIT, Vellore***

Title : ***Design of Controllers and Fault Diagnostic System for Cascaded Multilevel Inverters Hybrid Energy Conversion System***
Cost : ***2,00,000/-***
Principal Investigator: ***Dr. Sonam Shrivastava***
Funding Agency: ***Women Empowerment, VIT, Vellore***

Title : ***Condition Monitoring and Protection of Hybrid AC - DC Microgrids Using IoT Devices***
Cost : ***2,00,000/-***
Principal Investigator: ***Dr. Washima Tasnin***
Funding Agency: ***SEED Grant, VIT, Vellore***



Dr. B. Jaganatha Pandian, Dr. Manimozhi M, Dr. Bagyaveereswaran V

Title : ***Development of a Digital Twin for Control Valve Monitoring***
Cost : *Rs.* ***1, 50,000 /-***
Team members: ***Dr. B. Jaganatha Pandian, Dr. Manimozhi M, Dr. Bagyaveereswaran V***
Funding Agency : ***SEED Grant, VIT, Vellore***

Title : ***Development of chaotic PWM-based EMI mitigation strategy for high gain converters in EV applications***
Cost : ***1,53,000/-***
Principal Investigator: ***Dr. Sudhakar N***
Funding Agency: ***SEED Grant, VIT, Vellore***

Title : ***Design and Development of Advanced 2D Nanocomposite Sensing Material for Industrial Gas Monitoring***
Cost : ***3,00,000/-***
Principal Investigator: ***Dr. Uma Sathyakam P***
Funding Agency: ***SEED Grant, VIT, Vellore***

FACULTY ACHIEVEMENTS


Dr RajaSingh R


Dr Albert Alexander S


Dr Geethanjali P


Dr.V.Indragandhi


Dr Rajasekar N


Dr Dhanamjayulu C

Six faculty members have been recognized among the Top 2% Scientists of the World for their outstanding contributions to research and innovation. This remarkable achievement reflects their excellence and the academic culture of our School, bringing global recognition to the institution.

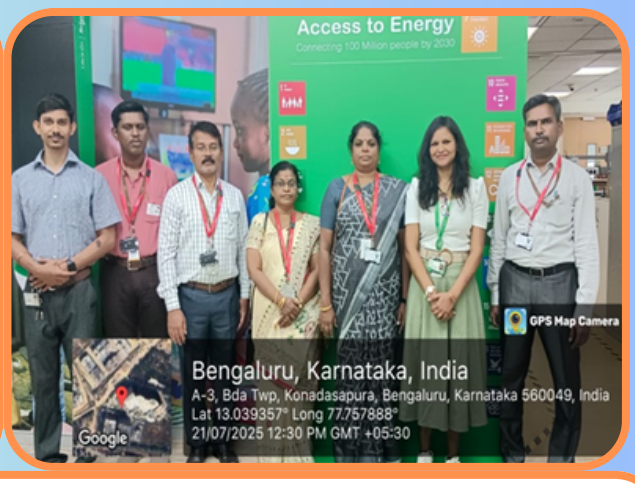
Dr. Albert Alexander received a Certificate of Appreciation for his role as a Mentor in the Nano Mentoring Session at IEEE CS SYP TechX Madras 2025.

Dr. Partha Sharathi Mallick, Pro-Vice Chancellor of Vellore Institute of Technology (VIT), is a part of the Springer Nature's India Research Advisory Council. This role highlights his leadership and contribution to the global research landscape.

INDUSTRIAL ENGAGEMENT

Industrial visit to the Southern Region Load Dispatch Centre (SRLDC), Bangalore on September 17, 2025. Forty three (43) students embarked on this highly informative industrial visit. The trip promised an enriching experience in the core areas of power system monitoring and control.

An industrial visit for 31 participants to WEG Industries (India) Pvt. Ltd. in Hosur, Tamil Nadu, on September 19, 2025. Students gained direct insight into the manufacturing of electrical components and industrial automation.



As a pivotal step in strengthening industry-academia collaboration, five SELECT faculty members, including Dr. M. Kowsalya and Dr. N. Rajasekar, visited Schneider Electric in Bangalore on July 21, 2025. During the visit, they participated in an introductory meeting to pinpoint mutual research interests, such as smart grids, software, and edge analytics. They also met with team leads and conducted a lab visit to explore collaboration on problem statements, syllabi refinement, and potential faculty training.

INDUSTRIAL ENGAGEMENT

Six faculty members, including Dr. M. Kowsalya, Dean of SELECT, visited Nsure Energy Pvt. Ltd., Malur (Karnataka), India's emerging lithium-ion cell manufacturer, on August 21, 2025. The visit explored possibilities for joint research and co-developing indigenous cell technologies and advanced Battery Management Systems (BMS).

Technical staff members, including Mr. Selvaganesan V M and Mr. Srinivasan U , visited Voltech Manufacturing Company Pvt., Ltd., Chennai, on July 2nd and 3rd, 2025. The visit covered Switch gear and Transformer Manufacturing sites to enhance their knowledge of Power system protection and industry testing facilities.

INDUSTRY PARTNERSHIPS

Partnering Company : Base Automation Technologies.
Date : 22/ 08/ 2025
Coordinators : Dr.Kowsalya, Dr.Sonam Shrivastava
Purpose: To launch Inductive Automation's Ignition Educational Engagement Program.

Partnering Company : Sonel Instruments India Private Limited, Chennai
Date : 28/ 08/ 2025
Coordinators : Dr.Kowsalya M, Dr.Yeddula Pedda Obulesu, Dr.Chilukuri Venkata Mahendra, Dr.Mukul Chankay.
Purpose : To focus on Power Quality (PQ) Research & Monitoring in solar farms using Sonel's advanced equipment. This joint initiative also includes applied research (harmonics, voltage fluctuation).

Partnering Company : RP Groups
Date : 31/ 08/ 2025
Coordinators : Dr. Kowsalya M, Dr. Vijaya Priya P, Dr. Mageshvaran R, and Dr. Vanishree J.
Purpose : To foster collaboration in the area of thin-film solar cells and semiconductor research, aligning with the international academic discussions.

INDUSTRY PARTNERSHIPS

Partnering Company : Nsure Reliable Power Solutions Private Limited Bengaluru
Date : 10/ 09/ 2025
Coordinators : Dr. M. Kowsalya and Dr. R Saravanakumar
Purpose : The core objectives are to foster joint research through information exchange and funded projects, and to enhance development via workshops.

Partnering Company : Merces Benz RDI, Bangalore
Date : 16/ 09/ 2025
Coordinators : Dr. Kowsalya M, Dr. Yeddula Pedda Obulesu
Purpose : To foster joint research through information exchange and funded projects.

INDUSTRY/ACADEMIA COLLABORATION ACTIVITIES

Industry: Edsols Innovations Private Ltd., Bengaluru

Date : 17/ 07/ 2025

The purpose was to establish an Collaboration for joint academic and research initiatives between VIT and Edsols Innovations Pvt. Ltd.. Key outcomes included proposing a Centre of Excellence (AI, Robotics, Drones), new labs (IoT, Healthcare R&D), certified student training, FDPs, and exploring international collaboration with VUB, Belgium.

Industry: Hitachi Energy , HVDC Division, Haryana

Date : 19/ 07/ 2025

The purpose was to establish an MoU between VIT and HITACHI ENERGY , HVDC Division, Haryana for joint academic and research initiatives.

Academic Institution: BMS College of Engineering, Bengaluru

Date : 11/ 09/ 2025

The purpose was to establish a collaboration for joint research initiatives between VIT and BMSCE Bengaluru and exploration of SELECT Labs.

Dr. Stephen K. O'Leary, Professor of Electrical Engineering from UBC Okanagan, Canada, a globally top-cited scientist, visited SELECT School on September 5, 2025. This visit facilitated potential collaboration.

FACULTY FOREIGN VISIT

The visit for the Royal Academy Award to Teesside University, UK, was very successful. It strengthened existing collaboration, advanced research in BMS/capacitor monitoring, facilitated industry engagement with Nexmu and Buggihams, and initiated new partnership talks with Durham University and Sheffield Hallam University for future academic and student exchange.

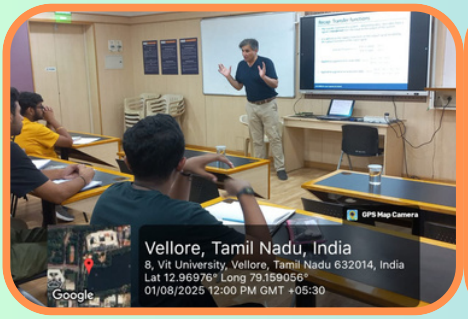
Date : 15/08/2025 to 23/08/2025, Team members: Dr. Chitra A, Dr. V. Indragandhi, Dr. Thirumalaivasan R, Dr. Razia Sultana W

A delegation from SELECT visited Institut Teknologi Sepuluh Nopember (ITS), Surabaya, Indonesia, on September 24, 2025, to explore academic and research collaborations. The team met with the Dean and Heads of Departments, Faculty of Electrical Engineering, discussing joint initiatives in teaching, research, and student exchange.

Team members: Dr M Kowsalya, Dr P Vijaya Priya, Dr I Jacob Raglend, Dr Belwin Edward, Dr R Thirumalaivasan Dr M Monica Subashini and Dr M Janaki

Highlights of the visit: ITS expressed interest in starting collaboration through the Global Lecture Series (GLS) and Student Exchange and Internship Programs, with plans to expand into joint publications and technical events.

INTERNATIONAL ADJUNCT FACULTY LECTURES ORGANISED



Title: *Time Domain Analysis of Linear Systems*
Date: *01-08-2025*
Resource Person : *Prof. Dr. Maher Al Greer*
Organization: *Teesside University, Middlesbrough, UK*
Coordinators: *Dr Monica Subashini M, Dr. Indragandhi V, Dr. Geetha M.*

Title: *AI in Battery Management Systems for Electric Vehicles (EVs)*
Date: *04-08-2025*
Resource Person : *Prof. Dr. Maher Al Greer*
Organization: *Teesside University, Middlesbrough, UK*
Coordinators: *Dr. Chitra A, Dr. Albert Alexander S.*

Title: *Smart Battery Management Systems in Electric Vehicle Systems*
Date: *07-08-2025*
Resource Person : *Prof. Dr. Maher Al Greer*
Organization: *Centre for Sustainable Engineering, Teesside University,*
Middlesbrough, UK
Coordinators: *Dr. Razia Sultana W.*

Title: *Net Zero Initiatives*
Date: *08-08-2025*
Resource Person : *Prof. Dr. Maher Al Greer*
Organization: *Centre for Sustainable Engineering, Teesside University, UK*
Coordinators: *Dr. Chitra A, Dr. Razia Sultana W, Dr. Indragandhi V.*

Title: *Adaptive Filter Principles and Applications*
Date: *11-08-2025*
Resource Person : *Prof. Dr. Maher Al-Greer*
Organization: *School of Computing, Engineering & Digital Technologies, Teesside University, UK*
Coordinators: *Dr. Abhishek G, Dr. Amutha Prabha N.*

NATIONAL/INTERNATIONAL FACULTY GUEST LECTURES ORGANISED

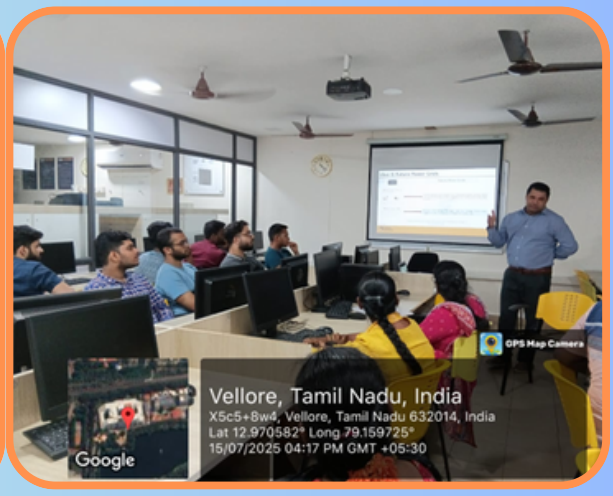
Title: *Smart Energy Management Systems for Future Power Grids.*

Date: *15-07-2025*

Resource Person : *Prof. Dr. Apel Mahmood*

Organization: *College of Science and Engineering, Flinders University, South Australia.*

Coordinators: *Dr. Indragandhi V, Dr. Thirumalaivasan R.*



Title: *Fuel Cell Vehicles: Opportunities and Challenges.*

Date: *21-07-2025*

Resource Person : *Prof. Dr. P. Karthikeyan*

Organization: *Department of Automobile Engineering, PSG college of Technology, Coimbatore .*

Coordinators: *Dr. D Elangovan, Dr. N Kalaiselvan.*

Title: *From Data to Diagnosis; AI in Laboratory Medicine*

Date: *17-09-2025*

Resource Person : *Dr. Anupama Raj, MBBS, MD (Pathology)*

Organization: *Department of Pathology, KMCT Medical College Hospital, Mukkam, Manassery, Kerala.*

Coordinators: *Dr. Monica Subashini M, Dr. Ruban N, Dr. Jacob Raglend I, Dr. Belwin Edward J.*

INDUSTRY GUEST LECTURES ORGANISED

Title: *Optimal Design and Development of Industrial Drives*
Date: *08-08-2025*
Resource Person : *Dr. Rajendran Ramasamy*
Organization: *aApta Dynamics Private Limited.*
Coordinators: *Dr. Chitra A, Dr. Washima Tasnin.*

Title: *Beyond academic Research : Lab to Market*
Date: *26-08-2025*
Resource Person : *Mr. Sandal Kotawala*
Organization: *Alfaleus Technologies Pvt. Ltd*
Coordinators: *Dr. Arulmozhivarman P, Dr. Ruban N*

Title: *Power Quality in the Smart Grid*
Date: *28-08-2025*
Resource Person : *Mr. Shyam Ravindran*
Organization: *Sonel Instrumentations, Chennai.*
Coordinators: *Dr. Chilukuri Venkata Mahendra, Dr. Mukul Chankaya, Dr. Ravi K.*

Title: *Careers in EV industry*
Date: *29-08-2025*
Resource Person : *Mr. P. Harish*
Organization: *TVS Motor Company, Bengaluru*
Coordinators: *Dr. Rajini G.K, Dr. Elangovan D.*

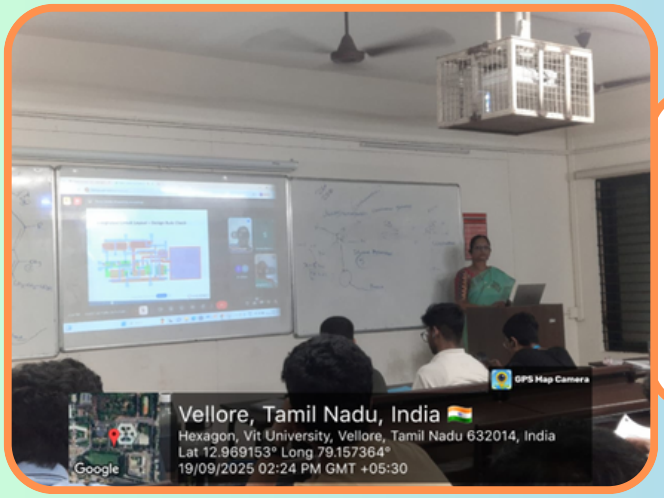
Title: *Career in Semiconductor Industry*
Date: *05-09-2025*
Resource Person : *Mr. Illa Anand*
Organization: *INTEL, Bengaluru*
Coordinators: *Dr. Chilukuri Venkata Mahendra.*

INDUSTRY GUEST LECTURES ORGANISED

Title: *Standards in Process control*
Date: *05-09-2025*
Resource Person : *Mr. Rajsekhar Uchil*
Organization: *Aerospace division ISA Bengaluru.*
Coordinators: *Dr.Vivekanandan. S.*

Title: *Power Progress : Electric Drives Across Key Industries*
Date: *11-09-2025*
Resource Person : *Mr. Rohan Mukesh Thole*
Organization: *ABB India Limited, Karnataka.*
Coordinators: *Dr. Arun N, Dr. Raja Singh R .*

Title: *Applied Neural Network in Real-world Systems: From Research to Industry*
Date: *19-09-2025*
Resource Person : *Mr. Saroj Anand Tripathy*
Organization: *Genpact India Pvt. Ltd, Hyderabad.*
Coordinators: *Dr. Sharmila A, Dr. Geetha M .*



Title: *Future on Chip*
Date: *19-09-2025*
Resource Person : *Dr. L. Gurukumar*
Organization: *Visionet Systems Pvt.Ltd, AMR Tech Park , Bengaluru India.*
Coordinators: *Dr. Balaji S, Dr. Rajini G.K .*

GUEST LECTURE BY OUR FACULTY

Dr. P. Mahalakshmi: *"Invited Talk and Session Chair" – in 8th International Conference on Recent Innovations in Modern Science and Technology ICRIMST-2025 held during 09 - 11 July 2025 held at Sri Sivasubramaniya Nadar College of Engineering, Chennai – 603 110, Tamil Nadu.*

Dr. P. Mahalakshmi: *"Plenary Speaker and Session Chair" – in 3rd IEEE International Conference on Networks, Multimedia and Information Technology - NMITCON-2025 held during 01 - 02 August 2025 held in association with IEEE Bangalore Section at Nitte Meenakshi Institute of Technology, Bengaluru – 560 064, Karnataka.*

Dr. M Kowsalya *was the chief guest in a two-day ANRF Sponsored National Seminar on "Research Potential in Power Electronics Converters for Renewable Energy" organized by the Department of Electrical and Electronics Engineering, New Horizon College of Engineering, Bengaluru during 17-18, September 2025. She also delivered a speech on "Advanced Electric Drives and Control Techniques for EVs" in this seminar.*

Dr. P. Mahalakshmi, *speaker in Six days FDP and Workshop on "EDGE AI AND EMBEDDED INTELLIGENCE: REDEFINING SMART DEVICES AND IOT SYSTEMS" dated 23/09/2025 at Ballari Institute of Technology and Management at Ballari-583 104, Karnataka. Technically Partnered by IEEE SB BITM. It is sponsored by ANRF, Department of Science and Technology, Government of India, New Delhi.*

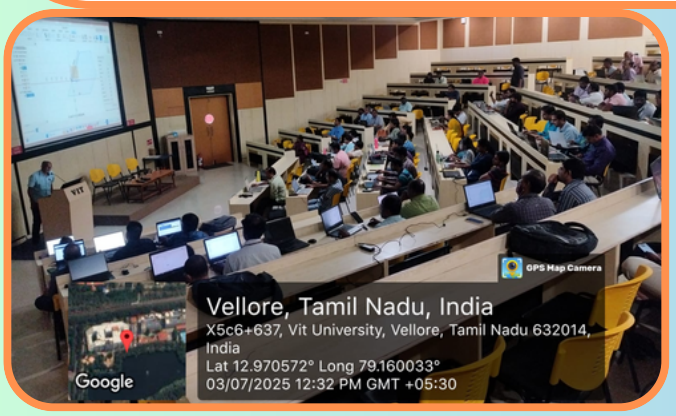
CONFERENCE

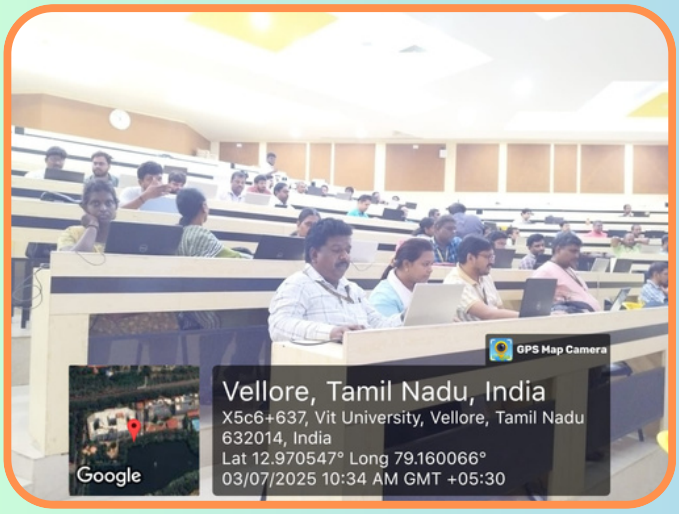
i-PACT Conference

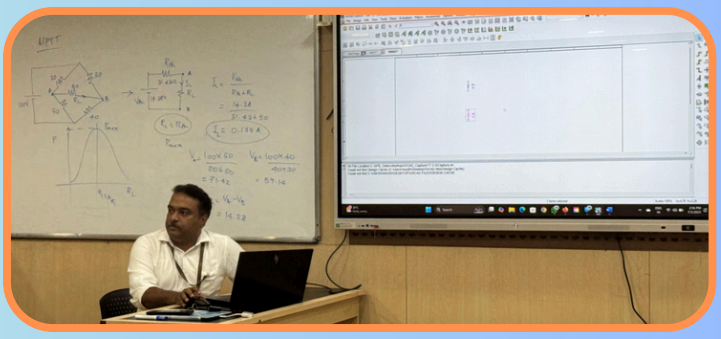
The School of Electrical Engineering (SELECT) of VIT, Vellore, Faculty of Engineering, Universiti Malaya, Kuala Lumpur, Malaysia and Faculty of Advanced Technology and Multidiscipline, Universitas Airlangga jointly organized the 5th International Conference on Innovations in Power and Advanced Computing Technologies, i-PACT-2025 at Universitas Airlangga, Indonesia on 25 – 26, September 2025. It was co-sponsored by IEEE Indonesian Section & IEEE –PES (Indonesia Chapter).

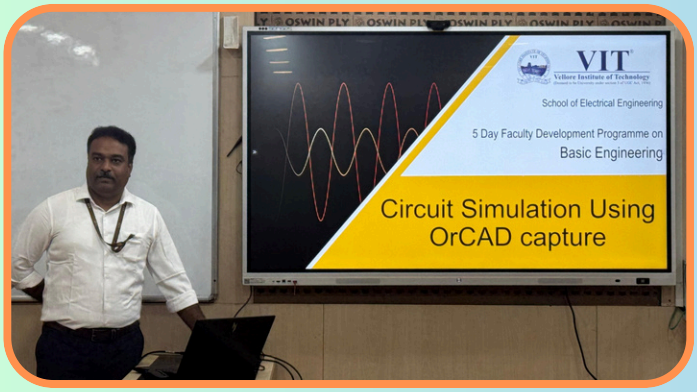
FACULTY DEVELOPMENT PROGRAMMES

SELECT & TLCE organized a Five days Faculty Development Programme on "OrCAD and Autodesk Fusion for Basic Engineering Course" from 01.07.2025 to 05.07.2025. Faculty Coordinators: Dr. Saravanakumar R and Dr. Belwin Edward J.





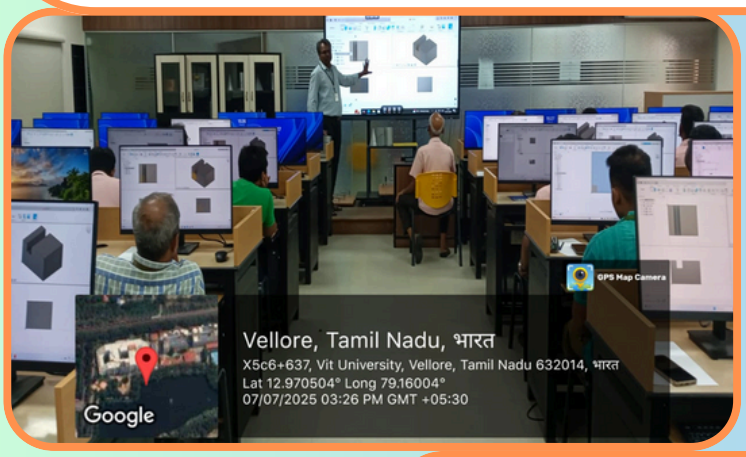


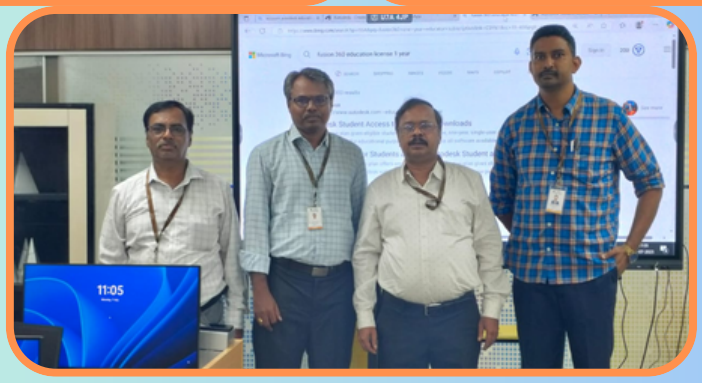


STAFF DEVELOPMENT PROGRAMMES

SELECT & TLCE organized a Staff Development Programme on "Autodesk Fusion Software Training Program" on 07.07.2025.

Event Coordinators: Dr. Saravanakumar R and Dr. Belwin Edward J.

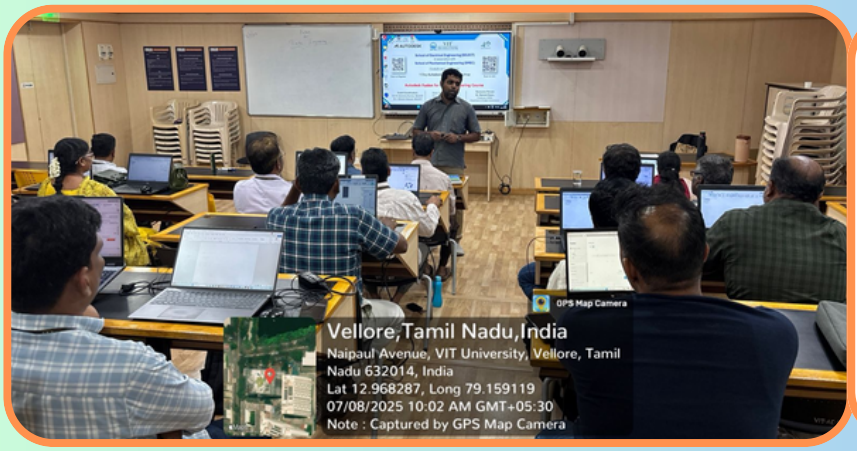




SELECT and TLCE organized a Staff Development Programme on "Stress Management - Batch-l and Batch-ll" on 14/ 08/ 2025 and 28/ 08/ 2025.

Event Coordinators: Dr. Thenmozhi M and Dr. Albert Alexander S.

WORKSHOPS/VAP ORGANISED



SELECT and SMEC organized a 1 Day Autodesk Certified Workshop on "Autodesk Fusion for Basic Engineering Course" on 08/ 07/ 2025. ***Coordinators:*** *Dr. Saravanakumar R and Dr. Belwin Edward J.*

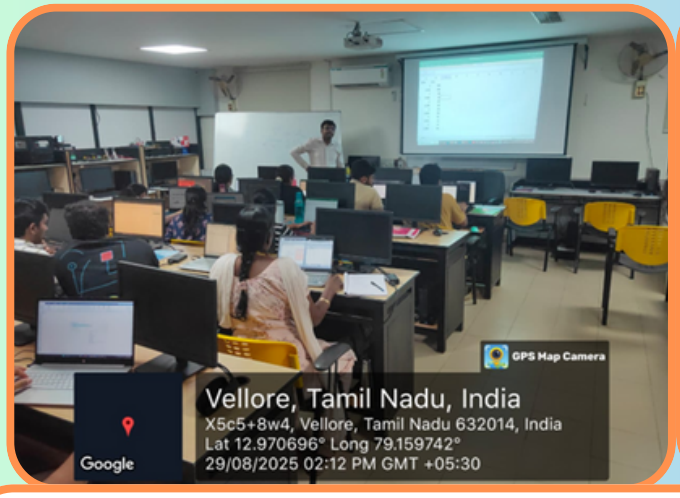
SELECT organized a Two Days National Workshop on "Hands on training in ORCAD/PSPICE Software" from 08/ 07/ 2025 to 09/ 07/ 2025.
Coordinators: *Dr. Vijaya Priya P, Dr. Vanishree J, Dr. Mageshvaran R.*

SELECT organized a Three days national workshop on "Simulation and Control of Power Systems Networks and Electric Vehicles" from 16/ 07/ 2025 to 18/ 07/ 2025.
Coordinators: *Dr.R. Mageshvaran and Dr. J.Vanishree.*

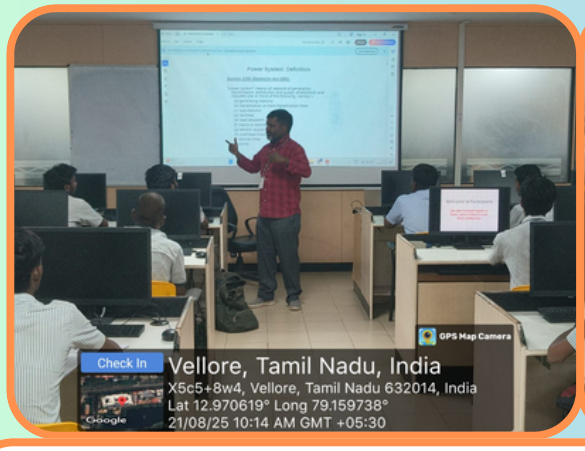
SELECT organized a One day workshop on "Embedded Systems Architecture and ARM Processor – Hands on " on 22/ 08/2025.
Coordinators: *Dr.Ponnambalam P and Dr.Marimuthu R.*

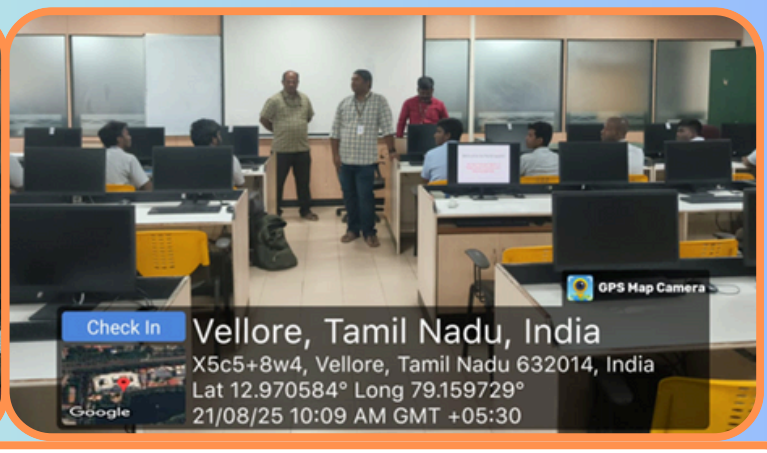
WORKSHOPS/VAP ORGANISED

SELECT organized a Three days national workshop on "Edge AI & Robotics Training Programme using NVIDIA Jetbot & Edge Devices" from 28/ 08/ 2025 to 30/ 08/ 2025. ***Coordinators:*** *Dr. Monica Subashini M, Dr. Geetha M, Dr. Sharmila A.*



SELECT organized a Three days national workshop on "Model Based Design Using MATLAB/Simulink" from 28/ 08/ 2025 to 30/ 08/ 2025. ***Coordinators:*** *Dr Yeddula Pedda Obulesu and Dr Mrutunjaya Panda.*



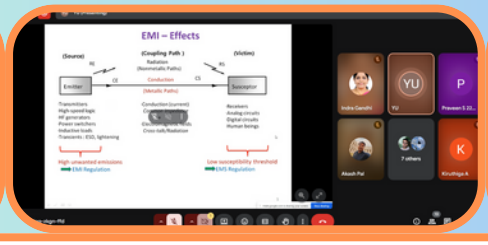


SELECT organized a Two days workshop on "Power System Protection and Electrical Machines " from 21/ 08/2025 to 22/ 08/2025. ***Coordinators:*** *Dr. S.Prabhakar Karthikeyan, Dr. G.Gokulakrishnan , Mr. Selvaganesan V M*

EVENTS



The School of Electrical Engineering, VIT Vellore, organized the ICSSR-sponsored National Level Energy Audit Competition to raise awareness on energy auditing and management. Thirty-eight reports were received nationwide, with ten shortlisted for the grand finale. Mr. J. Suresh Babu, Superintending Engineer (Retd.), TNEB, Vellore, served as the resource person for the event.
Date: 13.08.2025, Coordinators: Dr. V. Indragandhi and Dr. S. Albert Alexander



A Value Added Programme (VAC2514) was organized on "Artificial Intelligence in Semiconductor Industry Applications" with eminent speakers from industries and academic institutions in hybrid mode during 02.08.2025 to 13.09.2025. Coordinators: Dr. V. Indragandhi and Dr. S. Albert Alexander.


The School of Electrical Engineering, VIT Vellore, celebrated Engineers' Day 2025 on 15th September at Foodys, themed "Deep Tech and Engineering Excellence." The There was an enthusiastic participation from 29 students and faculty members. The event featured project exhibitions, research posters, and demonstrations showcasing innovation and technical expertise. Coordinator: Dr. M. Geetha.

EVENTS

Event Name : graVITas'25

Date and Time : 26.09.2025 and 27.09.2025 , 9:00 AM – 6:00 PM

About: The School of Electrical Engineering (SELECT), VIT Vellore, actively participated in graVITas'25 by setting up a promotional stall at Woody's Pathway. Featuring live project demonstrations, research posters, and school achievements, the stall attracted over 60 visitors and effectively showcased SELECT's innovation, academic excellence, and strong industry collaborations.

The School of Electrical Engineering (SELECT), VIT Vellore, organized a Pooja Celebration in the Machines Laboratory on 30.09.2025 at 4:30 PM, inviting all professors, staff, and research associates to participate and celebrate together, fostering unity, positivity, and festive spirit within the school community.

HIGHER STUDIES

1.University of Toronto, Canada (QS Global Rank - 29)

Mr. V. L. Varun (21BEE0154) has secured admission to the Master of Engineering in Electrical and Computer Engineering program at the University of Toronto, one of the world's top-ranked universities. His achievement reflects the strong technical foundation and academic excellence nurtured at VIT Vellore's School of Electrical Engineering.

2. Osaka University, Japan (91 QS Global Rank - 91)

Mr. Somesh Mridha (21BEE0161) has been admitted to the Master's in Electrical, Electronics and Info-Communication Engineering program at Osaka University, Japan. Ranked among the top 100 global institutions, Osaka University is renowned for cutting-edge research and innovation in engineering and technology, marking a proud moment for VIT Vellore.

3. Indian Institute of Technology Madras, India (QS Global Rank - 180)

Mr. Sooryadev S (21BEE0105) has joined the M.Tech in Construction Technology and Management program at IIT Madras, India's highest-ranked technical institution. His admission to this premier institute showcases the academic caliber and excellence of VIT's students, reinforcing the university's commitment to global-level education and research excellence.

NEWSLETTER TEAM

EDITORS

Mr. Rajagopal B
Student, 22BEE0063

Mr. Nigesh Palani Subbiah
Student, 22BEE0043

ADVISORY MEMBERS

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Professor (HAG) and Dean
School of Electrical Engineering
Vellore Institute of Technology
Vellore-632014, Tamil Nadu, India

Dr. Ruban N
Professor and Associate Dean School of Electrical Engineering Vellore Institute of Technology Vellore-632014, Tamil Nadu, India

Dr. P Vijayapriya
Professor and HOD, EEE

Dr. P. Mahalakshmi
Professor and HOD, EIE

Dr. Y P Obulesu
Professor and HOD, EPE

Dr. Vinodh Kumar E
Professor and HOD, C&A

COMMITTEE MEMBERS

Dr. JANAKI M
Professor, SELECT

Mrs.Ranagani Madhavi
Research scholar, SELECT

FORTHCOMING EVENTS

VITEEE 2026

Application Open for UG / PG / UG NRI / Foreign/ Research Programmes 2025 -26

VITREE – Ph.D. / Direct Ph. D. / Ph. D. (Deep Tech.) I January 2026 Session -Apply now NEW

FORTHCOMING EVENTS

SELECT organizes a "Energy Conservation Week 2025" during 05 – 11th January, 2026 in association with Anusandhan National Research Foundation (ANRF) and IEEE Power Electronics Society. The aim of this event is to create an awareness on energy efficiency and conservation. The event includes invited lectures and various competitions with cash prizes to the winners of the participants.

Make-a-Thon – School of Electrical Engineering
(SELECT – MAKE-A-THON 2026)
26 – 28 th March, 2026

Make-A-Thon is an event where students, designers and hackers collaborate for limited time to deliver solutions to various challenges proposed by industries and need-knowers. Event kick-starts with challenges being proposed to participants, for which they have to come up with an innovative solution and develop a prototype within 36 hours. Solutions can be based on hardware and software projects and are refined based on feedback from need-knowers.

weblink: https://vit.ac.in/conference/IAC-SELECT/

"தெய்வத்தான் ஆகா தெனினும் முயற்சிதன் மெய்வருத்தக் கூலி தரும்" - திருவள்ளுவர்

"Even if fate or God cannot grant it, perseverance will yield the reward for one's hard work" -Thiruvalluvar