



NEWSLETTER

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MAR 2023 – MAY 2023

Department of
Electronics and Communication Engineering

SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE

(An Autonomous Institution)

Puducherry-605 107



SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE

An Autonomous Institution

Sri Manakula Vinayagar Engineering College (SMVEC) established in the year 1999. SMVEC is an autonomous institution affiliated to Pondicherry University. It offers 14 undergraduate, 8 postgraduate, and 11 research programs in Engineering, Architecture, Management Studies and Computer Applications. SMVEC has been accredited by NAAC with "A" grade and NBA. The institution is also accredited by TATA consultancy services. The college has a good placement record with students getting job offers from top MNC companies in India and abroad. SMVEC students have won many awards and accolades for their academic achievements.

INSIDE

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Vision

To be globally recognized for excellence in quality education, innovation and research for the transformation of lives to serve the society

Mission

M1: Quality Education : To provide a comprehensive academic system that amalgamates the cutting edge technologies with best practices.

M2: Research and Innovation : To foster value-based research and innovation in collaboration with industries and institutions globally for creating intellectuals with new avenues.

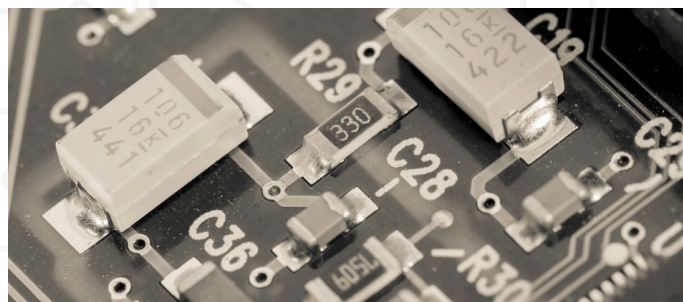
M3: Employability and Entrepreneurship : To inculcate the employability and entrepreneurial skills through value and skill based training.

M4: Ethical Values : To instill a deep sense of human values by blending societal righteousness with academic professionalism for the growth of society.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

The Department of Electronics and Communication Engineering is a top-notch department that offers high-quality UG, PG and Ph.D. programs. The UG program B.Tech - Electronics and Communication Engineering is accredited by the National Accreditation Board, AICTE-New Delhi, and has a placement record of over 89%. The department's graduates are highly sought-after by employers in the Electronics and Communication sector.

Our department contributes significantly to achieve the national objective of envisioning the world with a clear and deep commitment and a sincere desire to meet the expectations of a rising, fast-developing technology.



PROGRAMMES OFFERED

- B.Tech - Electronics and Communication Engineering
- M.Tech - Electronics and Communication Engineering
- M.Tech - VLSI & Embedded Systems
- Ph.D - Electronics and Communication Engineering

Vision



Facilitate academic excellence and research among Electronics and Communication Engineers to meet the global needs with high competence and ethical professionalism.

Mission



M1: Academic Excellence: To impart learning skills to meet the global challenges in the field of Electronics and Communication Engineering.

M2: Research and Innovation: To provide excellence in research and innovation through multidisciplinary specialization.

M3: Employability and Entrepreneurship: To enhance inter and intra personal skills among students to make them employable and entrepreneurs.

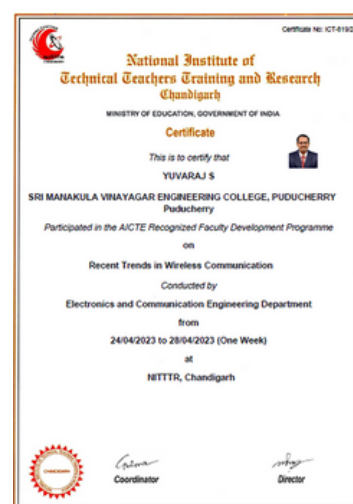
M4: Ethics: To inculcate the significance of human values and professional skills to serve the society.

KNOWLEDGE SHARING SESSION

- On April 20, 2023, Mrs. M. Devi, Software Developer at VEI Technologies in Chennai, delivered a guest lecture on "Analysis of Multi-Resolution Methods in Digital Image Processing." The session focused on advanced techniques and methodologies in digital image processing.
- On April 29, 2023, Ms. Sarayu Sudhindra, Founder of Dream Catcher, conducted a hands-on training session on "Visual Documentation." The workshop provided practical experience and skills in creating and managing visual documentation.
- On May 6, 2023, Dr. S. Dhivya, Assistant Professor in the ECE Department, delivered a lecture on "Lifestyle and Motivation." The talk aimed to inspire and guide students in balancing their professional and personal lives.
- On May 22, 2023, Dr. Shanmugakumar Murugesan, Founder and CEO of Modern Agriculture Technology Innovation Center (MATIC), MaDeIT, IITD&M, Kandigai, Chennai, presented a lecture on "Industry 4.0: Skill Set for Employability." The session highlighted essential skills and knowledge for thriving in the era of Industry 4.0.
- On May 23 and 24, 2023, Dr. Malaya Kumar Nath, Assistant Professor in the Department of ECE at the National Institute of Technology, Puducherry, conducted a two-day workshop on "Recent Trends in Signal and Image Processing Using MATLAB." The workshop covered the latest trends and applications of MATLAB in signal and image processing.

FACULTY DEVELOPMENT ACTIVITIES

- **Dr. S.Dhivya**, Assistant Professor, ECE, contributed as reviewer for the International Conference on Recent Trends in Data Science and its Applications (ICRTDA 2023) organized by the Department of Data Science and Business Systems, SRM Institute of Science and Technology, Kattankulathur, India during 30–31 March, 2023.
- **Mrs.R.Gayathri**, Assistant Professor, ECE, in recognition of his/her role as mentor for the NPTEL Online Certification course DISCRETE TIME SIGNAL PROCESSING JAN – APR 2023.
- **Dr.Vankayala chethan Prakash** has participated in the 5 days online FDP on machine learning and its real-time applications at Sri Manakula Vinayagar Engineering College from 06.03.2023 to 10.03.2023
- **Mr. S. Mohanram**, Assistant Professor, ECE, in recognition for Leading, Guiding & Managing Training Program on Artificial Intelligence in HealthCare held on 17th & 18th March 2022, organized by Sri Manakula Vinayagar Engineering College, Puducherry in collaboration with Makeintern & E-Cell IIT Kharagpur.
- **MR.S.Yuvaraj** has participated in the AICTE Recognized FDP on Recent trends in wireless communication from 24/4/2023 to 28/4/2023 at NITTTR,Chandigarh.
- **Mr.S.Yuvaraj** has actively participated in one week Faculty Development Programme on “Machine Learning for Signal Processing: Applications and Research Challenges”, organized by the Department of Electronics and Communication Engineering of Kumaraguru College of Technology, Chennai.



RESEARCH ACTIVITIES

Proposal submitted to various Funding Agencies



Dr.P.Raja and Dr.N.Saranya has the submitted 3 year proposal on “Indigenous Development of UWB microwave imaging system(MWI) for Early Breast Cancer Detection ” for Rs. 23,50,000/-.

SERBPOWER

Patents

- **C. Janani**, Dr.P.Raja, V. Sandhiya, M. Sharmila, E. Shruti, have filed for the patent titled, “A Smart gloves-based Vocalizer for Individual with Cognitive Impairments”.
- **Dr. P.Raja**, Dr. S. B. Lenin, Dr. S. Ashok Kumar, Dr. N. Saranya have filed for the patent titled, “Implementing Digital Circuit with VIVADO & Artix –7: From Theory to Practice”.

Publications

- **C.Janani**, Aishwarya.L.S, Maithili.S, Praveena.P, Deepa Natesan, “Reduction of fouling noise in an automobile alternator by Qualitative analysis using shainin doe technique to eliminate Wedge paper protrusion” in the Journal of Data Acquisition and Processing.
- **Logisvary V**, Raghavendra R., Riyaz Ahamad S., and Fleming Roland P. published their research on "ECG Signal Processing Using Code Recombination Algorithm" in the *Journal of Data Acquisition and Processing*, introducing an advanced algorithm designed to enhance the accuracy and efficiency of ECG signal processing for improved cardiac health monitoring.
- **J.Pradeep**, M. Harikirshnan, Sri Ram. R, Thanush. M, Prasanth.K.N, “Hybrid handwritten text recognition system using Convolutional neural network and recurrent neural Network” in the Journal of Data Acquisition and Processing.
- **S. Ganesan**, S. Dhivya, and B. Menaga presented their research on "DSP Control for Brushless DC Motor Using CCS Studio" at the International Conference on Innovative and Cutting Edge Technologies in Electrical, Electronics, Computer Engineering, and Information Technology (ICICEECI'22), showcasing the use of Digital Signal Processing (DSP) techniques to enhance the control and performance of brushless DC motors through CCS Studio software.
- **K. Thivya**, K. Vijayakumar, Nithyavalli, “New symmetric and planar designs of 8-bit reversible full- adder in quantum dot cellular automata” in the International Conference on Emerging Innovative Technologies in Engineering.
- **K. Vijayakumar** and R. Aysha presented their research on the "Implementation of Fast Multiplier Using Area and Power Efficient 4:2 Compressor" at the International Conference on Emerging Innovative Technologies in Engineering, highlighting a design that optimizes multipliers for improved speed, reduced area, and lower power consumption in digital circuits.
- **S. B. Lenin**, G. AzeessBasha, G. Srivatsan, Z. Aswin, “Privacy-Preserving Integration of Face Recognition System and ESD Tester using Federated Learning” in the International Conference On Circuit, Power And Computing Technologies ICCPCT-2023.
- V. Bharathi, Vishwaa M., Elangkavi K., and Hari Krishnan V. published their study on "A Custom YOLO V5-Based Real-Time Fire Detection System: A Deep Learning Approach" in the Journal of Data Acquisition and Processing, showcasing a real-time fire detection system using a custom YOLO V5 deep learning model for enhanced accuracy and rapid response in fire safety applications.
- **R. Kurinjimalar**, Kugan.A, Vineeth. R, BallaVeeraVenkataDurga Prasad, “Design and implementation of a gsm-based child rescue system For earthquake emergencies using raspberry pi” in the Journal of Data Acquisition and Processing.
- **R. Gayathri**, Hemamalini .S, Harini.K, BangayarSelvi N.G, Akshaya.I, Deepa Natesan, “Traffic sign identification and recognition system using deep Neural network” in the Journal of Data Acquisition and Processing.
- **R. Kurinjimalar**, Vigneshvar V., Gokulakrishnan K.S., and Aravind G. published their research on the "Multisensory Helmet Alerting System through Drowsiness Detection of Vehicle Drivers" in the Journal of Data Acquisition and Processing, introducing a safety system that uses multiple sensors to detect driver drowsiness and provide timely alerts, aimed at reducing accidents caused by fatigue.
- **A.Jayachitra**, Snega.R, Swetha.A, Nachellai.I, “Iot Based Tele-Assistance And Monitoring Of Heart Patients” in the Journal of Data Acquisition and Processing.
- **S. Dhivya**, Sermalakshmi P., Yuvalatchumi S., and Santhiya V. published their study on "An Astute Text Converter for Visually Impaired People Using Morse Code and Atmega Microcontroller" in A Journal for New Zealand Herpetology, showcasing a smart device that assists visually impaired individuals by converting text into Morse code using an Atmega microcontroller for improved accessibility.
- **S. Dhivya**, Kaviya M, Harshavardhni A, and Dhevipriyanka S. published their work on "A Novel Approach to Prevent Accidents by Using IoT System" in A Journal for New Zealand Herpetology, presenting an innovative IoT-based solution designed to enhance road safety by preventing accidents through real-time monitoring and alerts.

PROFESSIONAL BODIES ACTIVITIES



The Institution of Engineers (India) IEI

- The one-day seminar on "**Engineering Innovation for a More Resilient World**" took place on March 10, 2023, in the Conference Hall, with 220 students attending. The seminar explored innovative engineering solutions for sustainability and resilience, featuring expert insights on renewable energy and smart infrastructure. Students gained valuable knowledge and inspiration to contribute to a more sustainable future.
- **The Student Chapter Meeting** was held on March 15, 2023, in the Seminar Hall, with 35 students participating. The meeting focused on enhancing student engagement, networking, and collaboration within the chapter. Participants discussed upcoming events and initiatives, fostering a sense of community and shared purpose



- **The Second Southern Regional Conclave of Students' Chapter - Line Follower** was held on April 1, 2023, in the Seminar Hall, benefiting 40 students. The event featured hands-on workshops and competitions focused on line follower robots, enhancing students' skills in robotics and automation. Participants gained practical experience and insights into designing and programming autonomous robotic systems.

The Second Southern Regional Conclave of Students' Chapter - Robo Race took place on April 1, 2023, at the College Ground, benefiting 40 students. The event featured an exciting competition where students showcased their robotics skills in a racing challenge. Participants had the opportunity to test their robots' speed and agility, gaining hands-on experience and practical knowledge in robotic engineering.



Chapter - Line Follower



Chapter - Robo Race

- **The Schematic Presentation of Project Ideas** was held on May 11, 2023, in the Lecture Hall, benefiting 120 students. The session provided a platform for students to present their project ideas through detailed schematics and diagrams. It offered valuable feedback and insights, fostering innovation and improving project design skills.



PLACEMENT RECORD

Company-wise Placements

S.No.	Company	Package (Lakhs per Annum)	Offers
1	INTEGRA	1.8	6
2	PEGA FORD MOTORS	6	1
3	PEGA RTECH MAHINDRA	5.5	1
4	PEGA INFOSYS	4.45	2
5	TECH MAHINDRA	3.25	3
6	FABC	12	4

Congratulations to All Placed Students

PLACEMENT TRAINING

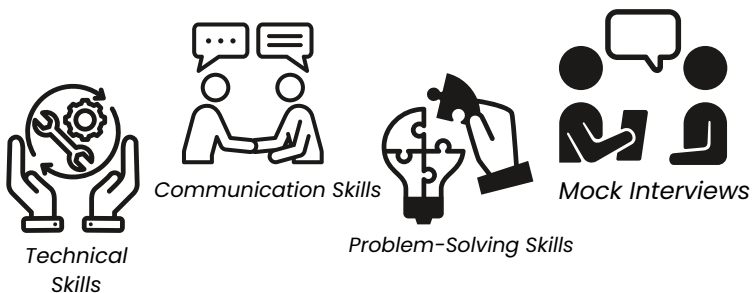
TECH mahindra

Tech Mahindra Specific Training

Tech Mahindra is a prominent multinational technology company headquartered in Pune, India. It is part of the Mahindra Group, a conglomerate with interests in various industries such as automotive, aerospace, agribusiness and more. Tech Mahindra primarily focuses on providing IT services, consulting and Business Process Outsourcing (BPO) solutions to clients across the globe.



Training on Technical Skills



PLACEMENT TRAINING



PEGA Systems Training

Pega Systems, often referred to simply as Pega, is a software company known for its Pega Platform, which provides tools for customer relationship management (CRM), business process management (BPM), and robotic process automation (RPA). Pega's platform allows organizations to build and deploy enterprise applications to streamline processes, improve customer engagement, and drive digital transformation.



Aptitude Skills



Domain-Based Skills



Communication Skills



Technical Interview



HR Interview



Session on Hands on Training Conducted by PEGA Systems

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