



**SRI MANAKULA VINAYAGAR**  
ENGINEERING COLLEGE  
(AN AUTONOMOUS INSTITUTION)

# NEWSLETTER

Volume 14 - Issue 4- 4 June, 2024

MAR 2024 - MAY 2024

Department of  
**Electronics and Communication Engineering**



## 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

- About the Department
- Knowledge Sharing Session
- Faculty Developmental Activities
- Research Activities
- Seminars and Workshops
- Students Corner
- NPTEL Activities
- Professional Bodies Activities
- Placement record and our recruiters
- Placement training

### 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.

### GUEST LECTURE



A Guest Lecture on "Mastering C Programming: Exploring Structures, Pointers, Unions, and File Operations" was conducted for 1 year students by **Dr. M. Anousouya Devi**, Assistant Professor, Department of Computational Intelligence, SRMIST, SRM University, Katankalathur campus Chennai on 13-04-2024.



A Guest Lecture on "Open Source Revolutionizing VLSI design: Advancements, Opportunities and Challenges" was conducted on 30-03-2024 by **Dr. M. Dhayalakumar** CEO & Founder, Dhisai Technologies Pvt Limited, Hprcse Lab, IITDM, Kancheepuram.



### KNOWLEDGE SHARING SESSION



On March 30, 2024, a highly engaging guest lecture on "Flask - Micro Web Frameworks with Python" was delivered by **Mr. K. Sathish Kumar**, a Senior Software Engineer at Saama Technologies Pvt. Ltd. in Coimbatore. The session offered an in-depth exploration of Flask, a lightweight yet powerful micro web framework that allows for the rapid development of web applications using Python.



## FACULTY DEVELOPMENT ACTIVITIES

- **Dr. S. Dhivya** has contributed significantly to the academic community by serving as a reviewer for the International Conference on Electrical, Computer, and Energy Technologies (ICECET 2024). Her expertise and critical evaluation of research papers have played a vital role in ensuring the quality and relevance of the conference proceedings. Dr. Dhivya's involvement as a reviewer demonstrates her commitment to advancing the field of electrical, computer, and energy technologies.
- **Dr. N. Saranya** received a Certificate of Excellence in recognition of her contribution to the quality of reviewing in the Journal of Cancer and Tumor International, held on **25.5.2024**.
- **Dr. N. Saranya** has made valuable contributions to the academic community by serving as a reviewer for the Engineering Review journal. Her expertise and critical evaluation of research papers have helped maintain the high quality and standards of the journal. Dr. Saranya's involvement as a reviewer demonstrates her commitment to advancing the field of engineering and ensuring the dissemination of rigorous research.
- **Mrs. R. Gayathri** has contributed significantly to the academic community by serving as a reviewer for the International Conference on Computing and Data Science (ICCDs 2024), held on April 26th and 27th, 2024, at Rajalakshmi Engineering College. Her expertise and critical evaluation of research papers have played a vital role in ensuring the quality and relevance of the conference proceedings.
- **Mrs.R.Gayathri**, acted as a Reviewer in the 10th International Conference on Communication and Signal Processing, ICCSP 2024 held on **12th and 13th April 2024** organized by Adhiparasakthi Engineering College, Melmaruvathur.

## RESEARCH ACTIVITIES

### Proposal submitted to various Funding Agencies



**Dr. P. Raja and Dr. N. Saranya** have been awarded Rs. 3,50,000/- by AICTE-ATAL for their project, "Innovation and Design Challenges in Antenna and RF Devices for Next Generation 5G/6G Wireless Communication." This grant will support their research on advanced technologies for 5G and 6G systems.



### Publications

- **N. Saranya, P. Raja, Alagamma V,** Yamini Krishna, and Subiksha S. have co-authored a significant research paper titled "A Novel FSS Loaded Circular Slot Monopole Antenna for Microwave Imaging Applications." This paper has been published in the IETE Journal of Research, spanning pages 1 to 15 in the May 2024 issue. The study presents an innovative approach to antenna design, specifically focusing on a Frequency Selective Surface (FSS) loaded circular slot monopole antenna. This research is particularly relevant for advancing microwave imaging applications and has been recognized in the Science Citation Index (SCI) for its contributions to the field.
- **Saranya N., Raja P,** Vigneshwara B., Janani R., and Raghavarshini K. have published their research paper, "A Compact Double Comb Shape Slotted Rectenna for Ambient RF Energy Harvesting," in the International Journal of Microwave and Optical Technology, Volume 19, Issue 3, in May 2024. This paper introduces a novel rectenna design that is specifically tailored for efficient harvesting of ambient RF energy. The compact double comb shape slotted rectenna offers significant advantages in terms of size, efficiency, and performance, making it a promising solution for various applications that require wireless power transfer. Indexed in Scopus, this research contributes to the advancement of RF energy harvesting technology.
- Tamilarasan, **S.B. Lenin,** P. Mukunthan, and N.C. Sendhilkumar have published their research paper, "Stochastic Ranking Improved Teaching-Learning and Adaptive Grasshopper Optimization Algorithm-Based Clustering Scheme for Augmenting Network Lifetime in WSNs," in China Communications, Volume 99, pages 1-20, in 2024. This paper presents a novel clustering scheme that combines the stochastic ranking improved teaching-learning algorithm and the adaptive grasshopper optimization algorithm to enhance network lifetime in wireless sensor networks. The proposed scheme effectively addresses the challenges of energy efficiency and network longevity in WSNs.
- **Ashok Kumar,** Shanmugaraj, Arunkumar Nagaradjane, Anandkumar Candassamy, and Karthikcharan Dhamodharan published their research paper, "Smart Heart Disease Prediction and Amalgamation Tracking System," in the Engineering Review, Volume 4, Number 1, pages 14-24, in 2024. This paper, indexed in Scopus, presents a novel approach for accurately predicting heart disease and effectively tracking amalgamation, a crucial factor in heart health. The proposed system utilizes advanced machine learning algorithms and a robust amalgamation tracking mechanism to provide valuable insights for healthcare professionals, aiding in informed decision-making and improved patient outcomes.

## SEMINAR ORGANIZED

The two-day National Seminar on "Advancement in Antenna Technology and Biological Effects of Electromagnetic Radiation," organized by Sri Manakula Vinayagar Engineering College, Puducherry on 21st and 22nd March 2024 provided a comprehensive platform for researchers, academicians, and industry experts to exchange insights and discuss recent developments in the field. Keynote speakers, including Dr. Sandeep Joshi from Birla Institute of Technology & Science (BITS), Pilani, **Dr. Raghvendra Kumar Chaudhary** from the Indian Institute of Technology, Kanpur, Dr. D. Sriram Kumar from the National Institute of Technology, Trichy, and Dr. T. Kesavamurthy from PSG College of Technology, Coimbatore, delivered informative lectures on various topics such as interference management, Metamaterial antennas, future wireless communications, biological effects of electromagnetic waves, and safety measurements regarding EM wave radiation.



**1. Inaugural Session** –Dr. Sandeep Joshi, an esteemed Associate Professor at Birla Institute of Technology & Science (BITS), Pilani, graced the occasion as the chief guest for the prestigious SERB-sponsored Two-Day National Seminar. This seminar, titled "Advancement in Antenna Technology and the Biological Effects of Electromagnetic Radiation," brought together experts and enthusiasts to explore cutting-edge developments in the field of antenna technology and delve into the critical discussion on the biological impacts of electromagnetic radiation. Dr. Joshi's presence and insights set a high standard for the discussions and laid a strong foundation for the sessions.

**2. General Photograph** –The photograph captures a dynamic and engaging moment from Session 1 of the seminar. During this session, Dr. Sandeep Joshi, a leading expert from Birla Institute of Technology & Science (BITS), Pilani, delivered an insightful lecture on "5G and Beyond Communication Networks: Interference Management and Performance Analysis." The session was marked by Dr. Joshi's thorough examination of advanced antenna technologies and their critical role in optimizing next-generation communication networks. Participants actively engaged in the discussion, reflecting on the latest advancements and their implications for the field. The image showcases Dr. Joshi's in-depth presentation and the vibrant interaction with attendees, highlighting the seminar's commitment to fostering knowledge and innovation in antenna technology and electromagnetic radiation.



## SEMINAR ORGANIZED

**3. Session 3 (22.03.2024- 9:00 AM to 11:00 AM):** In this session, Dr. D. Sriram Kumar, a distinguished Professor in the Department of Electronic and Communication Engineering at the National Institute of Technology, Trichy, delivered an engaging and insightful lecture titled "Antennas for Future Wireless Communications." Dr. Kumar provided a thorough examination of the latest innovations and emerging trends in antenna technology, focusing on how these advancements are crucial for the development of future wireless communication systems. His presentation highlighted the essential role that cutting-edge antenna designs will play in enhancing communication capabilities and addressing the demands of next-generation networks. The session featured a dynamic exchange of ideas, with Dr. Kumar's expert insights sparking meaningful discussions among participants about the future of wireless communication technology



**4. Valedictory Session:** We are excited to announce that the valedictory session of our event is scheduled for March 22, 2024, from 4:00 PM to 4:30 PM. We are honored to have Dr. T. Kesavamurthy, a distinguished Professor in the Department of Electronic and Communication Engineering at PSG College of Technology, Coimbatore, as our chief guest for this special occasion. Dr. Kesavamurthy is celebrated for his significant contributions to the field of electronic and communication engineering, and we anticipate that his address will be both inspiring and insightful. This session will provide a fitting conclusion to our event, celebrating the achievements of our participants while benefiting from Dr. Kesavamurthy's vast knowledge and experience. We warmly invite all attendees to join us in marking this momentous occasion.

## NPTEL ACTIVITIES

We are delighted to share the remarkable achievements of our esteemed faculty members, Dr. S.B. Lenin and Mr. S. Yuvaraj, who have both attained commendable success in the NPTEL examination conducted from January to April 2024. Their outstanding performance in this rigorous examination underscores their unwavering dedication to their professional development and academic excellence. This accomplishment not only highlights their personal commitment to advancing their expertise but also reflects the broader commitment of our institution to fostering a culture of continuous learning and excellence. Their success serves as an inspiration to all and reinforces our collective pursuit of academic and professional distinction. We extend our heartfelt congratulations to Dr. S.B. Lenin and Mr. S. Yuvaraj for their exceptional achievements and are proud to celebrate their contributions to our academic community.

Our students achieved commendable success in the NPTEL examination in Jan - Apr 2024. Total 33 students from ECE Department had cleared NPTEL examination. 22 students from IV year and 11 students from III year has cleared. These achievements reflect their dedication and our commitment to excellence. The department provided intensive workshops, mock tests, and personalized mentoring to support their preparation. Congratulations to our students for their outstanding performance and determination.



**STUDENTS CORNER**



**VIJAYAGANAPATHI** Won 1st prize in "CIRCUITRIX" at NGP on 3.4.24



**DEVANESH.S & YUVANESH BALAJI M** Won first prize in Robo LINE "TETRONIX 2K24" held at PTU Puducherry on 15.4.2024



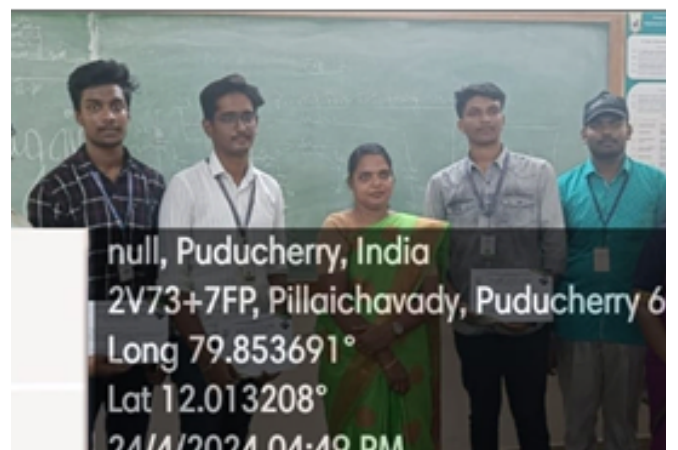
**YUVANESH BALAJI M, GOGULAN V, YAGATHEEPAN, HARINI V** Won SECOND prize in Robo soccer held at PTU on 2.3.2024



**Hemashree.P and Vibha Rincy.D** has participated in Codesy 2k24 on 24.04.2024 conducted at Dhanalakshmi Srinivasan College of Engineering, Chennai and won 3rd prize in Paper Presentation with a cash prize of Rs.500 each



**Nithya Shree and Bhavani Shree.S**, has participated in Avesha 2024 on 23.04.2024 conducted by Anna University, Tiruchirapalli and won 3rd prize in Project Expo with a cash prize of Rs.500



**GURUPRASATH S, AAKASH PR, PRANAVR** have won 2nd Prize Circuit debugging in a technical symposium organized by PTU on 24-04-2024.

**STUDENTS CORNER**



**Devanesh.S, Yuvanesh Balaji.M** has participated and won first prize in Robo soccer "GYANITH 2023" held at NIT karaikal on 2/3/2024.



**Devanesh.A, Yuvanesh Balaji.M** won 2nd prize in line follower robot held at MIT ,Chennai on 2/3/2024.



**Devanesh.S, Yuvanesh Balaji.M** won first prize in line follower robot held at PTU on 12.3.2024.



**Yuvanesh Balaji.M, Devanesh.S** w/o/ SECOND prize in Robo sumo held at CEG,ANNA UNIVERSITY on 23.3.2024.



**Devanesh.S, Yuvanesh Balaji.M** won first prize in robo soccer at MVIT on 16.3.2024



**Yuvanesh Balaji.M, Devanesh.S** won 2nd prize in robo line follower at MVIT on 16.3.24



**Arunkumar, Karan, Gunal** won 1st price in non technical event at Vel Tech Engineering college on 28.03.2024



**Gowtham.G ,Guruprasath.R, Monish.N, Jagan.S** from Second year ECE presented a paper in the event "VTECH SPARK' 24" a technical symposium organized by Vellore Institute of Technology, Chennai on 27.04.2023 and 28.04.2023



**Ahamed Saiffuiah.A, Devabharathi.M.S, Aravindhan.B, Harish.R** from Second year ECE presented a paper in the event "TECH" 24" a technical symposium organized by Christ College of Engineering And Technology, Pondicherry on 3.4.2024



**Logesh S, Keerthivasan S, Govardinan S** have won 1st prize ROBO SUMO in a technical symposium organized by PTU on 15-04-2024.



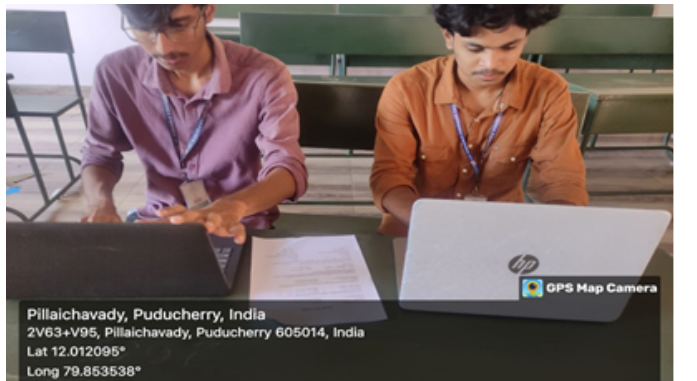
**Agalaya.J, Jayasri** from Second year ECE presented a paper in the event "TETRONX"24" a technical event organized by Pondicherry Technology University, Pondicherry on 15.4.2024



**Bhuvaneshwaran M, Balkumaran R, Vijaisriram G** have won 1st prize Circuit debugging in a technical symposium organized by Info Institute of technology on 23-04-2024.



**Vishnu priya V, Viveka C, and Srinidhi V.** from Third Year were awarded third place in a paper presentation competition held at Jerusalem College of Engineering on October 13, 2023.



**Shaaran V** won 2nd prize Circuit debugging in a technical symposium organized by PTU on 24-04-2024. & 25-04-2024.



**Kiren V, Gurunarayana S and Pavithran K** of II B ECE students have won Second prize in paper presentation organized by Mechatronics Engineering Department held at Sri Manakula Vinayagar Engineering College.



**Rijul Nambiar.P, Sudarsan.C, Sujith.S, Swetha.J and Mohan Raj** has participated in Election Awareness Reels Competition on 17.04.2024 conducted by the Chief Election Commission on the occasion of Lok Sabha Election 2024 and won a cash prize of Rs.15000

## STUDENTS CORNER



**Theema.S** and **Rupawaani.K** has participated in Mechatronics Fest 2k24 conducted by Department of Mechatronics on 13.04.2024 and won 2nd prize in Project Expo with a cash prize of Rs.500 each



**Jessena Rose.S** has participated in Codesy 2k24 on 24.04.2024 conducted at Dhanalakshmi Srinivasan College of Engineering, Chennai and won 1st prize in Paper Presentation with a cash prize of Rs.1500



**Nithya Shree** and **Bhavani Shree.S**, **Gayathri.D** has participated in Avesha 2024 on 23.04.2024 conducted by Anna University, Tiruchirapalli and won 1st prize in Technical Quiz



**Nandhika Vardhini**, **Kowsalya**, **Yuvashree.G** won 2nd prize in code debugging "TETRONIX 2K24" at PTU 16/04/24

## GATE ACTIVITIES



**Lokesh S**  
IV year B  
GATE Score 400



**Vigneshwara B**  
III year B  
GATE Score 385



**Nimal K**  
III year C  
GATE Score 241

Our students achieved commendable success in the GATE examination in February 2024. **Lokesh S.** from Class IV/B scored 400, **Vigneshwara B.** from Class III/B scored 385, and **Nirmal K.** from Class III/C scored 241. These achievements reflect their dedication and our commitment to excellence. The department provided intensive workshops, mock tests, and personalized mentoring to support their preparation. Congratulations to our students for their outstanding performance and determination!



## PROFESSIONAL BODIES ACTIVITIES

### IETE Students Forum (ISF)

The IETE Student Forum organized a one-day workshop on "Web Development" on April 2, 2024. Twenty-five students participated, gaining valuable insights and hands-on experience in the field.



Technical Quiz on 08.11.2023



Seminar about Arduino on 22.11.2023



## PLACEMENT RECORD

### Company-wise Placements

S.No.	Company	Package (Lakhs per Annum)	Offers
1	Girmiti Software Private Limited	3	2
2	AMI	4	1
3	SANMINA	3.4	1
4	CTS	4	8
5	Schneider Electric	3	5
6	Siechem Wires & Cables	3.87	5

## OUR RECRUITERS



# DATA PATTERNS



*Congratulations to All Placed Students*

## PLACEMENT TRAINING

### Girmiti Software Private Limited Specific Training



Girmiti Software Private Limited is a technology company based in Bangalore, India. Founded in 2011, Girmiti specializes in providing software solutions and services primarily focused on the payments industry. They offer a range of services including payment gateway integration, mobile payment solutions, payment processing platforms, and financial technology (fintech) solutions.

Girmiti Software Private Limited specific Training was conducted by Cranes Varsity. Total of 22 students from the Department of ECE has attended. For 2 months, the training is conducted for the following skills:

- Domain-Based Skills
- Communication Skills
- Technical Interview
- HR Interview



*Students at the premises of Girmiti Software Private Limited, Bengaluru*

### CTS Specific Training

Cognizant Technology Solutions (CTS), headquartered in Teaneck, New Jersey, USA, is a prominent multinational corporation specializing in IT services and consulting. Founded in 1994, Cognizant has grown to become a major player in the global technology services industry, with operations spanning across North America, Europe, Asia Pacific, and the Middle East. The company provides a comprehensive range of services including digital transformation, IT infrastructure services, application development, and business process outsourcing. Cognizant serves clients in various sectors such as financial services, healthcare, manufacturing, retail, and telecommunications, leveraging advanced technologies like AI, cloud computing, analytics, and IoT to drive innovation and efficiency. With a workforce comprising thousands of professionals worldwide, Cognizant is known for its client-centric approach, focusing on delivering value, quality, and strategic insights to help businesses navigate and excel in the digital age.



A snap of the training session carried by the placement trainers for our final year students.

CTS specific Training was conducted by Aptitude Buster, FacePrep and Alumni. Total of 100 students from the Department of ECE has attended. For 1 week, the training is conducted for the following skills:



HR interview



Technical Interview



Communication Skills



Domain-Based Skills

### EDITORIAL BOARD

#### Editor In Chief

**Dr. P. Raja**

Professor and Head, Dept. of ECE

#### Staff Coordinator

**Dr. S. Dhivya**

Assistant Professor, Dept. of ECE

#### Year Coordinators

**Dr. N. Jothy**

Final Year

**Dr. P. Arunagiri**

Third Year

**Dr. S. B. Lenin**

Second Year

**Dr. R. Kurinjimalar**

First Year

#### Student Coordinators

**Susmitha.J**

Final Year - A

**Thepikka.M**

Final Year - A

**Vishnupriyai.R**

Third Year - A

**Vidhya.K**

Third Year - A

**Dev Vishwaa.S**

Second Year - A

**Bharathi.V**

Second Year - A

**Anamalai.S**

Second Year - A

**Suvatha.V**

Final Year - B

**Vanaja.M**

Final Year - B

**Venkatesh.E**

Third Year - B

**Manoj Kumar.T**

Third Year - B

**Dhayanidhi.K**

Second Year - B

**Pradeep.V**

Second Year - B

**Nithya.P**

Second Year - B

**Swetha.M**

Final Year - C

**Janarthanan.M**

Final Year - C

**Prathibha.P**

Third Year - C

**Dhivakar.V**

Second Year - C

**Rahul.K**

Third Year - D

**Shivahari.S**

Third Year - D

**Nithyasri.A**

Second Year - D

**Suresh.S**

Second Year - D