



REPORT ON IEEE STUDENT BRANCH

March 2023 - May 2023

ABOUT THE 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.



ABOUT IEEE STUDENT BRANCH

The American Institute of Electrical Engineers and the Institute of Radio Engineers merged to create the IEEE on January 1, 1963. IEEE has over 460,000 members in 190 countries, with the U.S. based membership no longer constituting a majority. IEEE produces over 30% of the world's literature in the electrical and electronics engineering and computer science fields, publishing approximately 200 peer-reviewed journals and magazines. IEEE publishes more than 2,000 conference proceedings every year. The IEEE provides learning opportunities within the engineering sciences, research, and technology. IEEE offers educational opportunities such as IEEE e Learning Library, the Education Partners Program, Standards in Education and Continuing Education Units (CEUs). IEEE also sponsors a website designed to help young people better understand engineering, and how an engineering career can be made part of their future. Students of age 8–18, parents, and teachers can explore the site to prepare for an engineering career, ask experts engineering-related questions, play interactive games, explore curriculum links, and review lesson plans. Most IEEE members are electrical and electronics engineers, but the organization's wide scope of interests has attracted people in other disciplines as well (e.g., computer science, software engineering, mechanical engineering, civil engineering, biology, physics, and mathematics).

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.



Technical Visit



The CCE Department and IEEE SB jointly organized a technical visit to NeST Technologies and Spectrum Soft Tech Solutions Pvt. Ltd., Cochin, on March 14th and 15th, 2023, from 10:00 AM to 12:30 PM. The session commenced with an introduction to the fundamentals of electronics manufacturing, IT infrastructure design, software development, web designing, and hosting. It concluded by highlighting career opportunities in the software domain and emphasizing the significance of web applications in industrial applications. A total of 40 participants availed themselves of the opportunity and benefited from the visit.

Trouble Shooting of Laptops

On May 6, 2023, from 9:00 AM to 3:30 PM, the EEE Department and IEEE SB hosted a one-day workshop on "Trouble Shooting of Laptops," hosted by Mr. Baranidharan, Proprieter, Vizhuthagal. The speaker stated that Troubleshooting is a systematic process used to locate the cause of a fault in a laptop and correct the relevant hardware and software issues. Problem solving approach was explained using a logical approach to achieve successful resolution. At the end of the session, students provided the collective feedback stating that the session was effective and it's very helpful for their career.



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Guest lecture on "Renewable Energy in Power Sector"



The IEEE SB and EEE Department were treated to a guest lecture by Mr. M. Dhanraj, General Manager of Operations at VOLTECH O and M Services Pvt. Ltd., on May 20, 2023, from 2:30 to 3:30 p.m. on the topic of "Renewable Energy in Power Sector." The resource person discussed about Renewable Energy, often referred to as clean energy, comes from natural sources or processes that are constantly replenished. Renewable Energy are becoming a more important power source and expansion in renewables is also happening at scales large and small, from roof top solar panels on homes that can sell power back to the grid to giant offshore wind farms. There are around 172 students were participated in this program.



Foundation to Machine Learning



On May 20, 2023, from 2:00 PM to 4:00 PM, the CCE Department and IEEE SB hosted a guest lecture by Mr. Nithesh Kumar Manimaran, Data Scientist, KMPG, London, on "Foundation to Machine Learning Security." The introduction of machine learning by the speaker kicked off the meeting. Lastly, a discussion of its industrial uses, constraints, and project management techniques was included. The guest talk was attended and utilized by 57 people in total.

Trouble shooting of electrical circuits and designing of junction box



The EEE Department and IEEE SB collaborated to host an "Engineering Clinic" session focused on "Troubleshooting of Electrical Circuits and Designing of Junction Box" on May 27th, 2023. The session provided insights into investigating electrical circuit issues and ensuring safety measures in junction box design. A competition centered around junction box design was also conducted, attracting 56 teams from the second and third years of EEE. Following scrutiny, three teams were shortlisted by the committee. The winners were commended and rewarded for their creative designs.