

September 2023 (AY2023-24)

Newsletter



Symbiosis Institute of Technology, Pune

Symbiosis International (Deemed University), Pune

Electronics and Telecommunication Engineering Department

Department Vision:

To emerge as a leading source for Electronics and Telecommunication engineering, fostering globally proficient engineers to meet the demands of evolving industry and society.

Department Mission:

- **M1:** Foster collaboration with industry to facilitate the acquisition of cutting-edge technologies and contribute to the generation of up-to-date knowledge, enhancing employability and sustainability.
- **M2:** Encourage innovation, research, and development, creating an environment conducive to higher education, entrepreneurship, and lifelong learning.
- **M3:** Cultivate leadership qualities infused with social and ethical values, providing a platform for their development.

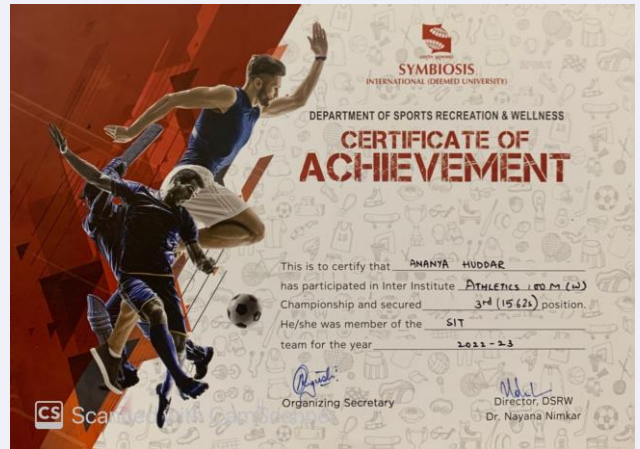
Program Educational Objectives (PEOs):

- **PEO1:** Graduates will possess a strong foundation in science and engineering fundamentals, along with analytical skills to effectively solve real-world problems.
- **PEO2:** Graduates will gain technical proficiency in Electronics and Telecommunication fields and scale new heights in profession through lifelong learning.
- **PEO3:** Graduates will embrace professionalism, ethical conduct at all levels and constantly evolve in a multidisciplinary approach leading towards sustainability.
- **PEO4:** Graduates will leverage their engineering knowledge, effective communication skills, leadership qualities, and teamwork spirit to serve society and contribute positively to their community.

Student Participation:



Atharva Sasane from the third year participated in the e-Yantra Robotics Competition and IIT Bombay FOSSEE Mapathon



Ananya Huddar enthusiastically participated in the 100m and 200m races organized by the Department of Sports, Recreation, and Wellness at Symbiosis International (Deemed University).



Garvitraj Pandey has presented paper entitled Educative Reality - Augmented Reality Application for Education in INOCON 2023.



Nitya Sharma has participated in E-summit 2023, securing a top 15 position in a 6-month challenge aimed at developing sustainable E-cells nationwide.

Guest Lectures:

The Department of Electronics and Communication Engineering has organized a series of illuminating industry guest lectures, strategically designed to elevate the educational experience of our students.



Mr. Hrishikesh Dhande, Regional Head of the Academic Interface Programme at TCS Pune, delivered an insightful lecture focused on the myriad initiatives and abundant opportunities within TCS.



Shilpa Mahangade, Lead SME at SEED Infotech Ltd., skillfully guided a practical session about using data structures with the C programming language.



Mr. Shridhar Dudam, Chief Technology Officer at Smart Logic Technologies, enlightened the audience with his expertise on the subject of "Real-Time Operating Systems."

Industrial Visits:

Industrial Visit to Bajaj Auto

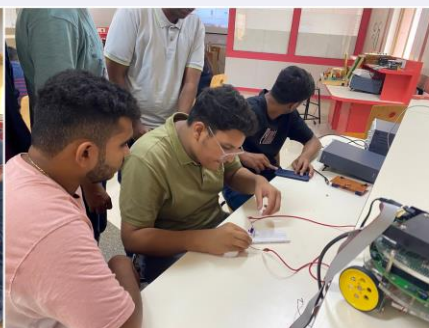


Industrial Visit to Flash Electronics



Value added course:

Electronics and Telecommunication Engineering department has offered three value added courses. These courses, namely "Competitive Programming and Problem-Solving," "Trends in Electronics and Communication Engineering," and "Electronic Engineering Tools and Techniques," have been seamlessly incorporated for the 2020-24, 2021-25, and 2022-26 batches, respectively. These courses underscore our dedication to fostering a comprehensive learning environment that prepares students for the dynamic landscape of electronics and telecommunication. Further, these forward-looking courses reflect our commitment to providing students with a holistic and industry-aligned education.



PROTECH 2023:

On the 29th of April 2023, we successfully orchestrated PROTECH 2023, an event that left an indelible mark in the realm of technology. Let us provide you with a glimpse into the captivating moments that transpired during this extraordinary occasion.



Tinkering in E&TC Department

In our Electronics and Telecommunication Engineering Department, we have an exciting place called the Tinker Lab. It's like a playground for trying out new ideas and cool things. Here, you can use the latest tools and gadgets to turn your creative thoughts into real stuff. It's a place where you can learn by doing and make your own projects. With helpful teachers around, you can have fun while learning and making cool things in the world of electronics and communication.



2023 SPS Seasonal School

In 2023, the 2023 SPS Seasonal School took place, offering an educational platform focused on the realms of signals and processing. The event provided attendees with an opportunity to engage in a structured learning environment where they could enhance their knowledge in these areas. Distinguished experts shared their insights through informative sessions and engaging activities, enabling participants to acquire valuable skills applicable to their professional pursuits and academic endeavors. Distinguished speakers who shared their expertise at the 2023 SPS Seasonal School are:

- Prof. K V S Hari, Professor, Indian Institute of Science, Bengaluru
- Dr. Ketan Kotecha, Director and Professor, Dept. of AIML, Symbiosis Institute of Technology, Pune
- Dr. Monika Aggarwal, Professor, IIT Delhi, India
- Prof. Yashwant Gupta, Center Director, NCRA/TIFR, Pune)
- Dr. Danilo P. Mandic, IEEE Distinguished Lecturer, Professor, Imperial College London, UK
- Ms. Kanchan Bhonde, Product Strategy Head, Tech Mahindra
- Dr. Celia Shahnaz, Professor, Dept. of EEE, Bangladesh University of, Engineering and Technology, Bangladesh

Highlights of the event



Research publications:

- M. D, J. K, P. Shah, R. Sekhar, Fractional order PI λ D μ controller for microgrid power system using cohort intelligence optimization, Results in Control and Optimization, 11 (2023) 100218.
- A. Kumar, N. Gupta, A. Jain, A.K. Goyal, Y. Massoud, Numerical assessment and optimization of highly efficient lead-free hybrid double perovskite solar cell, Results in Optics, 11 (2023) 100387.
- K.M.V.V. Prasad, G. Nagababu, H.K. Jani, Enhancing offshore wind resource assessment with LIDAR-validated reanalysis datasets: A case study in Gujarat, India, International Journal of Thermofluids, 18 (2023) 100320.
- T. Pawase, A. Malhotra, A. Mahajan, Compact hybrid EBG microstrip antenna for wearable applications, Frequenz, (2023).
- R. Krishnamurthy Venkataramani, K. Mohanarangam, J. Lim, K. Yu, V. Gonuguntla, J.R. Choi, Design and Analysis of an Inductive Coupling System for the Early Detection of Heart Failure, Applied Sciences, 13 (2023) 4381.
- A. Rahate, S. Mandaokar, P. Chandel, R. Walambe, S. Ramanna, K. Kotecha, Employing multimodal co-learning to evaluate the robustness of sensor fusion for industry 5.0 tasks, Soft Computing, 27 (2023) 4139-4155.
- R.A. Ansari, A. Ramachandran, W. Thomas, GPU based building footprint identification utilising self-attention multiresolution analysis, All Earth, 35 (2023) 102-111.
- A. Kumar, A. Jain, N. Gupta, Optimal design and performance assessment of CH₃NH₃SnBr₃ lead-free perovskite solar cells for > 24% efficiency, Indian Journal of Physics, (2023).
- N. Pachauri, V. Thangavel, V. Suresh, M.P. Kantipudi, H. Kotb, R.N. Tripathi, M. Bajaj, A Robust Fractional-Order Control Scheme for PV-Penetrated Grid-Connected Microgrid, Mathematics, 11 (2023) 1283.
- B.R. Mudhivarthi, P. Thakur, G. Singh, Aspects of Cyber Security in Autonomous and Connected Vehicles, Applied Sciences, 13 (2023) 3014.
- A.S. Dixit, S. Kumar, Antipodal Vivaldi Antenna with enhanced gain and improved radiation patterns for 5G-IoT applications using metamaterial and Substrate Integrated Waveguide, AEU - International Journal of Electronics and Communications, 161 (2023) 154549.
- M. Faseehuddin, S. Shireen, N. Herencsar, W. Tangsrirat, Novel FDNR, FDNC and lossy inductor simulators employing second generation voltage conveyor (VCII), International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 36 (2023) e3100.
- M. Hiwale, V. Varadarajan, R. Walambe, K. Kotecha, Nikshay Chain: A Blockchain-Based Proposal for Tuberculosis Data Management in India, Technologies, 11 (2023) 5.
- P. Moonmuang, M. Faseehuddin, T. Pukkalanun, N. Herencsar, W. Tangsrirat, VDTA-based floating/grounded series/parallel R-L and R-C immittance simulators with a single grounded capacitor, AEU - International Journal of Electronics and Communications, 160 (2023) 154502.
- A.S. Dixit, S. Kumar, M. Abegaonkar, A corrugated and lens based miniaturized antipodal Vivaldi antenna for 28 GHz and 38 GHz bands applications, Frequenz, (2023).
- A.K. Singh, A.K. Maurya, R. Prakash, P. Thakur, B.B. Tiwari, Reconfigurable intelligent surface with 6G for industrial revolution: Potential applications and research challenges, Paladyn, Journal of Behavioral Robotics, 14 (2023).

Placement details:

Students of 2019-23 batch have been placed in renowned companies, such as PhonePe, Deloitte, Adenza, Aditya Birla Capital Ltd., AI4M Technology Pvt. Ltd., Bitmapper, Bristlecone, Cogoport, Cuvette, Easebuzz, FortyTwo Labs, GE Appliances, Harman, HDFC –IT, Hewlett Packard, Home First Finance, IBM Software Labs, ICICI AMC, Intellipat, Kohler India, Leadsquared, Loyalty Juggernaut, Merkel Sokrati, Oracle Financial Software Services Ltd., Phonon Communications, Tata Consultancy Services, Veritas, Verolt Engineering, etc.

Here are a few noteworthy placement highlights.

- Riya Mehta and Sharmishta Tongia secured a whopping Rs. 22,50,000/- annual package with PhonePe.
- Vinayak sharma, Saijal Singhal, Pinky Sherwani, Manmeet Kaur, Aryan Shrivastava, and Ayush Malhotra secured Rs. 12,05,000/- annual package with Veritas.
- Rohit Mali received Rs. 11,00,000/- package from IBM Software Labs.
- Abhirup Sarkar, Harshvardhan Upadhyay, Soham Manoj Hudnurkar, Krishnaraja Sagar T S, Shreya Puthran, Arpit Kumar, and Rishit Kasliwal secured Rs. 7,60,000/- annual package with Deloitte.

Students corner

I am truly grateful for the numerous opportunities that SIT has provided me with. Specifically, the 6-month internship have been instrumental in broadening my horizons and offering me valuable insights into the professional world. The campus exudes a vibrant and exciting atmosphere. The credit for the university's success goes to its dedicated instructors, whose excellent teaching methods and practical knowledge have significantly boosted my confidence in advancing in my career. Thanks to the open-door policy that allows us to ask questions at any time during the day, my understanding of the subject matter and logical thinking has become crystal clear. The memories I made during this wonderful intellectual journey are unforgettable, and I often yearn to relive my SIT ENTC glory years.

Abhirup Sarkar, E&TC, 2019-23 Batch