Celebrating 50 Years of Excellence

January 2020

Newsletter

Symbiosis Institute of Technology, 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.

Guest lectures organized:

- The guest speaker **Dr. Rahul Wargad,** Asst. General Manager (IT- OSS /BSS), BSNL has delivered a comprehensive lecture on " Advanced communication System", on 30th January 2020 for the benefit of B. Tech students.
- The guest speaker **Dr. Deepak Vyas,** Deputy General Manager, Global Technology, Network & Operations, Tata Communications Limited, has delivered a comprehensive lecture on topic, "Getting ready for Telecommunication Industry", on 14th February 2020 for the benefit of B. Tech students.
- The guest speaker **Mr. Pawankumar Fakatkar**, Education Technical Evangelist at MathWorks India Private Limited, has delivered a comprehensive lecture on ,"MatLab and Simulink for model based design in control systems", on 25th February 2020 for the benefit of B. Tech students.

Student achievements:

- **Smit Shah** of E&TC department has participated in Brain Controlled Robot Design Competition organized on 06th June 2020 by Pantech Solutions.
- **Avantika Roy** of E&TC department has participated in COVID INDIA TASK FORCE fundraising charity event, Nukkad natak competition challenge organized on 15th May 2020 by Covid India Task Force nonprofit organization and have secured the third place.
- **Smit Shah** of E&TC department has participated in HackRx organized on 12th June 2020 by HealthRx (Bajaj Finserv Health Ltd.)

Department publications:

- Shastri, A.S., Nargundkar, A., Kulkarni, A.J., Sharma, K.K., Multi-cohort intelligence algorithm for solving advanced manufacturing process problems, Neural Computing and Applications, 2020, Vol. 32, Issue 18, 15055-15075
- Shahane, P., Design and implementation of single node noc router using small side buffer in input block and islip scheduler, International Journal of Advanced Trends in Computer Science and Engineering, 2020, Vol. 9, Issue 4, 5700-5709
- Patil, K., Mahajan, A., Balamurugan, S., Arulmozhivarman, P., Makkar, R., Development of Signal Processing Algorithm for Optical Coherence Tomography, Proceedings of the 2020 IEEE International Conference on Communication and Signal Processing, ICCSP 2020, 1283-1287
- Kashyap N., Deshpande S., Light fidelity based vehicular access system, Proceedings of the 5th International Conference on Communication and Electronics Systems, ICCES 2020, 422-429.
- Dixit, A.S., Kumar, S., The enhanced gain and cost-effective antipodal Vivaldi antenna for 5G communication applications, Microwave and Optical Technology Letters, Vol. 62, Issue 6, 2365-2374.
- Apte, A., Joshi, V.A., Mehta, H., Walambe, R., Disturbance-Observer-Based Sensorless Control of PMSM Using Integral State Feedback Controller, IEEE Transactions on Power Electronics, Vol. 35, Issue 6, 6082-6090.
- Nasikkar, P.S., Sayyad, J.K., Internet of Things (IoT) based outdoor performance characterisation of solar photovoltaic module, E3S Web of Conferences, Vol. 170.
- Sayyad, J.K., Nasikkar, P.S., Solar photovoltaic module performance characterisation using single diode modeling, E3S Web of Conferences, Vol. 170.
- Javed K. Sayyad, Paresh S. Nasikkar, Capacitor Load Based I–V Curve Tracer for Performance Characterisation of the Solar Photovoltaic System, Applied Solar Energy, Vol. 56, Isuue 3, 168-177.
- Safai, A., Prasad, S., Chougule, T., Saini, J., Pal, P.K., Ingalhalikar, M., Microstructural abnormalities of substantia nigra in Parkinson's disease: A neuromelanin sensitive MRI atlas based study, Human Brain Mapping, Vol. 41, Isuue 5, 1323-1333.
- Gunjal, A., Kumar, S., Gain Enhancement in U-Slotted Broadband Dual Circularly Polarized Antenna for S-Band Radar Applications, 2020 International Conference on Emerging Smart Computing and Informatics, ESCI 2020, 124-128.
- Prasad, S., Shah, A., Saini, J., Ingalhalikar, M., Pal, P.K., Aberrant global and local efficiency of the executive subnetwork in essential tremor, Journal of Neural Transmission, Vol. 127, Issue 3, 385-388.
- Dixit, A.S., Kumar, S., A miniaturized antipodal vivaldi antenna for 5G communication applications, 2020 7th International Conference on Signal Processing and Integrated Networks, SPIN 2020, 800-803.
- Nargundkar, A., Shastri, A., Optimization of sand usage for metal casting process – a sustainable manufacturing approach, International Journal of Scientific and Technology Research, Vol. 9, Issue 2, 2668-2672.
- Wazarkar, S., Patil, S., Kumar, S., A Bibliometric Survey of Fashion Analysis using Artificial Intelligence, Library Philosophy and Practice, 2020, 1-17.
- Pande, J.A., Nasikkar, P., Bibliometric Review of Energy Storage Systems for Grid Connected Wind Power Plant, Library Philosophy and Practice, 2020, 1-14.
- Kadu, M.B., Rayavarapu, N., Compact stack EBG structure for enhanced isolation between stack patch antenna array elements for MIMO application, International Journal of Microwave and Wireless Technologies, 2020.
- Deshpande, S., Walambe, R., Differential gaming approach with safety parameter for mobile robot to circumvent a dynamic obstacle, IFAC-PapersOnLine, Vol. 53, Issue 1, 477-482.
- Kadu, M., Rayavarapu, N., Reduction of mutual coupling in compact antenna array using meander line slot ebg structure, International Journal on Communications Antenna and Propagation, Vol. 10, Issue 3, 183-191.

Placement details:

Students of 2016-20 batch have been placed in renowned companied, such as Sokrati, Schindler, Vanderlande, Amazon, Oxynia, Mckinley and Rice, Trevista, Miniorange, etc.

Alumini Message

"My time at SIT Pune was really eventful. The faculty at SIT are very helpful right from the point where you have to choose for different courses to making you industry ready. All in all, I had a great experience at SIT Pune and would like to thank the management and everyone from the department for making my stay at SIT Pune unforgettable.“

“Sanmil Ralkar”

"I have been a student of B. Tech Electrical and Electronics Engineering programme for the batch of 2016- 2020. I have been fortunate to be a part of such a program and would encourage all aspiring researchers to make maximum use of the opportunity and delve into multi-disciplinary research to shape up the future of our country."

“Bhupesh Yadav”

Few Titbits by our students

- QWERTY keyboard was designed to slow down the typing speed, To avoid the problem and have a better typing experience, Christopher Latham Sholes made many design alterations to the keyboard layout. The current layout of the QWERTY keyboards was finally designed by E. Remington and Sons, which solved the problem of jammed type bars..
- Vladimir Sergeevich Lukyanov built the world’s first computer in 1936 that solved differential equations in partial derivatives. The amazing fact is that the machine was driven by water.