July 2021

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 **Mr. Rachakonda Sudhakar**, Systems Manager working at Ideabytes Software India Pvt. Ltd. has delivered a comprehensive lecture on Cloud Enabled Industrial IoT vs SCADA Systems on 1st May 2021 for the benefit of B. Tech students.
- The guest speaker **Mr. Saket Kulkarni**, R&D Engineer working at Agiliad Pune has delivered a comprehensive lecture on Digital Image Processing on 7th May 2021 for the benefit of M. Tech students.
- The guest speaker **Ms. Aditi Bongale**, Asst. Embedded Systems Engineer working at Tata Consultancy Services (TCS) has delivered a comprehensive lecture on Advanced Driver Assistance System (ADAS) Technology on 15th May 2021 for the benefit of B. Tech students.

Value added course:

- A value added course on **"Introduction to LaTex"** has been introduced for the benefit of B. tech students. The objective of this course is to make students well versed with the documentation in LaTeX and provide hands on practice session on various tools required. The course consists of 30 hours of theory and practical sessions. The coordinators for the event were Dr. Pritesh Shah, Dr. Jayant Jagtap, and Dr. Abhay Pal Singh.

Student achievements:

- **Janmejay Gupta** of E&TC department has participated in Chess competition organized on 22nd May 2021 by Unicorn Chess Academy, Bhopal and have won the Best U-19 Boy of the Tournament.
- **Neeraj T** of E&TC department has participated in National virtual design challenge organized on 23rd March 2021 by Fraternity of Mechanical and Automotive Engineers (FMAE) and have won the first prize.
- **Vinay Patil** of E&TC department has participated in Technical session on Robot Operating System (ROS) organized on 3rd September 2021 by e-Yantra Lab Setup Initiative (eLSI) and won the competition.
- **Garvitraj Pandey** of E&TC department has participated in Adobe UX Foundation competition organized on 2nd September 2021 by adobe and won the competition.
- **Tanya Singh** of E&TC department has participated in Remote Sensing for Lunar Science competition organized on 11th August 2021 by ISRO and IIRS Dehradun.

Department publications:

- "Jayshree Pande, Paresh Nasikkar, Ketan Kotecha, Vijayakumar Varadarajan, A Review of Maximum Power Point Tracking Algorithms for Wind Energy ConversionSystems, Journal of Marine Science and Engineereing (Marine Energy Section) -2021, Accepted for Publication."
- Bandopadhyaya, A., Dodwad, D., Gupta, D., Surya Koyyana, M., Narkhede, P., & Deshpande, S. (2021). Bibliometric Review on IoT Based System for Remote Downloading on Microcontroller.
- "Bandopadhyaya, A., Dodwad, D., Gupta, D., Surya Koyyana, M., Narkhede, P., & Deshpande, S. (2021). Bibliometric Review on IoT Based System for Remote Downloading on Microcontroller.
- Atha, G., Chaturvedi, S., Desai, A., Desai, D., & Deshpande, S. V. (2021). Bibliometric Analysis on Dynamic Target Tracking by Mobile Robot."
- Aniket Gunjal and Ujwala Kshirsagar*, Broadband Asymmetrically Fed Circularly Polarized Slot Antenna for Mid-Band 5G Smartphone Applications, Progress In Electromagnetics Research C, Vol. 115, 233{244, 2021 Broadband.
- Roongmuanpha, N.; Faseehuddin, M.; Herencsar, N.; Tangsrirat, W. Tunable Mixed-Mode Voltage Differencing Buffered Amplifier-Based Universal Filter with Independently High-Q Factor Controllability. Appl. Sci. 2021, 11, 9606.
- Faseehuddin, M., Herencsar, N., Albrni, M.A., Shireen, S. and Sampe, J. (2021), "Electronically tunable mixed mode universal filter employing grounded capacitors utilizing highly versatile VD-DVCC", Circuit World, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/CW-05-2020-0080.
- Faseehuddin, M.; Herencsar, N.; Albrni, M.A.; Sampe, J. Electronically Tunable Mixed-Mode Universal Filter Employing a Single Active Block and a Minimum Number of Passive Components. Appl. Sci. 2021, 11, 55. https://doi.org/10.3390/app11010055.
- Albrni, M. I. A., Mohammad, F., Herencsa, N., Sampe, J., & Ali, S. H. M. (2020). Novel Electronically Tunable Biquadratic Mixed-Mode Universal Filter Capable of Operating in MISO and SIMO Configurations. Informacije MIDEM-Journal of Microelectronics Electronic Components and Materials, 50(3), 189-203.
- Faseehuddin, M., Albrni, M. A., Sampe, J., & Ali, S. H. M. (2021). Novel VDBA based universal filter topologies with minimum passive components. Journal of Engineering Research, 9(3B).
- Sangeetha Subbaraj, Malathi Kanagasabai, M. Gulam Nabi Alsath, Saffrine Kingsly, Sandeep Kumar Palaniswamy, Y.V. Ramana Rao and Arun Kumar Shrivastav, Integration of dual function array with nested slot radiator for MIMO applications, International Journal of RF and Microwave Computer Aided Engineering, 2021, 31:e22781.
- Sangeetha Subbaraj, Malathi Kanagasabai, Padmathilagam Sambandam, M. Gulam Nabi Alsath, Sandeep Kumar Palaniswamy and Saffrine Kingsly, Performance enhanced folded multiband MIMO antenna for mobile terminals, AEU - International Journal of Electronics and Communications, 2021, 137, 153750.
- Cherry Bhargava, Pardeep Kumar Sharma, Statistical and intelligent reliability analysis of multi-layer ceramic capacitor for ground mobile applications using Taguchi's approach, International Journal of Quality and Reliability Management, 2021, 33, 1-132.
- Pardeep Kumar Sharma, Cherry Bhargava and Ketan Kotecha, Sustainability Analysis of a ZnO-NaCl-Based Capacitor Using Accelerated Life Testing and an Intelligent Modeling Approach, Sustainability, 2021, 10736, 1-16.
- Arminder Singh Walia, Vineet Srivastava, Mayank Garg, Nalin Somani, Nitin Kumar Gupta, Chander Prakash, Cherry Bhargava and Ketan Virendrabhai Kotecha, Surface Roughness analysis of H13 Steel during EDM Process using Cu-TiC Sintered Electrode, Materials, 2021, 5943, 1-14.
- Sanjay Kumar Roy, Brahmadeo Prasad Singh, Kamal Kumar Sharma and Cherry Bhargava, Unique Analysis Approach to Bridge-T Network using Floating Admittance Matrix Method, International Journal of Circuits, Systems and Signal Processing, 2021, 15, 1297-1304.
- Sanjay Kumar Roy, Kamal Kumar Sharma, Cherry Bhargava, Brahamdeo Prasad Singh, Mathematical Modelling and Simulation of Band Pass Filters using the Floating Admittance Matrix Method, WSEAS Transactions on Circuits and Systems, 2021, 20, 208-214."
- A. Jain, A. Kumar, N. Gupta, and V. Kumar, "Superior energy storage performance coupled with excellent electrical characteristics in lead-free $Ba_{0.8}Ca_{0.2}TiO_3$-$(Bi_{0.80}Mg_{0.20})$ $(Ti_{0.65}Mg_{0.30})O_3$ ceramics," J. Phys. D: Appl. Phys., 54[49] 495504 (2021).

Placement details:

Students of 2017-21 batch have been placed in renowned companied, such as Vodafone, Amazon, Emerson, eClerx, Endurance, Media.net, etc.

Alumini Message

"My time at SIT Pune was really eventful. Being able to pick and choose courses according to my needs enabled me to develop my knowledge in the fields I was interested in. The faculty are really approachable. I was able to work on research projects with the professors guiding me along the way. 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.“

“Smith Shah”

"I have been a student of B. Tech Electrical and Electronics Engineering programme for the batch of 2017- 2021. 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."

“Harshita Kulkarni”

Few Titbits by our students

- 87% of people have not heard of the term ‘Internet of Things’.
- ATMs are considered as the first IoT objects, and went online as far back as 1974.
- There is a common misbelief that because the browser is named Firefox, the logo must be a fox. The cute furry creature in the logo is actually a red panda!
- GE believes that the “Industrial Internet” will add $10 to $15 trillion to global GDP in the next 20 years.