



DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION

The program of Bachelor of Engineering in Electronics and Telecommunication is being conducted in accordance to the course curriculum prescribed by University of Mumbai. Department has been NBA accredited from 2012-2014, 2021-2024 and NAAC accredited. The college management has always encouraged the student fraternity by announcing scholarships and cash awards for meritorious students. The department has active IEEE Student chapter. Technical and Co-curricular activities are being conducted under IEEE on regular basis.

Jan-July2023

The department of EXTC was started in 2002. Right from the inception of the institute, it has progressed rapidly, to be regarded, as one of the premiere departments with excellent infrastructure and dedicated faculty. Department is well equipped with laboratories. The department has highly qualified and competent faculty members who specialize in their areas of expertise, in order to give the students a holistic and pragmatic view of the present scenario of Electronics and Communication industry.

Vision and Mission of Electronics and Telecommunication Department

VISION

To be a Premier Department in Electronics & Telecommunications Engineering

MISSION

- To provide quality education satisfying the requirements of corporate world across diverse field.
- To develop life-long learning skills to cater to the socio-economic needs.
- To strengthen Industry-Institute Interaction to bridge the gap between academic and Industrial requirements.
- To equip students with leadership and entrepreneurial skills.

Editors

Prof. Vaishali Mangrulkar

Prof. Pranavi Nikam

Program Educational Outcomes (PEOs)

Graduates will be able to:

- 1. PEO1: Identify, formulate and solve engineering problems in the industry, complying with ethical standards and societal needs.
- 2. PEO2:Pursue higher studies and professional development courses leading to significant advancement in the field of specialization.
- 3. PEO3: Apply technical concepts to develop applications and design products.
- 4. PEO4: Exhibit leadership and entrepreneurial acumen in career.

Program Specific Outcomes (PSOs) Students should able to

1.PSO1: Achieve eminence in domains like signal processing, VLSI, embedded IoT, RF & microwave.

2.PSO2: Become technocrats capable of working in multi- disciplinary fields.

Department Activities

- Received The best IEEE chapter award for IEEE MTTS SIESGST chapter on 25/6/2023.
- Organized expert lecture in -value added course Antenna Design on topic "Antenna testing" by Mr. Akshay Jain ,Hardware Engineer at Gurutva Industries Pvt. Ltd Pune on 27/6/2023.
- ➤ Organized expert lecture in value added courses-Image processing and machine learning on topic "Use and Applications of AI and ML" by Mr. Abhay Phanshikar, Business Development Director at Azilen Technologies Pvt Ltd, Mumbai on 3/7/2023.
- ➤ Organized expert lecture in value added course Image processing and machine learning on topic "Applications of CNN in industry" by Mr. Pawan Hebli, 2018 Alumni, AI engineer at Assert AI, Mumbai on 30/6/2023.
- ➤ Organized value added course on Advanced Antenna Design during 26/6/2023 to 3/7/2023.
- Organized value added course on Image Processing and Machine Learning using Python during 26/6/2023 to 4/7/2023.
- ➤ Organized expert talk on Importance of GATE and career opportunities in EXTC field by Mr.Soham Lakhote, Research scholar (IISC Banglore) for third year students on 17/3/2023.
- Organized expert talk Seminar on Role of Optical Communication and Networks in Industry by Mr. Pratik Atha, Sr. Manager – Technical, Fiber Optic Sensing Solutions Private Limited, Mumbai for final year students on 23/3/2023.

- ➤ Organized workshop on Ultimate SQL Bootcamp: Query, Project, Interview preparation" by Mr.Umesh Mahind, Software Engineer, Relx group for third year students on 11/3/2023.
- ➤ IEEE WIE organized Women of Vision: IMPERIUM- panel discussion and interaction with students on Entrepreneurship on 9/3/2023.
- ➤ IEEE SIESGST organized WEBASCEND: 2 days web design workshop during 18/3/2023 to 19/3/2023.
- Organized Hands On session of Networking by Industry Expert -Mr Bhargav Upadhyay -NTT Global company on for third year students on 11/3/2023.
- Organized Expert Talk on Cyber Security and Ethical Hacking by Mr.Azare Shaikh ,Founder Axximum Info Solution for third year Students on 31/3/2023.
- ➤ Department advisory board meeting was conducted on 25/2/2023.
- Organized Industrial Visit on 24/2/2023 at ISRO Space Exhibition BARC exhibition center at VJTI, Mattunga.
- ➤ Organized Research Lab visit at VJTI and arranged an interactive session with Dr. Faruq Kazi, Dean R&D, VJTI for BE students on 24/2/2023.
- Organized expert talk on Applications of Linux in Industry for students on 15/2/2023 by Mr. Gaurav Shikhare ,Senior Consultant at Capgemini India Technology Services
- ➤ Organized national level technical festival Technopidea XI during 20/1/2023 to 21/1/2023.
- ➤ organised a workshop for students by students on Digital system design using Verilog on 28/1/2023.

Academic/ Technical achievements of students

- Ms. Shruti Singh got first place in shark tank event conducted by IEEE VIT.
- Ms. Shruti Tiwari secured 2nd place in Hackthon Joy2023 organized by Pillai group of Institutions.
- Ms. Vinitha Odiyar and Mr. Varad, Patil third year students qualified the GATE 2023 examination.
- Mr. Kartikram and Ms. Prachi Jain our alumni invited in Department Advisory Board meeting on 25/2/2023.

Faculty achievements

- Prof. Pranavi Nikam, Prof. Priyanka Kadam, Shyamala M and Prof. Hema Gavali, published a paper in JETIR journal titled" Real time tracking survillance ROBOT using Rasberry PI "on 15/6/2023
- Prof. Pranavi Nikam , Prof. Priyanka Kadam , Shyamala M , Prof. Sonal H.and Prof. Hema Gavali presented a paper titled "Blockchain

- based E-Voating system" in IEEE CONIT conference on 23/6/2023.
- Prof. Pranavi Nikam, Prof. Priyanka Kadam, Shyamala M and Prof. Hema Gavali Copyright registered "LORA based underground messenger for Miners" on 14/6/2023.
- Prof. Sonal Hutke published a paper titled Wearable CPW Antenna for WBAN Applications" in 3rd International Conference on Intelligent Technologies (CONIT 2023) during 23rd to 25th June 2023.
- Prof. Biju B. published a paper titled "Development of 3-axis CNC machine" at International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE, Peer reviewed journal), Volume 11, Issue 5, May 2023.
- Prof. Biju B. received The best IEEE chapter award for IEEE MTTS SIESGST chapter on 25//6/2023.
- Dr. Preeti Hemnani and Dr. Shubhangi Kharche submitted proposal on 5G lab on use cases to AICTE in the month of April2023.
- Dr. Shubhangi Kharche published a paper in Journal of Mobile Multimedia "6G Intelligent Healthcare Framework: A Review on Role of Technologies, Challenges and Future Directions" on 22.02.2023.
- Dr. Shubhangi Kharche registered copyright on topic A Simple Life Literary/ Dramatic.
- Dr. Preeti Hemnani was invited as a speaker in Panel Discussion on "The Edunext Series-Tech Driven Learning- Preparing students to become workforce of future" organized by Mint and Microsoft on 23/3/2023.
- Prof. Biju Balkrishnan invited as a speaker on "Exploring Perspective: Award Awareness Session on IEEE MGA Student Activities Awards" at Award awareness session organized by IEEE Bombay Section Student Activities Committee (SAC) on 28-03-2023.
- Prof. Biju Balkrishnan Published a paper titled "Real-time Remote User Controlled Military Robot" in IEEE explore.
- Dr.Preeti Hemnani published a paper titled " Virtual Cloth Warping using Deep Learning" in Scopus indexed journal, Resmilitaris in Jan 2023.

Student Development Programs:

- Prof. Vandana Sawant ,Prof. Sonal Hutke and Prof. Hema Gavali organized and conducted value added course on Advanced Antenna Design during 26/6/2023 to 3/7/2023.
- Dr. Preeti Hemnani , Prof. Swati Rane , Prof. Shyamala M and Prof.Madhuri Kulkarni organized and conducted value added course on Image Processing and Machine Learning using Python during 26/6/2023 to 4//7/2023.

- Dr.Preeti Hemnani and Prof. Pranavi Nikam organized and conducted SDP on Digital system design on FPGA Design using Verilog during 2/1/2023 to 7/1/2023.
- Prof. Vaishali Mangrulkar and Prof. Vishal Gaikwad organized and conducted SDP on Workshop on Embedded System Design Using Arduino Uno during 2/1/2023 to 7/1/2023.

Seminars/workshops attended by department faculty:

- Prof. Sonal Hutke Completed course on Mastering STM32 microcontrollers Developing applications exploring many STM32F4 peripherals in May 2023.
- All faculties attended STTP on "AR and VR" organized by SIESGST during 19/6/2023 to 24/6/2023.
- Dr. Preeti Hemnani successfully completed course on "Mathematic foundation for Machine learning AI from Eduinox Learning solutions" by Udemy in May 2023.
- Prof. Biju Balkrishnan Successfully completed One week IEEE Bombay Section sponsored FDP on "Cloud Computing" by G H Raisoni Institute of Engg and Technology and G H Raisoni College of Engg, Nagpur.
- Prof. Biju Balkrishnan participated 3-days IEEE Bombay Section's Student, Young professionals, Women in engineering and Life member Congress IB-SYWLC 23 at Annasaheb Dange College of Engineering and Technology, Ashta during 23/6/2023 to 25/6/2023.
- Prof. Biju Balkrishnan Organized workshop for students Techtonic: Applications of Python in AI/ML and Image Processing ""on 2/4/2023.
- Prof. Biju Balkrishnan Participated in "IEEE Educational Activities Workshop" conducted by IEEE EAC Bombay Section on the occasion of IEEE Education Week 2023 on 6/4/2023.
- Prof. Biju Balkrishnan Organized workshop for students Design 101: Design and Photoshop Workshop"" on 9/4/2023.
- Prof. Biju Balkrishnan Invited as Expert for Department Quality Assurance Committee at Father Agnel Engineering college, Vashi on 28/4/2023.
- Prof. Biju Balkrishnan Attended and participated IEEE India Council Day seminar and Quiz at D J Sanghvi CoE, Mumbai on 29/4/2023.
- Dr. Shubhangi Kharche Organized and conducted a "Handson Session on Amazon VPC for TE EXTC Students" on 3/4/2023.
- Dr. Shubhangi Kharche Invited at Vivekanand Education Society Polytechnic College, Chembur for expert talk topic 5G, 6G and IoT:

- Emerging Technologies with use cases on 11/4/2023.
- Prof. Biju Balkrishnan participated in IEEE Xplore webinar: Search strategies to maximize your research experience organized and attended Talk on "Meeting Technological Challenges 2023" by Dr. Kushal R Tuckley, Chairman and Director, R&D, AGV systems Pvt Ltd, organized by for MHRD IIC Cell, SIESGST on 29/03/2023.
- Prof. Biju Balkrishnan participated in IEEE Xplore webinar: Search strategies to maximize your research experience.
- Prof. Biju Balkrishnan organized and attended Industrial Visits at ISRO Space Exhibition BARC exhibition center at VJTI, Matunga.
- Prof. Biju Balkrishnan attended 5 days FDP on Recent Trends in High Frequency Communication during 20/2/2023 to 24/2/2023 by Dr. Somak Bhattacharyya, IIT Varanasi at Annant Gyan Knowledge and Skills Pvt Ltd.
- Prof.Shyamala M. attended orientation of sem VIII subject Optical Communication and Network on 14/1/2023 organized by Bharati Vidyapeet of Engineering, Navi Mumbai.
- Prof.Vanadna Sawant attended orientation of sem VIII subject Optical Communication and Network on 14/1/2023 organized by Bharati Vidyapeet of Engineering, Navi Mumbai.
- Vaishali Mangrulkar attended orientation of sem VIII subject Network Management in Telecommunication on 13/1/2023 organized by Atharva College of Engineering, Malad, Mumbai.

"None can destroy iron, but its own rust can! Likewise ,none can destroy a person, but its own mindset can!"

By Ratan Tata