



# DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION

July-Dec-2022

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.

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. Shyamala Matthi

# **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 MTTS chapter award from IEEE Bombay Section on 10/12/2022.
- ➤ Signed MoU with Electronics Enterprises Pvt.Ltd on 10/8/2022.
- Organized project competition on 30/9/2022 for second year and third year students.
- ➤ Initiated and completed consultancy project named "Python program development for alpha particulate monitor model" for the period of July 2022 to December 2022 of Rs.20000/-.
- ➤ Organized national level technical festival TECHOPEDIA XI during 20/1/2023 to 22/1/2023. Four different events Squabble-a national level debate competition, Inquisitive-a National level Quiz Competition, Mystification a game and Cold War-game were organized

# Academic/ Technical achievements of students

- Ms.Anjana Ashokkumar and Mr. Surya Madhavan received recieved best paper presentation award in Conference for the title "Virtual Cloth Warping using Deep Learning" in WCASET,2022.
- Mr.Anurag Nala , Mr.Hiten Sharma and Mr. Khush Patil of BE EXTC received third place in Project Management Institutes Make Reality Challenge 2021
- Mr. Vatsal Kore ,Ms. Anusha Ganapathy, Mr. Aaryan Kumbhar , Ms. Shruti Singh ,

- Mr.Swapnendu Mukherjee , Ms.Krishnaveni Doki , Ms.Harshita Shrivastav , Ms.Nandita Nandakumar and Prathamesh Patil attended Attended IEEE AISYWLC 2022 at COE Pune during 7/10/2022 to 9/10/2022.
- Mr.Satyam S., Mr.Aarav Sinha, Mr.Tanmay Tandel and Mr. Tejas T. received first prize in second year project competition held at SIES GST on 30/9/2022 as a part of Cognition 2022.
- Mr. Sameehan J, Chaitanya K., Anand K. and Adinath K received second prize in second year project competition held at SIES GST on 30/9/2022 as a part of Cognition 2022.
- Mr. Nijesh N., Ms. Kinnari D., Mr. Prasad A. and Shruti W. received first prize in third year project competition held at SIES GST on 30/9/2022 as a part of Cognition 2022.
- Mr. Rohan S. , Mr. Soumya V. , Mr. Vigneswaram G. , and Ms. Sayali received second prize in third year project competition held at SIES GST on 30/9/2022 as a part of Cognition 2022.
- Prerna Aswal second year student won the final inter college badminton tournament held at Mumbai university on 9/9/2022.

# **Faculty achievements**

- Dr. Preeti Hemnani published a paper titled," Virtual Cloth Warping using Deep Learning" in Scopus indexed journal, Resmilitaris January 2023.
- Mr. Biju Balakrishnan. presented paper titled "Real time remote user controlled military robot" at IEEE ICAST 2022, KJ Somaiya IEIT, sion on 3/12/2022.
- Ms. Sonal Hutke presented a paper titled "Design of T shaped UWB textile antenna for WiMax/WLAN application" at IEEE ICAST 2022, KJ Somaiya IEIT, sion on 3/12/2022.
- Mr. Biju Balakrishnan. published an article in IEEE R10 Connect Newsletter 4th issue "R10 student branch- IEEE SIES Graduate School of Technology SB" pp 28-29, December 2022.
- Ms. Pratibha Joshi published paper titled "Past, Present and Future of Automated Mammographic Density Measurement for Breast Cancer Risk Prediction" in 4th International conference on ICAS.Vol.2327 on 23/9/2022.
- Prof. Pushkar Sathe published paper titled "Helmet detection and number plate recognition using deep learning" got published in IEEE Xplore on 1/9/2022.
- Dr. Shubhangi Kharche attended conference & presented paper titled "Bussiness meeting summarization system" in IEEE Asiancon 2022.

- Mr. Biju Balakrishnan. published paper titled "Vehicle anti-theft face recognition system, speed control and obstacle detection using R-Pi "in IEEE ROMA 2022 during 6/8/2022 to 8/8/2022
- Ms. Madhuri Kkularni published paper on "Credit Card Fraud Detection using Machine Learning", in UGC approved journal of International Journal of All Research Education and Scientific Methods (IJARESM), ISSN: 2455-6211Volume 10, Issue 8, August-2022.
- Dr. Shubhagi Kharche presented and published a paper in International Conference-AECE proceedings on cotton leaf disease detection using ML held on 14th and 15th July 2022.
- Ms. Vaishali Mangrulkar presented and published a paper in International Conference-AECE on IOT based social distancing and monitoring robot for queue held on 14th and 15th July 2022.
- Prof.Sonal Hutke presented paper in International Conference-AECE on Implantable antenna for Biomedical applications on 15/7/2022.
- Prof. Vandana Sawant presented paper in International Conference-AECE on Contagious Disease Preventing Chamber Using Raspberry Pi held on 14th and 15th July 2022.

# **Student Development Programs:**

- Student development program is organized on "IP and ML using python" during 27/6/2022 to 15/7/2022.SDP conducted by Dr. Preeti Hemnani, Prof. Swati Rane, Prof. Pushkar Sathe and Prof. Shyamala Mathi.
- Student development program is organized on "workshop on Raspberry-Pi" during 27/6/2022 to 15/7/2022.SDP conducted by Prof. Vishal Gaikwad, Prof. Vaishali Mangrulkar and Prof. Nita Patil.
- Student development program is organized on " Advanced Antenna design" during 27/6/2022 to 4/7/2022 .SDP conducted by Prof.Vandana Sawant , Prof. Sonal Hutke and Prof. Hema Raut

# Seminars/workshops attended by department faculty:

- Dr. Preeti Hemnani completed certificate course on Verilog HDL: VLSI Hardware Design Comprehensive Masterclass ,28th Dec 2022
- Mr. Biju Balakrishnan attended IEEE Bombay Section Signature Conference 2022 at NMIMS University during 8/12/2022 to 10/12/2022.
- Mr. Biju Balakrishnan. attended 6 days national level workshop on "Moodle-LMS" by ESSGEE

- Digiskills Learning Center during 21/12/2022 to 26/12/2022.
- Ms. Sonal Hutke attended two days STTP on Research Trends in Antenna Design and Beyond Applications" during 5/12/2022 to 6/12/2022.
- Ms. Vandana Sawant and Ms.Sonal Hutke attended workshop on "5G Advanced Antenna design and analysis using Ansys HFSS by ARK solutions on 7/12/2022.
- Ms. Vaishali Mangrulkar attended IEEE Bombay section WIE affinity group Symposium on 17/12/2022 at VSIT WIE AG,Wadala,Mumbai.
- Ms. Vandana Sawant , Ms. Sonal Hute and Ms. Hema Raut attended HFSS training during 1/6/2022 to 2/6/2022.
- Prof. Vaishali Mangrulkar organized expert session on Robotics and its applications on 15/10/2022 by Ms. Dharini Dutia ,Software Engineer, Open Robotics, USA.
- Prof. Pratibha Joshi , Prof. Nita Patil an Prof. Vandana Sawant organized expert session on Networking security on 15/10/2022 by Mr.Bhargav Upadhyay,From NTT global Networks.
- Prof. Vandana Sawant an Prof. Honal Hutke organized expert talk session on Role of RF Engineering in Industry by Ms. Gitimayee Sahu is currently serving as a Senior Manager in the Jio Platforms ltd for BE students on 12/10/22.
- Prof.Biju Balakrishnan and Prof. Vaishali Mangrulkar organized · STEM workshop at NMMC school no.11 , Nerul on 14/9/2022 and STEM workshop at Gyan Jyoti Savitribai Phule school, Nerul on 14/9/2022.
- Prof.Biju Balakrishnan Organized workshop on Outcome Based Education: "Designing Course Outcomes and Outcomes-focused Questions" on 17/9/2022.
- Prof. Madhuri Kulkarni undergone training on Innovation Ambassador "Foundation Level" conducted in online mode by MoE's Innovation cell and AICTE (15 sessions).
- Ms. Pratibha Joshi Organized Industry(SIEMENS LTD.)Expert Session for SE & TE students on 23/09/22.
- Ms. Madhuri Kulkarni Successfully completed course on "Introduction to Python Programming" by coursera with 86.76 grade on 23/8/2022.
- Mr. Biju Balakrishnan organized international three days Symposium during 13/8/2022 to 15/8/2022.
- Mr. Biju Balakrishnan. organized IEEE Year book TECHNOZINE launch Ceremony on 1/8/2022.

- Mr. Biju Balakrishnan. organized Inspect Element 2.0 National level Front end Web development competition.
- Prof.Sonal Hutke attended webinar titled IP awareness training program on 17/8/2022.
- Dr. Preeti Hemnani attended IEEE Bombay Section's Panel of Conference Organizers (POCO) 2022 on Saturday, July 30th 2022 at MPSTME NMIMS University Mumbai.
- Dr. Preeti Hemnani worked as a Reviewer for ICIS2022: 2nd International Conference on "Intelligent Systems".
- Dr. Shubhangi Kharche conducted orientation of Sem VII subject Internet communication Engineering on 15/7/2022 organized by SIESGST.
- Dr. Shubhangi Kharche attended orientation of Sem VII subject Cloud Computing.
- Dr. Shubhangi Kharche attended orientation of sem VII subject "Mobile Communication Systems" R-2019 C syllabus as a resource person.
- Dr. Shubhangi Kharche attended orientation of sem VII subject 5G Technology as a resource person.
- Mr. Biju Balkrishnan..organized IEEE Investiture 2022 ceremony on 1/8/2022.
- Mr. Biju Balkrishnan. invited as a expert in Department Quality assurance Committee at Fr. C. Rodrigues Institute of Technology, Vashi on 30/7/2022.
- Mr. Biju Balkrishnan distinguished Microwave Lecture by Dr Kaushik Sengupta, Princeton University, USA on 27/7/2022.
- Ms.Swati Rane organized Alumni interaction session on 9/7/2022. Alumni invited were Ms. Unnati Wadkar - 2014 batch- Director (India region), NuCUrrent on Topic- Wireless Power Transfer - Applications, working and growth and Mr. Rahul Seshadri - 2012 batch-Director of Engineering, Dozee on Topic- Career Path: From Student to Engineering Leader.
- Ms. Vaishali Mangrulkar Completed course on Raspberry Pi for beginners-2022 complete by udemy in July2022.
- Ms. Vaishali Mangrulkar attended orientation of Sem VII Robotics on 15/7/2022.
- Ms.Nita Patil Attended orientation of Sem VII Internet communication Engineering on 15/7/2022 organized by SIESGST.
- Ms.Vandana Sawant and Prof.Sonal Hutke attended orientation of Sem VII subject Microwave Engineering on 11/7/2022 organized by VESIT.
- Mr. Pushkar Sathe attended orientation of Sem VII Deep Learning on 15/7/2022 organized by Thadumal Sahani.
- Prof.Biju Balkrishnan attended IEEE Sponsored FDP on Education 4.0: Tools for

effective NEP2020 implementation during 27/6/2022 to 2/7/2022.

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

By Ratan Tata