



BEARYS INSTITUTE OF TECHNOLOGY

LANDS END INNOLI, MANGALORE-574199

— Department of Electronics and Communication —
Engineering



BYTES & INSIGHTS

Dept Vision & Mission

Events

Workshop

Achievements

Vision

To be recognized by the world at large as a full-fledged department offering quality technical education in the field of Electronics and Communication Engineering with focus on research and catering to the needs of the environment and society.

Mission

1.To deliver outstanding education by continuously enhancing curriculum and fostering collaboration with industry leaders.

2.To nurture the spirit of innovation and creativity in niche areas of technology among faculty and students by providing state-of-art research facilities.

3.To provide ethical and value- based education by emphasizing multi-disciplinary activities to address the societal needs and environmental sustainability.

PROGRAM OBJECTIVES

1. **Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialisation to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/ Development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
6. **The Engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of need for sustainable development.
8. **Ethics :** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and Team Work :** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project Management and Finance :** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning :** Recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Message from HOD

It is a pleasure to present the ECE Department Newsletter for the academic year 2022-2023 of Bearys Institute of Technology. This newsletter showcases the department's academic activities, achievements, and key initiatives carried out over the year.



The Department of Electronics and Communication Engineering at BIT continues to uphold its commitment to academic excellence, innovation, and skill development. We strive to equip our students with strong theoretical foundations, practical exposure, and industry-relevant competencies to meet the ever-evolving technological landscape.

I extend my heartfelt congratulations to our students for their accomplishments and express my sincere appreciation to our faculty members for their dedication to teaching, mentoring, and research. I also thank the editorial team for their efforts in compiling and presenting this newsletter. Let us continue to work together with enthusiasm and dedication to make this academic year both productive and successful.

With best wishes,

Dr. Abdullah Gubbi
Head of the Department – ECE
Faculty Editor

Message from Student Editor

Dear Readers

We are happy to present the ECE Department Newsletter for the academic year 2022-2023 of Bearys Institute of Technology. This newsletter captures the experiences, achievements, and learning journey of students and faculty throughout the year.

The year has been filled with opportunities to learn, explore, and grow through various technical events, workshops, projects, and academic activities. The constant support and guidance from our faculty members have played a significant role in shaping our knowledge, skills, and confidence.

This newsletter stands as a reflection of our teamwork, creativity, and enthusiasm. We sincerely thank all the students, faculty members, and the editorial team for their valuable contributions in making this publication successful.

With best wishes

Uzair Ahmed , Mariyam Fameeza
BE Students – Department of ECE

Invited Talk on the Benefits of IEEE Membership

An Invited Talk on the Benefits of IEEE (Institute of Electrical and Electronics Engineers) Membership was organized on 30th July 2022 at Bearys Institute of Technology (BIT).

The resource persons for the event were Dr. Poornalatha, Associate Professor, I&CT Department, MIT Manipal, and Present Chair, IEEE Mangalore Subsection; Dr. Niranjana U. C., President, BMESI, Past Chair, IEEE Mangalore Subsection, Adjunct Professor, MIT, Director – Research and Training, and MDN Labs; and Mr. Aniketh Shenoy, IEEE Region 10 Student Representative.

The programme commenced with a welcome address by Dr. Abdullah Gubbi, HOD, ECE, BIT–Mangaluru. The session began with an address by Mr. Aniketh Shenoy, who encouraged students to become members of the IEEE Student Chapter.

Dr. Poornalatha highlighted that the primary goal of IEEE is to apply technology for the betterment of humanity. Dr. Niranjana U. C. addressed the queries raised by the students during the interactive session.

The event concluded with a vote of thanks by Prof. Afsar Baig, HOD, CSE.



"Betterment of Humanity"



Robust Stabilization and Control of Takagi-Sugeno Fuzzy Systems



The Department of Electronics and Communication Engineering, Bearys Institute of Technology (BIT), Mangalore, hosted an insightful seminar on “Robust Stabilization and Control of Takagi-Sugeno Fuzzy Systems” on 6th September 2022. The event featured Dr. Iqbal Ahammed Kaladgikar, Professor, Department of Electrical and Electronics Engineering (EEE), AITM, Bhatkal, as the keynote speaker.

The seminar commenced with a warm welcome address by Dr. Abdullah Gubbi, Head of the Department of ECE and coordinator of the event. An introduction to the session and the speaker was presented by Prof. Nikitha C, also a coordinator of the program. The proceedings were efficiently conducted by the Master of Ceremony, Ms. Susmitha K. The session began at 10:00 AM, drawing keen interest from both students and faculty members.

During the seminar, Dr. Kaladgikar provided a comprehensive overview of advanced concepts in Takagi-Sugeno fuzzy systems, focusing on robust stabilization and control strategies. His presentation offered practical insights and highlighted the importance of fuzzy system design in modern engineering applications. The session concluded with an interactive Q&A segment, fostering engaging discussions and clarifying complex concepts for the attendees. The seminar proved to be highly enriching, enhancing the academic knowledge of participants and inspiring interest in advanced control systems and fuzzy logic applications.



The drive highlighted the dangers of garbage and plastic pollution to marine life.

Hand gloves, sanitizers, gunny bags, and rakes were provided by the Bearys Group.

The program was inaugurated by Dr. S.I. Manjur Basha, Principal of BIT.

Faculty, staff, and students from BIT and sister institutions participated actively.

Volunteers interacted with the public, tourists, vendors, and fishermen to spread awareness.

Special emphasis was placed on the adverse environmental impacts of littering.

The event successfully promoted the message of a clean, green, and litter-free beach.

"A clean beach is a reflection of a clean heart. Protect Our Beaches, Preserve Our Future."

'Clean Beach and Green Beach'

On Sunday, 27th November 2022, the NSS unit of Bearys Institute of Technology (BIT) organized a beach cleaning drive at Ullal titled 'Clean Beach and Green Beach'.

The program aimed to raise awareness about environmental cleanliness and the harmful effects of beach littering.

Students carried banners and slogans promoting hygiene and respect for nature.



Workshop on Networking Projects Using Cisco Packet Tracer

Department of Electronics and Communication Engineering organised one Day Workshop on “Networking Projects Using Cisco Packet Tracer” on 16th December 2022.

The Resource person for the event was Mr. Rahul Redkar, Freelancer and expert couch for networking from Goa. The audiences were welcome by Dr. Manjur Basha, Principal, BIT.

Mr Rahul gave insight into networking projects and enlightened students with Job opportunities in computer networking, followed by hands-on training on Packet Tracer Tool. The participants were students from Computer Science and Electronics.

The event was coordinated by Professor Mehaboob. M, Department of Electronics and the vote of thanks was delivered by Dr. Abdullah Gubbi, Professor, Department of Electronics and Communication.

"In the world of technology, networking is the art of turning connections into possibilities."



Inauguration of IEEE BIT Student Chapter at Bearys Knowledge Campus

The IEEE BIT Student Chapter was inaugurated on 12th January 2023 at the International Seminar Hall, Bearys Knowledge Campus.

The event was graced by Dr. Poornalatha (MIT Manipal), Dr. Mohit P. Tahiliani (NITK Surathkal), Dr. U. C. Niranjana (BMESI), and Prof. Ashwini Holla (Canara Engineering College). Dr. Abdullah Gubbi, HOD-ECE, welcomed the gathering, followed by introductory remarks from Dr. S.I. Manjur Basha, Principal BIT.

The inaugural ceremony began with the watering of plants by the dignitaries. Dr. Poornalatha spoke on the benefits of IEEE membership for students, faculty, and institutions.

Dr. Mohit delivered a talk on industry-oriented opportunities for members and non-members.

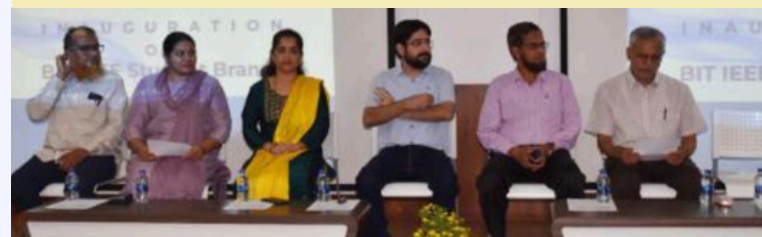
Prof. Ashwini Holla shared experiences of IEEE members worldwide, stressing networking.

Dr. U. C. Niranjana gave a technical talk on embedded system applications, followed by a Q&A session.

The event ended with a vote of thanks, conducted by Prof. Umme Najma, and the National Anthem.



**"Empowering students today
to engineer a better
tomorrow."**



SparkFest 2023: An Experiential Learning and Student Engagement Initiative by BEASPIRE



The Electronics and Communication Engineering student association, BEASPIRE, orchestrated a spectacular event known as “SparkFest” – a technical circuit rig-up designed exclusively for ECE students.

The event, which took place on the 31st of January 2023 at 2:00 PM, saw active participation from students enrolled in the 3rd and 5th Semesters.

A profound sense of technical skill and innovation infused the competition, as students showcase their skills in circuitry.

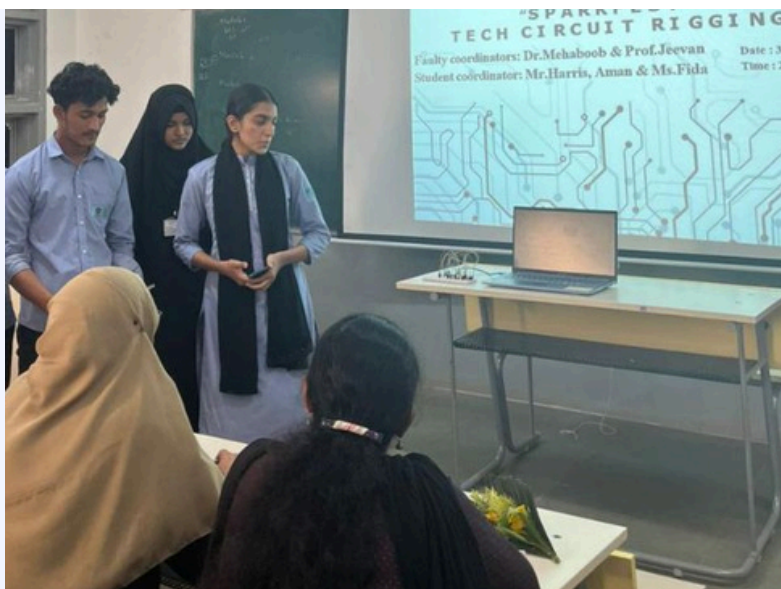
The 1st prize was secured by Mr. Hyder, Nihal, and Numan for their exceptional work on the “Vehicle Parking System.” Meanwhile, the 2nd prize was claimed by Mr. Mahroof, Safwan, Naufal, and Shihabuddin, who impressed with their project on the “Theft Detection System using Laser and LDR.”

In recognition of their outstanding achievements, the winners of the 1st and 2nd positions were honored with cash prizes.

The event was coordinated by Dr. Mehboob and Prof. Jeevan, whose guidance contributed to the seamless execution of SparkFest. Additionally, the invaluable contributions of student coordinators, Mr. Harris, Aman, and Ms. Fida from the 5th Semester, played a pivotal role in ensuring the success of this technical extravaganza.



Bears Electronics Association of Students Pioneer



Conclusion

As we bring this edition of the ECE Department Newsletter 2022–2023 to a close, we take a moment to reflect on the achievements, growth, and collective efforts that have defined our journey over the past academic year. From notable academic accomplishments and student projects to engaging activities and collaborative initiatives, the department has continued to progress with dedication and enthusiasm.

We extend our sincere gratitude to our faculty, students, and all contributors whose commitment and support have made these successes possible. Their efforts have significantly enriched our academic environment and strengthened our community.

As we move forward, let us stay connected, inspired, and committed to achieving greater milestones in the years ahead. Here's to continued learning, innovation, and excellence.

Uzair Ahmed
Mariyam Fameeza
Student Editor

Dr. Abdullah Gubbi
Faculty Editor