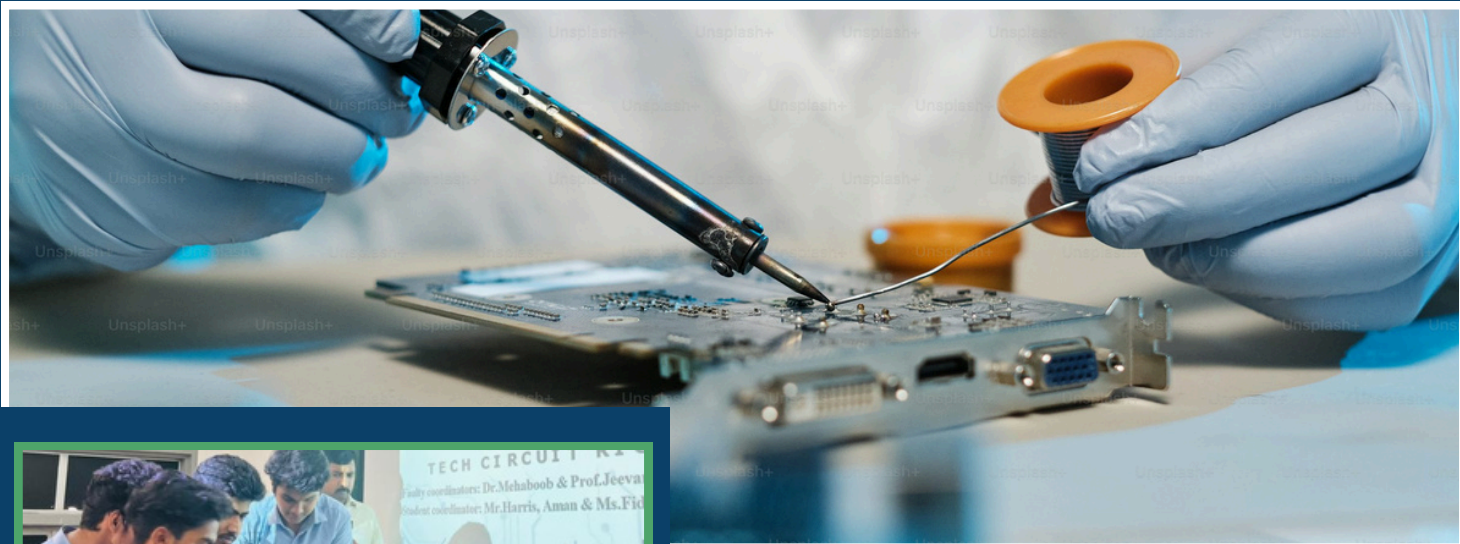




# BEARYS INSTITUTE OF TECHNOLOGY

## LANDS END INNOLI, MANGALORE-574199



## IN FOCUS

Department Vision & Mission

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Events Organized by  
Department

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Workshop Organized by  
Department

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Students Acievements

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Faculty Acievements

## 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.

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## COLLEGE VISION & MISSION



### Vision

To be a world-class engineering institution that nurtures leaders in every field of Engineering and Technology and grooms Knowledgeable men and women with the highest ethics and values, who can significantly contribute to a progressive, peaceful, and greener world



### Mission

- Creating a stimulating academic environment by achieving excellence in the teaching-learning process to meet the growing needs of the industry and society.
- Fostering innovation and creativity through constant research with competent human resources and state-of-the-art infrastructure.
- Transform and steer society towards a sustainable green environment and instil value-based education for a better world.

## PROGRAM OUTCOMES (POs)

<b>PO1</b>	<b>Engineering Knowledge</b> Apply knowledge of mathematics, science, engineering fundamentals, and specialization to complex engineering problems.
<b>PO2</b>	<b>Problem Analysis</b> Identify, formulate, and analyse complex engineering problems reaching substantiated conclusions using first principles.
<b>PO3</b>	<b>Design/Development</b> Design solutions for complex engineering problems with consideration for public health, safety, and environmental factors.
<b>PO4</b>	<b>Conduct Investigations</b> Use research-based knowledge including design of experiments, data analysis, and synthesis of information for valid conclusions.
<b>PO5</b>	<b>Modern Tool Usage</b> Create, select and apply appropriate techniques, resources, and modern engineering and IT tools to complex activities.
<b>PO6</b>	<b>Engineer &amp; Society</b> Apply reasoning to assess societal, health, safety, legal and cultural issues relevant to professional engineering practice.
<b>PO7</b>	<b>Environment &amp; Sustainability</b> Understand the impact of engineering solutions in societal and environmental contexts and the need for sustainable development.
<b>PO8</b>	<b>Ethics</b> Apply ethical principles and commit to professional ethics, responsibilities, and norms of engineering practice.
<b>PO9</b>	<b>Individual &amp; Teamwork</b> Function effectively as an individual, and as a member or leader in diverse and multidisciplinary teams.
<b>PO10</b>	<b>Communication</b> Communicate effectively on complex engineering activities, write reports, make presentations, and give clear instructions.
<b>PO11</b>	<b>Project Management</b> Demonstrate knowledge of engineering and management principles and apply these to manage projects in multidisciplinary environments.
<b>PO12</b>	<b>Life-long Learning</b> Recognise the need for and have the ability to engage in independent and life-long learning in the context of technological change.

## PROGRAM SPECIFIC OBJECTIVES (PSOs)

### PSO 1

To design, analyze and implement hardware - software systems for signal processing, communication, VLSI and embedded systems for the given functionality and specifications

### PSO 2

To develop professional skills to address ethical, societal and environmental challenges and to effectively manage projects in multidisciplinary areas.

## MESSAGE FROM HEAD OF DEPARTMENT

Dr. Abdullah Gubbi | Professor & HOD, ECE



Dear Students, Faculty Members, Alumni, and Readers,

As we reflect on the academic year 2023–24, I am pleased to share this message through TechPulse, the Department Magazine of the Electronics and Communication Engineering Department, Bearys Institute of Technology, Mangalore.

This year has been exceptional. Our students achieved National Level Rank 1 in an AI Healthcare paper, won 1st Prize at Knowledge Nexus (KOMEDKares), and earned 3rd Prize at IIT Madras' Caterpillar Autonomy Challenge. The department organised over 15 technical events and workshops throughout the year, each strengthening the bridge between

academic learning and industry readiness. I sincerely appreciate the dedication of our faculty and congratulate the editorial team for this wonderful publication. I encourage every student to remain curious, confident, and committed to lifelong learning. At Bearys Institute of Technology, we place strong emphasis on holistic development. Beyond technical knowledge, we nurture leadership skills, ethical values, teamwork, and social responsibility. The department actively promotes innovation, interdisciplinary learning, industry interaction, and research-oriented thinking to prepare students for global opportunities.

This magazine serves as a meaningful platform to showcase the academic, technical, and creative contributions of our students and faculty during the year. I congratulate the editorial team for their diligent efforts in bringing out this publication and thank all contributors for making it informative and inspiring.

As we move ahead, I encourage our students to remain curious, confident, and committed to lifelong learning, and urge our faculty to continue striving for excellence and innovation. Together, let us build upon the achievements of this year and work toward an even more impactful future.

I wish all our students and staff continued success in their academic and professional endeavors.

With best wishes,

Dr. Abdullah Gubbi

Head of the Department

Electronics and Communication Engineering

Bearys Institute of Technology, Mangalore

## MESSAGE FROM THE FACULTY EDITOR

Prof. Nikitha C | Assistant Professor , ECE



Dear Readers,

It gives me great pleasure to present the ECE Department Magazine 2023–2024 of Bearys Institute of Technology, Mangalore. This magazine is a reflection of the creativity, dedication, and academic achievements of our students, faculty members, and alumni throughout the academic year.

This edition highlights a wide range of accomplishments,

including innovative student projects, research initiatives, insightful articles, technical perspectives, and memorable departmental events. Each contribution beautifully represents the enthusiasm, hard work, and progressive mindset that define the Electronics and Communication Engineering department.

I extend my heartfelt appreciation to all the students, faculty members, and alumni who have shared their ideas, experiences, and creative expressions in this magazine. I would also like to thank the editorial team for their sincere efforts, cooperation, and commitment in bringing this publication together.

I hope this magazine inspires curiosity, encourages innovation, and strengthens a sense of pride and belonging within our department. May it serve as both a source of motivation and a cherished record of our collective journey toward excellence. Happy reading, and best wishes for continued success in all your academic endeavors.

Warm regards,

Prof. Nikitha C

Faculty Editor

ECE Department

Bearys Institute of Technology, Mangalore

## MESSAGE FROM THE STUDENT EDITORS

Uzair Ahmed & Mariyam Fameeza | ECE Department

Dear Readers, It gives us great pleasure to present TechPulse 2023–24 of Bearys Institute of Technology, Mangalore.

This edition is

a heartfelt reflection of the dedication, talent, and innovative spirit demonstrated by our students, faculty, and alumni throughout this memorable academic year.

This year has been extraordinary in every sense. We have witnessed our batchmates stand on national podiums, our IEEE Student Branch complete another outstanding year of events, and our department forge stronger bonds with industry through workshops, awareness programmes, and placement drives.

We would like to express our heartfelt appreciation to all contributors, to our faculty for their unwavering support, and to Dr. Abdullah Gubbi for his consistent guidance and inspiration throughout the year.

**Warm regards,**

**Uzair Ahmed & Mariyam Fameeza**

**Student Editors — ECE Department, BIT Mangalore**

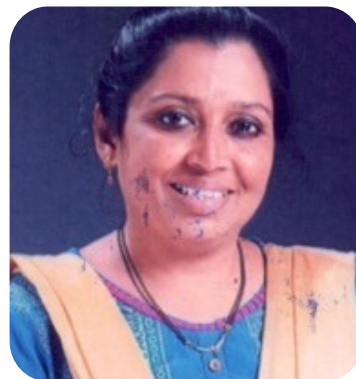
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**TEACHING STAFF**

**Dr. S I Manjur Basha**  
Principal



**Dr. Abdullah Gubbi**  
Professor & HOD



**Ms. Mubeena Parvin**  
Assoc. Professor



**Mr. Abdul Jabbar**  
Asst. Professor



**Ms. Rashmi**  
Asst. Professor



**Mr. Jeevan M D**  
Asst. Professor



**Ms. Nikhitha C** Asst.  
Professor



**Ms. Fathimath Fameeza**  
Asst. Professor



**Mr. Sujay K**  
Asst. Professor

## NON TEACHING STAFF



**Mr. Vinayakumar**  
**Lab Instructor**



**Ms. Koulath Beebi**  
**Lab Instructor**



**Mr. Sagar**  
**Attender**

# THE YEAR IN NUMBERS

2023–24 At a Glance



## Key Milestones of 2023–24

<b>26 Aug 2023</b>	Prosperity & Perseverance: IT Industry Talk with 4 industry experts — IEEE BIT
<b>22 Sep 2023</b>	International Expert Dr. SA Khan, IIUM Malaysia — Aerospace Research, sponsored by IEEE
<b>25 Sep 2023</b>	Big Data Analytics & Machine Learning Event — IEEE BIT Student Branch
<b>20 Oct 2023</b>	Cyber Security & Cyber Crime Awareness Program — IEEE BIT
<b>10 Nov 2023</b>	Interview Mastery: Igniting Confidence — 12th IEEE Event of the Year
<b>4 Dec 2023</b>	Innobyte-23: Hands-On IoT Workshop — IEEE BIT + IEEE MSS
<b>6 Jan 2024</b>	IIT Madras Caterpillar Autonomy Challenge — 3rd Prize (Shastra)
<b>31 Jan 2024</b>	SparkFest 2024: Technical Circuit Rig-Up Competition — BEASPIRE
<b>21 Feb 2024</b>	Infosys Springboard Awareness Program — Training & Placement Cell
<b>19 Feb 2024</b>	IEEE Xplore Digital Library Workshop — IEEE BIT + IEEE Mangalore Subsection
<b>23 Feb 2024</b>	The Career Landscape: Interactive Session — IEEE BIT
<b>4 Jun 2024</b>	Farewell Function for Batch 2020–24 — ECE Department
<b>6 Jul 2024</b>	AMTIS Paper Presentation — 1st Prize, Knowledge Nexus (KOMEDKares)
<b>11 Jul 2024</b>	AI Algorithms for Satellite Data Analysis — ECE Department
<b>12 Jul 2024</b>	National Level Rank 1 in AI Healthcare Paper
<b>12 Jul 2024</b>	Salesforce Workshop — Training & Placement + CSE Dept
<b>13 Jul 2024</b>	VLSI Design: Trends & Career Opportunities — Training & Placement + ECE
<b>1 Aug 2024</b>	Mini Project Competition — IEEE BIT + CEABIT

# IEEE EVENTS 2023–24

BIT IEEE Student Branch — Connecting Students with Industry & Innovation

12+

IEEE Events

500+

Participants

15+

Industry Experts

2

International Speakers

The BIT IEEE Student Branch had an outstanding year in 2023–24, organising over 12 impactful technical events. From Big Data to Cybersecurity, IoT to Blockchain, the branch consistently served as a dynamic bridge between the classroom and the real world.

Every event was meticulously planned to provide hands-on exposure, practical insights, and genuine networking opportunities.



## Prosperity & Perseverance: Path to Success in IT

26 August 2023 | 9:30 AM – 12:30 PM

Organised by: Bearys Institute of Technology + IEEE BIT Student Branch



BIT, in collaboration with the IEEE BIT Student Branch, organised an enlightening invited talk titled ‘Prosperity and Perseverance: Unveiling the Path to Success in the Ever-Evolving IT Industry.’ Four distinguished IT professionals shared their personal journeys, insights into AWS, Azure, and Web 3.0, and practical advice for a successful IT career. The event was inaugurated by Dr. Abdullah Gubbi, IEEE Branch Counsellor, and concluded with thanks by Ms. Huda from the CSE department.

- Syed Ameen Murtuza — Product Designer, Treflo &
- Tabrez Humayun — System Engineer, Infosys
- Saud Manzoor Khan — Design Engineer, Western Digital
- Abdul Khalik — Co-Founder, TechSculpt Innovations
- Welcome: Dr. Abdullah Gubbi | Vote of Thanks: Ms. Huda



“

The IT industry rewards those who combine deep technical expertise with perseverance, adaptability, and the courage to keep reinventing themselves in a landscape that never stops evolving.

## Big Data Analytics and Machine Learning Techniques

25 September 2023 | International Seminar Hall

Organised by: IEEE BIT Student Branch



The IEEE Student Branch of BIT hosted an insightful event at the International Seminar Hall on 25th September 2023. Dr. Sanjeevakumar M Hatture delivered a compelling talk on Big Data Analytics, while Dr. Rashmi P. Karchi presented the latest advancements in Machine Learning Techniques. Both sessions from Nagarjuna College of Engineering and Technology, Bangalore, were highly praised for their practical relevance. Event coordinated by Dr. Abdullah Gubbi; MC: Ms. Salma Nadaf (ECE); Vote of thanks: Prof. Najma (CSE).

- Dr. Sanjeevakumar M Hatture — Big Data Analytics Techniques (Nagarjuna College, Bangalore)
- Dr. Rashmi P. Karchi — Machine Learning Counselor (Nagarjuna College, Bangalore)
- Coordinated by Dr. Abdullah Gubbi, IEEE Branch
- MC: Ms. Salma Nadaf (ECE) | VoT: Prof. Najma, CSE



“

Data is the new oil — but it is useless without the refinery of machine learning and analytical thinking.

International Expert Talk: Passive Control Research by Dr. SA Khan

22 September 2023 | 10:30 AM | National Seminar Hall

Organised by: IEEE Mangalore Sub-section + Institution's Innovation Council (IIC)



Dr. SA Khan from IIUM Malaysia presented groundbreaking research on 'Numerical and Experimental Study of Passive Control in the Form of Ribs at Sonic and Supersonic Mach Numbers with the Application of Neural Networks.' The research used ribs of 6 mm, 8 mm, and 10 mm diameters at duct locations 1D, 2D, 3D, and 4D. Welcomed by Dr. Vasanth Kumar (Mechanical Engineering). Coordinated by Dr. Imran Mokashi (Mechanical Engineering).

- Aerospace Engineering Expert Dr. SA Khan — IIUM Malaysia, International
- Supersonic Mach numbers Research: Passive control using ribs at sonic and understanding
- Neural networks applied to passive flow control 2D, 3D, 4D
- Welcomed by Dr. Vasanth Kumar I
- Coordinated by Dr. Imran Mokashi



“

The marriage of experimental aerospace research with neural network modelling marks a paradigm shift in how we design aerospace systems.

## Cyber Security and Cyber Crime Awareness Program

20 October 2023 | IEEE BIT Student Branch

Organised by: Bearys Institute of Technology + IEEE Student Branch



BIT, in partnership with the IEEE Student Branch, hosted a Cyber Security and Cyber Crime Awareness Program on 20th October 2023. Mohammed Sheik Nihal, CEO of EyeQ Dot Net Pvt Ltd, led in-depth discussions on cyber threats, defence strategies, and real-world case studies. The interactive Q&A session inspired students to explore cybersecurity certifications. Welcome: Dr. Abdullah Gubbi (Branch Counselor, HOD-ECE). MC: Ms. Salma Nadaf (ECE). Vote of thanks: Dr. Vinutha, Head of Physics.

- Mohammed Sheik Nihal, CEO — EyeQ Dot Net Pvt real-world case studies
- Topics: digital asset protection, emerging threats, HOD-ECE
- Welcome: Dr. Abdullah Gubbi, Branch Counselor & of Physics
- MC: Ms. Salma Nadaf (ECE) | VoT: Dr. Vinutha, Head



“

Cybersecurity is not just an IT problem — it is a human problem. The most powerful defence is an informed and vigilant community.

## Interview Mastery: Igniting Confidence and Enthusiasm

10 November 2023 | 12th IEEE Event of the Year

Organised by: Bearys Institute of Technology + IEEE BIT Student Branch



BIT organised 'Interview Mastery: Igniting Confidence and Enthusiasm in Students' on 10th November 2023 — the 12th event under the IEEE Student Branch banner for the year. Diana Bangera, HR at Novigo Solutions, was the resource person, sharing practical interview guidance covering answer structuring, pressure questions, and personality showcase. Welcome: Dr. Abdullah Gubbi (HOD-ECE). MC: Salma Nadaf (ECE). Vote of thanks: Mashooda (ECE).

- Diana Bangera, HR at Novigo Solutions — Resource person
- 12th IEEE Student Branch event of the academic year
- Focus: transforming interview challenges into professional opportunities
- Welcome: Dr. Abdullah Gubbi, HOD-ECE
- MC: Salma Nadaf (ECE) | VoT: Mashooda (ECE)



“

An interview is not just a test of what you know — it is a stage to tell your story and step boldly into the future.

## InnoByte-23: One-Day Hands-On IoT Workshop

4 December 2023 | International Seminar Hall | IEEE BIT + IEEE MSS

Organised by: BIT-IEEE Student Branch + IEEE Mangalore Subsection (IEEE MSS)



BIT-IEEE Student Branch, in collaboration with IEEE MSS, hosted the 'InnoBytes-23' one-day Hands-on IoT Workshop on 4th December 2023. Keynote by Dr. SI Manjur Basha (Principal, BIT). Chief Guest Prof. Ashwini Holla (IEEE Women in Engineering Chair Elect) spoke on IEEE membership benefits. Hands-on IoT sessions in the Mobile Application Lab. MC: Salma Nadaf (ECE). Vote of thanks: Prof. Umme Najma (CSE). Workshop concluded at 4:30 PM.

- Dr. SI Manjur Basha (Principal, BIT) — Keynote on IoT's industrial impact
- Prof. Ashwini Holla — Chief Guest, IEEE Women in Engineering Chair Elect
- Hands-on IoT sessions in the Mobile Application Lab (CSE)
- MC: Salma Nadaf (ECE) | VoT: Prof. Umme Najma
- Workshop concluded at 4:30 PM



“

IoT is not just about connecting devices — it is about creating intelligence in the fabric of the physical world.

## SparkFest 2024: Technical Circuit Rig-Up by BEASPIRE

31 January 2024 | 2:00 PM | 3rd &amp; 5th Semester ECE

Organised by: BEASPIRE — ECE Student Association



BEASPIRE orchestrated SparkFest 2024 on 31st January 2024 at 2:00 PM. Students from the 3rd and 5th Semesters competed in designing functional electronic circuits. The 1st prize went to Mr. Hyder, Nihal, and Numan for their 'Vehicle Parking System.' The 2nd prize went to Mr. Mahroof, Safwan, Naufal, and Shihabuddin for their 'Theft Detection System using Laser and LDR.' Winners honoured with cash prizes. Coordinated by Dr. Mehboob and Prof. Jeevan.

- 1st Prize: Hyder, Nihal, Numan — Vehicle Parking system
- 2nd Prize: Mahroof, Safwan, Naufal, Shihabuddin — Theft Detection (Laser & LDR) system
- Coordinators: Dr. Mehboob & Prof. Jeevan
- Student Coordinators: Mr. Harris, Aman, Ms. Fida (5th sem)
- Winners honoured with cash prizes



“

SparkFest is where theory becomes current and components become creations — a celebration of the hands-on engineering spirit.

## Workshop: Exploring IEEE Xplore Digital Library

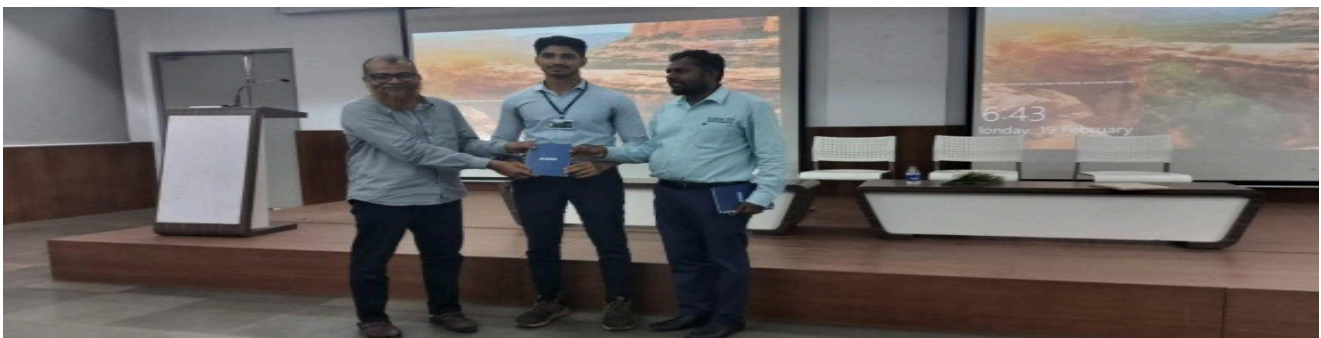
19 February 2024 | International Seminar Hall

Organised by: IEEE BIT Student Branch + IEEE Mangalore Subsection



The IEEE BIT Student Branch organised a workshop on 'Exploring IEEE Xplore Digital Library' on 19th February 2024. Mr. M. S. Srinivasa, EBSCO/IEEE Training Manager, guided participants through search capabilities, citation tools, and alert systems within IEEE Xplore. The session significantly enhanced the research capabilities of all attendees. Coordinated by Dr. Abdullah Gubbi. MC: Ms. Salma Nadaf (ECE). Vote of thanks: Mr. Shankar, Librarian.

- Mr. M. S. Srinivasa, EBSCO/IEEE Training Manager  
citation tools — Resource Person
- Topics: IEEE Xplore navigation, search strategies,
- Coordinated by Dr. Abdullah Gubbi, Branch Counselor  
MC: Ms. Salma Nadaf (ECE) | VoT: Mr. Shankar,  
● Librarian



“

A researcher who knows how to navigate IEEE Xplore stands on the shoulders of thousands of brilliant minds — accessing a century of engineering knowledge.

## Interactive Session: The Career Landscape

23 February 2024 | International Seminar Hall

Organised by: IEEE BIT Student Branch + IEEE Mangalore Subsection



The IEEE BIT Student Branch organised an interactive session on 'The Career Landscape' on 23rd February 2024. Mr. Mohammed Faizal, faculty coordinator of IEEE PRO COMM and the Google Developer Student Club, delivered practical insights on IT career opportunities and SWOT analysis for career planning. Coordinated by Dr. Abdullah Gubbi. Welcome: Mr. Swahaf. MC: Ms. Nabila (ECE). Vote of thanks: Ms. Fida (student).

- Mr. Mohammad Faizal — IEEE PRO COMM & Google Developer Student Club
- Topics: IT industry landscape, SWOT analysis for career planning
- Coordinated by Dr. Abdullah Gubbi, Branch Counsellor
- Welcome: Mr. Swahaf | MC: Ms. Nabila (ECE) | VoT: Ms. Fida



“

Understanding the career landscape is not just about knowing what jobs exist — it is about knowing who you are and charting a deliberate path forward.

## Mini Project Competition — IEEE BIT + CEABIT

1 August 2024 | IEEE BIT Student Branch

Organised by: IEEE BIT Student Branch + CEABIT Computer Science Student Forum



The IEEE BIT Student Branch, in association with the CEABIT Computer Science Student Forum, organised a Mini Project Competition on 1st August 2024. Prof. Chandra Singh from Sahyadri College of Engineering served as the expert reviewer, providing valuable technical feedback to all teams. Welcome by Dr. Abdullah Gubbi, Branch Counselor. Graced by Dr. Aziz Mustafa, Principal BIES. Best projects awarded certificates and mementos. MC: Ms. Saniya Banu (ECE). Vote of thanks: Prof. Sinan (CSE).

- Prof. Chandra Singh (Sahyadri College) — Expert Reviewer
- Projects from CSE and ECE branches showcased
- Welcome: Dr. Abdullah Gubbi | Graced by Dr. Aziz Mustafa (Principal BIES)
- Best projects awarded certificates and mementos
- MC: Ms. Saniya Banu (ECE) | VoT: Prof. Sinan (CSE)



“

Innovation is not about having ideas — it is about building them, testing them, failing bravely, and ultimately creating something that works.

## OTHER EVENTS & ACTIVITIES

Departmental & Institutional Events — 2023–24

### Infosys Springboard Awareness Program

21 February 2024 | International Seminar Hall

Organised by: Department of ECE + Training & Placement Cell, BIT



The Infosys Springboard Awareness Program was held on 21st February 2024 to familiarise students and faculty with the Infosys Springboard learning platform. Prof. Abdul Jabbar H, SPoC – Infosys Springboard – BIT, welcomed the gathering. Ms. Aishwarya Rajeev, Senior Analyst-Learning from Infosys, delivered an enlightening session covering certifications, course catalogue, and industry-aligned learning tracks. Students responded very positively. Vote of thanks: Mrs. Ashwini, Placement Manager.

- Ms. Aishwarya Rajeev, Senior Analyst-Learning, Infosys — Resource Person
- Topics: platform features, certifications  
Prof. Abdul Jabbar H, SPoC Infosys Springboard BIT
- Vote of thanks: Mrs. Ashwini, Placement Manager, BIT



“

Lifelong learning is the passport to the future.

## AI Algorithms for Satellite Data Analysis

11 July 2024 | Department of ECE, BIT

**Organised by:** Department of Electronics and Communication Engineering, BIT



An interactive session on ‘Artificial Intelligence Algorithms for Satellite Data Analysis’ was organised by the ECE Department on 11th July 2024. Dr. Shyam Lal, Professor, Department of ECE, NITK Surathkal, provided in-depth insights into ML and deep learning applications in satellite data processing, covering remote sensing image analysis, classification algorithms, and use cases in environmental monitoring and urban planning. Students and faculty engaged in fruitful dialogue with the speaker.

- Dr. Shyam Lal, Professor, Dept. of ECE, NITK Surathkal — Resource Person
- Topics: ML & Deep Learning for satellite data, remote urban planning sensing image analysis
- Real-world use cases: environmental monitoring, AI applications
- Active Q&A session bridging theory and practical



“

AI is transforming how we see Earth from space — turning satellite data into actionable intelligence.

## Farewell Function — Batch 2020–24

4 June 2024 | Bearys Knowledge Campus

Organised by: Department of Electronics and Communication Engineering, BIT



The ECE Department organised a heartfelt Farewell Function for the 2020–24 batch at Bearys Knowledge Campus on 4th June 2024. The event began with a prayer followed by a welcome speech from Mr. Asad P.J (ECE). Dr. Abdullah Gubbi (HoD ECE) shared the achievements and memories of the outgoing batch. Dr. S I Manjur Basha (Principal) and Dr. Aziz Mustafa (Principal, BIES) delivered inspiring speeches. Dr. Mehboob (HOD, AIDS) shared personal memories. Each student was felicitated by the Principal. Vote of thanks: Mr. Adil (ECE). MC: Ms. Fathima Taskeen.

- Welcome speech: Mr. Asad P.J (ECE) achievements
- Address by Dr. Abdullah Gubbi sharing batch
- Dr. S I Manjur Basha (Principal) and Dr. Aziz Mustafa (Principal BIES) — speeches
- Dr. Mehboob (HOD AIDS) — shared personal Taskeen memories of the batch
- Vote of thanks: Mr. Adil (ECE) | MC: Ms. Fathima



“

Every ending is a new beginning — your degree is a key that unlocks a world of infinite possibilities.

## National Day Celebrations & Awareness Programmes

Aug 2023 | Jun 2023 | Jan 2024

### 77th Independence Day — 15 August 2023

BIT celebrated India's 77th Independence Day with a flag hoisting ceremony, cultural performances, and speeches highlighting India's journey and sacrifices of freedom fighters. The atmosphere was filled with unity, respect, and national spirit.

### 75th Republic Day — 26 January 2024

BIT marked India's 75th Republic Day with a grand campus celebration honouring the day India's Constitution came into force, symbolising unity, freedom, and democratic values.

### Drug Abuse Awareness — 17 July 2023

BIT hosted a talk titled 'On the Ill Effects of Drug Abuse' featuring Mr. Nagaraj PSI and Mr. Mohan ASI from Konaje Police Station. Dr. SI Manjur Basha welcomed the gathering. The event fostered commitment toward a drug-free Mangalore.

### National Energy Conservation Week — 24–30 June 2023

The ECE Department, in association with KREDL, organised the National Energy Conservation Week. Dr. UC Niranjan (Manipal Dot Net) delivered an expert talk. Students and faculty marched with conservation banners. Coordinated by Dr. Abdullah Gubbi.



# WORKSHOPS

Industry-Focused Technical Training Sessions — 2023–24

## Unlocking Learning Potential with Salesforce

12 July 2024 | Final Year CSE & ECE Students

Organised by: Department of Training & Placement + Department of CSE, BIT



The Department of Training and Placement, in association with CSE, organised a session on Salesforce on 12th July 2024. Mr. Mohammed Shahid, Treasurer of BIT Alumni Association and Team Lead at Novigo Solutions Pvt Ltd, Mangalore, was the resource person. As an experienced Salesforce Specialist, he explained career opportunities for freshers, the importance of Salesforce Admin Training, User Management, Data Security, Report Design, and paths to Salesforce Consultant, Developer, and Architect roles. Mr. Shahid expressed plans for follow-up training sessions.

- Mr. Mohammed Shahid — Team Lead, Novigo Solutions & BIT Alumni Treasurer
- Salesforce Admin Training: high demand, strong Solution Architect salaries, clear career growth
- Career paths: Salesforce Consultant, Developer, Dashboard Design
- Topics: User Management, Data Security, Report & Training sessions
- Plans announced for follow-up Salesforce Admin



“

Salesforce is not just a CRM — it is a career ecosystem. Engineers who master it today will lead tomorrow's businesses.

## Recent Trends and Career Opportunities in VLSI Design

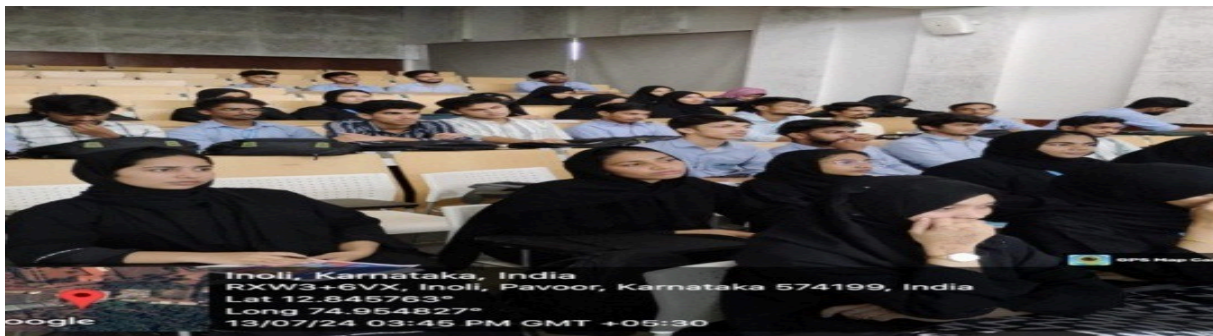
13 July 2024 | ECE Students

Organised by: Department of Training & Placement + Department of ECE, BIT



The Department of Training and Placement, in association with ECE, conducted a session on 'Recent Trends and Career Opportunities in VLSI Design' on 13th July 2024. Mr. Mahamad Anif D, BIT alumnus and Sr. Design Verification Engineer at Synaptics India Pvt Ltd, Bengaluru, was the resource person. He provided a comprehensive overview of the VLSI Design Cycle, career verticals including RTL design, functional verification, and physical design, and practical advice on certifications, EDA tools, and professional networking. A Q&A session addressed interview preparation and industry opportunities.

- Mr. Mahamad Anif D — Sr. Design Verification Engineer, Synaptics India (BIT Alumnus)
- VLSI Design Cycle overview: RTL, verification, physical design, test engineering
- Career paths: R&D, Design engineering, Networking verification engineering
- Practical advice on certifications, EDA tools, and preparation
- Interactive Q&A on VLSI industry and interview



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VLSI design is the heartbeat of every modern electronic device. Mastering it means mastering the foundation of the technological era.

# STUDENT ACHIEVEMENTS

National & Institutional Recognition — 2023–24

**National Rank 1 — AI Healthcare**

**1st Prize — AMTIS (KOMEDKares)**

**3rd Prize — IIT Madras**

**360+**  
Competitors Beaten

## National Level Rank 1 — AI Healthcare Paper Presentation

12 July 2024



### ■ National Level Rank 1

4th-semester ECE students achieved **National Level Rank 1** for their outstanding paper titled ‘Revolutionizing Healthcare: The Transformative Role of Artificial Intelligence.’

Competing against over **360 participants** from Odisha, Telangana, Kerala, and Tamil Nadu, the team demonstrated exceptional research capability and presentation skills on the national stage.

#### Team Members:

- Mr. Mohammed Junaid Raza
- Mr. Shabaz S M
- Ms. Suman G B
- Ms. Shabrin K R
- 4th Semester ECE — Bearys Institute of Technology



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23

Competing against 360+ participants from across India and coming out on top is a testament to preparation, clarity, and the courage to present your best self on the biggest stage.

## 1st Prize — Advanced Military Tactical Integration System (AMTIS)

6 July 2024

### ■ First Place — Knowledge Nexus, KOMEDKares

**M.H. Muhammad Rizwan** and **Mohammed Thahseen** of the ECE Department won 1st Place at Knowledge Nexus, KOMEDKares, under Mechatronics and Visualization. Their project, the Military Spy Robot, was titled ‘**Advanced Military Tactical Integration System (AMTIS).**’

The AMTIS integrates autonomous navigation, multi-sensor data fusion, and a robust communication system. Guided by **Dr. Mehaboob Mujawar**.



- Autonomous navigation and intelligence gathering
- Multi-sensor integration for strategic operations
- Mechatronics and visualisation framework
- Guided by Dr. Mehaboob Mujawar, ECE Department

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First place is validation that your vision, your hard work, and your willingness to go beyond the textbook can create something genuinely remarkable.

## 3rd Prize — IIT Madras Caterpillar Autonomy Challenge (Shastra)

6 January 2024



## ■ Third Place — Shastra, IIT Madras

A team of 5th Semester ECE students developed an advanced **Space Autonomous Rover** for the Caterpillar Autonomy Challenge at IIT Madras, earning 3rd Prize at one of India's most prestigious engineering competitions.

The rover featured a vision and detection camera, ultrasonic distance sensor, and a multi-DOF robotic arm for pick-and-place operations.

### Team Members (5th Sem ECE):

- Mr. Aadil
- Mr. Rizwan
- Mr. Arshak
- Mr. Fayeem
- Mr. Thahseen
- Mr. Nabeel



“

Competing at IIT Madras and standing on the podium is proof that BIT ECE students belong on the national stage — and they will keep rising.

# BEASPIRE — ECE STUDENT ASSOCIATION

Empowering ECE Students Through Technical Excellence

## About BEASPIRE

BEASPIRE is the dedicated student association of the Department of Electronics and Communication Engineering at Bearys Institute of Technology. The association serves as the premier platform for ECE students to develop technical skills, leadership capabilities, and professional acumen beyond the classroom.

## Mission

To ignite technical curiosity, foster innovation, and build a community of engineers who are not only skilled in their craft but ready to lead in a rapidly evolving technological world.

## Key Activities

SparkFest — Annual Technical Circuit Rig-Up Competition

Technical workshops and hands-on lab sessions

Collaboration with IEEE BIT Student Branch on joint events

Industry visits and professional exposure programmes



## DEPARTMENT AT A GLANCE

ECE Department Highlights & Infrastructure

### About the Department

The Department of Electronics and Communication Engineering at Bearys Institute of Technology was established with the vision of providing quality technical education in ECE with a focus on research and societal contribution. The department is affiliated to Visvesvaraya Technological University (VTU) and is committed to academic excellence, industry relevance, and holistic student development.

### Key Department Highlights

<b>VTU Affiliated</b>	All programmes affiliated to Visvesvaraya Technological University, Karnataka
<b>State-of-Art Laboratories</b>	Well-equipped labs for digital electronics, communication, embedded systems, and IoT
<b>Industry Partnerships</b>	Active MoUs with companies for training, internships, and placement support
<b>IEEE Student Branch</b>	Active BIT IEEE Student Branch organising 12+ events annually
<b>BEASPIRE Student Association</b>	ECE student association organising SparkFest and technical competitions
<b>Research Focus</b>	Faculty engaged in research on embedded systems, signal processing, AI, and VLSI
<b>FDP Programmes</b>	Regular Faculty Development Programmes on research writing and emerging technologies
<b>Placement Record</b>	Students consistently placed in leading technology companies including Tech Mahindra

## FACULTY RESEARCH & PROFESSIONAL INITIATIVES

Research, Development & Industry Engagement — 2023–24

### Faculty Development Programmes

Faculty members actively participated in and organised Faculty Development Programmes throughout 2023–24. The one-day FDP on ‘**Effective Research Writing Techniques**’ held at BIT on 17th July 2023 provided faculty from Engineering, Architecture, and Diploma streams with practical guidance on publishing in high-impact journals. The session emphasised that quality research writing is achievable through dedication, consistency, and persistent effort.

### IEEE Branch Counsellor — Dr. Abdullah Gubbi

Dr. Abdullah Gubbi served as IEEE Branch Counsellor for 2023–24, personally coordinating over 12 IEEE events. His hands-on involvement in every event reflects his commitment to holistic student development.

### Research Areas of Focus

The ECE Department faculty actively pursue research across contemporary engineering domains:

- Embedded Systems and IoT Applications
- Signal Processing and Communication Systems
- VLSI Design and Verification
- Artificial Intelligence and Machine Learning
- Aerospace Engineering and Control Systems
- Medical Image Processing and Healthcare AI
- Renewable Energy and Sustainable Technology
- Fuzzy Logic and Intelligent Control Systems



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Research is the lifeblood that keeps teaching relevant, keeps students inspired, and keeps the institution connected to the frontiers of human knowledge.

## PLACEMENTS 2023–24

Industry Placements — ECE Department

The Department of ECE is proud to present the placement achievements of the 2023–24 batch. Students secured positions across leading technology companies, demonstrating the quality of education and industry preparation at BIT.

### Placed Students — 2023–24 Batch

Student Name	Branch	Company
Mahammadmateen Bagawan	BE-ECE	FACE Prep / Spiders
Saleek Hasan	BE-ECE	IntelliPaat / Spiders Teachnook
Pratibha	BE-ECE	Tech Mahindra / ETHNUS
Renuka H Gondi	BE-ECE	Teachnook
Sumangala Kattimani	BE-ECE	Focus
Sheik Mohammed Afthaz	BE-ECE	Edumatics Teachnook / ETHNUS
Uzair Ahmed	BE-ECE	Teachnook / ETHNUS
Aishwarya Kalal	BE-ECE	Tech Mahindra / ETHNUS
Mahinbanu	BE-ECE	Spiders
Bhagyashree Goudar	BE-ECE	Tech Mahindra
Kaveri Basarakod	BE-ECE	

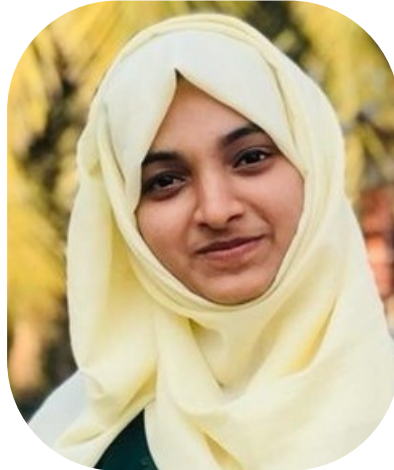
### Recruiting Companies

<b>Tech Mahindra</b> Engineering & Technology	<b>Teachnook</b> EdTech Placements	<b>ETHNUS</b> Aptitude & Placements	<b>Spiders</b> Technology Services
<b>IntelliPaat</b> Online Certification	<b>FACE Prep</b> Career Services	<b>Focus Edumatics</b> Education Technology	<b>Novigo Solutions</b> CRM & Technology

## PLACEMENTS



Mariyam Fameeza  
BE - ECE  
Offered by



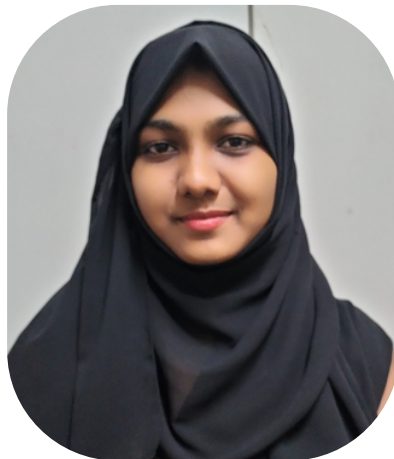
Huzaina  
BE - ECE  
Offered by



Fathima Mashuda  
BE - ECE  
Offered by



Vaishali P Bijapur  
BE - ECE  
Offered by



Tanzeela Akhalak Shaikh  
BE - ECE  
Offered by



Salma Nadaf  
BE - ECE  
Offered by



# PLACEMENTS



Sabida  
BE - ECE  
Offered by



Mariyath Shabnam  
BE - ECE  
Offered by



Mohammed Raziq  
BE - ECE  
Offered by



Adler Nunez  
BE - ECE  
Offered by



# PHOTO GALLERY

IEEE Events — August to October 2023



# PHOTO GALLERY

IEEE Events — November 2023 to February 2024



# PHOTO GALLERY

Events — SparkFest, Xplore & Career Sessions



# PHOTO GALLERY

Workshops, AI Sessions & Campus Events



**Bearys Education** Quality Pedagogy Integrity  
**BEARYS INSTITUTE OF TECHNOLOGY** Mangalore  
 Department of Training & Placement  
 In association with  
**Department of Computer Science & Engineering**

Organises a talk on  
**UNLOCKING LEARNING POTENTIAL WITH SALESFORCE**

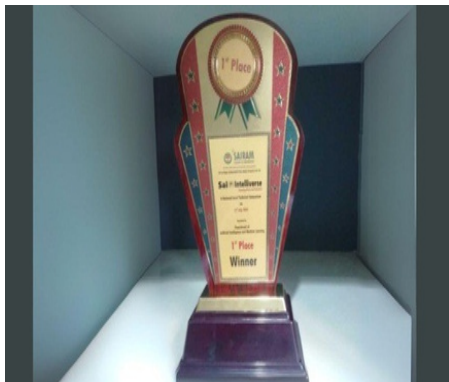
Date: 12-07-2024  
 Time: 3:30 PM  
 Venue: International Seminar Hall, BIT

Resource Person:  
**Mr. Mohammed Shahid**  
 Team Lead  
 Navigo Solutions Pvt. Ltd.,  
 Mangalore



# PHOTO GALLERY

Student Achievements — IIT Madras, AMTIS & National Rank 1



## CONCLUSION

Academic Year 2023–24 in Review

The academic year 2023–24 was a landmark year for the Department of Electronics and Communication Engineering, Bearys Institute of Technology. It was a year defined by academic excellence, national-level achievements, vibrant industry engagement, and an inspiring culture of innovation.

The department organised over **15 technical events and workshops** spanning Big Data Analytics, Machine Learning, IoT, Cybersecurity, VLSI Design, Salesforce, AI for Satellite Data, and IEEE Xplore — each serving as a powerful bridge between classroom learning and industry reality.

On the achievements front, BIT ECE students earned national recognition: **National Level Rank 1** in an AI Healthcare paper, **1st Prize at Knowledge Nexus (KOMEDKares)**, and a **3rd Prize at IIT Madras' Caterpillar Autonomy Challenge**. These achievements are proof that BIT students can stand on the national stage and shine.

The **BIT IEEE Student Branch** completed its 12th and beyond events of the year, connecting students with industry professionals, international researchers, and global engineering communities. The cultural and awareness programmes reflected our commitment to developing responsible citizens.

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The ECE Department is not just a place of learning — it is a launchpad for the engineers, innovators, and leaders of tomorrow. Every event, every achievement, and every student who walks out of these doors carries with them the values, knowledge, and ambition to change the world.

## ACKNOWLEDGEMENTS

<b>Dr. S I Manjur Basha</b> Principal, BIT	For his inspiring leadership and continuous support for student and departmental activities
<b>Dr. Abdullah Gubbi</b> HOD & Faculty Editor, ECE	For invaluable guidance, mentorship, and tireless dedication to building a world-class ECE department
<b>Dr. Aziz Mustafa</b> Principal, BIES	For motivational presence and support for student growth and inter-institutional events
<b>All ECE Faculty Members</b> Department of ECE, BIT	For dedication to teaching, research, and student mentorship throughout the academic year
<b>BIT IEEE Student Branch</b> Student Chapter	For organising 12+ impactful events connecting students with industry and innovation
<b>BEASPIRE Members</b> ECE Student Association	For organising SparkFest and student-led technical competitions with great enthusiasm
<b>All Contributing Students</b> ECE Department 2023–24	For outstanding participation, achievements, and contributions that made this year memorable

**Training & Placement Cell**

BIT Mangalore

For facilitating industry interactions, workshops, and meaningful placement opportunities

**FOR ENQUIRIES,  
CONTACT US.**



[bitmangalore.edu.in](http://bitmangalore.edu.in)  
[contactout.com/company/Bearys-Institute-of-Technology-MANGALORE-74703](http://contactout.com/company/Bearys-Institute-of-Technology-MANGALORE-74703)