

## DON BOSCO INSTITUTE OF TECHNOLOGY



## **ECE CHRONICLES**



**JULY-DECEMBER 2022** 



# HIGHLIGHTS



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- MANAGEMENT'S KEYNOTE
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## DON BOSCO INSTITUTE OF TECHNOLOGY $igg( igcap_{i} ig)$



#### DEPARTMENT OF ELECTRONICS AND COMMUCINATION ENGINEERING



## INNOVATING MINDS: ELECTRONICS AND COMMUNICATION ENGINEERING AT DBIT

SINCE ITS INCEPTION IN 2001, THE ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT AT DBIT HAS GROWN TO AN INTAKE OF 180 STUDENTS, SUPPORTED BY A DEDICATED FACULTY WITH AN AVERAGE OF 15 YEARS OF EXPERIENCE, MANY HAVING INDUSTRIAL BACKGROUNDS.

THE DEPARTMENT BOASTS A STRONG STAFF-TO-STUDENT RATIO OF 1:16 AND IS EQUIPPED WITH MODERN LABORATORIES, A DEPARTMENTAL LIBRARY, AND INTERNET FACILITIES. STUDENTS GAIN HANDS-ON EXPERIENCE THROUGH INDUSTRIAL TRAINING AND LIVE PROJECTS, ENHANCING THEIR EMPLOYABILITY.

WITH A FOCUS ON RESEARCH AND CREATIVE WORK, THE DEPARTMENT MAINTAINS A HIGH PASS PERCENTAGE AND EXCELLENT PLACEMENT RECORDS, WITH TOP COMPANIES LIKE TCS, COGNIZANT, AND MENTOR GRAPHICS ACTIVELY RECRUITING. MANY STUDENTS ALSO SECURE ADMISSIONS TO PRESTIGIOUS INTERNATIONAL UNIVERSITIES FOR M.S. PROGRAMS.

THE DEPARTMENT FOSTERS HOLISTIC DEVELOPMENT THROUGH ITS ASSOCIATION "ELECTRONICA," WHICH ORGANIZES WORKSHOPS, SEMINARS, AND SKILL DEVELOPMENT PROGRAMS. STUDENTS ACTIVELY ENGAGE IN TECHNICAL, CULTURAL, AND SPORTS EVENTS, CONSISTENTLY BRINGING ACCOLADES TO THE DEPARTMENT.

CHEIF EDITOR

DR.AN MAHESHWARAPPA HOD ECE, DBIT MANAGING DIRECTOR

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PROF ECE DEPT

EDITOR

MS.LIKITHA R STUDENT,3RD SEM,ECE

## MANAGEMENT'S-KEYNOTE



# Sri.B BYLAPPA PRESIDENT

ECE Chronicles, the department newsletter highlights key developments, notable achievements, and upcoming events that will further solidify our commitment to excellence. As we continue to strive for greater heights, I encourage you to remain engaged with our department, whether by participating in events, mentoring students, or collaborating on research initiatives.

# Sri.B MANJUNATH VICE PRESIDENT

I would like to take this opportunity to thank all of you—students, faculty, staff, and alumni—for your continued efforts and contributions. Your work strengthens the fabric of our ECE department and ensures our lasting success. Let's continue this journey of excellence and make the most of the exciting opportunities ahead.





# Sri. B. RAGHAV SECRETARY

The ECE department, has successful accreditation from both the National Board of Accreditation (NBA) and the National Assessment and Accreditation Council (NAAC). These accreditations are a testament to the collective efforts of our faculty, staff, and students, and they highlight our commitment to excellence in education, research, and overall institutional development. I take this opportunity through this Newsletter to congratulate and wish best of Luck to the entire ECE department for all their endeavours

# Dr. Nagabhushana B S PRINCIPAL

The field of ECE continues to be a cornerstone of technological innovation, and I am delighted to witness the outstanding contributions from our department to both academia and industry. I encourage all students to take full advantage of the opportunities provided by the department and to continue pushing the boundaries of what is possible in electronics and communication technology. Congratulations to the editorial team for bringing together such a valuable resource, and I hope you all find this edition inspiring and insightful.



## VISSION AND MISSION

#### **VISSION:**

To nurture and disseminate the body of knowledge in the field of electronics and communication engineering along with ethical values to serve the society globally.

#### **MISSION:**

- To impart knowledge through teaching learning process that builds strong concepts in Electronics and Communication Engineering.
- To inculcate technical, professional, managerial and leadership skills.
- To nurture students to provide sustainable solutions keeping environmental considerations and ethical practices.



## HOD'S MESSAGE



DR.AN
MAHESHWARAPPA,
HEAD OF ELECTRONICS
AND COMMUNICATION
ENGINEERING

WELCOME TO THE DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING (ECE) AT DON BOSCO INSTITUTE OF TECHNOLOGY, BANGALORE. THE FIELD OF ELECTRONICS AND COMMUNICATION ENGINEERING PLAYS A PIVOTAL ROLE IN SHAPING THE FUTURE OF OUR DIGITAL WORLD, AND WE ARE COMMITTED TO PROVIDING OUR STUDENTS WITH THE KNOWLEDGE. SKILLS, AND EXPERIENCE THEY NEED TO EXCEL IN THIS EVEREVOLVING INDUSTRY, OUR DEPARTMENT PRIDES ITSELF ON OFFERING A ROBUST CURRICULUM THAT BLENDS THEORETICAL FOUNDATIONS WITH HANDS-ON PRACTICAL EXPERIENCE. FROM CUTTING-EDGE RESEARCH IN AREAS SUCH AS LIKE VLSI DESIGN, WIRELESS COMMUNICATION, SIGNAL PROCESSING, IOT, ETC AND TO COLLABORATIONS WITH INDUSTRY LEADERS, WE AIM TO EQUIP OUR STUDENTS WITH THE TOOLS NECESSARY TO SOLVE REAL-WORLD PROBLEMS AND BECOME LEADERS IN THEIR FIELDS. WE ARE ALSO PROUD OF OUR DISTINGUISHED FACULTY, WHO BRING A WEALTH OF EXPERIENCE AND EXPERTISE TO THE CLASSROOM, FOSTERING AN ENVIRONMENT OF ACADEMIC EXCELLENCE AND INNOVATION. THEIR MENTORSHIP AND GUIDANCE ARE INSTRUMENTAL IN HELPING OUR STUDENTS THRIVE IN BOTH ACADEMIC AND PROFESSIONAL ARENAS. AT ECE, WE PLACE A STRONG EMPHASIS ON RESEARCH AND DEVELOPMENT. ENCOURAGING OUR STUDENTS TO ENGAGE IN GROUND BREAKING PROJECTS AND EXPLORE EMERGING TECHNOLOGIES. THROUGH INTERNSHIPS, INDUSTRY COLLABORATIONS, AND STATE-OF-THE-ART LABS, OUR STUDENTS GAIN INVALUABLE PRACTICAL EXPOSURE, ENSURING THEY ARE READY TO MEET THE CHALLENGES OF THE GLOBAL TECH INDUSTRY. WHETHER YOU ARE A PROSPECTIVE STUDENT, RESEARCHER, OR INDUSTRY PARTNER, WE LOOK FORWARD TO WELCOMING YOU TO OUR DEPARTMENT AND WORKING TOGETHER TO SHAPE THE FUTURE OF ELECTRONICS AND COMMUNICATION ENGINEERING.

# JULY 2022

JULY 1.1

#### CINEMATIC DAY BY ELECTRONICS FORUM

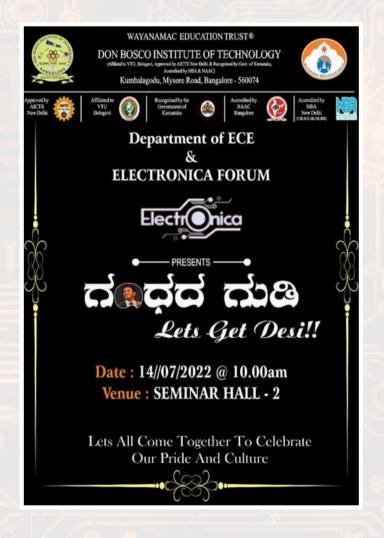
On July 14, 2022, the Electronica Forum proudly hosted a vibrant technical event titled "Gandhadha Gudi," celebrating the rich culture of Karnataka. This unique event encouraged participants to embrace the spirit of the Karnataka film industry by adopting a dress code inspired by its iconic styles.

Organized by enthusiastic student coordinators, the event aimed to foster a sense of community and pride in Karnataka's cultural heritage. Under the guidance of faculty coordinators Dr. Roopa BS and Prof. Tejaswini ML, and with the support of Dr. A.N. Maheshwarappa, the Head of the ECE Department, "Gandhadha Gudi" transformed into a lively celebration of art, music, and tradition.

Participants showcased their creativity not only through their attire but also through various activities that highlighted Karnataka's artistic expressions. The atmosphere was filled with energy as students engaged in performances, cultural presentations, and interactive sessions that reflected the essence of the state's diverse heritage.

The event provided a platform for students to connect with their roots and appreciate the significance of cultural identity in their lives. It reinforced the importance of extracurricular activities in enhancing the overall educational experience, allowing students to explore their passions beyond academics.

Overall, "Gandhadha Gudi" was a resounding success, leaving participants with a deeper appreciation for Karnataka's culture and a sense of unity within the ECE department. The event exemplified the commitment of the Electronica Forum to promote not only technical skills but also cultural awareness among students.



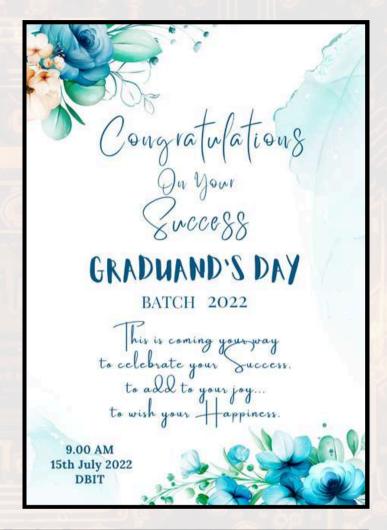
JULY 1.2

#### GRADUATION DAY FOR 2022 BATCH

On July 15, 2022, the ECE Department proudly celebrated Graduation Day for the batch of 2018-2022. The event marked the culmination of years of dedication and hard work, bringing together faculty, family, and friends to honor the graduates. The ceremony featured inspiring speeches from distinguished guests and faculty, reflecting on the students' journeys and achievements. As each graduate received their degree, the applause symbolized the pride and support from their peers and mentors.

This memorable occasion celebrated not only academic success but also the friendships and skills developed during their time at DBIT. The ECE department is proud of its graduates and looks forward to their future successes in industry, research, and further education.

Congratulations to the batch of 2018-2022! May you carry the spirit of innovation and excellence into your next endeavors.





# AUGUST

2022

#### INDEPENDENCE DAY CELEBRATION

The ECE Department, in collaboration with the Physical Department of DBIT, celebrated Independence Day with enthusiasm. The event was coordinated by Dr. A.N. Maheshwarappa, our Head of Department.

Festivities included cultural performances, speeches, and flag hoisting, bringing together students and faculty to honor the significance of the day. This celebration fostered community spirit and instilled pride in our heritage, reinforcing the values of unity and appreciation within the department.







# 86PT&MB&R 2022

### AWARENESS WALKATHON ON ALZHEIMER'S DISEASE

A Walkathon was conducted in association with the Physical Department of DBIT and the Rotary Club of Bangalore to raise awareness about Alzheimer's disease. This initiative aimed to educate participants about the condition and promote community support for those affected.

Coordinated by Prof. Suresh H.S. and Dr. Shashiranjan, the event brought together students, faculty, and community members in a spirit of solidarity and compassion. Participants engaged in an invigorating walk while sharing information about Alzheimer's, fostering a sense of community and understanding.

The Walkathon not only highlighted the importance of awareness but also encouraged a healthy lifestyle and active participation in social causes. Overall, the event was a meaningful success, contributing to the ongoing dialogue about Alzheimer's disease and the need for collective action in supporting affected individuals and their families.







# OGTOB&R

2022

#### APTIKWIZ BY ELECTRONICA FORUM

In October 2022, our department organized an enriching Internship Training Program for 3rd semester ECE students, focusing on essential soft skills and IoT-based projects. This initiative aimed to bridge the gap between theoretical knowledge and practical application, equipping students with valuable skills for their future careers.

- 1. Soft Skills Development:
- Workshops on communication, teamwork, and problem-solving.
- Interactive sessions led by industry professionals to enhance interpersonal skills.
- 2. IoT-Based Projects:
- Hands-on training in Internet of Things technologies.
- Students collaborated on projects, learning to design and implement IoT solutions.
- Emphasis on real-world applications to prepare students for industry demands.

The training not only fostered technical expertise but also encouraged personal growth, boosting students' confidence as they prepare to enter the workforce. We are proud of our students for their active participation and dedication throughout the program.





# NOV&MB&R

2022

**NOV 1.1** 

### DAC A TECHNICAL EVENT BY ELECTRONICA FORUM

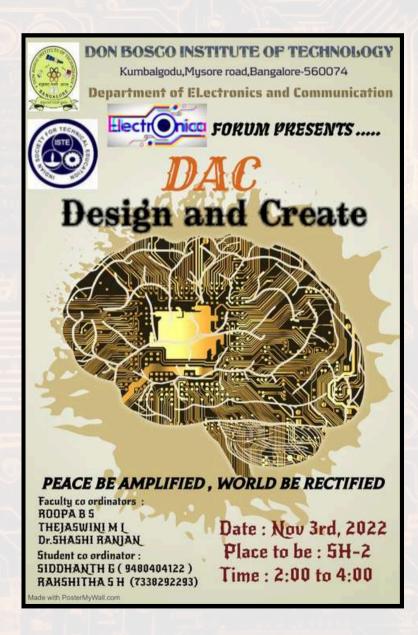
On November 12, 2022, the Electronica Forum proudly hosted a dynamic technical event titled "Design and Create." This event was organized by enthusiastic student coordinators, aiming to inspire creativity and innovation among participants in the field of electronics and communication.

Under the expert guidance of faculty coordinators Dr. Roopa BS and Prof. Tejaswini ML, and with the unwavering support of Dr. A.N. Maheshwarappa, the Head of the ECE Department, "Design and Create" provided a platform for students to showcase their engineering skills and creativity.

The event featured a series of hands-on workshops and competitions that encouraged participants to design and build projects using various materials and techniques. Students collaborated in teams, fostering a spirit of teamwork and problem-solving as they brought their ideas to life.

Throughout the day, the atmosphere buzzed with excitement and innovation, as students presented their projects and received feedback from faculty and peers. The event not only enhanced their practical skills but also reinforced the importance of applying theoretical knowledge in real-world scenarios.

Overall, "Design and Create" was a resounding success, highlighting the commitment of the Electronica Forum to nurture talent and creativity within the ECE department. The event left students inspired and motivated to continue exploring their passions in technology and design.



#### NOV 1.2

#### SMART BHARATH INDUSTRIAL VISIT

On November 24, 2022, the ECE Department organized an industrial visit for students to the Smart Bharat Tech Summit in Bangalore, one of India's leading technology events. Coordinated by Dr. Sharanbasappa and Dr. Shashiranjan, the visit aimed to enhance students' understanding of real-world applications in electronics and communication.

At the summit, students attended keynote speeches and panel discussions on topics like smart technologies and digital transformation. They explored exhibitions showcasing innovative products from top companies and startups, gaining valuable insights into industry trends.

This visit not only enriched the academic experience but also provided networking opportunities with professionals, inspiring students to consider future careers in technology. Overall, the trip to the Smart Bharat Tech Summit was a great success, reinforcing the department's commitment to bridging the gap between theory and practical application.







# D&G&MB&R 2023

**DEC 1.1** 

ECE CONNECT FOR THE BATCH OF 2021

The "ECE Connect" event was organized by the 5th and 7th-semester ECE coordinators to warmly welcome the 3rd-semester students to the department. Under the guidance of faculty coordinators Dr.Roopa BS and Prof. Tejaswini ML, along with the support of our Head of Department, Dr. A.N. Maheshwarappa, the event aimed to foster a sense of community among students.

During ECE Connect, senior students shared their experiences, insights, and tips for success in the program. The event facilitated interaction between the newcomers and their seniors, helping the 3rd-semester students feel more at home in the department.

This initiative not only strengthened bonds within the ECE community but also encouraged collaboration and support among students, embodying the spirit of teamwork and camaraderie that the department promotes.



**DEC 1.2** 

#### ISRO INDUSTRIAL VISIT

the ECE Department organized an insightful industrial visit for students to the UR Rao Satellite Centre (URSC) of ISRO in Bangalore. Coordinated by Prof.Mahadevi S Mannur and Dr.Shashiranjan,the visit aimed to expose students to satellite technology and space development.

Students toured the facilities, observing various stages of satellite design and testing. They engaged with scientists and engineers, gaining insights into satellite communication, remote sensing, and advancements in space exploration.

This visit not only enhanced students' technical knowledge but also inspired them to consider careers in aerospace and related fields. Overall, the industrial visit to URSC was a valuable experience, connecting theoretical studies with real-world applications in space technology.







## **ACHIEVEMENTS**

#### **ACHS 1.1**

#### SILVER MEDAL IN VTU YOUTH FESTIVAL

We are excited to feature Likitha R(1DB21EC079), a distinguished member of the 1 KAR Air Squadron NCC in Bangalore. Likitha has demonstrated exceptional skill and dedication in aviation, particularly in her experience with microlight aircraft, including the Zenair STOL CH107.

Her journey in aeromodelling showcases her passion for aviation and her commitment to hands-on learning. Likitha's participation in the NCC has not only honed her flying skills but also instilled in her the values of teamwork, leadership, and perseverance.

We applaud Likitha for her achievements and her contributions to the field of aviation. Her story inspires us all to pursue our passions with determination and courage.

Keep soaring high, Likitha!







#### **ACHS 1.2**

#### ALL INDIA TREKKING EXPEDITION

We are proud to announce that Deekshith and Sohan represented the Karnataka and Goa Directorate of the NCC at the prestigious All India Trekking Expedition Camp held from October 6th-13th,2022 at Kulamavu, Kerala.

This remarkable opportunity allowed them to engage with fellow cadets from across the country, fostering teamwork, leadership, and outdoor skills. Their participation in this challenging event highlights their commitment to the NCC and their dedication to personal growth.

Congratulations to Deekshith and Sohan on this outstanding achievement! Your experience serves as an inspiration to your peers and showcases the adventurous spirit of our students.





