DON BOSCO INSTITUTE OF TECHNOLOGY

MYSORE ROAD,KUMBALGODU,BANGALORE-560074

ECE CHRONICLES

JULY 2023-DECEMBER 2023

HIGHLIGHTS

DON BOSCO INSTITUTE OF TECHNOLOGY

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	MANAGING DIRECTOR	EDITOR
DR.AN MAHESHWARAPPA	PROF.MAHADEVI S MANUR	MS.LIKITHA R
HOD ECE,DBIT	PROF ECE DEPT	STUDENT,5TH 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
SECREGARY

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.
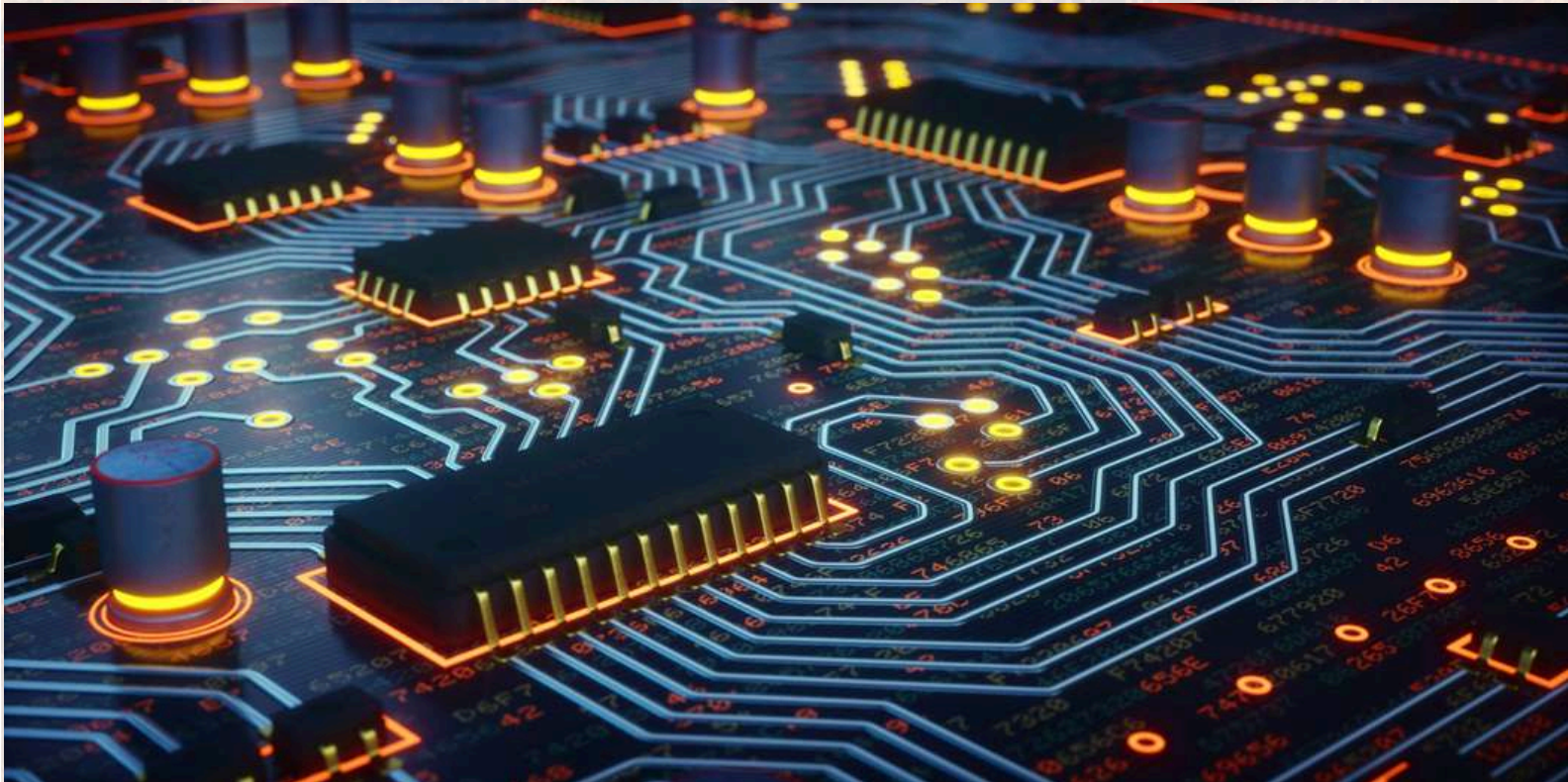
VISSION AND MISSION

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

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.

DR.AN MAHESHWARAPPA, HEAD OF ELECTRONICS AND COMMUNICATION ENGINEERING

JULY
2023

DIALECTIC-VOICE OF BRAINS,INTERDEPARTMENTAL TECH WAR

On July 12, 2023, the Electronica Forum, in association with the ISTE Student Chapter at DBIT (KA-167), proudly hosted an interdepartmental competition titled "Dialectic: The Voice of Brains." This exciting event was organized by the dedicated student coordinators of the Electronica Forum, who worked diligently under the expert guidance of faculty coordinators Dr. Roopa BS and Prof. Tejaswini ML.

With the support of the esteemed Head of the Electronics and Communication Engineering Department, Dr. A.N. Maheshwarappa, the competition aimed to foster innovation and critical thinking among students across various departments. "Dialectic" provided a platform for participants to engage in intellectual discourse, showcasing their analytical skills and creative problem-solving abilities. The event brought together students from different fields, promoting collaboration and the exchange of ideas in a vibrant academic environment. It was a fantastic opportunity for participants to not only demonstrate their knowledge but also to connect with peers and mentors. The success of "Dialectic" reflects the commitment of the Electronica Forum and the ISTE Student Chapter to enhancing the educational experience at DBIT.

AUGUST
2023

AUG 1.1

POSTER PRESENTATION OF IDEAS IN ASSOCIATION WITH R&D,DBIT.

The Department of Electronics and Communication Engineering at DBIT recently organized an exciting competition focused on poster presentations, showcasing innovative ideas from students in the fields of ECE and Artificial Intelligence and Machine Learning (AIML). This event was held in association with the Institution's Innovation Council (IIC) and the Research and Development (R&D) wing, highlighting the department's commitment to fostering creativity and innovation among its students.The competition was expertly coordinated by Dr. Ashwath Narayan BS, a dedicated professor and R&D coordinator for the ECE department. Under the insightful guidance of Dr. Natraj KR, the esteemed Dean and Director of R&D at DBIT, the event aimed to encourage students to think critically and present their ideas in a visually engaging manner.

Participants had the opportunity to delve into their research and innovative concepts, translating complex ideas into concise and compelling poster presentations. This format not only allowed students to hone their communication skills but also fostered an environment of collaboration and knowledge-sharing among peers.

The event was a resounding success, showcasing a diverse range of projects that reflect the students' passion for technology and research. It served as a platform for aspiring innovators to gain valuable feedback from faculty and industry experts, paving the way for future advancements in the field. Overall, the poster presentation competition exemplified the department's dedication to nurturing the next generation of engineers and researchers.

AUG 1.2

The Department of Electronics and Communication Engineering (ECE) at Don Bosco Institute of Technology (DBIT), in collaboration with the Institution's Innovation Council (IIC) and R&D, recently organized a workshop titled "Microsoft Dynamics Products (CRM Specialization)." This program aimed to provide hands-on training in Microsoft Dynamics 365 CRM, preparing students with essential skills for careers in IT, especially those related to customer relationship management.

The workshop, conducted over three consecutive Saturdays starting August 12, 2023, was led by Mr. Uddharth, a 2012 ECE alumnus and Application Development Team Lead at Accenture, Bengaluru. Distinguished guests presiding over the event included Sri B. Bylappa, President of WET, and DBIT Executive Director, Sri B. Manjunath. The program was also supported by Dr. B.S. Nagabhushana, Principal of DBIT, and other department heads and alumni coordinators, with sessions held at the ECE Department on campus.

SEPTEMBER

2023

SMART INDIA HACKATHON

The Internal Smart India Hackathon 2023 was held on September 11, 2023, at DBIT, organized by the Department of Research & Development. The event, starting at **9:00 AM*, welcomed Shri B. Bylappa, President of WET, as the Chief Patron, alongside patrons Shri P.B. Manjunath, Vice President, and Shri Raghav Bylappa, Secretary. Dr. Nataraj KR, Dean & Director of R&D at DBIT, supervised the event as the chief organizer.

Dr. B S Nagabhushan, Principal of DBIT, and Dr. Manjunathswamy B E, SPOC-DBIT, served as the organizing chairs. Coordination was led by Dr. Manu K S, Associate Professor in AI & ML, and Dr. Ashwath Narayana B S, Associate Professor in ECE, ensuring a successful event that fostered innovation and collaborative research among students

OCTOBER

2023

ECE Department Event Update: Quotient Quest – Bridging Classroom and Industry

The Department of Electronics and Communication Engineering hosted Quotient Quest, a dynamic forum designed to enhance students' job-readiness through an interactive, placement-style experience with alumni guidance. Held on October 26, 2023, in Seminar Hall 2, the event featured alumni sharing their industry insights and career advice.

Guest Alumni Speakers:

Nithin N., Software Developer at Siemens Healthineers

Athreya Prathuri, Big Data Engineer at Scienaptic Systems Pvt. Ltd.

Vaishnavi Revankar, Senior Consultant at Mercedes-Benz R&D India

Organized under the guidance of faculty coordinators Prof. Tejaswini ML and Prof. Rashmi KT, with support from Dr. Maheswarappa, HOD ECE, and Dr. B.S. Nagabhushana, Principal, Quotient Quest provided a valuable platform for students to connect with industry professionals and prepare for the future.

NOVEMBER
2023

INDUSTRIAL VISIT TO ADVI GROUP OF COMAPNIES

The Department of Electronics and Communication Engineering organized an insightful industrial visit for ECE students to the ADVIG Group of Companies in Marathahalli, Bangalore. Coordinated by Prof. Mahadevi S. Mannur and Dr. Shahshiran Janan, the visit aimed to connect theoretical knowledge with real-world applications.

Students explored various departments, gaining firsthand experience of industry practices and technologies. Interacting with professionals provided them valuable insights into the challenges and opportunities in the field.

This visit not only enhanced their understanding but also inspired them to consider their future careers in electronics and communication, highlighting the importance of practical experience and industry networking. Overall, the event was a great success, demonstrating the department's commitment to comprehensive student learning.

DECEMBER
2023

DEC 1.1

ELECTRA VERSE COMPETEITION CONDUCTED BY ELECTRONICA FORUM.

The Electronica Forum recently held a dynamic technical event titled "ElectraVerse," designed to engage and inspire students in the field of electronics and technology. Organized by the enthusiastic student coordinators of the Electronica Forum, the event showcased their dedication to fostering innovation and collaboration within the academic community.

Under the expert guidance of faculty coordinators Prof. Rashmi KT and Prof. Tejaswini ML, ElectraVerse provided a vibrant platform for students to explore cutting-edge technologies and present their projects. The event received robust support from Dr. A.N. Maheshwarappa, the Head of the Electronics and Communication Engineering Department, who emphasized the importance of hands-on experience and real-world application in engineering education.

ElectraVerse featured a range of activities, including workshops, demonstrations, and competitions, all aimed at enhancing students' technical skills and encouraging creative problem-solving. Participants had the opportunity to engage with industry experts, learn about emerging trends, and network with peers passionate about electronics and communication.

The event was a resounding success, reflecting the commitment of the Electronica Forum to nurture talent and innovation. By providing an engaging platform for students to showcase their ideas and projects, ElectraVerse contributed to a culture of learning and exploration within the department, paving the way for future advancements in technology.

DEC1.2

INDUSTRIAL VISIT TO BANGALORE TECH SUMMIT 2023

TThe Department of Electronics and Communication Engineering organized an enriching industrial visit for ECE students to the Bangalore Tech Summit, one of India's leading technology conferences. Coordinated by Prof. Mahadevi S Mannur and Dr. Shahshiranjan, the visit immersed students in cutting-edge innovations and industry insights.

At the summit, students attended keynote speeches, panel discussions, and workshops led by industry experts, enhancing their understanding of current trends in electronics and communication. The event also provided valuable networking opportunities, allowing students to connect with professionals and fellow tech enthusiasts.

Overall, the visit to the Bangalore Tech Summit was a great success, showcasing the department's commitment to offering comprehensive learning experiences and preparing students for the evolving tech landscape.

DEC 1.3

ECE CONNECT

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 Prof. Rashmi KT 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.

ACHIEVEMENTS

ACH 1.1

FIRST PLACE IN POSTER PRESENTATION OF IDEAS

Chaitanya C., Gowtham N. H., Sripadaranjan, and Likitha R. from the 5th semester of the ECE department achieved remarkable success by winning the first prize in the poster presentation competition held on 5th August,2023 organized by the R&D department at DBIT. Their innovative project focused on a nitrogen-fueled automatic car, showcasing their creativity and technical expertise.

The team's presentation highlighted the potential of nitrogen as a sustainable fuel source, demonstrating their understanding of current environmental challenges and the future of automotive technology. Their work not only impressed the judges but also set a high standard for innovation within the department.

This achievement reflects the dedication and talent of the students and underscores the importance of research and development initiatives in fostering creativity and problem-solving skills among aspiring engineers.

ACHS1.2

FIRST PLACE IN NATIONAL LEVEL IDEATHON

Chaitanya C., Gowtham N. H., Sripadaranjan, and Likitha R. from the 5th semester of the ECE department proudly won the first prize in the "Idea Presentation" category at the 7th International Conference on "Artificial Intelligence, Machine Learning & Advanced Engineering Science and Technologies (ICAMLAEST-2023)." The conference was held on August 9, 2023, and was organized by R. L. Jalappa Institute of Technology.

Their innovative presentation demonstrated a deep understanding of emerging technologies and showcased their creativity in applying AI and machine learning concepts. This recognition not only highlights their hard work and dedication but also underscores the department's commitment to fostering talent and promoting research in cutting-edge fields.

Winning this prestigious award at an international conference is a significant achievement that reflects the potential of these students and the support they receive from their faculty and peers in the ECE department.

ACHF 1.3

INTEL CONCLAVE

Prof. Mahadevi S. Mannur and Dr. Shashiranjan attended the Intel Conclave at Intel's headquarters in Bangalore, a prestigious event that gathered industry leaders and educators to discuss advancements in technology.

During the conclave, they engaged with experts on topics like artificial intelligence, machine learning, and next-generation computing through keynotes and panel discussions. This experience provided valuable insights and networking opportunities that will enhance their work within the department and benefit their students.

Their participation highlights the ECE Department's commitment to fostering innovation and collaboration between academia and industry.