



CANARA
ENGINEERING COLLEGE



VOLUME 14, ISSUE 2

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NEWS LETTER FROM CANARA ENGINEERING COLLEGE



Student
Achievements

DEPARTMENT
ACTIVITY

Staff Achievements

EDITORIAL

Dr. Dayananda G K

Professor & HOD
Department of E&C

Mr. Sandeep Prabhu M

Assistant Professor
Department of E&C

STUDENT MEMBERS

Ms. Shubha Sudesh Shetty

Ms. Sindhu Shenoy M

Ms. Aishwarya H S

Ms. Kavya

VISION

To be a center of repute by imparting quality education to produce globally competent graduates with human values

MISSION

Create conducive environment for overall development of students

Equip the students with technical skills to bridge the gap between academia and industry



Sudhindra Nagara, Benjanapadavu, Bantwala, Mangalore, India - 574219. Ph: 8792727001 / 8904737001.

DEPARTMENT PROFILE

Electronics and Communication (EC) engineering broadly deals with systems related to acquiring, communicating, manipulating and analyzing information. To put it in simple words EC covers wide area of applications from small sensor to huge satellites, simple calculators to super computers, microwave ovens to missiles, mobile phones to medical electronics, automation in industries to electronics in automobiles etc. EC has achieved fastest technology growth ever among all domains of engineering and has registered its spread in almost all areas of application. Presence of EC has become ubiquitous and has undoubtedly become one of the basic branches in Engineering. Because of the nature of curriculum that EC Engineers study, they have plenty of career opportunities not only in the core area of Electronics and Communication but also in allied areas like Instrumentation, Computer Engineering, Aeronautical Engineering, Mechatronics, Bio-medical etc.

The Faculty members are Highly Experienced and dedicated in moulding the students to cope with competitive career, higher studies and research activities. Faculty members have published many international journal papers, attended many workshops and FDP. The department has a close interaction with the alumni and is continuously using their inputs for betterment of the curriculum and research facilities to meet the industrial needs. Keeping an eye on the need of the industry and the society, department of Electronics and communication Engineering has been conducting numerous core technical workshops for both students and faculty members to meet the vision and mission of the department and eventually of the college. The department is committed to work toward quality education through innovative teaching and learning processes, state-of-the-art facilities and conducive academic ambience.



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PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

- Succeed in their professional career
- Apply the knowledge of Electronics and Communication to address technological problems of industry and society
- Demonstrate leadership qualities and exhibit professional standards

PROGRAMME OUTCOMES (PO)

Engineering graduates in Electronics and Communication Engineering will be able to :

Engineering knowledge : Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems

Design/development of solutions : Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations

Modern tool usage : Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations

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

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice

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

Life-long learning: Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences

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

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

Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of and need for sustainable development

Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings

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

PROGRAMME SPECIFIC OUTCOMES (PSO)

- Ability to specify, design, build and test analog, digital, embedded systems and to apply programming skills in the relevant fields
- Ability to understand and apply modern wired and wireless analog and digital communication systems for existing problems

STAFF ACHIEVEMENTS

NPTL

Online Courses

Mr. Sujit Satish Pai, Assistant Professor, Department of E&C completed NPTEL 4 Weeks Course “Python for Data Science” with Elite certification from Jan 24 to Feb 24



Mr. Sujit Satish Pai, Assistant Professor, Department of E&C completed NPTEL 12 Weeks Course “Deep Learning” from Jan 24 to Apr 24



Mr. Sujit Satish Pai, Assistant Professor, Department of E&C honored with a Domain Certificate from NPTEL in “Data Science” (Computer Science) in April 2024



Mr. Sujit Satish Pai, Assistant Professor, Department of E&C contributed as a Reviewer for the ICWITE-2024 organized by IEEE Women in Engineering Affinity Group, Bangalore Section during 16th-17th February 2024



Mr. Ramesh E, Assistant Professor, Department of E&C completed NPTEL 4 Weeks Course “Python for Data Science” from Jan 24 to Feb 24

Workshop / Webinar Attended

Dr. Dayananda G K, HOD & Professor, Department of E&C attended a session on “Mentoring the Mentors” Organized by Department of Student welfare, Canara Engineering College on 12/06/2024



Workshop / Webinar Attended



Dr. Ganesh V Bhat, Professor, Department of E&C attended a session on “Mentoring the Mentors” Organized by Department of Student welfare, Canara Engineering College on 12/06/2024

Workshop / Webinar Attended

Mr. Raghavendra Shetty M K, Assistant Professor, Department of E&C attended a session on “Mentoring the Mentors” Organized by Department of Student welfare, Canara Engineering College on 12/06/2024



Workshop / Webinar Attended



Mrs. Jayashree K Assistant Professor, Department of E&C attended a session on “Mentoring the Mentors” Organized by Department of Student welfare, Canara Engineering College on 12/06/2024

Workshop / Webinar Attended

Ms. Ashwini Holla V R, Assistant Professor, Department of E&C attended a session on “Mentoring the Mentors” Organized by Department of Student welfare, Canara Engineering College on 12/06/2024



Workshop / Webinar Attended

Mrs. Akshatha G Baliga Assistant Professor, Department of E&C attended a session on “Mentoring the Mentors” Organized by Department of Student welfare, Canara Engineering College on 12/06/2024



Workshop / Webinar Attended

Mr. Sandeep Prabhu M, Assistant Professor, Department of E&C attended a session on “Mentoring the Mentors” Organized by Department of Student welfare, Canara Engineering College on 12/06/2024



Workshop / Webinar Attended

Mr. Sujit Satish Pai, Assistant Professor, Department of E&C attended a session on “Mentoring the Mentors” Organized by Department of Student welfare, Canara Engineering College on 12/06/2024



Workshop / Webinar Attended

Mr. Ramesh E, Assistant Professor, Department of E&C attended a session on “Mentoring the Mentors” Organized by Department of Student welfare, Canara Engineering College on 12/06/2024





Workshop / Webinar Attended

Mr. Manjunatha I R, Assistant Professor, Department of E&C attended a session on “Mentoring the Mentors” Organized by Department of Student welfare, Canara Engineering College on 12/06/2024

Workshop / Webinar Attended

Mr. Sreerama Samartha J G, Assistant Professor, Department of E&C attended a session on “Mentoring the Mentors” Organized by Department of Student welfare, Canara Engineering College on 12/06/2024



Mrs. Akshatha G Baliga Assistant Professor, Department of E&C attended FDP on “EmpowerED” organized by Internal quality assurance cell in association with training, career Guidance and placement cell, Canara Engineering College on 27/02/2024

Workshop / Webinar Attended

Mrs. Akshatha G Baliga Assistant Professor, Department of E&C attended FDP on “On IEEE Remote Access and New Features” organized NDLI Club of Canara Engineering College on 20/02/2024



Workshop / Webinar Attended

Mr. Vayusutha M, Assistant Professor, Department of E&C has successfully participated and completed AICTE Training and Learning (ATAL) Academy Faculty Development Program on “Advances in Acoustics, Speech and Signal Processing” at NMAM INSTITUTE OF TECHNOLOGY, NITTE from 08/01/2024 to 13/01/2024



Paper Published in Journals / Book Chapters

Dr. Dayananda G K, HOD & Professor, Department of E&C presented a paper titled “AID for visually challenged people”, IEEE International Conference for Women in Innovation, Technology & Entrepreneurship (ICWITE 2024) on 17/02/2024



Mr. Raghavendra Shetty M K, Assistant Professor, Department of E&C published a paper in IAES International Journal of Artificial Intelligence (IJ-EI) titled “Photo-realistic photo synthesis using improved conditional generative adversarial networks” during Feb 2024



Mr. Raghavendra Shetty M K, Assistant Professor, Department of E&C published a paper in International Journal of Electrical and Computer Engineering (IJECE) titled “Adversarial sketch-photo transformation for enhanced face recognition accuracy: a systematic analysis and evaluation” during Mar 2024



Mr. Sreerama Samartha J G, Assistant Professor, Department of E&C presented a paper titled “AID for visually challenged people”, IEEE International Conference for Women in Innovation, Technology & Entrepreneurship (ICWITE 2024) on 17/02/2024



Mr. Vayusutha M, Assistant Professor, Department of E&C presented a paper titled “AID for visually challenged people”, IEEE International Conference for Women in Innovation, Technology & Entrepreneurship (ICWITE 2024) on 17/02/2024



Mrs. Savitha Acharya, Assistant Professor, Department of E&C presented a paper titled “AID for visually challenged people”, IEEE International Conference for Women in Innovation, Technology & Entrepreneurship (ICWITE 2024) on 17/02/2024

STUDENT ACHIEVEMENTS

Ms. S. Sanjana Pai, Final year student has been recognized as an outstanding achiever of Yukti-2024 for securing the winner position in “SWARA: Solo Singing” Event of the national techno-cultural fest on 12/01/24 at VTU, Belagavi

Ms. S. Sanjana Pai, Final year student has been recognized as an outstanding achiever of Yukti-2024 for securing the winner position in “Flash Frame: Spot Paper Presentation” Event of the national techno-cultural fest on 12/01/24 at VTU, Belagavi



Ms. Sannidhi Shenoy, III-year student has been recognized as an outstanding achiever of Yukti-2024 for securing the winner position in Group Dance Event of the national techno-cultural fest on 11/01/24 at VTU, Belagavi



Mr. Abhishek Shetty, Mr. Nagaraj Shetty, Mr. Samarth Shetty and Mr. Yogesh Prabhu secured funds from the Karnataka State Council for Science and Technology (KSCST) for their project titled **“Non-Invasive Temperature and Glucose Level Detection.”** The project was guided by **Mrs. Rajitha A A**



Mr. Abhijith A, Mr. Ashwin K S, Mr. Krithik S Kotyan and Mr. Manoj Hegde winner of the Project Expo 2024 for their titled **“Vending Machine Using UPI”**. The project was guided by **Mrs. Rajitha A A**



Academic Toppers

CANARA ENGINEERING COLLEGE
SUDHINDRA NAGARA, BENJANAPADAVU, BANTWAL TQ, D.K - 574219

Congratulations!

TOPPERS FOR THE GRADUATE BATCH 2023-24

Department of Electronics and Communication Engineering



2

SINDHYA SHENOYM
4CB20EC053
CGPA: 8.67



1

SHUBHA SUDESH SHETTY
4CB20EC052
CGPA: 8.94



3

KRUPALI
4CB20EC017
CGPA: 8.66

Opportunities don't happen. you create them!

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Department of Electronics and Communication Engineering

Congratulations!

5th Sem Toppers



1

NISARGA B U
4CB21EC028
SGPA : 9.0



2

POOJA LAXMAN ACHARI
4CB21EC029
SGPA : 8.78



3

AISHWARYA H S
4CB21EC001
SGPA : 8.72



3

ANUSHA SUBRAY GOWDA
4CB21EC003
SGPA : 8.72

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Department of Electronics and Communication Engineering

Congratulations!

3rd Sem Toppers



1

PRATHEEKSHA
4CB22EC031
SGPA: 9.2



1

ARPITA RAMA NAIK
4CB22EC003
SGPA: 9.2



2

KAPIL GAJANAN PRABHU
4CB22EC014
SGPA: 9.15



3

UTSAVI ULLAS HEGDE
4CB22EC054
SGPA: 9.05



3

ANKITA DEEPAK PARULEKAR
4CB22EC002
SGPA: 9.0



3

SHRIKRITHI
4CB22EC045
SGPA: 9.0

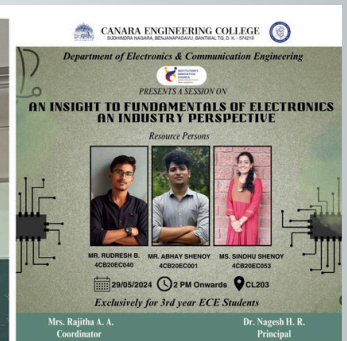
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Department Activity

On May 4th 2024, the students of third year ECE hosted a **farewell party** for the Final year ECE students. The event was inaugurated by the Head of The Department, Dr. Dayananda G K and the Former Principal Dr. Ganesh V Bhat in the presence of the Department Faculty. This was followed by the cultural performances. Also, some games such as saree draping, identifying childhood pictures, Mr and Ms Farewell etc were organized to engage each and every one



The Department of **Electronics and Communication Engineering**, organized a session titled **"An Insight into the Fundamentals of Electronics: An Industry Perspective"** for 6th semester ECE students. Our final-year ECE students, Rudresh, Abhay, and Sindhu, provided valuable insights into the fundamentals of electronics and recommended several e-resources to prepare for placements. They highlighted the importance of mastering core concepts such as circuit design, digital circuits, and semiconductor devices. Additionally, they shared practical tips for excelling in technical interviews and offered guidance on leveraging online platforms for skill enhancement. The event was co-ordinated by Mrs. Rajitha A A, Assistant Professor, Department of ECE.



The Training, Career Guidance, and Placement Cell, in collaboration with the **Department of Electronics and Communication Engineering**, organized a session titled **"Electronics Unveiled: Key Concepts and Industry Perspectives"** for 6th semester ECE students. The session was led by **Ms. Jisha Rani**, a Characterization Engineer at Karmic Design Pvt. Ltd. and a distinguished alumna of our EEE program. Ms. Rani addressed the students on fundamental concepts in electronics, including the operation of diodes and transistors, emphasizing the importance of mastering these basics for a solid foundation.

She elaborated on how these components are integral to more complex circuits and their practical applications in various technologies. Additionally, Ms. Rani provided valuable insights into the semiconductor industry, detailing the interview process at companies like Karmic Design. She discussed the skills and knowledge that are critical for success in such interviews and highlighted the industry's expectations from prospective candidates. Her talk also included tips on staying updated with the latest advancements in electronics and effective strategies for continuous learning and professional growth. The event was coordinated by Mrs. Rajitha A A, Assistant Professor, Department of ECE.



Industrial Visit



The Department of **Electronics and Communication Engineering** organized a full-day **industrial visit** on May 14, 2024, specifically for third-year EC students. The itinerary for the day included: Attendance at **Nao Jatha at MIT**: This likely involved students participating in or observing an event related to Nao robots, showcasing advancements in robotics and possibly AI.



Visit to the **Centre of Excellence for Cyber Security at MIT**: Students had the opportunity to visit a specialized center focusing on cyber security. This visit would have provided insights into the importance of cyber security in today's digital landscape.



Visit to **Karmic Design Pvt Ltd, Manipal**: During the forenoon session, students visited Karmic Design Pvt Ltd, a company located in Manipal. This visit would have exposed students to practical aspects of semiconductor design and possibly other electronics-related technologies. Overall, the industrial visit aimed to enhance students' understanding of emerging technologies in cyber security, and semiconductor design. It provided them with firsthand exposure to industry practices and real-world applications relevant to their field of study in Electronics and Communication Engineering. Event was coordinated by Mr. Vinay H S , Department of ECE. Items Amount



Technical Events

IOT with Android App was conducted on 26/06/2024

Mr.Sreerama Samartha J G Asst.Prof. ,Mr.Srinidhi and Mr.Guruprasad M 3rd year ECE Conducted the workshop.The Smart IoT Workshop is designed to provide 4th semester ECE students with a comprehensive understanding of the Internet of Things (IoT) and its applications. By the end of the Smart IoT Workshop, students will have a solid foundation in IoT concepts and practical experience in building IoT solutions. They will be equipped with the skills to tackle real-world IoT challenges and contribute to the ever-evolving field of IoT technology.

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
IN ASSOCIATION WITH THE TECHNOVATION STUDENT CLUB
PRESENTS

WORKSHOP ON IOT WITH ANDRIOD APP

26/06/2024
2 PM onwards
EC VLSI LAB

Highlights

- Hands-On IoT Integration
- Sensor Fusion
- Cloud Connectivity
- Hands-On MIT APP INVENTOR
- Empowering Seniors to Guide Junior Achievers

FOR SECOND YEAR ECE STUDENTS

Convenor: Mr. Sreerama Samartha
Principal: Dr. Nagesh H. R.

Robo Soccer Workshop was conducted on 26/06/2024

from 27th Apr to 12th June 2024, the Department of ECE and Technovation presented the Robo Soccer Workshop series. Coordinated by Mr. Vayusutha M, this event was aimed at 4th semester ECE students, focusing on the exciting world of robotic soccer and teaching participants to design and program soccer-playing robots.

The workshop included sessions on robot design, sensor integration, and programming strategies specific to soccer robots. Participants worked in teams to build their robots, competing in friendly matches to test their creations. The workshop aimed to provide a fun and educational experience, promoting teamwork and innovation in robotics.

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
IN ASSOCIATION WITH TECHNOVATION STUDENT CLUB
PRESENTS

HANDS-ON WORKSHOP ON ROBO SOCCER

26/6/2024
2 PM onwards
EC Seminar Hall

Highlights

- ROBO SOCCER Design
- Robotics and Applications
- Drones Design
- Hands-On Robotics
- Empowering Senior to Guide Junior Achievers

FOR SECOND YEAR ECE STUDENTS

Convenor: Prof. Vayusutha M.
Principal: Dr. Nagesh H. R.

Project Expo 2024 was conducted on 24/04/2024

Project Expo, where the culmination of years of hard work, dedication, and innovation converges into a dazzling display of creativity and ingenuity. The Project Expo is not merely an event; it's a testament to the academic journey and the relentless pursuit of excellence undertaken by our final year students. The Students exhibited their Projects and the 17 batches gave a Demonstration of their Projects

Raghavendra M Shetty K is an Associate Professor in the Department of Electronics & Communication Engineering with a diverse educational background and significant experience in both academia and industry. K Dr. Chandana B R. Department: Electronics & Communication Engineering; Designation: Assistant Professor



Smart IOT was conducted on 20/06/2024

the Department of ECE and IIPC organized another event titled "Smart IoT." Coordinated by Vayusutha M, this event targeted students from Kaveri School, Kuppepadavu, particularly 8th and 9th standard students, covering various aspects of IoT technology and encouraging exploration and innovation in smart connected devices.

The event included introductory sessions on IoT principles, along with hands-on activities to build simple IoT projects. Students learned about sensors, actuators, and communication protocols, gaining a foundational understanding of how IoT systems work. The aim was to spark interest in technology and innovation among young students, providing them with a glimpse into the future of connected devices.

Advanced Line-following Robot Design Contest 2024

Organized by the Department of ECE in association with Technovation, the Advanced Line-following Robot Design Contest 2024 was held on 28th February 2024. Coordinated by Mr. Vayusuta and Sreerama Samartha, this contest targeted 5th semester ECE students, challenging them to design and build precise line-following robots. The event showcased the innovative and technical skills of the participants



Circuitrex was conducted on 10/05/2024

the Department of ECE held Circuitrex in association with the Department Technical Event. Coordinated by Sreerama Samartha, this event targeted all ECE students, providing them with an opportunity to demonstrate their skills in electronics and circuit design through various technical challenges

The event included hands-on activities such as circuit building, debugging, and optimization tasks. Participants worked in teams to tackle real-world problems, using their knowledge of electronic components and circuit theory



Design Thinking: Exploring Advanced Line Following Robot Design workshop was conducted on 10/05/2024

The Department of ECE, in collaboration with Technovation, hosted the "Design Thinking: Exploring Advanced Line Following Robot Design" workshop series from 3rd January 2024. To 24th Feb 2024. Vayusutha M coordinated this event, which was aimed at 5th semester ECE students. The workshop focused on advanced techniques and design thinking principles for creating sophisticated line-following robots.

This workshop series included interactive sessions on design thinking methodologies, robot sensor integration, and control algorithms. Participants engaged in group activities to brainstorm and prototype their robot designs, receiving feedback from experienced mentors. The series culminated in a mini-competition, allowing students to test and refine their robots in a simulated environment.



Design Thinking: Node Craft Robotics-designing Intelligent Line Follower With Nodemcu workshop from 3rd January 2024. To 24th Feb 2024., the Department of ECE and Technovation presented the "Design Thinking: Node Craft Robotics-designing Intelligent Line Follower With Nodemcu" workshop series. Coordinated by Vayusutha M, this event targeted 3rd semester ECE students, offering insights into the use of NodeMCU in creating intelligent line-following robots

The workshop covered topics such as the basics of NodeMCU, sensor interfacing, and programming techniques specific to line-following robots. Students participated in hands-on sessions to build and program their robots, learning how to implement efficient path-following algorithms. The workshop aimed to enhance students' practical skills and understanding of IoT-enabled robotics.

Innovatex: MIT App Inventor App Contest 2024 was conducted on 21/02/2024.

The Innovatex: MIT App Inventor App Contest 2024, organized by the Department of ECE in association with Technovation, took place on 21st February 2024. Coordinated by Sreerama Samartha, this contest was designed for 3rd semester ECE students, encouraging them to develop innovative apps using the MIT App Inventor platform.

Participants received training on the MIT App Inventor interface, along with guidance on app design and development best practices. The contest featured various categories such as educational apps, productivity tools, and entertainment applications. Judges evaluated the apps based on functionality, creativity, and user experience. This contest provided a platform for students to showcase their coding skills and innovative ideas



Innovation And Entrepreneurship Outreach Program At Sri Ramakunjeshwara Residential School, Uppinangadi was conducted on 20/01/2024.

the Department of ECE in collaboration with IIPC hosted the Innovation And Entrepreneurship Outreach Program at Sri Ramakunjeshwara Residential School, Uppinangadi. Coordinated by Vinay H S, this program targeted 8th and 9th standard students, aiming to inspire and educate them about innovation and entrepreneurship.



MIT App Inventory Explained: A Hands-on Guide To Android Development workshop series was conducted on 24/01/2024.

Technovation and the Department of ECE held the "MIT App Inventory Explained: A Hands-on Guide To Android Development" workshop series on 24th January 2024. Coordinated by Sreerama Samartha, this event was aimed at 3rd semester ECE students, providing practical insights and hands-on experience in Android app development

This workshop series covered the basics of Android app development, including user interface design, database management, and app deployment. Participants engaged in hands-on coding sessions, creating their own apps under the guidance of experienced instructors. The workshop also included sessions on debugging and performance optimization, ensuring that students gained a comprehensive understanding of the app development process.

