



BITS & BYTES

NEWS LETTER FROM CANARA ENGINEERING COLLEGE





EDITORIAL

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VISION

To be a globally competent center in Computer Science and Design committed to produce a pool of knowledgeable engineers to extend solutions for the mankind in the field of software and design.

MISSION

- Provide the environment to become industry ready **Professionals, Researchers and Entrepreneurs by** offering emerging courses.
- Imparting experiential learning to gain proficiency in contemporary software and design tools to meet the current demands of the industries.
- Develop teamwork and problem-solving abilities, foster lifelong learning and instill sense of ethical and societal responsibility among students.





CANARA ENGINEERING COLLEGE

DEPARTMENT PROFILE

The department was started in the year 2021 to offer under graduate degree programme i.e. Bachelor of Engineering (BE) in Computer Science & Design (CS&D). To guide the students with their academics. the department includes enthusiastic, skilled, and experienced teaching members. The faculty members are actively involved in teaching, product development and research. The faculty members have published number of research and review papers/articles in referred International journals and reputed International conferences which archived at IEEE/ACM/Springer and other renowned digital libraries. A course in computer science and design is related to a course in computer science and engineering, which emphasises not only technologies, computing programming, and tools but also various design techniques and interaction approaches.

The program's goal is to provide students with an interdisciplinary skill set that will allow them to succeed in a variety of industries, including the information technology field, animation, virtual reality, augmented reality, multimedia, robotics, game development, entertainment, and digital analytics, among others. The faculty frequently attends staff development programmes (SDP/FDP/Seminar) to update themselves in technological advancements and conferences to present research findings. The department aims at building the students' career by placing special emphasis on all-round development through continuous interaction with Industry. To increase the opportunity of placements to students, the department conducts soft skills training programmes, technical skill development activities and initiatives on self-learning (Spoken Tutorial programmes by IIT Bombay).



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PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

- Graduates will apply knowledge and skills of computer science and business system to address challenges in various aspects of technology, business and society. Graduates will design and develop
- technologies that will solve real time complex problems by pursuing higher education and research.
- Graduates will engage in lifelong learning by adapting to changing industrial and societal needs.
- Graduates will work efficiently and effectively as computer science and business systems engineers exhibiting team spirit, leadership and ethical qualities.

PROGRAMME OUTCOMES (PO)

Engineering graduates in Information Science and Engineering will be able to:

- **1.Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- **2.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.
- **3.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.

- **4.Conduct** investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and the interpretation of data and synthesis of information to provide valid conclusions.
- **5.Modern tool usage:** Select/Create and apply appropriate techniques, resources and modern engineering and IT tools, including prediction and modelling to complex engineering activities, taking comprehensive cognizance of their limitations.

- **6.The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the the consequent responsibilities relevant to professional engineering practice.
- **7.Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development.
- **8.Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the relevant scientific and/or engineering practices.
- **9.Individual and team work:** Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.
- **10.Communication:** Communicate effectively on complex engineering activities with the engineering community and with the society-at-large, such as being able to comprehend and write effective reports and design documentation, make effective presentations and give and receive clear instructions.
- **11.Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work as a member and leader in a team to manage projects and in multidisciplinary environments.







PROGRAMME SPECIFIC **OUTCOMES (PSO)**

- Apply designing principles and mathematical concepts to make the students well-versed with full stack applications.
- Design and develop computer programs/computer-based systems in various areas of Multimedia, Graphics and User Interface.

NEW FACES OF CSD FAMILY



Mr. Ravishankara K



Ms. Likhitha

STAFF ACHIEVEMENTS



Paper Publication & Research

• Dr.Praahas Amin has published the paper titled "Deep Learning Based Gesture Recognition System Using EMG Spectrogram Data". Amin, P., Khan, A.M. (2023)Deep Learning Based Gesture Recognition System Using EMG Spectrogram Data. In: Choudrie, J., Mahalle, P.N., Perumal, T., Joshi, A. (eds) ICT with Intelligent Applications. ICTIS 2023. Level Notes in Networks and Systems, vol 7 Amin Dec. Singapores. Singapore. https://doi.org/10.1007/978-981-99-3758-5_29 **Dr.Praahas Amin** has contributed to IASC in observations of near earth objects and main belt asteroids by analysis of images from Pan-STARRS and discovered object provisionally named "P11U9En".

Workshop/FDP Attended

Mrs. Chatura V Karadesai has attended the One Day Faculty Development Program on "IEEE Remote Access and new features" held on 20th February 2024, Organized by the NDLI Club of Canara Engineering College. Mrs. Chatura V Karadesai Participated in EmpowerED- One Day Faculty Development program on "Personal and Professional Growth held on 27-02-2024 organized by IQAC and Training Career Guidance and Placement Cell, Canara Engineering College.







Workshop/FDP Attended

 $\bf Mrs.\ Pooja\ N\ S$ has attended the One Day Faculty Development Program on "IEEE Remote Access and new features " held on 20th February 2024, Organized by the NDLI Club of Canara Engineering College.

Workshop/FDP Attended

Mr. Gurusandesh M has attended the One Day Faculty Development Program on "IEEE Remote Access and new features" held on 20th February 2024, Organized by the NDLI Club of Canara Engineering



Mentorship Excellence Award

Dr. Praahas Amin, Associate Professor and HoD and Mr. Anantha Krishna Kamath Assistant Professor in the Department of Computer Science and Design, received the "Mentorship Excellence Award" for making a significant impact and fostering self-growth and development. The award was presented by the management of CHSA Mangalore on June 3, 2024.





FDP Attended

All Faculty of CSD attended a one-day workshop on "Mentoring the Mentors" on June 12th, 2024 at CEC.













STUDENT ACHIEVEMENTS





Mr. Prabuddh Shetty (USN: 4CB21CG034) and Ms. Shwetha Ravindra Baliga (USN: 4CB21CG052) were the toppers of the 5th semester exams with both scoring SGPA of 9.17

Ms. Rakshitha B Bhajentri(USN:4CB22CG034), Ms. Rashmi S Mallya(USN:4CB22CG035), Ms. Mehek Rajesh Kelaskar (USN:4CB22CG023), and Ms. Sinchana Mahadev Naik (USN: 4CB22CG051), were the toppers of the 3rd semester exams with SGPA of 9.33, 9.14, 9.05 and 9.05 respectively



Ms. Rakshitha B Bhajentri(4CB22CG034), Ms. Jonita Pinto(4CB22CG014), Ms. Sanjana Karanth (4CB22CG041), Ms. Rishika Bangera (4CB22CG037), Ms. Sheethal Shivani (4CB22CG013), Ms. Thrisha Shetty (4CB22CG055), Harshitha Pai(4CB22CG012), Vaibhav Ganapati Balgi(4CB22CG057), Shivaprasad Acharya(4CB22CG046), B Shashank Kamath(4CB22CG002), Praveena Gunaga(4CB22CG030), Deepak D Nayak(4CB22CG009), Syed Arbaaz Hussain(4CB21CG057), Prabuddh Shetty(4CB21CG034), Dawood Thouseef(4CB21CG014) Goutham Pai(4CB21CG020), Ananth A Joshi(4CB21CG009), Poorva Kumari (4CB21CG033), Dhanush V Shetty (4CB21CG016), Nishanth (4CB21CG032), Prathiksha (4CB21CG037), Roshan Talekar (4CB21CG042) participated in the DPBH Hackathon organized by IIT-BHU &Department of Consumer Affairs.





STUDENT ACHIEVEMENTS

Mahima US(4CB22CG022)Sanjana Karanth (4CB22CG041)Harshitha Pai (4CB22CG012) participated and won in UI Design Challenge, TECHX 2024 conducted by ComedKares.

Rakshitha B Bhajentri(4CB22CG012, Jonita Pinto (4CB21CG014) Participated in Idea Pitching Competition at TechX organized by ComedKares.





Deeksha RM (4CB22CG006) participated in National Level Hackathon at SJEC

Rakshitha B Bhajentri(4CB22CG034), Syed Arbaaz Hussain(4CB21CG057) and Purag P Rai (4CB21CG038) participated in MSNIM- Rotary Biz Quiz by Rotary Club Mangalore North







Poorva Kumari (4CB21CG033),Prakrithi Sujir (4CB21CG036), Harshitha Pai (4CB22CG012), participated in VTU - Inter-collegiate Level Mangalore Division Throwball Tournament at Sahyadri College of Engineering and Management.









STUDENT ACHIEVEMENTS

Prabuddh Shetty (4CB21CG034), Harshitha Pai (4CB22CG012), Sanjana Karanth (4CB22CG041) have contributed to IASC in observations of near earth objects and main belt asteroids by analysis of images from Pan-STARRS and discovered object provisionally named "P11U2TB".











Shamanth (4CB21CG046) and Shamith (4CB21CG047) have Successfully Completed the Course Time Management held at Infosys on 14.02.2024

Poorva Kumari (4CB21CG033) Secured second place in VTU Managalore Division Badminton Tournament held at SJEC, Mangalore on 7/7/2024 and has qualified for the State level Tournament at PESCE, Mandya.



Prajwal S Tirthahalli (4CB22CG027), participated in VTU Mangaluru Division Table Tennis Tournament which was held at NMAMIT, Nitte



Deekshith Nayak(4CB22CG008) won first place in Valorant at Sharada PU College



Purag P Rai (4CB21CG038) won the First Place in Primed - The Placement Hackathon organized by Student Activity Committee IEEE-Mangalore Sub-Section at Canara Engineering College



CANARA ENGINEERING COLLEGE



WORKSHOP CONDUCTED

One day workshop on Android Development for Industrial **Applications** Using Java was organised bv the Department of Computer Science and Design in association with IIC and Alumini Cell on 22-06-24. The resource person was Mr. Nagesh Shenoy A., Senior Software Engineer, Robosoft Technologies Private Limited. More than 100 students from the second and third years of the CSD Department participated in the event. During the workshop, participants had the opportunity to delve into the essentials of Android app creation, gaining practical insights into coding, UI/UX design principles, and the integration of essential features. The workshop not only equipped students with technical skills but also inspired them to explore the limitless possibilities within Android development. The event was coordinated Mrs. Chatura ٧. Karadesai-IIC by Coordinator, and Mr. Anantha Krishna Kamath-alumni coordinator of the department.



WORKSHOP CONDUCTED



On July 3rd, 2024, the Department of Computer Science and Design at Canara Engineering College, in association with the Alumni Cell and IIC, organized a talk on "Bridging The Gap Between The Classroom And Industry." The keynote speaker, Mr. Shreesha Kulkarni, an experienced software engineer and CEC alumnus from the ECE department (2017-21), discussed essential skills for IT careers, including programming, problem-solving, and continuous learning.

The session highlighted job opportunities in software developement, data analytics, and emerging tech fields. Practical exercises focused on logic building underscored the importance of strong analytical skills. Coordinated by Mr. Anantha Krishna Kamath and Ms. Chathura V. Karadesai, the event benefited over 70 students.

CANARA ENGINEERING COLLEGE



WORKSHOP CONDUCTED

The Department of Computer Science and Design organized an industrial visit to the Manipal Incubation Centre titled "Exploring Options for Entrepreneurship - Discussion with Startup Ecosystem Enablers" on June 21, 2024. A total of 50 second-year CSD students participated.

Students gained valuable insights into the operation of incubator centres, including the resources they provide, such as mentorship, funding opportunities, office space, and networking for startups. The event was coordinated by Mrs. Chatura V. Karadesai, Assistant Professor, Department of CSD in association with Mrs. Ashwini Holla V R and IEEE Canara Students Branch.



WORKSHOP CONDUCTED

The Department of Computer Science and Design organized an industrial visit to the SOIS Lab, Innovation Centre, and Cybersecurity Centre at MAHE on June 21, 2024, under the theme "Exploring Options for Entrepreneurship - Discussion with Startup Ecosystem Enablers." A total of 62 third-year CSD students participated. Students had an enriching experience, gaining valuable insights into the forefront of technological and scientific development. The event was coordinated by Mrs. Chatura V. Karadesai, Assistant Professor, Department of CSD in association with Mrs. Ashwini Holla V R and IEEE Canara Students Branch.





WORKSHOP CONDUCTED

An industrial visit was organized by the Computer Science and Design Department for second-year students on June 25th, 2024, to the COMEDKARES Innovation Hub in Mangalore, in association with the Institution's Innovation Hub, Council(IIC). The COMDKARES Innovation established by the Consortium of Medical, Engineering, and Dental Colleges of Karnataka (COMEDK), aims to enhance 21st-century skills and familiarize budding engineers with the latest technologies like AI, ML, and IoT to increase their employability and industry readiness. During the visit, students were introduced to the process of building a BOT and had the opportunity to assemble the parts and construct a bot themselves. Dr. Praahas Amin, Associate Professor in the Department of CSD, served as the convenor of the industrial visit. A total of 56 students and 1 faculty member participated in this event.



WORKSHOP CONDUCTED



The Department of Computer Science and Design in association with IIC organized a Talk on Celebrating Youth Changemakers Contribution in Innovation and Entrepreneurship in Commemoration of National Youth Day on 17 January 2024 in Seminar Hall 2. Jeethan Castelino Managing Director of Nlite Energy Private Limited and alumnus of CEC Department of ECE 2010 Batch Spoke about Renewable Energy systems and its importance in present and upcoming future and the role of He motivated students about upskilling and role of green energy for sustainable future. Entrepreneurship in nation Building.



WOERBKINSAHROP CONDUCTED

The Department of Computer Science and Design in association with IIC organized Hands-on Session on Development of Machine Learning Projects. The resource person was Dr. Praahas Amin, Associate Professor and HOD Department of Computer Science and Design. He addressed the students regarding Machine Learning Fundamental and Workflow followed when Developing Machine Learning Projects. Students developed simple Machine Learning Projects during the session.



