BUILDERS ENGINEERING COLLEGE

Paribhaashaa

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

NEWS LETTER

Genesis:

The Department of Computer Science and Engineering, started in the year 2009, offers BE Computer Science and Engineering and M.E Computer Science programme was started in the year 2013 to meet the challenges of higher education, research, and innovation in key areas of computer science. The department aims to develop computer and software engineers who are industry-ready, innovative and entrepreneurial to become global leaders in research and technology. Students are encouraged to participate and present papers in both national and international conferences. The Computer Science and Engineering department is equipped with 306 computers with high-end configuration distributed across Seven laboratories with four blade-mounted servers and latest version software. The department is an active participant in various activities in the campus.

Highlights:

- Exemplary Placement Record
- Hands on Workshop on Trending Technology
- Academic Incentives for Top Performers
- Empowered Faculty Members who received National and International Awards
- Strong Industry Tie-Ups
- Smart Class Rooms & Learning Management Systems
- Students are given Opportunity to organize Major Events of the Department
- National level Champions in Sports and Games

Vision:

To be the most skilled software engineer provider.

Mission:

Endeavors to prepare rural students for successful career through academic and applied research as an inspiration for upcoming student community.
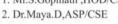
Program Specific Objectives (PSOs):

The Students will be able to,

- Exhibit design and programming skills to build and automate business solutions using cutting edge technologies.
- Strong theoretical foundation leading to excellence and excitement towards research, to provide elegant solutions to complex problems.
- Ability to work effectively with various engineering fields as a team to design, build and develop system applications.

Editors:

1. Mr.S.Gopinath ,HOD/CSE
2. Dr.Maya.D,ASP/CSE

Program Outcomes (POs):

- **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **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.
- **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.
- **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.
- **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.
- **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.
- **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **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.
- **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.
- **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.

COLLEGE VISION & MISSION

Vision:
To be the most preferred knowledge provider.

Mission:
Builders Engineering College endeavors to prepare rural students for successful career through academic and applied research.

Programme Educational Outcomes (PEO):

PEO1

Should achieve success in their field of work, in future education and in their research.

PEO2

Shall consistently learn new things and hone existing talents to generate impactful,
resource-saving and cutting-edge solutions.

PEO3

Must demonstrate strong communication abilities, a professional demeanour and ethical principles while designing and creating practical, multidisciplinary solutions that are technically sound, financially viable and socially acceptable.

EDITORIAL BOARD

FACULTY IN-CHARGE

Mr. S. Gobinath HoD/CSE AP (Sr.Gr)

Dr.D.Maya AsP/CSE

STUDENT MEMBERS

V. Santhosh Kumar

G. Shanmuga Priya

From the Principal's Desk

Dr. S. Gopalakrishanan
Principal

It gives me an immense pleasure in welcoming you to Builders Engineering College (BEC),Nathakadaiyur, Tirupur 638 108. BEC (Formerly Erode Builder Educational Trust's Group of Institutions) was founded in the year 2009 by Erode Builder Educational Trust (EBET) with a vision to impart quality higher education to rural aspirants through innumerable institutions. It has been promoted by a group of likeminded visionaries with the unique objective of offering value based education to the students for a prosperous career.

BEC is approved by AICTE, New Delhi and affiliated to Anna University, Chennai. The campus is eco-friendly and equipped with excellent infrastructure, qualified and well experienced faculty members who strive hard to attain academic excellence in higher education by empowering students with knowledge, wisdom and experience.

Over the past 14 years, the college has witnessed a strong blend of state-of-the-art infrastructure including incubation and innovation centres and dedicated human resource committed to provide professional education with thrust on Creativity, Technical and Innovation.

Since its inception, BEC creates excellent placement opportunities to the students to reach a spectacular position in their professional career and offers special training to develop the extracurricular skills.

I look forward to receiving you at Builders Engineering College to witness all new Outcome Based Education (OBE).

From the HoD's Desk

Mr. S. Gobinath
HoD

Department of Computer Science & Engineering commits to work towards developing Engineers with a rich blend of competent, technical, managerial and social skills and contribute to nation building. The Department takes the initiative to improve the soft skills, analytical capabilities and verbal communication of the students so that they can face the competition in the corporate world confidently. To meet the vision and mission of the depatemnt , emphasis was given to practical skill based learning with recent technical tools in order to match the technical expecation of the corporate companies.

Students exhibit their innovative ideas, skills and potentials as final year projects and have won many awards at variours levels. The state of the art infrastructure, experienced team of faculty strengthen effective teaching learning process ensuring quality technical education.

Journal of Design Engineering

January, 2022

Journal of Design Engineering, January 2022 Conferences Mrs. D. Kalaiabiramai contributed to the discourse on Intrusion Detection Systems using Machine Learning at the International Conference on Management, Engineering, Science, and Humanities in January 2022. Her research sheds light on innovative approaches to enhancing cybersecurity through advanced algorithms and detection methodologies.

Mrs. D. Kalaiabiramai's research endeavors extended to Fire Hazard Prevention utilizing Convolutional Neural Networks via Video Cameras, presented at the International Conference on Management, Engineering, Science, and Humanities in January 2022. Her work underscores the importance of leveraging cutting-edge technology to mitigate fire risks and enhance safety measures effectively.

January, 2022

Mr. M. Arun's research delves into the realm of Intrusion Detection Systems employing Machine Learning Algorithms. His work, presented at the International Conference on Management, Engineering, Science, and Humanities in January 2022, contributes valuable insights to the ongoing efforts in enhancing cybersecurity through advanced detection mechanisms.

January, 2022

Ms. P. Santhiya offered valuable insights into the realm of Machine Learning algorithms and their diverse applications at the International Conference on Management, Engineering, Science, and Humanities in January 2022. Her research illuminates the potential of machine learning in various domains, fostering innovation and problem-solving across disciplines.

Ms. P. Santhiya's scholarly contributions included an exploration of Intrusion Detection Systems employing Machine Learning Algorithms, presented at the International Conference on Management, Engineering, Science, and Humanities in January 2022. Her study elucidates novel approaches to bolstering cybersecurity infrastructure and mitigating emerging threats in digital environments.

Ms. P. Santhiya addresses the critical issue of fire hazard prevention using Convolutional Neural Networks through Video Cameras. Her paper, part of the proceedings at the International Conference on Management, Engineering, Science, and Humanities in January 2022, highlights innovative approaches to leveraging technology for fire safety measures.

January, 2022

Mrs. D. Padmapriya also focuses on fire hazard prevention through Convolutional Neural Networks and Video Cameras in her research presented at the same International Conference on Management, Engineering, Science, and Humanities in January 2022. Her work adds to the discourse on using advanced technologies for proactive fire safety.

January, 2022

Mrs. D. Vidhya's paper provides a comprehensive review of cybersecurity measures during the COVID-19 pandemic. Published in the proceedings of the International Conference on Management, Engineering, Science, and Humanities in January 2022, her research sheds light on the evolving

January, 2022

Ammu V. contributes to assistive technology with her paper on a "Walking Stick for Blind Person using ATMEGA 8." Presented at the International Conference on Management, Engineering, Science, and Humanities in January 2022, her work showcases the application of technology to enhance mobility and independence for visually impaired individuals.

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Student participation:

On January 19, 2022, V. Kabilan, V. Valliappan, and K. Srivarsini actively participated in the event titled "Analysis of Machine Learning Algorithms and its Application" organized by the International Conference MESH 2022 in collaboration with IARDO and Conference World, New Delhi. This showcased their engagement in exploring the practical applications of machine learning within a collaborative academic environment.

Also on the same date, students B. Myshree and A. Priya Sakthi were actively involved in the event centered on "Emergency Trends in E-learning" organized by Conference MESH 2022 in collaboration with IARDO and

Furthermore, on January 19, 2022, student V. E. Nandini made a significant contribution to the event titled "Matrix and Calculus" organized by Conference MESH 2022 in collaboration with IARDO and Conference World, New Delhi. Her participation highlighted a focus on specialized mathematical domains, demonstrating a keen interest in advanced academic subjects.

In addition, students S. Harish, K. Mohammad Shafiq, and P. Rajendra Prasanth actively engaged in the event addressing "Innovative Ideas for Developing Future Education using Technologies" on January 19, 2022. The event, organized by the International Conference MESH 2022 in collaboration with IARDO and Conference World, New Delhi, likely fostered discussions on forward-thinking approaches to shaping the future of education through technology integration.

Technical Quiz:

On April 29, 2022, V. Kabilan from Sengunthar Engineering College exhibited his technical prowess in a competitive setting by participating in a Technical Quiz. This platform enabled him to apply theoretical knowledge and problem-solving skills.

Similarly, D. Arisrada, a student of Sengunthar Engineering College, actively engaged in a Technical Quiz on the same date, contributing to her ongoing educational journey and intellectual growth.

K. Srivarsini, also from Sengunthar Engineering College, embraced the challenge of the Technical Quiz on April 29, 2022. This event likely provided her with an opportunity to test her technical knowledge and enhance her problem-solving abilities.

A. Praveen, representing Sengunthar Engineering College, participated in the Technical Quiz on April 29, 2022, demonstrating his commitment to continuous learning and intellectual development through active engagement in extracurricular activities.

Furthermore, M. Viitnesh Immanuvel, a student from Sengunthar Engineering College, showcased his dedication to staying informed about the latest technical advancements by participating in the Technical Quiz on April 29, 2022, contributing to the academic vibrancy of the institution.

Student Achievements:

In the academic year 2021-22, S. Arshik from Dr NGP Institute of Technology emerged as a coding maestro, securing the First Prize with a cash reward of Rs.1000 in the Codewares event. His exceptional coding skills and dedication earned him top honors, showcasing the talent nurtured at his institution.

A. Vaishali, a student at Sengunthar Engineering College, displayed her creative flair in LOGO designing, earning the Second Prize along with a cash prize of Rs 500 and a trophy in the same academic year. Her artistic prowess and innovative design capabilities were acknowledged in this competitive event.

Similarly, in the LOGO designing category at Sengunthar Engineering College, S. Sneka demonstrated her artistic talents, securing the Second Prize with a cash award of Rs 500 and a trophy. Her creativity and proficiency in design contributed to the success of the event for her institution.

P. Sachin Prabhu, representing Erode Sengunthar Engineering College, showcased his musical talents in the Musical Instruments event, earning the Second Prize with a cash reward of Rs 500 in the academic year 2021-22. His musical prowess and skillful performance were recognized and celebrated.

Leeladharani.M. from BEC (institution not explicitly mentioned) secured the First Prize in the Academic event during the 2021-22 academic year. Her intellectual achievements and academic excellence were acknowledged, reflecting her commitment to scholarly pursuits and academic distinction.