JULY-DEC 2022

CEC Jhanjeri, established in 2012, under the Chandigarh Educational Society stands as a beacon of academic excellence in India. Renowned for its stellar research and teaching standards, the college boosts a highly skilled faculty and an innovative learning environment. CEC Jhanjeri and its affiliated institutions are administered and operated under the guidance of the Chandigarh Educational Society and promise to deliver quality higher education at affordable fees.

CEC Jhanjeri is committed to academic excellence, affordability, and holistic student development, making it a preferred choice for students nationwide.

S. Rashpal Singh Dhaliwal (President)

With great excitement, I welcome you to the newest edition of our newsletter! As we mapped out our strategic vision, one thing became crystal clear—strong, meaningful communication within our community is key.

This newsletter is more than just a bulletin—it's a celebration of our students' incredible milestones and the dynamic life pulsing through our campus. At CEC, we take pride in being more than an institution—we're a launchpad for futures, a pillar of support for families, and a beacon for communities.

So, dive in and discover the heart, hustle, and harmony that define CEC. This is your window into our shared journey of growth, excellence, and impact.

Mr. Arshdeep Dhaliwal (Managing Director)

With the launch of our newsletter, I'm thrilled to see our shared vision for stronger internal communication come to life. Each story reflects the power of teamwork, inclusivity, and our impact on the Indian education landscape. Our faculty and students are the heartbeat of our journey, and this edition proudly celebrates their achievements. Here's to a year filled with momentum, fresh ideas, and unwavering excellence!

Prof (Dr.) Anish Gupta (Director Engineering)

It's a true privilege to be part of an institution where excellence isn't just a goal—it's a way of life. At CEC Jhanjeri, we are redefining education by blending academic brilliance with real-world readiness. Our mission is to ignite minds, shape futures, and nurture individuals who thrive not just in their careers, but as responsible citizens of the world. With a strong focus on innovation, hands-on learning, and industry-relevant skills, we're equipping our students to lead with confidence and vision. As we continue to rise as a beacon of learning in the region, our commitment remains unwavering: to break barriers, inspire growth, and build a brighter tomorrow for all.

Dr. Rini Saxena (HOD CSE)

As the Chair of the Computer Science and Engineering Department, it's a true privilege to connect with each of you. We're not just stepping into classrooms—we're stepping into a world of boundless innovation and discovery. This journey we're on isn't just about assignments and exams; it's about igniting curiosity, building resilience, and nurturing a mindset that thrives on lifelong learning.

Together, let's push boundaries, question the norm, and turn bold ideas into real impact. Every challenge is a chance to grow, and every success, a step toward something greater. You hold immense potential, and I can't wait to see how you harness it to shape the future of tech.

Here's to exploring, evolving, and excelling—together. Wishing you a journey filled with inspiration, growth, and achievement in all you pursue.

ABOUT THE DEPARTMENT

The B.Tech. Computer Science & Engineering programme at Chandigarh Engineering Institutions (CEC), Jhanjeri, one of the top CSE colleges in Punjab, will give you the greatest theoretical and practical abilities necessary to develop original solutions to both ongoing and new IT-related challenges.Our course offers a mix of theoretical and practical instruction, along with access to state-of-the-art labs.Students will gain the crucial hands-on experience that top employers want thanks to our 360° placement training, industry-academia connections, and knowledgeable instructors.

Department of Computer Science and Engineering

VISION

To emerge as Institution of Technical excellence imparting professional education for sustainable development of society.

MISSION

- To educate the students in the field of Computer-Science with ever-changing technologies and skills.
- To enable the students in solving real-time problems and make use of new technologies.
- To have industry collaboration and interaction with professional societies for continuous development.
- To help students in becoming successful entrepreneurs.

Programme Educational Objectives (PEO):

Students of Computer Science & Engineering shall:

1. Become competent Computer Professionals.

2. Have abilities to analyze the requirements of software and provide solutions through efficient product designs.

3. Have a successful career and meet the requirements of Indian and other Multi-National Companies.

4. Have exposure to advanced technologies, technical skills, and opportunities to work as team members on multidisciplinary projects.

Students of Computer Science & Engineering will be able to do:

PSO1: To use principles of Computer Science & Engineering (such as software engineering, computer networks, data structures & computer programming high level languages) for developing software solutions.

PSO2: To clearly understand the concept of programming languages, computer architecture and their applications in different field of technologies to develop cost-effective solutions in the area of computer science by the use of various methodological algorithms and different tools.

PROGRAMME OUTCOMES (PO)

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: 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.

PO4: 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.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO6: 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.

PO7: 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.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
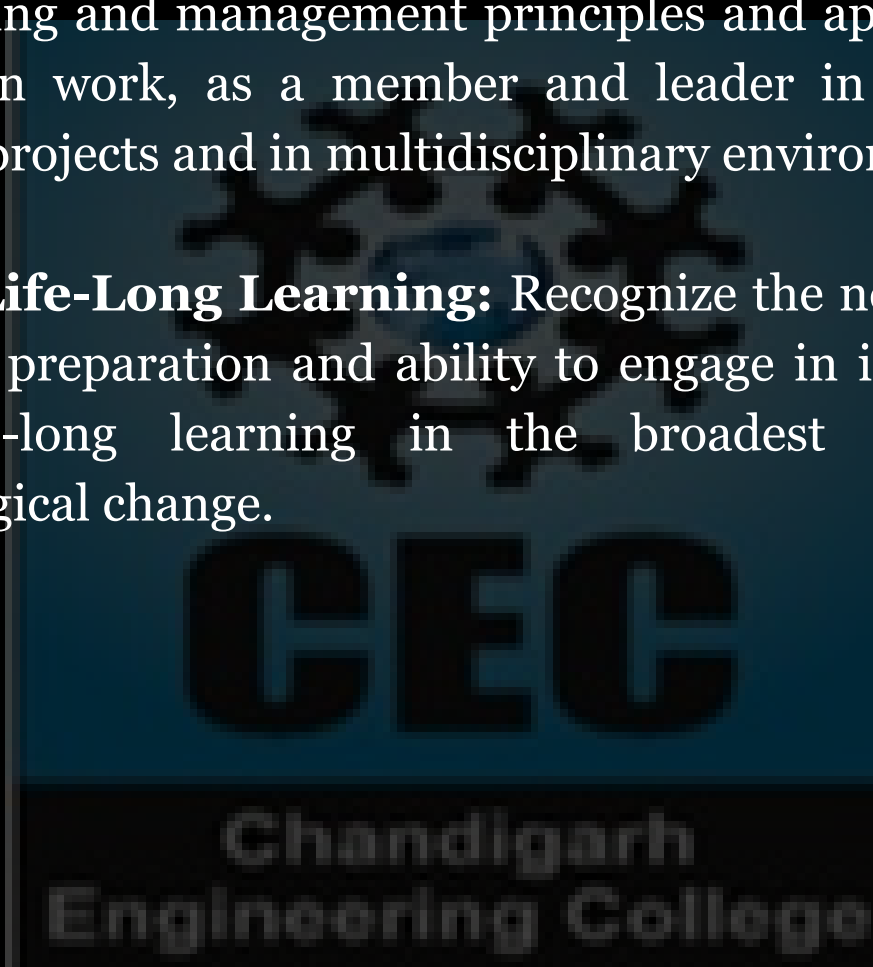
PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: 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.

PO11: 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.

PO12: 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.

ABOUT THE COURSES & CARRER PROSPECTS

The Department of Computer Science and Engineering (CSE) stands as a beacon of excellence, committed to delivering premier education while spearheading groundbreaking research and innovation. With a distinguished faculty renowned for their expertise, the department thrives not only in academia but also in pioneering advancements through nationally funded research initiatives, including AICTE-backed programs.

Fostering a dynamic industry-academia synergy, the department has forged strategic alliances and formalized MOUs with leading technology giants. It regularly hosts symposiums, exhibitions, conferences, and workshops, enriching both students and faculty across various institutions. The department takes immense pride in its illustrious alumni, who have ascended to prominent roles in elite Indian and global IT enterprises, further cementing its prestige.

Dedicated to an Education, Research, Development, and Innovation (ERDI) Strategy, the department seamlessly integrates theoretical knowledge with hands-on experience. State-of-the-art laboratories, coupled with an esteemed faculty specializing in diverse AI and data science domains, foster an ecosystem conducive to technological breakthroughs and entrepreneurship. As transdisciplinary frontiers expand, the department remains unwavering in its mission to drive progress, shaping the next generation of AI and data science pioneers.

RANK/AWARD	COMPETITION
1st	Competition of ISIE-Indian Karting Race 2022 at Galgotia University, Greater Noida, and Future Award with Cash prize amount ₹10000
4th	Competition of Thomso 22 at IIT Roorkee.
1st	Competition of AAZADI ka Amrit mohatsav at Chandigarh College of Engineering and Technology, Chandigarh.
1st	Engineers day 2022 at Chandigarh Engineering College, Jhanjeri.
3rd	Competition of Technical Quiz on Engineers day 2022.
3 badges & 1 trophy	Competition of Microsoft Azure learning 2022
Gold Position	Competition of 4×100 Relay race at Chandigarh Engineering College, Jhanjeri.
2nd	Competition of Tech linguistic quiz –java at Chandigarh Engineering College, Jhanjeri.
3rd	Public Speaking competition at Chandigarh Engineering College, Jhanjeri.

FACULTY	PUBLICATION
Dr. Rini Saxena	AN EFFICIENT ARTIFICIAL INTELLIGENCE MODEL TO PREDICT THE VALUES OF CRYPTOCURRENCIES",MATHEMATICAL STATISTICIAN AND ENGINEERING APPLICATIONS,SCOPUS VOL.71 NO.4(2022) ISSN NO. 2094-0343.
Ms. Rohini Mahajan	"A STUDY ON A TENSORFLOW/KERAS-BASED REAL-TIME FACE MASK IDENTIFICATION TECHNIQUE BASED ON ARTIFICIAL INTELLIGENCE ",INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS, IJCRT, ISSN NO 2320-2882.
Ms. Deeksha Verma	"DRIVER DROWSINESS DETECTION SYSTEM ", INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN SCIENCE, ENGINEERING AND TECHNOLOGY,VOLUME 11, ISSN NO. 2319-8753
Ms. Divyanshi Chabbra	"AN ESSEMBLE BASED MACHINE LEARNING APPROACH FOR PREDICTING DIABETICS", INSTITUTION OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS (IETE),SCOPUS.
Ms. Sumanpreet Kaur	"FACE RECOGNITION SYSTEM, INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS, IJCRT,ISSN NO 2320-2882.
Ms. Kiran Bala	"CREDIT CARD FRAUD DETECTION AND CLASSIFICATION BY DEEP LEARNING AND MACHINE LEARNING", GLOBAL JOURNAL OF ENGINEERING AND TECHNOLOGY ADVANCES,GJETA.
Ms. Kiran Bala	"MATHEMATICAL MODELING OF BIOLOGICAL SYSTEM" INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS, IJCRT, ISSN NO. 2320-2882.
Ms. Rashmi Choudhary	VIRTUAL PERSONAL ASSISTANT USING ARTIFICIAL INTELLIGENCE",WORLD JOURNAL OF ADVANCED ENGINEERING & TECHNOLOGY SERVICES.
Ms. Meenakshi Garg	"EXPLORING ON MACHINE LEARNING AND ITS PROCESS AND ITS GROWTH",IJIRCCE, ISSN NO. 23209798

Enlightening Tech Sessions at Chandigarh Engineering College
The iTechnocrats Club of the Computer Science & Engineering Department at Chandigarh Engineering College orchestrated two intellectually stimulating sessions, imparting invaluable insights into emerging technologies.
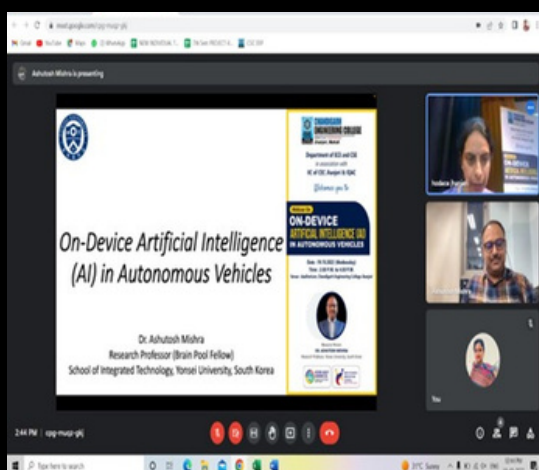
Workshop on Full-Stack Development (18th October 2022)
In collaboration with Cybertron Technologies, Mohali, a distinguished workshop on Full-Stack Development was conducted, featuring Mr. Simarpreet Singh, a seasoned Senior Software Developer. He elucidated the core principles of Full-Stack Development, shedding light on its evolution, industry relevance, and future prospects in the dynamic tech landscape.

Webinar on AI in Autonomous Vehicles (19th October 2022)
A thought-provoking webinar on "On-Device Artificial Intelligence (AI) in Autonomous Vehicles" was organized in association with Yonsei University, South Korea. Dr. Ashutosh Mishra, a distinguished Research Professor, spearheaded the session. The webinar commenced with a warm welcome by Dr. Vinod Kumar, Director Academics, who emphasized the pivotal role of AI in research and technological advancements.

Both events served as an intellectual reservoir, equipping students with profound knowledge of cutting-edge technologies and their transformative impact on the digital ecosystem.

CURRENT AFFAIRS IN COMPUTER TECHNOLOGY

Meta AI is pioneering a Universal Speech Translator (UST) to revolutionize speech-to-speech translation (S2ST), eliminating the traditional pipeline of transcription, translation, and speech synthesis. This innovation is crucial for languages without a written script, leveraging advancements in large language models (LLMs) to enhance machine comprehension and accessibility.

On the technological frontier, ISRO has announced that its next-generation satellites, starting with NVS-01, will incorporate L1 frequency capabilities. In the data infrastructure sector, Mumbai is now home to Asia's largest and the world's second-largest data center, developed by the Hiranandani Group and inaugurated by India's IT Minister.

OpenAI has launched ChatGPT, an AI-driven chatbot designed to provide precise, jargon-free responses, making AI interactions more accessible. In the realm of responsible AI, NASSCOM, in collaboration with industry giants such as Microsoft, TCS, IBM Research, Deloitte, and Fractal Analytics, has introduced the Responsible AI Hub to ensure the ethical deployment of AI at scale.

Finally, Tesla CEO Elon Musk has unveiled the latest prototype of Optimus, a humanoid robot, during the company's annual AI Day, showcasing Tesla's strides in robotics and AI integration.

TECH -WRITING SECTION

Why use the MERN stack while building Web Applications

One of the most well-liked and approachable Full Stack Web Development architectures is MERN Stack. It greatly aids in the improvement of our applications. Because MERN stack spans both the front-end and back-end, you do not need to learn several programming languages in order to construct web applications. You will have the benefit of developing websites using just one language, JavaScript, which makes it incredibly efficient and strong.

MERN Stack developers are highly sought after in the market since they are an invaluable resource for any business. All businesses, no matter how big or small, are looking for MERN Stack specialists. For the past five years, full-stack engineers have even seen an increase in Google Trends. We may conclude that the future of MERN Stack Developer is promising based on current trends.

The MERN stack uses open-source components that developers are free to use, thus nothing needs to be created from scratch. For instance, there's a good probability that someone has already created a popular framework like WordPress if you want a blogging platform.

KUMBHAJ SHUKLA

Machine Learning The Future:

Machine Learning is a rapidly growing field that is revolutionizing many industries and changing the way we interact with technology. There are several reasons why machine learning is considered the future.Machine learning algorithms can process large amounts of data and make decisions based on that data, which allows for the automation of complex tasks that would otherwise be too time-consuming or difficult or humans to do

By automating tasks and making decisions based on data, machine learning can help organizations become more efficient and productive. This can lead to cost savings and increased competitiveness in the market.

Machine learning algorithms can analyze data in a way that humans cannot, and can make decisions based on patterns and trends that humans may not be able to discern.

This can lead to more accurate and reliable decision-making.

Machine learning can be used to personalize customer experiences, such as by recommending products or content based on a customer's past interactions. This can lead to a more satisfying customer experience and increase customer loyalty.

**SHUCHI
SHUKLA
(CSE)**

Virtual Reality and Augmented Reality

Recent breakthroughs in high-speed communication and compact mobile computing have fueled an insatiable demand for immersive human-digital interactions, surpassing the constraints of conventional flat-panel displays. Augmented Reality (AR) and Virtual Reality (VR) have emerged as the vanguard of next-generation interfaces, offering immersive 3D experiences. Despite their potential, these cutting-edge technologies have yet to gain widespread consumer adoption.

AR and VR boast transformative applications across various domains, including education, healthcare, engineering, and gaming. While VR has found a stronghold in gaming, AR briefly surged in popularity with mobile applications. The true challenge lies in seamlessly integrating these technologies into daily life. VR delivers a fully immersive digital realm, whereas AR harmonizes digital elements with the physical world, enhancing real-world interactions through transparent overlays.

Financial incentives further bolster the field's allure—AR engineers command salaries exceeding six lakh per annum, making it a lucrative career prospect. Entering the industry requires minimal training, as basic programming skills, coupled with a passion for visualization, are often sufficient to secure employment. With millions of AR and VR devices sold annually, it is only a matter of time before these technologies become an integral part of our daily existence.

— Sahil Dhiman, CSE

HIGHLIGHTS:

More than 50 companies visited for recruitment. More than 70% students got placed in the companies like ZOPSMART,DELLTechnology,ISCHOOL CONNECT, AU Small FinanceBank,ACCENTURE,ECOLABDIGITAL CENTRE PVT. LTD. Highest package offered to Ankur Dhawan(10 LPA) by ZOP SMART &to Rajesh Kumar(10 LPA) by ISCHOOL,Bharti.
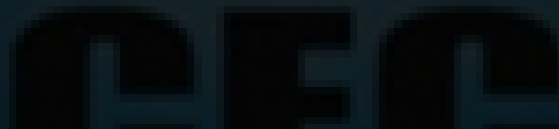
Kritika
ZS Associates Private Limited

"I was concerned about my future when I first started at CEC. We had so many opportunities for personal and academic growth over the course of the four years that I felt confident. Our knowledge, talents, and abilities are to be improved by the institution. Due in large part to my faculty member, these years at CEC have been the best in terms of learning, experience, and exposure to subjects related to my career. Finally, I'd want to express my gratitude to the college's Training & Placement Department for their ongoing efforts to place me with a reputable IT company. Our college will reach unprecedented heights as a result of our endeavor".

Ankur Dhawan
MakeMyTrip.com

"CEC is much more than merely an "Institution"... Actually, it refers to a "Culture"... excellence, empowerment, and enrichment cultures I felt fortunate to be a part of CEC. My personality has changed as a result of education, and my future goals have become more clear. I am appreciative of the Institute for providing me with direction and inspiration to help me reach my objectives"

Abhishek Singh
Nihilent Technology Limited

"After many formative years of schooling, a student's time in college is a vital stage in their academic path. While pursuing my B.TECH, I appreciated the experience of attending a school that placed a strong emphasis on developing students' general skills while also enhancing their job prospects. The teachers are smart, passionate, and really caring individuals who are committed experts in their fields. I will always be appreciative to CEC for delivering the ideal balance of academics, industry exposure, attitude, and leadership for my multidimensional learning".

FROM THE EDITORIAL ...

We are thrilled to unveil the latest edition of TECHTIMES, the biannual newsletter of Chandigarh Engineering College's Computer Science and Engineering (CSE) Department. This publication captures the department's academic and extracurricular milestones, fostering a vibrant sense of community.

In this edition, we spotlight notable achi evements, faculty and student contributions, and comprehensive training and placement statistics of the latest graduating cohort. The Student's Corner further celebrates creativity and intellectual prowess.

Our heartfelt gratitude goes to the dedicated faculty and students whose steadfast support has brought this edition to life. TECHTIMES serves as a vital conduit, connecting students, alumni, faculty, parents, industry experts, and stakeholders—offering valuable insights, campus highlights, and a platform for fresh perspectives.
We invite your constructive feedback to refine future editions.
Thank you for being an integral part of TECHTIMES!

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