

The Communiqué

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An Institution of Excellence

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Vision of the Chandigarh Engineering College- CGC, Landran, Mohali

To become a leading institute of the country for providing quality technical education in a research based environment for developing competent professionals and successful entrepreneurs.

Mission of the Chandigarh Engineering College- CGC, Landran, Mohali

- 1. To provide state of the art infrastructure and engage proficient faculty for enhancing the teaching learning process to deliver quality education.
- **2.** To give a conducive environment for utilizing the research abilities to attain new learning for solving industrial problems and societal issues.
- **3.** To collaborate with prominent industries for establishing advanced labs and using their expertise to give contemporary industry exposure to the students and faculty.
- **4.** To cater opportunities for global exposure through association with foreign universities.
- **5.**To extend choice based career options for students in campus placements, entrepreneurship and higher studies through career development program.





(Prof.) Dr. Rajdeep Singh

Director Principal

Chandigarh Engineering College-CGC, Landran, Mohali

Chandigarh Engineering College-CGC, Landran, Mohali is a centre of learning that has a great heart and passion for serving the needs of aspiring students. It is really good to see how much this academic fraternity has grown academically and socially over the years. Since its inception, the institution has been rendering valuable service for the advancement of the society. Our institution has always made outstanding progress in academics, co-curricular and extra- curricular activities. All the activities and the events bear testament to the administration's massive efforts to transform the college into a beacon of educational and research excellence.

I would like to extend my heartiest congratulations to all the contributors and editorial group of 'Communique' for successfully presenting another edition of the magazine. I am sure that 'Communique' will give all the readers a mindful delight. I wish all the students, the very best for their future.



Dr. Rachin Goyal Professor and Head Department of Mechanical Engineering

It gives me great pleasure to share my opinions about the college magazine's publication. You'll notice the college's notable accomplishments as you scan the pages. The college magazine is a reflection of the many events that take place at the institution and in which students are inspired to demonstrate their talents. The institution makes sure that students exhibit that they are not only highly qualified engineers, but also responsible and ideal citizens of our nation.

At CEC-CGC, Landran, Mohali, excellence is perceived and practiced as a continuous process, and the institute has significantly contributed in the form of internationally famous technocrats, prosperous entrepreneurs, competent leaders, creative scientists, and researchers in pursuit of this purpose. Our institution adheres to its founding principles and mission of producing thoughtful, well-rounded professionals. The college magazine serves as an example of the cross-country voyage and highlights the skills of our staff and students. The editorial team deserves praise for their enormous efforts in producing this publication.



From the Editor's Desk....

It gives me immense joy and pleasure to introduce the 26th edition of Communique magazine. Communique is a reflection of the Institution's effort for the growth and betterment of its faculty and students. It serves as an eyepiece, reflecting the Institution's multiple activities. In order to offer this newsmagazine to our readers, I really thank the amazing assistance and collaboration from the editorial team, HODs, all of my colleagues, students, and the college administration.

Every issue of our college publication is an accomplishment that records our growth, allows our imaginations to run daring, and gives life to our goals and ideas. In the minds and hearts of many stakeholders, Communiqué is an impeccable mix of informed opinion, artistry, expertise, and intellect.

Once again, through this magazine I would like to convey my thanks to all for their cooperation. Wishing you all a Happy Reading!

Inderjot Kaur

Editor

RANKING & AWARDS 2022

1. Patent Filing Rank

CGC Landran bestowed with 4th position Pan India among the Top 10 Patent filing Institutes and 3rd among the Top 5 in the field of Information Technology along with the IITs, other premium Institutions and IT Corporates in the country.

2. MoE-AICTE (2022)

CEC-CGC, Landran, Mohali has received the highest 3.5-star rating by Institution Innovation Council of the Ministry of Education (MoE) and All India Council of Technical Education (AICTE) for demonstrating excellence in activities related to Innovations, Entrepreneurship, Startups, and Research & Development.

3. Dataquest T-School Survey Awards March 2022

Chandigarh Engineering College awarded with 9th Rank among the Top 100 Engineering Colleges in the Northern Region by Dataquest T-School Survey March 2022.

4. Chronicle 10th Rank All India Engineering Colleges Survey 2022

- 5th Rank Overall among top Engineering Colleges (Government and Private) in India
- 2nd Rank Overall among top Engineering Colleges (Government and Private) in North India
- Grade A+++

5. DataQuest T-SCHOOL EMPLOYABILITY INDEX 2022

- 10th Rank Overall among top 100 T Schools (Government and Private)
- 5th Rank in North India T Schools (Government and Private)
- 4th Rank in North India T Schools (Private)

6. THE WEEK-Hansa Research Survey 2022

- 8th Rank in private colleges North Zone
- 36th Rank in private Engineering colleges across the country
- 60th Rank in Engineering Colleges all over India

7. NIRF Ranking 2022

Engineering All India Rank: 139

In Punjab

- Position including all institutes and universities (Government +Private): 6th Rank
- Position with only institutes (Government +Private) : 1st Rank
- Position with only private universities & institutes : 4th Rank
- Position with only private institutes. : 1st Rank

North India: (Punjab, Chandigarh, Delhi, Haryana, Himachal, Jammu and Kashmir, Rajasthan, Uttar Pradesh, Uttarakhand)

- Position with only institutes (Government + Private) : 1st Rank
- Position with only private institutes. : 1st Rank

8. Outlook I-Care Rankings 2022-India's Best Colleges

- 59th among top 100 private institutes in India
- 4th private institute among Punjab including University's Institutes
- 1st among private colleges in Punjab (excluding university's Institutes)

9. India Today Ranking 2022

- 2nd Rank in Private Colleges in Punjab
- 5th Rank in Private Colleges and Universities in Punjab
- 71th Rank across country (Overall India)

10. Times of India Engineering Survey 2022

- 7th in North Region
- 17th in top 125 private Engineering Institutes
- 22nd in all Engineering Institutes in India

11. Career 360⁰ Ranking 2022

• AAA+ Ranking in North India

12. NBA Accreditation

Chandigarh Engineering College-CGC, Landran, Mohali has recently received NBA Accreditation for two undergraduate courses:

- Computer Science and Engineering-Valid upto 30th June 2025
- Electronics and Communication Engineering-Valid upto 30th June 2025

13. Dataquest Tech School survey, 2022

- 2nd in Punjab in Top 100 T-Schools (Overall) Government and Private
- 1st in Punjab in Top T-Schools (Private)
- 17th rank in Top T-Schools (Private)
- 9th rank in North India (Zone Wise)
- 29th rank in Top 100 T-Schools (Overall) Government and Private

CEC - CGC, Landran, Mohali awarded with 9th Rank by Dataquest T-School Survey 2022

Chandigarh Engineering College - CGC, Landran, Mohali, is awarded as "Ranked 9th in North Region Dataquest T-School Survey March 2022" among Ranking of Top 100 Engineering Colleges in Dataquest T-School during a Higher Education Conference & Awards on Wednesday, 21st December, 2022 at India Habitat Centre, Lodhi Road, New Delhi. Dr. Nirmaljeet Singh Kalsi, IAS (Retd.), Chairperson, National Council for Vocational Education & Training, Ministry of Skill Development & Entrepreneurship, Govt. of India was the Chief Guest for the award ceremony.



ECE Department organized 5-days FDP on "MATLAB – Artificial Intelligence & Optimization Techniques"

ECE Department organized 5-days Faculty Development Program on "MATLAB – Artificial Intelligence & Optimization Techniques" through ICT mode, sponsored by NITTTR Chandigarh from 21/11/2022 to 25/11/2022. This programme was intended to provide the participants a common platform to share the knowledge, experience in the areas of Artificial Intelligence and Optimization Techniques using MATLAB. The experts from renowned institutes like NITTTR Chandigarh, IIT Roorkee, CSIO Chandigarh, PEC Chandigarh and others shared their expertise with the faculty members on the topics like Soft Computing Techniques, Bio-inspired Optimization Techniques, Latest Features of MATLAB & Simulink, Shallow Neural Networks in MATLAB, Hybrid Neuro-Fuzzy Systems, Differential Evolution Algorithm. The FDP was attended by faculty members of the host institutes and other institutes. At the end of the programme, the participants were able to understand the significance and applications AI and Optimization techniques using MATLAB.



Expert talk on "Intellectual Property"

Department of Computer Applications, CEC-CGC, Landran, Mohali organized an Expert talk on the topic "Intellectual Property" on 11th November, 2022. The aim of this talk was to provide a platform to discuss innovation and creativity in the areas of technology, sciences, and humanities that will be fostered by nurturing new ideas along with creation and promotion of IPR in College. Students were inspired about the current IPR market trends for budding computer graduates/postgraduates. They got knowledge about the importance of IPR which is critical to fostering innovation.



IT Department organized Session on "Startups and Entrepreneurship"

IT department organized a session on "Startups and Entrepreneurship". CEC-Institution Innovation Council and Dept. of IT jointly organized this session. This event aimed to increase students' awareness of entrepreneurship, inspire them to launch businesses, and also to inspire them about the world of entrepreneurship.



Expert Talk on "Principal Stresses and Strains"

The Department of Mechanical Engineering organized an Expert Lecture on "Principal Stresses and Strains" on October 04, 2022. This lecture was delivered by Dr. Sachin Kumar, Associate Professor, Department of Mechanical Engineering, IIT Ropar. The students were acquainted with the concept of Principal Stresses and Strains in the subject of Strength of Materials. During this lecture, students learned about the process of identifying the section under Principal Stresses and how to modify them. Students were also apprised about various case studies related to failure under the action of principal Stresses.



IT Department organized Expert Talk on "The Rise of Kubernetes"

Mr. Mohinder Kumar, Director of Cloud Techner Private Limited started the session of Kubernets by giving brief about the transportation containers work and about the virtualization in cloud technology works. He gave a brief introduction about the containers, dockets and kubernets. He also described about the future of this technology with some examples.



Expert Lecture on IR Spectroscopy

Dr. Kashma Sharma, a Post Doctoral from Department of Chemistry, DAV College, sec 10-Chandigarh, specializing in the area of Infra Red Spectroscopy addressed the Faculty and students of Department of Applied Sciences, Chandigarh Engineering College-CGC, Landran Mohali on 23rd November, 2022. The learned speaker dwelled on a wide range of applications of IR Spectroscopy in modern technological age. Her lecture was heard with rapt attention by the students as it included several real life illustrations. The session was attended by more than 180 students from Informational Technology, Electronics and Communication, AI-ML Engineering fields. Dr Kashma Sharma is well known for excellence in imparting education in the field of Chemical Sciences. She has won many awards and published numerous scholarly papers in national and international journals.



Awareness Programme on "Cyber Security and Internet Frauds"

The department of Applied Sciences, Chandigarh Engineering College-CGC, Landran, Mohali conducted an Awareness Programme on "Cyber Security and Internet Frauds" as a Pre-Parivartan activity. The progamme was conducted on 19th October, 2022 in Government Middle School at Village Baironpur. A few departmental faculty members and student coordinators made a visit to the school and interacted with the students. They were thoroughly briefed on practical knowledge and methods for cyber security and combating online fraud. Additionally, they received instruction on how to use mobile devices and laptops safely. All of the students showed up in full force for the session.





Industrial Visit to Amar Ujala, Panchkula

Department of Business Administration, CEC- CGC, Landran, Mohali organized an industrial visit to Amar Ujala, Panchkula on 24th November 2022 for first semester MBA students. The students learned about the overall processing of a newspaper, their marketing strategies, financial models, hierarchy and other administrative activities done by Amar Ujala. Students got an opportunity to meet with the managers of the company who explained the various segments of the Amar Ujala and shared details insight about the input processing and output that precisely make a copy of the newspaper.



Technical Events organized during Parivartan-2022

The Department of Mechanical Engineering organized three technical events, namely Robo soccer, Weldmaster and CAD modeling during CGC Landran's flagship Techno Cultural Event- Parivartan 2K22 on November 3-4, 2022. These events received an overwhelming response from the students of various colleges and schools who actively participated in these events. The winners of these events were awarded with cash prizes of Rs. 3000 (First position), Rs. 2000 (Second position) and Rs. 1000 (Third position).





ECE Department organized "Debate Competition"

Techcomm professional society, ECE department organized a debate competition for the students of the department on 17th October 2022. The objective of the event was to enhance the communication skills, confidence level and general awareness. The debate ended with both the participants agrees on the same subject or when the arguments of any one of the participants are considered stronger than the other participant. The head of the department appreciated the participants and congratulated the winners of the event.

Winners of the competition were:

- 1st Position- Simarleen Mann
- 2nd Position- Sitambhra
- 3rd Position- Muskan Kumari & Amisha Garg





Hands-on Workshop on "AI ML with Python"

To acknowledge the students with the practical application related to "AI-ML with Python", Electronics Project Club, Department of Electronics and Communication Engineering and IIIC Cell organized 1- day workshop in hybrid mode with Mr. Aanchal Mittal (Solitaire Infosys, Mohali) on 25th November 2022. The students of ECE department attended the workshop. This workshop was organized to provide hands-on session experience to students on AI ML using Python. The students practiced on Basic python programming, GUI with python, dJango, libraries and frameworks and website development. The expert highlighted the future of software & automation to be based on data analysis and driven further by AI &ML.





Industrial Visit to Grazitti Interactive, Panchkula

The department of Computer Science & Engineering, Chandigarh Engineering College-CGC Landran, Mohali organized an Industrial visit to Grazitti, Panchkula. The presentation comprised of details about the company and latest job roles prevalent in the IT Industry. Students interacted with the HR department and various Technical Heads of each team. The visit ended with lunch and a tour of the office premises.





Expert Talk on NAAC Accreditation

Dr. Manjit Singh Garewal, an expert in NAAC and other institutions' accreditation process was the Guest Speaker for the expert talk on NAAC Accreditation Process. He gave useful insights to the faculty regarding the accreditation process. He is an eminent educationist, technocrat and distinguished administrator with a career of over 45 years, spanning numerous countries, technical organizations, schools and industries. BTech from IIT, MSc(Engg) and PhD from Cranfield University, UK. Experienced, pragmatic and knowledgeable about the expectations of the higher education system, Dr Grewal is in sync with the current and futuristic technologies and quality requirements.



Techno Cultural Festival ZEST-O-FIESTA- 2022

Zest-O-Fiesta is a techno-cultural event of CSE department, held annually, providing students an effective platform to hone and showcase their technical aptitude, team synergy and cultural enthusiasm. This event gives them an opportunity to channelize their creative as well as technical potential in the right direction. This year's fest had three categories namely: technical, non-technical and cultural which was also sponsored by DigiMantra Labs, Coding Ninja and Paper Wiff. Various promising projects were shared by students in the field of technology and science. The day ended with a prize distribution ceremony and numerous inspiring stories for everyone.









Pre-Parivartan Activity on "Virtual operations are the Future Innovation"

On 18th October 2022 and 19th October 2022, Chandigarh Engineering College- CGC Landran, Mohali's Computer Science Engineering Department organized a Pre Parivartan Activity (Project presentation session), in which a team of students were sent to Government Senior Secondary School, Phase-11, Mohali and Government Middle School, Bharatpur, for spreading awareness among the students about new emerging technologies like Deep Learning, Computer Vision, Artificial Intelligence, Robotics etc.





FDP on "An Innovative Practical Approach to Big Data Apprehensive Tools"

The department of Computer Science & Engineering, Chandigarh Engineering College-CGC Landran, Mohali organized a week long FDP under Phoenix Club for interested faculty of CSE and IT department. The FDP sessions were delivered by Ms Sakshi Mehta (Innovator, ex Sr. Technical Analyst IBM Pvt. Ltd). The workshop familiarized the faculty with live working of projects on various platforms and technologies like IBM Private Cloud and Watson. The main objective of the FDP was to teach implementation of Cloud Era, Hadoop, Apache Yarna and Map Reduce Generic Identifications Application development.





Workshop on "Big Data Analytics and Augmented & Virtual Reality"

CSE Department organized a workshop on Big Data Analytics and Augmented and Virtual reality for the third-year students on October 20, 2022. It was a 2-hour workshop. Mr. Sachin Chandla, Joint Director, NIELIT (National Institute of Electronics & Information Technology) and Dr. Sarwan Singh, Deputy Director, NIELIT delivered the sessions. This workshop gave an insight about cutting edge technologies including Big Data Analytics, Artificial Intelligence, Augmented and virtual reality and their needs.





Hands-on workshop on "Android Jetpack compose camp - 2022"

Acquainting the students with the advanced knowledge in the field of Android Development in today's scenario, Google Developer Student Club of CEC-CGG, Landran, Mohali and Department of Computer Science and Engineering organized a hands-on workshop "Android Jetpack compose camp - 2022" on 06th and 07th Oct, 2022. The primary mandate of Hands-on workshop was to encourage, inspire and nurture young students by supporting them to work with new technologies such as android and transform their ideas into practically implemented applications.





Expert Lecture on IoT (Internet of things), Robotics and Artificial Intelligence

CSE Department organized an expert lecture on "IoT (Internet of things), Robotics and Artificial Intelligence" on 10th November, 2022. The lecture was delivered by Mr. Ajay Godara, Techno_preneur, Mentor of Change (NITI AYOG G.O.I), Innovator, Founder & CEO @Enovate Skill, Robotics, automation, IoT, Chandigarh, India. Third-year students of B.Tech CSE attended this Lecture.





IT Department organized an Industrial Visit to Grazitti Interactive

IT Department organized an Industrial Visit to Grazitti Interactive. The aim was to give knowledge to students about Marketing Automation, Salesforce, Devops and Full stack Development. Detailed information about Salesforce and Quality Assurance was also given.



Faculty Achievements

- Ashima Kalra published research paper on "Blockchain based energy efficient multitasking optimistic scenario for mobile edge computing", Peer J Computer Science, Oct 2022.
- ➤ Dr. Mohit Srivastava published research paper on "Technique to enhance the efficiency of edge IoT architecture", Scopus Indexed AIP Conference Proceedings, Dec 2022.
- ➤ Dr. Pooja Sahni published research paper on "Improvement in Sybil attack detection and mitigation using Diffie-Hellman method in WSN", Scopus Indexed AIP Conference Proceedings, Dec 2022.
- ➤ Dr. Ramanpreet Kaur published research paper on "Performance evaluation of AMERP for emergency handling in homogeneous WBAN", Scopus Indexed AIP Conference Proceedings, Dec 2022.
- ➤ Nidhi Chahal published book chapter "Understanding of Image Fusion" in a book titled "Convergence of Deep learning and artificial intelligence in internet of things", CRC Press, 9781003355960, Nov 2022.
- ➤ ECE faculty members got Swayam certification and AWS certifications during Oct-Dec 2022.

Patents Filed

- ➤ Patent filed on "Hygiene Maintenance Device" by Dr. Ramanpreet, Ms. Nidhi, Dr. Ankur with CBR no. 52340.
- ➤ Patent filed on "Surface Temperature Control System" by Dr. Simarpreet Kaur with CBR no. 47305.

Students Achievements

- ➤ ECE Students got Swayam certifications, AWS certifications and multiple MOOC course certification during Oct-Dec 2022.
- ➤ ECE Students participated enthusiastically in various Technical and Non technical events in CGC annual Techfest- Parivartan and won prizes in events like poster presentation, logo design, Technical quiz, etc.

Building Careers. Transforming Lives.



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