**Vision of the Chandigarh Engineering College**

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**

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.
Dear Readers,

Being the Director-Principal of Chandigarh Engineering College, it brings me great pleasure and honour to inform you that this institution is working hard to serve the nation to the best of its ability. It is a source of great pleasure for our institution that it has consistently excelled in academics, co-curricular activities, and extra-curricular activities.

Each quarterly issue of this News magazine acts as a watershed moment in our institution's development, as well as a springboard for our imagination and thinking. The Magazine reflects the values and the quality of institution itself. Every issue of this publication contains a number of proud moments. The magazine is a reflection of the students' creative talents and innovative ideas, as well as the faculty's hard work. The administration's huge efforts to convert the college into a beacon of educational and research excellence are reflected in all of the activities and events. I extend my warmest greetings and best wishes to the faculty and students, and I wish them success in their future endeavours.
It's always a joy to be a part of a team that strives to help students and employees achieve their full potential. The results speak for themselves, as Chandigarh Engineering College has always pushed to keep one step ahead of the competition. Every day, it's awe-inspiring to watch and witness our students' potential grow at all stages and in various conditions.

I believe that our team consisting is capable of doing wonders. Chandigarh Engineering College has become a symbol for excellent placements which showcases our academic and extracurricular strengths. The college magazine exemplifies the cross-country journey and showcases our faculty and students' abilities. Congratulations to the editorial team for their tireless efforts in bringing out this magazine.
From the Editor’s Desk….

I'm delighted to introduce the current issue of Communiqué, our quarterly publication. The college magazine is a great place to keep track of happenings, recollecting, and communicating creatively. It is a wonderful blend of creative thinking, art, knowledge, and wisdom that resonates in the hearts and minds of all stakeholders.

Communiqué is a platform for the students also to express their creative pursuit which develops in them, originality of thought and expression. The contents of the magazine reflect innumerable co-curricular and extra co-curricular activities that complete the process of education.

I'm thankful to all members of the editorial team, HODs, all my colleagues, students and the college management for their support in raising this news magazine for our readers.

Inderjot Kaur
Editor
1. Chandigarh Engineering College was presented with a Certificate of Recognition by the Ministry of Education, Government of India. On 29th December 2021, the college was recognized in the band "Excellent" under the category of "Colleges/Institutes (private/self-financed) (technical)" in Atal Ranking of Institutions on Innovation Achievement (ARIIA) 2021.

2. Chandigarh Engineering College awarded with “Outstanding Engineering Institute with Best Placements" title during World Education Summit 2021

3. CEC has received the highest 4 star rating by the Ministry of Education’s (MoE) Institution’s Innovation Council in association with All India Council for Technical Education (AICTE).

4. DL Ranking 2021 (Top private Engineering Institute of India 2021)
   - Ranked 10th Pan India
   - Ranked 2nd in Punjab

5. NIRF Ranking 2021
   Engineering All India Rank: 147

   In Punjab
   - Position including all institutes and universities (Government + Private): 8th Rank
   - Position with only institutes (Government + Private): 1st Rank
   - Position with only private universities & institutes: 5th Rank
   - Position with only private institutes: 1st Rank

   North India: (Punjab, Chandigarh, Delhi, Haryana, Himachal, Jammu and Kashmir, Rajasthan, Uttar Pradesh, Uttarakhand)
   - Position including all institutes and universities (Government + Private): 42nd Rank
   - Position with only institutes (Government + Private): 1st Rank
   - Position with only private universities & institutes: 17th Rank
   - Position with only private institutes: 1st Rank

6. Outlook I-Care Rankings 2021-India’s Best Colleges
   - 62nd among top 110 private institutes in India
   - 5th private institute among Punjab including (University’s Institutes)
   - 1st among private colleges in Punjab (excluding university's Institutes)
   - 19th among private colleges in North India (including University Institutes)
   - 5th among private colleges in North India (excluding University’s Institute)

7. Dataquest Tech School survey, 2021
   - 3rd in Punjab in Top 100 T-Schools (Overall) – Government and Private
   - 2nd in Punjab in Top T-Schools (Private)
   - 29th rank in Top T-Schools (Private)
   - 40th rank in Top 100 T-Schools (Overall) – Government and Private

8. India Today Ranking 2021
   - 3rd Rank in Private Colleges in Punjab
   - 6th Rank in Private Colleges and Universities in Punjab
   - 80th Rank across country (Overall India)
Chandigarh Engineering College was presented with a Certificate of Recognition by the Ministry of Education, Government of India. On 29th December 2021, the college was recognized in the band "Excellent" under the category of "Colleges/Institutes (private/self-financed) (technical)" in Atal Ranking of Institutions on Innovation Achievement (ARIIA) 2021.
Ministry of Education’s (MoE) Institution Innovation Council along with All India Council of Technical Education (AICTE) has conferred the highest 4-star rating to Chandigarh Engineering College (CEC) Landran. This highest rating has been bestowed to CEC for exhibiting excellence in conducting activities related to Innovations, Entrepreneurship, Startups and Research & Development.
CEC hosted 15th Annual Convocation

It was a glorious day for our Engineering graduates as Chandigarh Engineering College hosted its 15th Annual Convocation Ceremony on 23rd December, 2021 for the passing out batches of 2020 & 2021. The event witnessed the gleaming faces of the students, their parents and faculties, feeling the true sense of accomplishment. Mr. Sunil Goyal, Dy. Chief Executive Officer, Sopra Steria India & Chief Executive Officer, Sopra Banking Software India graced the occasion as the Chief Guest and was extended a warm welcome by our President Rashpal Singh Dhaliwal and other Management officials. More than 3000 students were conferred with the degrees. The PTU toppers were also presented with medals during the ceremony. A total of 24 Gold medals, 13 silver medals and 14 Bronze medals were bestowed to the Engineering toppers of 2020 and 2021.
Department of CSE & IT, Chandigarh Engineering College, Landran, organized 2nd International E-Conference on Computational Methods in Science & Technology (ICCMST 2021) on 17th & 18th December 2021. The inaugural ceremony started at 10 am on 17th December 2021. Hon’ble Chief Guest was Prof. Rajeev Ahuja, Director, IIT Ropar. Guest of Honor was Prof. S. Anaantha Ramakrishna, Director, CSIR-CSIO Chandigarh. There were two International speakers from Romania and UK who also joined and shared their research and expertise with all the research scholars, faculty members, and students during the inaugural ceremony of the conference. A large number of participants presented their papers in this conference. The second day of the conference started with four parallel technical sessions of presentations by the research scholars. The four technical sessions were for the papers in tracks Communication Networks, System Design & Methodologies, Big Data Analytics & Applications and ICT for Sustainable Environment. A total of 34 papers were presented and shared by all the researchers with the experts.
**Expert Lecture on Business Dynamics of Technology (Web3.0) and What comes after!**

In order to offer the students with latest insights into the emerging technologies and advancements, CSE department regularly invite renowned experts to deliver expert lecture to our students. The department organized an expert lecture which was conducted on 12th November 2021 at 2 pm in seminar hall of Block 3. Ms. Abha Chauhan-Project Manager, Sage Himalaya Consultancy delivered a lecture on the topic, “Business Dynamics of Technology (Web3.0) and What comes after!”

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**Expert lecture on Data Structures**

Experts play an important role in giving educational experience to the students. They expose students to real-world life experiences from the position of someone who has been there. One important benefit that is derived is the enhancement of the student’s educational experience. CSE department organized an expert lecture on “Data Structures” for B.Tech Computer Science second year students on 17th November 2021. The lecture was delivered by Dr. Neerja Mittal from CSIR-CSIO, Sector-30C, Chandigarh.
Workshop on Computer Aided Manufacturing

The Department of Mechanical Engineering organized a workshop for students of Mechanical Engineering on November 26, 2021. This workshop was conducted by Ankush Gupta, Proprietor of A.N.G Industries. The topic of this workshop was “CNC Machining”. During this workshop the students learned about the concept of Computer aided Manufacturing and Computer Numerical Control (CNC) machining. After an interactive session with the students, the practical training session was conducted in the advanced manufacturing lab (CNC Lab), where the students were given practical knowledge about the CNC machine and its working.

IT Department Students Scored positions in PTU Merit List

As per PTU merit list released on 17th Dec 2021, Department of Information technology students have scored various positions. In batch 2016, 4th position is achieved by Sonalika Singh. In batch 2017, 2nd, 4th and 8th PTU merit positions are bagged by Gurleen, Rishab Singla and Saloni Aggarwal. 1st PTU position was bagged by Krishan Kumar and Jasmine from 2018 and 2019 batch of IT department. Other than these 5th, 6th, 7th, 9th, 10th position are also of IT department. In 2020 batch, 1st position was achieved by two IT students and 4th, 6th position also of IT students.

IT Department students won first prize in “Ideathon 2021”

ACIC RISE Association, Mohali in collaboration with Startup Punjab, organized a National level event in line with the Sustainable Development Goals (SDGs) with the title-“In Quest of SDGs – An Ideathon 2021” on 1st & 2nd December, 2021. The first prize of Rs. 50000/- was awarded to Team Code Red from Department of Information Technology, Chandigarh Engineering College, Landran represented by Mr. Ravinder Bishnoi.
MBA Department organized 5th Online HR Symposium on “Fostering Innovation and Creativity in People Strategies”

The 5th online HR Symposium on “Fostering Innovation and Creativity in People Strategies” was organized by MBA Department on 5th October 2021. The eminent experts globally connected through this online symposium and discussion took place on best HR practitioners from the industry.

Mr. Amit Kataria, Mr. Mohit Sethi, Dr. Chandrashekhar Deshmukh, Mr. Aditya Pal Singh and Mr. Vinod Kumar were the experts who underwent a panel discussion on Innovation in HR. They all propelled upon various trends, analytics, critical thinking and decision-making skills in the field of talent management and contrasted the same pre and post-pandemic. They spoke about various practices that have seen a paradigm shift in the field of HR.

The symposium not only let students interact and learn from the best HR Tycoons in industry but also provided them with a platform to learn about different trends and practices in Human Resource Management.
MCA Department organized Session on Problem Solving and Ideation Process

A session on “Problem-Solving and Ideation Process” for students of MCA was organized on 30th November, 2021. The main objective of this session was to highlight the hidden skills of students by performing programming in various languages. This session was focused on the hidden skills of students by providing them knowledge about problem-solving.
MBA Department organized Workshop on “Equity Stock Market Concept and Investment Risk”

MBA Department organized two days workshop in association with Make intern on Equity Stock Market Concept and Investment Risk on 14th and 15th December, 2021. Make intern (Unit of Mohipuri Technologies Pvt. Ltd.) is an association which offers best training opportunities to the students as it has tie-ups with renowned colleges like ECELL IIM Calcutta and IIT Kharagpur. A total 137 students from MBA department participated in the workshop which was conducted by two experts Mr. Amit Khattar and Mr. Devinder Negi. The session was very informative and participative. Students gained the knowledge about the structure and functioning of equity stock markets, the theories governing equity stock markets, the pricing and trading aspects, and the market and regulatory mechanisms governing equity stock markets, Capital Market and its Operation, and Derivatives Market & Currency Market.

Expert Lecture on Rapid Prototyping and 3-D printing

The Department of Mechanical Engineering organized an expert talk for the students of Mechanical Engineering on November 29, 2021. Dr. Rupinder Singh, Professor & Head NITTTR Chandigarh apprised the students about the concept of 3D and 4D printing with practical examples. He also discussed the current research scenario in the field of Rapid Prototyping and its prospects in the broad area of Design Engineering.
Workshop under “Unnat Bharat Abhiyan”

A workshop under Unnat Bharat Abhiyan(UBA) cell was organized by the ECE and IT Department of Chandigarh Engineering College on 7\textsuperscript{th} December 2021. The villages covered under UBA activity were - Saidpur and Sawara located near the college. The aim of workshop was to create awareness among young and aged people about Smart Agriculture, Basics of Computers, Electrical Components and Basics of Electronics. A skit was also organized to create awareness about online frauds. The school students and locals of the village also participated in cultural performances. Overall, this workshop was very informative and motivating for all the students and villagers. Ms. Nidhi Chahal, Asst. Prof., ECE department expressed a vote of thanks to all the students and villagers for attending the workshop.
CSE Department organized CodeWar Event

Department of Computer Science Engineering, CEC organized ‘Codewar’ event with the objective to challenge the coding skills of the students. 140 students competed against each other and the top three winners were bestowed with cash prizes!

AICTE sponsored Study Trip to Atal Tunnel

The All India Council of Technical Education (AICTE) has funded 100 top engineering colleges in India to take its top ranked students from Civil, Mechanical and Structural engineering branches on a study tour to Atal Tunnel in Himachal Pradesh - Youth Undertaking Visit for Acquiring Knowledge - YUVAK Scheme.

Atal Tunnel connects Manali in Himachal Pradesh to Leh in Ladakh and is the world’s longest highway tunnel (9.02 km) constructed at a height of above 3000 meters from the sea level. It cuts down the travel time between Manali and Keylong towns by 3-4 hours. The objective of this study tour was to understand the geological and geotechnical challenges faced in the construction of the tunnel, the novel method adopted in the construction of the tunnel, inculcate research, innovation and patriotism among the budding engineers of the country.

A team of 10 students of Department of Mechanical Engineering were selected for this study tour and visited Atal Tunnel on November 30, 2021. Engineers from Border Roads Organization who constructed this tunnel, took the students on a half-day guided tour and explained the New Austrian Tunnelling Method (NATM) adopted, the ventilation systems, pollution monitoring inside the tunnel and the mode of dilution of air pollution by injecting fresh air using heavy duty fans.
**Workshop organized in association with Henkel Adhesives**

The Department of Mechanical Engineering organized a workshop for students of Mechanical Engineering on December 06, 2021. This workshop was conducted by Mr. Amit Grewal from Henkel Adhesives. The topic of this workshop was “Maintenance and Assembly Solutions (Loctite)”. During this workshop the students learned about the applications of adhesives in various manufacturing industries. The students were also briefed about the use of Loctite in thread locking, shafts, Torque Augmentation, etc.

**Expert talk on “Industrial Project - Case Studies”**

The Department of Mechanical Engineering, Chandigarh Engineering College, Landran organized an expert talk entitled “Industrial Project - Case Studies” on December 14, 2021. The lecture was delivered by industry expert, Mr. Ashutosh Butt, Sr. Consultant, AeroSphere, Chandigarh.
Expert Lecture on “Unigraphics NX-CAD”

The Department of Mechanical Engineering organized an expert talk for the students of Mechanical Engineering on December 15, 2021. Mr. Gaurav Gupta, Sr. Consultant, Parametric CADTech, Mohali, delivered an expert talk on “Unigraphics NX-CAD”. The students of 4th year attended this session and learned about the concepts of Computer aided Design and Manufacturing. The expert gave an overview of the NX Cad software and explained different capabilities of the software with case studies.
A workshop on “Process of Innovative development & Technology Readiness Level (TRL)” was organized by Department of Electronics & Communication in collaboration with Institution Innovation Council of Chandigarh Engineering College. The speaker, Prof. (Dr.) Satish Kumar, Sr. Principal Scientist, ACSIR, CSIO, Chandigarh, discussed many innovative ways of technology readiness level with the students and faculty members.

The speaker started with the concept of TRLs which can allow engineers to have an understanding of readiness for particular technology, its evolution, scope and how to achieve its top level regardless of their technical background. He stated the TRLs measure of maturity level of a technology throughout its research, development and deployment phase progression. He further explained the scaling based system from 1 to 9, with 9 being the most mature technology. Further many examples related to demonstration to go ahead were discussed with industry revolution concept, capabilities required for Industry 4.0 revolution and role of IoT and other technologies to ease out the concept. Scientific observations based on semi-integrated system/model of technology and supporting elements in a simulated environment were also presented. He explained the system prototype & its operational environment using the knowledge flow diagram.

ECE Department organized event “Techtrivia”

Techtrivia (Technical quiz) was organised by Electronics Project Club (EPC) of Electronics and
Communication Department on 23rd October 2021. This event was an excellent opportunity for all the students to showcase their technical talent and enhance their technical skills. The quiz was related to Electronics, Communication skills and Basic programming skills. E-certificate were given to all the participants. Piyush Vashisht held first position, 2nd position was held by Ranjan Kumar and 3rd position was held by Mandeep Kumar. The event was successfully conducted under the guidance of Dr. Vinay Bhatia (HoD, ECE).

ECE Department organized “TECHNOVATE 2K21”

Electronics Project Club (EPC) and Techcomm Professional Society (TPS) of Department of Electronics and Communication Engineering organized an event "TECHNOVATE 2K21" on 6th December 2021. The Department organized five events and one Expert Lecture under TECHNOVATE 2K21. The different events organized were - Orators for life (Group Discussion and PI), Uniquegenix (Unique Idea Presentation), Problem Solving Ability Test (Aptitude, Logical, Verbal and Technical questions), Deceive the Twist (Technical Puzzle Ability Test), Voice of Brains (Stand up). The winners of different events were awarded with cash prizes, certificates. The expert lecture on “Human Ethics” by Mr. Harinder Singh Hundal, Director Aemeyo (IT organization), Rotodhem, Holland was attended by around 100 participants and students were made aware of significance of ethics in personal and professional life.

IT Department organized Workshop On “Entrepreneurship and Innovation as Career Opportunity”
CEC-Institution Innovation Council and Dept. of IT organized a Workshop on “Entrepreneurship and how one can opt innovation as a career option”. In this workshop, students came to know the real definitions of Entrepreneurship and Innovation. Students were introduced with a new term ‘Ikigai’. All the queries of students regarding entrepreneurship and placements were solved. ‘Ikigai’ will help the students a lot in their future.

**Guest Lecture on Applications of NMR Spectroscopy in Modern Technological Age**

Dr. Rohit K. Sharma, a distinguished Professor from Department of Chemistry, Punjab University, Chandigarh specializing in the area of Nuclear Magnetic Resonance Spectroscopy addressed the Faculty and students of Department of Applied Sciences, Chandigarh Engineering College, Mohali. The learned speaker dwelled on a wide range of applications of NMR Spectroscopy in modern technological age. His lecture was heard with rapt attention by the students as it included several real life illustrations. The session was attended by more than 150 students from Mechanical, Informational Technology and Electronics and Communication engineering fields.

Dr Rohit K. Sharma is well known for excellence in imparting education in the field of Chemical Sciences. He has won many awards and published numerous scholarly papers in national and international journals. Earlier, the distinguished speaker was honoured & welcomed by Dr. Harpal Singh, Head of Department Applied Sciences.
Faculty Development Programme on Communication Skills

5 days Faculty Development Program on Communication Skills was organized from 10th to 14th January, 2022. This FDP was organized by Applied Sciences Department, CEC with an initiative taken by the Head of department, Dr Harpal Singh. The First day of the FDP started with a general overview on Communication skills by Ms. Inderjot Kaur, Assistant Professor (English) in the Applied Sciences department. Ms. Inderjot Kaur also delivered a lecture on the topic, “Persuasive Speaking: A Fundamental Teaching Skill”. On the second day Mr. Krishant Kant, Assistant Professor (English) in the Applied Sciences department delivered a lecture on the topic, “Effective Writing Skills”. The third day session was conducted by Ms. Navneet Kaur Assistant Professor, English on “Listening and Reading Skills”. The fourth day session was conducted by Ms. Harshmeet Kaur Assistant Professor, English on the topic “Effective Communication Skills. The Fifth and the concluding day session was conducted by Ms. Gurpreet Kaur Assistant Professor, English on “Aspects of Personality Development”.
Applied Sciences Department organized “Light-o-ween” Event

On the occasion of Halloween and Diwali falling in the same week the Applied Sciences Department of Chandigarh Engineering College, Landran, Mohali organized an inter college online event comprising of different activities. The activities were decided keeping in mind all the different fields where the students could showcase the best of their talents. The organised activities were Poster making (A theme based poster making competition to check the creativity and imagination of students), Halloween Fiesta (A theme based makeover category where the students were asked to either dress up or to do a makeover on either Halloween theme or Diwali theme) and Crackycrafts (A best out of waste category to promote hand made goods and decoration with the least expense).

The event head Mrs. Namrata Chopra judged the entries along with her team of coordinators. The winners of Halloween Fiesta were Rashmi (1st position), Savy Matharu (2nd position) and Sonali (3rd Position). The winners of Crackycrafts were Shrishti Sharda (1st Position), Mehak Garg (2nd Position) and Pooja and Tania Sharma (3rd Position). The winners of Handmade Poster making were Isha Walia (1st Position) and Vanshika Chanana and Savvy Matharu (2nd position). The winners of Digital Poster making were Amarpal Singh (1st Position) and Yash Mishra (2nd Position).
The Applied Sciences Department of Chandigarh Engineering College, Landran organized an event for the Department level Titles of Mr. and Ms. Freshers’ and Mr. and Ms. Freshers’ Runners up 2021 on 26th November and around 30 students voluntarily gave their names to compete for the titles. The event was done in three rounds. The final round consisted of walk, introduction and cross questioning by the judges who were Dr. Harpal Singh (HOD Applied Sciences), Dr. Manpreet Kaur (HOD Bcom) and Dr. Tejinder Singh Brar (HOD MCA). Four students were titled, Lakshaya Shirstava (Mr. Freshers 2021), Harnoor Kaur (Ms. Freshers 2021), Shivam Sharma (Runners Up Mr. Freshers 2021) and Esha Sharma (Runners Up Ms. Freshers 2021).
IT Department students won Silver medal in “Badminton Tournament”

B.Ed Department organized a 3-Day Badminton tournament for Girls and Boys students in association with the Department of Student Welfare from 13th - 15 Dec, 2021. A team of 5 girls from the Department of Information Technology grabbed a silver in the tournament. The runner up departments for the day was Information Technology (Girls) and B.Com (Boys). The participants exhibited true spirit of sportsmanship during the event. Silver Medal winner Girls are Mahima, Sacheta, Manpreet, Kanika and Aditi.
Faculty Achievements

- ECE Department’s Dr. Dinesh Arora’s name has been published in a book “50 Eminent Researchers of 2021” Vol.1, December 2021 in an event organized by International Institute of Organized Research (I2OR), India.
- Ms. Rachna Manchanda of ECE department has been awarded with the participation certificate in the category “Working conditions; ensuring occupational health and safety issues” for presenting a prototype/innovative solution of “AUTOMATIC GARBAGE PICKER” under the theme “India’s Economic Recovery Post Covid; Reverse Migration and Rehabilitation Plan to support “Atmanirbhar Bharat” organized by AICTE Regional Level Chhatra Vishwakarma Awards 2020.

Students Achievements

- Sukhbir Singh Student of 5th sem has been awarded with the participation certificate in the category “Working conditions; ensuring occupational health and safety issues” for presenting a prototype/innovative solution of “AUTOMATIC GARBAGE PICKER” under the theme “India’s Economic Recovery Post Covid; Reverse Migration and Rehabilitation Plan to support “Atmanirbhar Bharat” organized by AICTE Regional Level Chhatra Vishwakarma Awards 2020.
- Mohit Kumar Gupta (5th sem), Kuldeep Rajput (5th sem) and Ravi Kumar (3rd sem) participated in Inter – College Quiz Competition organized by Senior Deputy Director General, Department of Telecommunication, Punjab, licensed service area on 27-10-2021 and scored 3rd position in the event.

Research Publications

- Dr. Simarpreet Kaur published a paper on “Security enhancement of 2-D DIM codes using 4 × 1 NOR logic based on FISO” in International Journal of Optical and Quantum Electronics-Springer.
- Dr. Mohit Srivastav and Dr. Simarpreet Kaur published a paper on “Hybrid Local-Global Optimum Search using Particle Swarm Gravitation Search Algorithm (HLGOS-PSGSA) for Waveguide Selection”, IEEE Access.

Patents Filed

- Rider Safety System For Two Wheelers. Inventors: Himanshu Raj, Heena, Uditya Chourasia, Ritik Kumar
- Contact-Less And Hygienic Examination Conduction System. Inventors: Dr. Rinkesh Mittal, Dr. Parveen Singla, Kumar Parth, Palak