



## Vision of ECE Department

To produce skilled, socially –sensitized and globally competitive professional engineering graduates in the area of Electronics and Communication Engineering.

## Mission of ECE Department

1. To provide quality and contemporary education through innovative teaching-learning process and effective resource utilization.
2. To develop responsive and socially sensitive engineer through research oriented practices.
3. To promote industrial collaboration for providing practical exposure leading to industry ready engineering graduates.
4. To open new vistas of learning for students through international collaborations.
5. To provide conducive environment through pre placement training and professional development activities for providing ample opportunities of placements, higher studies and entrepreneurship.

## INDUSTRIAL VISIT TO SOLITAIRE INFOSYS, MOHALI ON 21.7.23



Electronics and Communication Engineering Department and IIIC Cell organized industrial visit to Solitaire Infosys, Mohali on 21.7.23 for the students of B.Tech 3rd semester. The main aim of this industrial visit was to educate the students about the latest technologies used in the IT Industry. The session was organized by an expert speaker Mr. Joginder Singh, Project Manager of Solitaire Infosys. He taught the students about various technical topics and the importance of projects and skills on Mobile applications, Web Applications, Enterprises



Applications, Digital Marketing Strategies, Tech Support & Maintenance. All the questions raised by students were satisfactorily addressed. Students were elated to visit such a prestigious organization where they got to witness the working of Software Development Company.



## INDUSTRIAL VISIT TO CDAC MOHALI ON 20.7.23

ECE Department in collaboration with IIC Cell organized industrial visit to CDAC Mohali for the students of B.Tech. 3rd semester on 20th July 2023. This event was organized to make students aware of the current and future industrial requirements. In this event, students came to know about virtual reality technology and usage of it in today's world with the help of live orientation. Students came to understand about various cyber security forensic tools like Advik (CDR Analyser), Netforce Suite, Win-LiFT (Windows Live Forensics tool), SIMXtractor.







## SYMPOSIUM OF INNOVATION ON 18.8.23

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Techcomm Professional Society in collaboration with “Institution’s Innovation Council” organized an event “Symposium of Innovation” on 18th August, 2023. This event was organized to make students showcase their hidden talent and to bring their innovation in front of everyone and providing them a platform. The event was divided into two sections: Project Display and Poster Presentation.

### Winners of the Project Display

1. Harshit (Project LIVA)
2. Yash (Project Smart Farming)

### Winners of the Poster Display

1. Sonam
2. Aditya and Sonali



## INDUSTRIAL VISIT TO AMBER ENTERPRISES INDIA LTD. RAJPURA ON 17.8.23

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ECE department has organized an industrial visit to AMBER Group Enterprises limited, Rajpura dated 17.8.2023 for students of 3rd sem. Amber Enterprises India Ltd is a prominent solution provider for HVAC Industry in India. It has a dominant presence in RACs complete built unit and major RAC components with 27 manufacturing facilities across India focusing on different product segments. Diversified product portfolio includes various



products like Room AC (indoor & outdoor units as well as window ACs), Reliable Critical Components, and Mobility Applications for railways, metros, buses, and defence, among others. Design capability along with strong R&D is one of the core strengths of the Group. Students has learned a lot about the various research areas in core electronics and designing.



## EXPERT LECTURE ON “INNOVATION IN ELECTRONICS AGRICULTURE INSTRUMENT FOR SMART FARMING ”

The Department of Electronics and Communication Engineering organized an expert talk on the topic “Innovation in Electronics Agriculture Instrument for Smart Farming” on 18th August, 2023. The expert talk was organized by Electronics Project Club (EPC) in association with Institutional Innovation Council (IIC) and Institutional Industry Interface Cell (IIIC) of ECE Department. The expert, Mr. V.D Shivling (Chief Scientist CSIR-CSIO) provided insights into the topic for the students.

The speaker discussed about the sustainable development goals and how farming technique and equipment have revolutionized over the time. The expert also talked about various other topics like hyper spectral camera, seed dropping and also about innovation done by his team till now in the field of Agriculture





Instrument for Smart Farming. It was an enlightening session for all the students and faculty members of ECE Department.



## INDUSTRIAL VISIT TO SOLITAIRE INFOSYS, PVT. LTD, MOHALI

ECE Department in collaboration with IIC organized Industrial visit to Solitaire Infosys, Pvt. Ltd, Mohali on 24<sup>th</sup> August 2023. This event was organized to enhance awareness about the current and future industrial requirements. In this event, students came to know about virtual reality technology and its usage in today's world with the help of live orientation and activities done in the past. Students came to know about how to become a software developer in the emerging field of cyber security tools, ethical hacking. A very insightful and interactive event for students in which students learnt about how to explore various business opportunities to enterprises worldwide which left students with clarity and new information to work upon.



## INDUSTRIAL VISIT TO SEMICONDUCTORS LIMITED (SCL), MOHALI

ECE Department in collaboration with IIC organized Industrial visit to Semiconductors Limited (SCL), Mohali on 25<sup>th</sup> August, 2023. The visit aimed at sensitizing the students about the various domains of VLSI design in India. The students visited the various sections like the Fabrication Lab where they learned about how the chip is fabricated starting from a silicon wafer and undergoing various processes. They also visited the assembly section where the chip is finally assembled to the form it is made available to customers. They also got an insight into the testing section where the final stringent testing of the chip is done so as to make a complete product. It was an educative and fruitful visit, with immense exposure to the real world techniques and ongoing industrial research work benefitting the students of ECE Department. On the whole, the visit was quite beneficial for the students as they got practical exposure to the VLSI industry and also helped them enhance their technical skills.





## INDUSTRIAL VISIT TO SOLITAIRE INFOSYS, PVT. LTD ON 29.8.23

ECE Department in collaboration with IIC organized Industrial visit to Solitaire Infosys, Pvt. Ltd, Mohali on 29th August 2023. Students came to know about current and future industrial requirements related to virtual reality technology and its usage in today's world with the help of live orientation and activities done in the past. A very insightful and interactive event for students in which students learnt about how to explore various technical opportunities in the field of cyber security and ethical hacking which helped students with clarity and new domains to work upon.





## INDUSTRIAL VISIT TO WONDER SYSTEMS

The Department of Electronics and Communication Engineering in collaboration with IIC organized an industrial visit to “Wonder System India Pvt. Ltd.”, Mohali on 11th September 2023 for the students of 3rd semester. The basic thrust of the conducting this industrial visit was to provide maximum technical exposure to students about widest range of training program like Industrial automation, along with high performance servos and panel mounted devices. Students were given exposure to the current hardware and software market requirements in the areas of areas like PLC, AC Drives, DC Drives, HMI, SCADA & software testing.



## “DE-ADDICTION OF DRUGS- SAY NO TO DRUGS” UNDER UBA

An interactive and informative session on the theme “De-Addiction of Drugs- Say No to Drugs” was organized on 14th September 2023 by the Unnat Bharat Abhiyan (UBA) cell of Electronics and Communication Department in the village of Saidpur





adopted by the Chandigarh Engineering College-CGC Landran, Mohali. The main objective of event was to make them aware about the consequences of Addiction of Alcohol and to make the villagers aware about the De-Addiction of Drugs. The UBA cell also organized a session in the Government high school of Saidpur village which includes various informative and interactive activities for children like making a software game from scratch, dumb charades, sketching competition and many more. The students were also given gifts and chocolates as a token of appreciation. The villagers were able to enhance their awareness about the bad impact of drugs and alcohol in our society.



## INDUSTRIAL VISIT TO PUSHPA GUJRAL SCIENCE CITY

The Electronics and Communication Engineering Department organized an enriching industrial visit to Pushpa Gujral Science City, Kapurthala on 15th September 2023. This outing provided an exceptional opportunity to the students to delve into the realms of science and technology. One of the highlights of this visit was the Robotics Competition, where our students showcased their engineering skills and creativity. This competition not only encouraged innovation but also fostered teamwork and problem-solving abilities among the participants. The students visited several galleries - Amazing Living Machine, Science of Sports, Virtual Reality and Cyber Space, Earthquake Simulator, convention hall and Dinosaurs park to grab memorable, entertaining, knowledge-based and excitable experience.



## TECH-UP EVENT ORGANIZED BY ECE DEPARTMENT

Electronics Project Club of ECE Deptt. in collaboration with ACIC RISE Department orchestrated a highly anticipated event “Tech Up”- Power Point Presentation Competition on 15th September 2023. The primary objective of this event was to encourage participants to collaboratively generate innovative solutions to specific challenges or problems within a defined time frame. What made this event truly remarkable was the diverse pool of participants it attracted. Students from various academic departments came forward, eager to present their innovative ideas. The competition provided a unique platform for them to not only showcase their technical acumen but also to flex their non-technical skills, such as effective communication and presentation abilities. The event was highly informative for the participants as well as the attendees. They came to know about various cutting-edge technologies, inspiring innovative ideas and speaking skills to make the pitching a success.







## RESEARCH PUBLICATIONS BY ECE DEPARTMENT

### BOOK CHAPTERS

Dr. Ashima Kalra	Applications of Artificial Intelligence Across Industry 4.0	CRC Press
Dr. Ashima Kalra	Nature Inspired Computing for Optimization	CRC Press
Dr. Ramanpreet Kaur	Performance Comparison of Routing Protocols of WBAN for Emergency Handling in Homogeneous Network	Springer
Dr. Ramanpreet Kaur	Recognition of Hypertension Through Retinal Fundus Images by Segmentation of Blood Vasculature	Springer
Dr. Tarun Singhal	Methods and Applications of Graph Neural Networks for Fake News Detection Using AI-Inspired Algorithms	IGI Global
Nidhi Chahal	Impact on Industrial and Domestic Applications	Scrivener

## AWARDS RECEIVED BY FACULTY ON TEACHERS DAY

<b>Dr. Simarpreet Kaur</b>	<b>Best teacher</b>
<b>Dr. Abhishek Sharma</b>	<b>Best teacher</b>
<b>Dr. Ashima Kalra</b>	<b>Special achievement</b>
Dr. Pradeep Gaur	Achievement
Ms. Nidhi Chahal	Achievement
Dr. Pooja Sahni	Achievement
Dr. Ramanpreet Kaur	Achievement
Ms. Rachna Manchanda	Achievement
Ms. Preeti	Achievement
Mr. Naresh Sharma	10 years



# ELECTRIC FLASH

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Dr. Ramanpreet Kaur	15 years
Ms. Rachna Manchanda	15 years
DR MOHIT SRIVASTAVA	RESEARCH COORDINATOR
DR BHAWANA TANDON	BEST IQAC COORDINATOR
MS NIDHI CHAHAL	BEST ALUMNI COORDINATOR
DR ANKUR SINGHAL	BEST MENTOR
MR SHANKER LAL	BEST LAB ASSISTANT/TECHNICIAN/ INSTRUCTORS

## CHIEF EDITOR MESSAGE

This newsletter is intended to be published quarterly in a year. This issue is a brief account of the important events held from July to Sept 2023. It is expected that wide support for this mission will be provided through the reader's valuable suggestions and comments. This issue of newsletter should inspire all of us for a new beginning enlighten with hope, confidence and faith in each other in the road ahead.

**Chief Editor: Dr. Ashima Kalra**

**Student Editors: Kashish, ShivOm  
Sharma**