



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 CDAC MOHALI ON 17.8.2022



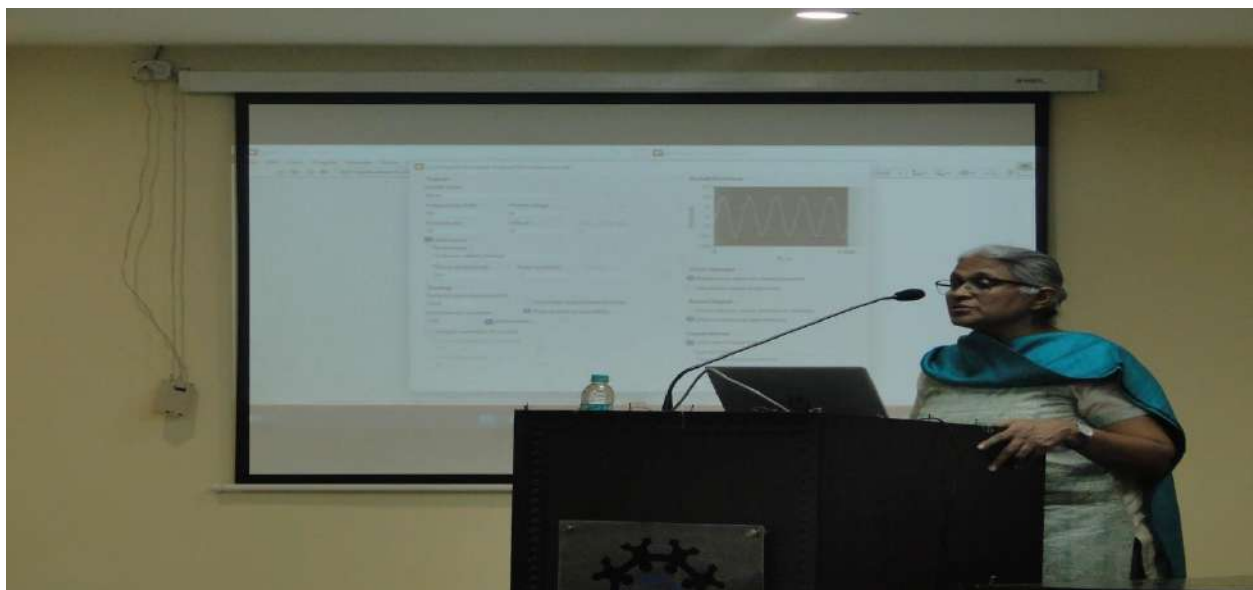
The department of Electronics and Communication Engineering organized an industrial visit to **CDAC Mohali** on **17 August 2022** for the students of B. TECH 3rd Semester along with the two faculty members of ECE department, Ashima Kalra and Dr. Kuldeep. Students visited the Bio medical Lab and Cyber Security Lab and learnt different aspects of corporate world, technical and non technical. Students highly motivated to gain practical exposure of equipments and tools during this industrial visit.

HIGHLIGHTS OF THE VISIT:



- Electronics Product Design & Technology (EPD)
- Very Large Scale Integration (VLSI) Design
- Embedded Systems (ES) and Information Technology (IT).
- Hydroponic farming
- Artificial intelligence key points
- Mac operating system

EXPERT LECTURE ON APPLICATIONS OF LABVIEW IN CONTROL SYSTEM ON 29.9.2022



An Expert Lecture on Applications of LabVIEW in Control System was organized by Electronic Project Club in association with IETE and IIIC of ECE Dept. on 29.09.2022 in Seminar Hall Block-1. It was undertaken by Dr. Lini Mathew (Head, EE Dept, NITTTR Chandigarh) who provided significant knowledge of the industry trends and carrier opportunities to the students. LabVIEW with its simulation module is add-on software that integrates with the programming environment to offer capabilities such as built-in parallelism, multicore, and multi-rate technologies as well as tools for deploying to real-time hardware. Using the LabVIEW application students can custom test for a better understanding of the whole concept.

Some Highlighted Topics were discussed:

- Introduction to Virtual Instrumentation
- Application of LabVIEW



ELECTRIC FLASH

VOLUME -6, ISSUE -5, JULY-AUGUST 2022

- Front Panel
- Back Panel
- Different types of Palettes
- Data flow Programming
- Broken Run unwired terminals
- How does LabVIEW work



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 - How does LabVIEW work
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INDUSTRIAL VISIT TO WONDER AUTOMATION PVT LIMITED, MOHALI ON 9.8.2022

The department of Electronics and Communication Engineering organized an industrial visit to **Wonder Automation Pvt. Ltd.**, E-192 Sector 74, S.A.S. Nagar Mohali 160059, Punjab on..09 August 2022 for the students of B. TECH 3rd Semester along with the two faculty members of ECE department.



The Company manufactures PLCs, AC & DC drives etc. Trainer motivated to the students to select their domain and area of interest. She also guided the students to select the areas like PLC, AC Drives, DC Drives, HMI, SCADA & software testing etc. and its importance in the current hardware and software market. She also guided on Advance technology which is their working technology. Finally she gave a brief introduction of Wonder Automation Pvt. Ltd. and Training Division Company to the students.

TECHNOLOGIES SHOWN TO STUDENTS : PLC, AC Drives, DC Drives, SCADA



HIGHLIGHTS OF THE VISIT:

1. Visited stepper, compact and high performance servo, AC variable speed, high current output DC and panel mounted drives.
- 2 Exposure to Industry oriented courses.
- 3 Multi-Disciplinary programs
- 4 On-site practical exposures

Visit was knowledgeable. Company motivated the students for future scope of Hardware and software technology. Students learned about SCADA, PLCs.

EXPERT LECTURE ON “START IT UP WITH INTERNET OF THINGS (IOT) AND MACHINE LEARNING (ML) ON 25.8.2022



An Expert talk was organized for B.Tech. Students of 5th semester. The Guest Lecture was given by Dr. Tulika Mehta, Director, Kaizen Systems, Mohali on the topic “**Start it up with Internet of things (IOT) and Machine Learning(ML)**”. The speaker explained how Internet of things (IOT)



and Machine Learning (ML) can be utilized for latest development and project work. The use of IoT and its applications in industries were also well explained. She also explained how IoT and ML has revolutionized the world in the field of electronics, and how along with microprocessor various applications and projects can be made possible and can become smart after combining with IOT Technology. **The Students were able to know Basic & advance knowledge of Embedded system design using IOT .**



EXPERT LECTURE ON “INDUSTRIAL DESIGN 4.0 ON 8.9.2022

An Institute Innovation council & Techcomm professional society of ECE organized an Expert talk for B.Tech. Students of 5th semester on the topic Industrial design 4.0. The Guest Lecture was given by Er.Harsween Kaur, Director, Wonder System Private limited, Mohali. The Speaker



explained how Industry 4.0 has revolutionized the world, she added how the evolution to cyber-physical systems, representing the fourth *industrial revolution* in manufacturing and industry has put impact on productivity, speed, better choices and many more features were being told by the speaker. The use of SCADA, PLC & HMI along with applications in industries and how they are being connected using Artificial intelligence & Machine learning were explained one by one by the speaker. She added Industrial automation is the control of machinery and processes used in various industries by autonomous systems through the use of technologies like robotics and computer software has made the life very easy. She demonstrated some of the live examples via video's pictures and graphs. **The Students were able to know Basic & advance knowledge of Industry design 4.0.**





WORKSHOP UNDER “UNNAT BHARAT ABHIYAN” ON 13.9.2022



The Unnat Bharat Abhiyan (UBA) Cell of Chandigarh Engineering College organized a workshop by the **ECE Department** on 13.09.2022. The ECE department has adopted the “Saidpur” village under UBA. The workshops consisted of two major parts. The first part comprises of Project making, project displaying, quiz held at the school and the other part contains medical camp, hygiene awareness and activities like Embroidery and best out of waste learning in the village.

The UBA team went to the Government High School, Saidpur. The Students from class 9th and 10th were taught the basics of electronics by displaying some basics projects to them accompanied by project making. The Session was later followed by General Knowledge Quiz. Likewise, a Medical camp for dentist, allopathy and homeopathy was scheduled for the villagers. Notably, the hygiene awareness as well as was embroidery techniques and best out of waste teachings was also planned for them. Approximately, 100+ people actively participated in the event.

In a nutshell, the workshop was a huge success. The team got very positive response from the school as well as the village. Ms. Nidhi Chahal, Asst. Prof ECE Department presented its warmest wishes to all the students and villagers for attending the workshop.



PLACEMENTS

We have a very good placement record as

DXC Placed: 71

Capgemini Placed: 48

Accenture Placed: 8

Cognizant Placed: 37

- Mr Anish got Placed in Incture Tech at 6.25 LPA
- 3 students, Prerna , Sajeela aqeel and Meenakshi Devi, got placed in The Math Company at 5.5LPA
- Yalla Ramesh got selection in EY GLObal at *7.61 LPA
- Mr Robin Tuteja got placed in Amazon at CTC 44.14 LPA(as per CRC Notice)
- PRIYA- 1902473 and YUKTA-1902587 got placed in ADP INDIA with Package - 6 LPA
- Kuldeep and Saurabh got selected in Secure Meters



TWO-DAYS

4TH INTERNATIONAL CONFERENCE ON

INNOVATIONS IN COMMUNICATION, COMPUTING AND SCIENCES
(ICCS-2022)-14-15 SEPT'2022



Two days International Conference on Innovations in Communication, Computing and Sciences(ICCS-2022) and International Conference on Contemporary Advances in Mechanical Engineering(ICCAME-2022) organized by Department of ECE and ME marked its beginning with the enlightening inaugural ceremony on 15th September, 2022. The inaugural session started with the lamp lightening by Prof.(Dr.)Rajiv Kumar Garg, (Chief Guest, Professor (HAG), Former Director NIT Arunanchal Pradesh & Director Incharge NIT Jalandhar) , Dr. Sanjay Sood



ELECTRIC FLASH

VOLUME -6, ISSUE -5, JULY-AUGUST 2022

(Guest of Honor, Associate Director, C-DAC, Mohali), Prof.(Dr.) Inderdeep Singh (Keynote Speaker and Guest of Honor, Head of Department of Design, IIT Roorkee), Prof. (Dr.) P. N. Hrisheeksha (Campus Director, CGC Landran), Prof. (Dr.) Rajdeep Singh (Director Principal, CEC), Prof.(Dr.) Harbinder Singh(Associate Dean R&D, CGC Landran), Prof. (Dr.) Vinay Bhatia (HOD,ECE) and Prof. (Dr.) Rajesh Sharma (HOD, ME). This conference witnessed significant participation from academicians, researchers as well as experts from industry. Chief Guest, Prof.(Dr.)Rajiv Kumar Garg highlighted about NEP 2020 and advanced technologies in multidisciplinary environment to enhance the technical skills of the students. Keynote Speaker and Guest of Honor, Prof. (Dr.) Inderdeep Singh talked about affordable design products that are environment savvy. Guest of Honor, Dr. Sanjay Sood enlightened the audience with his knowledge in the field of Telemedicine informatics along with various tools used in telemedicine field. Keynote Speaker, Mr. Michael Kahl, Global Application Manager, M.S. Raith Technology, Amsterdam, Netherland discussed and enlighten the delegates on the Quantum computing, beam lithography, quantum dot array concepts.





A total of 400+ papers were received, out of which 179 papers were accepted, registered and presented in ICCS 2022 and ICCAME 2022 from India, Canada, South America and Oman. After the successful presentation of the papers in four sessions for two days, best paper award was given to Tameem Ahmed (1st Session), Nadeem Akhtar (2nd Session), Kavita Sharma (3rd Session) and Hashir (4th Session) in ICCS 2022. The best paper award of ICCAME 2022 was given to Rupinder Singh (1st session), Ms. Neeru (2nd Session), Mr. Sahil (3rd session), Dr. Punit Patel (4th Session), Ms. Aditi Mahajan (5th Session), Dr. Aman Kumar and Mr. Sandeep Gairola (6th Session). The sessions were chaired by Dr. Vivek Pahwa, (Prof., UIET Chandigarh), Dr. Anil Bhardwaj, (SMVU, Katra), Dr. Ambrish Maurya (NIT Patna), Dr. Chetan Kumar Kirwani (NIT Patna), Dr. Sarabjit Singh (PEC Chd), Dr. Jimmy Karloopia (PEC Chd), Dr. Krishnakant Dhakar (SGSITS, Indore) and Dr. Irfan ul Haq Siddiqui (King Saud University, UAE). Poster Presentation was also organized as a part of the conference. The winners of Poster presentation are: Team Bloodbonds (1st prize), Team Warriors (2nd prize), S²Y (3rd Prize).

SCI/SCIE PUBLICATIONS

Many of our Faculty members have published research papers in SCI and SCIE Journals.

- Dr. Harbinder, “Design and synthesis of circular antenna array using artificial hummingbird optimization algorithm”, Journal of Computational Electronics, Springer, Aug 2022.
- Ashima Kalra, “Energy Efficient Multi-Tasking for Edge Computing using Federated Learning”, International Journal of Pervasive Computing and Communications- Emerald journal. July-2022.

FACULTY ACHIEVEMENTS

- Dr. Bhawna Tandon and Dr. Ankur Singhal have got the Best Teacher Award on Teachers day, 5th Sept 2022.
- Ms. Nidhi Chahal has got Award of Appreciation 2022.
- Six faculty members have received Achievers Award 2022- Dr. Vinay Bhatia, Dr. Tarun, Ashima Kalra, Dr. Dinesh, Dr. Sukhdeep and Dr. Kuldeep.
- Three faculty members have received Award for Special Achievement 2022- Dr. Mohit, Dr. Simarpreet and Dr. Ramanpreet.



- Dr. Ramanpreet Presented paper in ETBS 2022, JUIT, Waknaghat, in September 2022 on "Performance comparison of routing protocols of WBAN for emergency handling in homogeneous network". Springer publication.

STUDENT ACHIEVEMENTS

Two students of 3rd sem, Arsh Vats and Ishu Banga got second prize in project display at Chandigarh Engineering College, Jhanjeri in the celebration of Engineers day 2k22 on 15 sept'2022.

PATENTS

- Waste water Management System, PIE No. 1113
- Assistive device for visually impaired person, PIE No. 1040

CHIEF EDITOR MESSAGE

This newsletter is intended to be published quarterly in a year. This inaugural issue is a brief account of the important events held from April to June 2022. It is expected that wide support for this mission will be provided through the reader's valuable suggestions and comments. This is only a small step towards a long journey. 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: MsAshimaKalra