



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.

EXPERT LECTURE



Electronics Project Club of ECE Department organized an Expert Lecture on “Drone

Technology” on 2nd April, 2019 in seminar Hall, Block 1. CEC Landran for 4th semester students. The vision behind organizing this lecture was to groom the industry based skills of the students and to enhance their technical skills in the field of drone. We have invited industry expert Er. Manish Pandit from Fly-X, who has already run different “on campus Training” at many colleges and having experience in handling the projects of various Departments of industries.



INDUSTRIAL VISIT TO KASAULI, HIMACHAL PRADESH

An industrial visit to Doordarshan Kendra (Prasar Bharti); Kasauli, Himachal Pradesh was organized by Department of Electronics & Communication Engg., CEC Landran on 3 April 2019. The visit was well coordinated by Ms. Tejinder and Mr Gaurav Garg of ECE department. Total 52 students of 4th and 6th semester along with faculty members of the

department attended the same. The Doordarshan Kendra of Kasauli (A Government Undertaking) was established here in early 80s. In Doordarshan Kendra (Prasar Bharti), Students visited the entire studio like control room, music studio, playback studio, talks studio, Transmitter Section, recording room; etc.



The visit started with the video recording room where the company personnel explained the concepts of lighting, cameras used with live demonstrations. There are total 3 ELG cameras & 1 ENG camera in that studio. Then he showed the working of control room to the students. At control room there are two VM i.e. Video mixing machine, which mixes the video output of those ELG cameras. He demonstrated the students that how the video from CCU (Central Control Unit) comes to VTR (Video Tape Recorder) then to CCVS (Color Composite Video Signal). Then he took the students to Audio control room where he showed the tally distribution and audio console, from which they control the audio signals by altering the Frequencies of sound. He also explained about the different frequency band i.e. HF, VHF, UHF etc, Transmitter & Receiver, uplink & downlink frequency, Line of sight, analog & digital signal, resonance, microwave communication, satellite communication, waveguide, multiplexing, RF, digital encoding, quantization, noise, earth station, power supply, signal transmission, and many more such devices and principles. After that, they headed towards the transmission part. The tower situated at the height of 1680 meter above sea level is 130 meter high, including 14-meter height of DD 1 antenna. The signal-catching facility is outstanding and currently is also used by private Operators on Rent. It's the transmitter station from where all the received frequencies are captured and transmitted in the form of radiations. The visit was exceptionally good and knowledgeable for the students as well as the faculty. All the students highly enjoyed their entire visit. It was an amazing experience of fun & learning.



INDUSTRIAL VISIT TO (C-DAC)

An Industrial visit to the Centre for Development of Advanced Computing (C-DAC), Mohali was organized by the department of Electronics and Communication on 18 June, 2019 for the 3rd semester students of AB & CD sections. The visit was coordinated by Er Meenakshi and Er Mamta

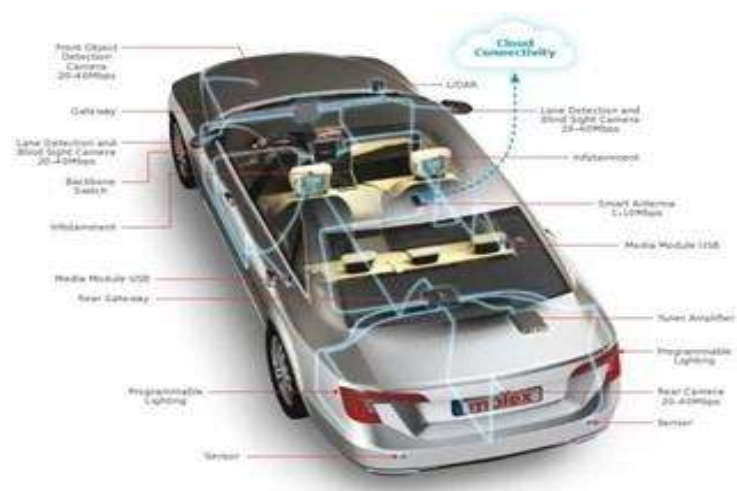
Janagal. As part of the mandate given to C-DAC, Mohali to generate manpower to address the growing demand for trained manpower in the extremely fast moving sector of Electronics & Information Technology C-DAC, Mohali has established its ACSD (Academic & Consultancy Services Division). ACSD has been providing high-end training in the field of hardware and software, running M.Tech programmers along with its Research and Development activities in various fields viz., Electronics Product Design & Technology (EPDT), Very Large Scale Integration (VLSI) Design, Embedded Systems (ES) and Information Technology (IT)., ASIC IP development, microprocessor, microcontroller. C-DAC has designed, deployed and transferred manufacturing technology for numerous large scale electronics systems as well as small footprint VLSI and Embedded System Products for applications ranging from



Supercomputing, Energy Measurement, Personal Computing, Medical appliances, Power and Process control. During this visit an expert lecture was scheduled and the expert lecture was delivered by Dr. Balwinder Singh.

RECENT TRENDS on HIGH-SPEED NETWORK SOLUTIONS

FOR THE NEXT GENERATION OF CONNECTED VEHICLES



In response to growing data acquisition and computational needs, in-vehicle networks are going to have to go through some radical changes. The inclusion of ever greater numbers of on-board sensors, combined with uptake of a plethora of new data-intensive multimedia technologies, will set major challenges for the networking hardware incorporated into our cars. There will be implications in terms of supporting adequate bandwidth, as well as cabling weight, system complexity and overall cost. Back in the 1980s, the average car had just a handful of electronic control units (ECUs), while today there can easily be well over a hundred present. The advent of advanced driver assistance systems (ADAS) and in-vehicle infotainment (IVI) have already led to a substantial ramp up in the data overheads of vehicle models. At first this was mainly seen in luxury models, but it has now proliferated further down into medium end and economy models too. Figure 1 gives an indication of the scope of functionality that is now being expected.

PATENTS FROM ECE DEPARTMENTES

- INTELLIGENT WALKING APPARATUS
- ACCIDENT AVOIDANCE SYSTEM
- INTRUDER DETECTION SYSTEM
- POWER MANAGEMENT SYSTEM



PATENTS SELECTED FOR RFE “Women Self Defence Wrist Band”

DEPARTMENT TOPPER

- In 2nd Semester is “Tanvi Kakkar(1802505)” achieved 9.49 SGPA .
- In 4th Semester is “Diksha Sharma(1702995)” achieved 8.86 SGPA.
- In 6th Semester is “Riya Puri(1602826)” achieved 8.68 SGPA

STUDENTS ACHIEVEMENT

- Pratik Saha participated in Internship Experience Contest at Internshala.

EDITOR'S MESSAGE



The college Newsletter will definitely help to showcase the activities that are happening in the campus. It also helps in building up teamwork which is very much needed today in the world of competition. It provides a platform for exposing the merits and academic achievements of the faculty.

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Chanpreet Kaur

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