



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

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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.

An expert talk was organized for B.Tech 3rd and 5th Semester students to improve technical skills in the field of electronics and communication engineering. The venue of expert talk at seminar hall of Block – 1(CV Raman Block). The expert talk organised by ECE/CEC Department. The chief guest Dr.Rohit Y. Sharma, Associate



Professor, Electrical Engineering Department, IIT Ropar, Punjab was also there on 31.08.2017.

WORKSHOP ON DESIGNING HIGH SPEED INTERCONNECTS

TATVA 2K17

Every year an event named Tatva is celebrated in CEC Landran on an odd Semester. There are a lot of events like Rock Band, Theme Song, Rapper Performance, Dance, Modeling, Theatre Drama, Western Dance, Bhangra etc. This event is always organised by ECE Department on



27.09.2017. The venue of that event is auditorium. The non- technical events include Online dubsmash video, Photography, Debate, Movie Quiz, Group discussion, Extempore, recycler. The programme was inaugurated by Director Admin. Er. A. C. Sharma, Director Principal Dr. B. Pattnaik, DSW Sh. Rajesh Hooda. Anchor Shaffi and Station Head Ms. Tavneet Kaur. The prize distribution was carried out by our chief guests.

RECENTTRENDS

Molecular electronics



The ultimate goal of electrical circuits is miniaturization. Also known as single molecule electronics, this is a branch of nanotechnology that uses single molecules or collections of single molecules as electronic building blocks. Molecular electronics and the organic electronics described above have a lot in common, and these two fields overlap each other in some aspects. To clarify, organic electronics refers to bulk applications, while molecular-scale electronics refers to nano-scale, single-molecule applications. Conventional electronics are traditionally made from bulk materials. However, the trend of miniaturization in electronics has forced the feature sizes of the electronic components to shrink accordingly. In

single-molecule electronics, the bulk material is replaced by single molecules. The smaller size of the electronic components decreases power consumption while increasing the sensitivity (and sometimes performance) of the device. Another advantage of some molecular systems is their tendency to self-assemble into functional blocks. Self-assembly is a phenomenon in which the components of a system come together spontaneously, due to an interaction or environmental factors, to form a larger functional unit. Several molecular electronic solutions have been developed, including molecular wires, single-molecule transistors and rectifiers. However, molecular electronics is still in the early research phase, and none of these devices has left the laboratory.

FAILURE

IS THE OPPURNITY

TO BEGAN AGAIN

MORE

INTELLIGENTLY



RESEARCH **PUBLICATIONS**

- “Analysis of feature extraction methods for speaker dependent speech recognition” **under** “International Journal of Engineering and Technology Innovation” conference on JULY 2017.
- “Speaker and speech recognition using deep neural networks” **under** “International journal of emerging research in management and technology” conference on AUGUST 2017.
- “A field guide for validation of program outcomes through rubric development:an important part of technical education courses accreditation-NBA Tier II " Under “CICE-2017” for International Conference in August 2017.
- “Designing and modelling of speech and speaker recognition system to control the wheelchair” **under** “Advances in computational sciences and technology” at the International Conference In August 2017.
- “An Efficient Approach for Image Denoising Based on Edge-aware Bilateral Filter” **under** IEEE international conference On 22 September.2017.
- “A Novel Approach for IR Target Localization Based on IR and Visible Image Fusion” **under** IEEE International Conference on 22 September 2017.
- “Salient infrared target and visible image fusion based on morphological

segmentation” **under** “IEEE” International Conference On SEPTEMBER 2017.

- “A Novel Approach for IR Target Localization Based on IR and Visible Image Fusion” **under** “IEEE” International Conference On SEPTEMBER 2017.
- “Stability analysis of feedback linearized Magnetic Levitation System using Sum-Of-Squares method” **under** “IEEE- ISPC 2017/conference” on SEPTEMBER 2017.
- “Stability analysis of feedback linearized Magnetic Levitation System using Sum-Of-Squares method” **under** “EEE- ISPC 2017/conference” on SEPTEMBER 2017.
- “Hybrid Artificial Neural Network for Data Classification Problem” **under** international Conference on SEPTEMBER 2017.

INTER STATE LEVEL **EVENT(SPORTS)**

- Ashish Kumar Verma achieved 2nd Position In “Swimming Competition - 100m Freestyle” at PTU University.
- Kaustubh Dhasmana_achieved Gold Medal In “Basketball” at PTU University.
- Anima achieved 3rd position in “Chess” at PTU University.
- Aditi Thakur achieved Gold In “Basketball(W)” at PTU University
- Sahil Kumar achieved Bronze In “Football” at PTU University.
- Khushbu Shah achieved Bronze in Badminton at PTU University.
- Lavenna achieved Silver in “Chess” at PTU University.
- Rohit Chauhan achieved Silver In “Best Physique” at PTU University.



- Sidharth Singh achieved Gold in “Best physique” at PTU university.
- Ujjwal Gupta achieved Bronze in “Swimming” at PTU University.

INTER INSTITUTE EVENTS

- The students Babu Kumar, Shubham Gupta have participated in TECHNO CHAMP which was held at JOHN DEERE, PUNE and achieved 1st position in Runner up.
- The student Kapil Jain participated in Microsoft Student Ambassador at IIT Delhi.
- IISF- National Start Up Summit event was held at Anna University, Chennai, Manish Negi was a participant of this event for developing his Technical Skills.

INDUSTRIAL VISIT TO KASALI

DOORDARSHAN

An Industrial visit was organized for 47 students of B.Tech 5th semester students of AB, CD, EF, GH,IJ and KL Section of B.Tech. and 4 students of M.Tech. 3rd Sem. The venue was Doordarshan ,Kasauli . The students of ECE visited the place and learnt the process of Broadcasting the audio ,video signal to the 5 different states via High Power Transmitter .The tower of Doordarshan is situated at the height of 1680 meter above sea level is 130 meter high, including 14-meter height of DD 1 antenna. It's the transmitter station from where all the received frequencies are captured and transmitted in the form of radiations. Two types of signal are received in the desired frequency C-Band and Ku- Band. The Doordarshan work part is divided into 2 subparts DD NEWS CHANNEL (that has 21+ channels and they work on Ultra high frequencies of around 471 MHz) and DD NATIONAL CHANNEL(that has 6+ channels and they work on High frequencies of around 187 MHz. The industrial visit attended by Dr. Dinesh (III- cell Incharge) Ms. Ritu Sharma and 51 students of B.Tech 5th sem M.tech 3rd semester.

MESSAGE BY CHIEF





ELECTRIC FLASH

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EDITOR



A thought that has been enduring in mind when it becomes real; is truly an interesting and exciting experience.

This newsletter was one such cherished work that had its roots in the persuasion. It would be a snapshot of the various activities and advancements. Proper communication plays a vital role in an institution's development. This newsletter will serve to reinforce and allow increased awareness, improved interaction and integration among all of us.

Ms. Chanpreet Kaur

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