



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 engineers 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 a conducive environment through pre placement training and professional development activities for providing ample opportunities of placements, higher studies and entrepreneurship.

The Book by Dr. Parveen Singla

On:

- WCDMA System over Fading Channels has been published by Lambert Academic publishing in Jan, 2019.
- A 5G: Security Architecture, Characteristics, Implementation issues and solutions has been published by Kaav Publications, on Feb. 2019

“Don't let what you cannot do interfere with what you can do”

SPECTRUM 2K19

World Radio Day has been celebrated by the department of Electronics & Communication Engineering on 13th February, 2019 to remember the unique power of radio as a medium to touch lives and a nexus among people to bring them together across



every corner of the globe. This event was a mixture of interesting

and entertaining technical, non-technical and cultural events. The technical events include Dirt Robot Race, Line Follower, Technical quiz, IETE Quiz, Rocket propulsion, Circuit designing, Programmers at war, Robo soccer, Lan/Mobile Gaming. The non-technical events include Online dub smash video, Photography, Debate, Movie Quiz, Group discussion, Extempore, recycler. The programmer was inaugurated by Director Admin. Er. A. C. Sharma, Director Principal Dr. B. Pattnaik, DSW Sh. Rajesh Hooda. The chief guest of the event was RJ Abhinav 98.3 FM, Anchor Shaffi and Station Head Ms. Tavneet kaur. The main attraction event was Flash Mob that was held in our campus outside CBSA and ELANTE Chandigarh. The prize distribution was carried out by our chief guests.



EXPERT TALK ON RASPBERRY PIE



An Expert talk was arranged for B.Tech. 6th Semester of ECE department for CD & GH Section and 4th Semester students of CD Section on 14th Feb ,2019 . The Lecture was given by Dr.SarwanSingh , Deputy Director (Systems) ,NIELIT, Mohali.The students were made aware about open source arduino environment (IDE) and Raspberry PIE & its potential for designing various services in an educational institution. The speaker explained about Implementation of various operators, variables, data types used in arduino.The free and open source servers used for Raspberry Pie like SCI lab , Python Oscad were also told to the students.The students were explained about the difference between the arduino and Raspberry Pie. He explained how Raspberry Pie is compatible with space science.

INDUSTRIAL VISIT AT WONDER SYSTEM



The department of Electronics and Communication had organized an Industrial visit to Wonder Systems Private limited located in the Industrial Area (S.A.S. Nagar) Mohali, on 22 Jan, 2019 for the 4th semester students of AB section. WSIPL being the premier system integrator offers a full range of Parker drives including stepper, compact and high performance servo, AC variable speed, high current output DC and panel mounted drives.This visit was coordinated by Dr. Harbinder and Ms. Tejinder Kaur of ECE Department.It started with the brief presentation of company profile by the company personnel. After that the students visited different sections i.e production, testing, and Research Lab of the company. Students have learned about DC drives, AC drives, Servo drives & motors, HMI touch screen, SCADA, PCC panels, MCC panels, and APFC panels etc. Students also learned about PLC automation panels. A Programmable Logic Controller (PLC) or Programmable Controller is an industrial digital computer which has been ruggedized and adapted for the control of manufacturing processes, such as assembly lines, or robotic devices, or any activity that requires high reliability control and ease of programming and process fault diagnosis.



AWARENESS CAMP ON EAC



under the DST-NIMAT project.

IEDC cell of CEC, Landranhas organized an Entrepreneurship Awareness Camp(EAC) from 13-15 March 2019 at seminar hall of Block-1. The objective of the camp is to create awareness among S&T students to opt Entrepreneurship as a career. The program consists of 12 sessions of one hour each. In the program students learnt how to open a new Enterprise (Business), to arrange funds, to market the product and students got a chance to interact with entrepreneurs through an Industrial visit. After the completion of camp certificate of participation has been issued to the participants. This event was sponsored by EDII, Gandhinagar and NSTEDB

RESEARCH PUBLICATIONS

- By Dr. Harpal Singh on Robust image watermarking theories and techniques in transform domain and Fuzzy-NN approach with statistical features for description and classification of efficient image retrieval
- By Dr. Dinesh Arora on “An effective audio watermarking approach with high data embedding” and “A Split network based routing approach in wireless sensor network to enhance network stability”
- By Dr. Surinder Singh on Detection technique for selective forwarding attack in wireless sensor networks.

STUDENTS ACHIEVEMENTS

- Chirag, Akash, Parkhar, Abhishek participated in the Debate competition at PCTE Ludhiana.
- Sweta Singh participated in world IOT Hackathon at Chandigarh University.
- Naman Goyal secured the 1st position at Pushpa Gujral Science City Jalandhar in project model display competition.
- Uma Shankar participated in a Startup India event organized by Govt. of Punjab.
- Sweta Singh secured 4th position and won the cash prize of 10,000 Rupees in Smart India Hackathon 2019 at Vel Tech Chennai.
- Aditya, Charu, Ayush, Prince, Kriti, Abhishek won 1st Runner Up trophy in Smart India Hackathon 2019 at Shri Baba Ramdev Engineering College Nagpur.
- Amreen,, Harvinder, Parteek, Naman won 1st runner up trophy in Smart India Hackathon at JECRC Jaipur.
- Pushkar, Dhamija, Partil Shaah participated in Placement Heat Contest 3.0 at Talent Battle.



RECENT TRENDS EDGE COMPUTING

Cyber security is important because the government, military, corporate, financial, and medical organizations collect, process, and store unprecedented amounts of data on computers and other devices. A significant portion of that data can be sensitive information, whether that be intellectual property, financial data, personal information, or other types of data for which unauthorized access or exposure could have negative consequences. Organizations transmit sensitive data across networks and to other devices in the course of doing businesses, and cyber security describes the discipline dedicated to protecting that information and the systems used to process or store it. As the volume and sophistication of cyber attacks grow, companies and organizations, especially those that are tasked with safeguarding information relating to national security, health.



PATENTS FROM ECE DEPARTMENT

- INTELLIGENT CHARGING DEVICE AND A METHOD THEREOF
- AUTOMATIC RAILWAY SIGNAL DETECTION SYSTEM
- WIRELESS SYSTEM FOR HALTING VEHICLES
- SELF DESTRUCTIVE DEVICE AND A METHOD THEREOF
- AUTOMATED CROP MONITORING SYSTEM
- HEAT SHIELD DEVICE FOR PROTECTING ATMOSPHERIC

MESSAGE BY HOD

At the outset, I would like to thank the management and the students who have been doing exemplary support and contributions in the department. I also want to congratulate the faculty editor and student editor for our newsletter “electric flash”. Having officially decreed as the new HOD of the ECE Department is both a challenge and an opportunity. A challenge - to harness my leadership skills to address the areas of improvement in the ECE department and an opportunity - to work along with highly-esteemed staff and very-much-willing-to-learn students.



Dr. Vinay Bhatia



ELECTRIC FLASH

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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 up to March 2019. 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 the 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

Ms. Chanpreet Kaur

Chief Editor : Ms. Chanpreet Kaur

Editor : Ms. Anjana Sharma

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