



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 Talk on Intelligent Systems using Embedded Systems

Expert talk by Er. Gurmeet Sharma of Eureka Electro soft Solutions Private Limited on Embedded Systems & Design on 21.04.2018 for B.Tech. 5th semester students of GH, IN Section N 3rd Semester students of AB Section in the seminar hall of ECED at 1:00 pm onwards. The Guest Lecture was given by Er. Gurmeet Sharma of Eureka Electro soft Solutions

Failure will never overtake you. If Your determination to the succeed is strong Enough

Private limited, Mohali. He delivered the lecture on “Intelligent systems design using Embedded systems’. He explained how a machine can be programmed with an embedded, Internet-connected computer. How big data can be analyzed and communicated with other systems. The lecture covered the capacity of intelligent systems to learn and gain from experience, security & connectivity and how it can be utilized to make the system automatic. He discussed the scope of Embedded systems in the real world and explained how things are embedded dependent. The lecture covered



intelligent devices, Internet of things, Artificial Intelligence & interconnected collections of devices, including networks and other types of larger systems. The Artificial Intelligence-based software systems, such as catboats, expert systems and other types of software were also discussed in the lecture. Queries of many students were handled by the expert. The speaker was having experience of around 20 years in the same field. He was energetic, persuasive, proactive and presentable having excellent man management skills. With the vast knowledge & experience of expert

Students have developed projects under IEDC along with their mentors

Farmer Relief system

by

**Sushilkumar, Aditi
Thakur, Sankalp Sinha, Uma Shanker**



Industrial Visit to MARS Edpal

Instrument Private Limited, Mohali

An industrial visit to Mars Edpal Instruments Private limited, Ambala was arranged for B.Tech ECE 3rd Semester students of AB & CD Section on 23rd May ,2018 . Mars EdPal Instruments Pvt. Ltd. is an Indian company engaged in providing reliable quality and competitively priced Electronic, Electrical and Scientific Instruments. During the visit the students observed how the products are being manufactured in the industry and how the

fabrication process is done for all the analog and digital kits covering mainly laboratory standards & testing of the measuring instruments for Institutions, Industry and Research. The students learnt how debugging is done. They also saw the troubleshooting of the electronic devices. The students were familiarized with the basic components, their need, fabrication and designing them on bare PCB for digital and analog circuits.

Expert lecture on 'Fundamentals of MOSFET based Digital Design2



An expert lecture on 'Fundamentals of MOSFET based Digital Design2 was organized by Electronics Project Club (EPC) of Department of Electronics and Communication Engineering for B.tech. 3rd Semester students on 24th May, 2018. Expert Lecture was delivered by Dr. Rohit Y Sharma, Associate Professor Of Department of Electrical Engineering, IIT Ropar. The students familiarized with the basic concept of Digital Design. They became able to know about the concept of FET and MOSFET. It is also helpful for them to know how the universal gates and the transistor play the major role in fabrication. Apart from this Dr. Rohit also explained the PMOS, NMOS and CMOS

technologies. The session was really interactive and students also cleared their doubts and it is also helpful for them in VLSI Design.

Industrial Visit to SIEMENS, IATC Panchkula

An industrial visit to Siemens, IATC ,Panchkula has been arranged for B.Tech ECE 3rd Semester students of GH Section on 28th April, 2018. Siemens, IATC is an Indian company engaged in providing reliable quality and competitively priced Electronic, Electrical SCADA Based PLC and other Automation based products and is



engaged in giving training to the corporate sector engineers. They Train engineers on real time SCADA machines. The students will watch the products being manufactured by Siemens and will explore how the things are managed in the plant. The students will be visiting the Robotics and control department where various machineries are demonstrated to visualize the real time projects related to automation. They will also see the analog oscillators, working and operations. Troubleshooting departments will also be a part of the visit. The students will be familiarized with the Siemens product, SCADA, PLC System their need and how to fabricate and design them.

Student Exchange Program

- Rajneesh Sood (1406115) went to **Arkansas State University (USA)** under a student exchange program for attending Digital Creative Media course in Photography, video making & communication skills.
- Aditi Rana (1503101) went to **Arkansas State University (USA)** under student exchange program for attending Internship on CAE course in Communication Skills, Personality Development, Intellectual Skills.

Interstate Level Events

- Shikha Gupta of Electronics and communication Has participated in Enovation change Designee contest. Which was held in Texas Instruments, Bangalore

RESEARCH PUBLICATIONS

- “Security Techniques for wormhole attack in wireless Sensor Network” **under** “International Journal of Engineering & Technology(UAE)” APRIL 2018.
- “A novel framework for iris and thumbprint recognition using optimization algorithms” under IJST on

APRIL 2018 and “Fusion Enhanced Image Stitching using DCT & DCHWT” under Journal of Engineering Research and Application on JUNE 2018

- “Fusion Enhanced Image Stitching using DCT & DCHWT” under Journal of Engineering Research and Application on JUNE 2018

RECENT TRENDS IOT

The Internet of Things (IOT) concept is not new, and now that it is becoming truly ingrained into everyday life, efforts are ramping up to employ connectivity in



new ways – both large and small. One example, the Amazon Dash, allows the user to simply press a button when it's time to reorder a staple household product.

However, the Dash offers no visual confirmation of the order – and adding a display would do just that. For these kinds of products, a display would need to be small, inexpensive, easy to read, and able to last a long time on the same battery. The kind of ePaper currently being used on shelf labels, made by companies such as [Visionect](#), would be useful for this type of application, as well as for home appliances. On a larger scale, ePaper for outdoor displays is a growing trend. It can be used in myriad ways – for



building signage, bus shelters, advertising on public transportation, and more. These smart surfaces are

easily visible, regardless of weather, and their solar-enabled low power and wireless connectivity enable them to provide tremendous value to the user.

PTU TOPPERS

- In 2nd semester' "Huma Guhar(1703019)" achieved 9.57 SGPA.
- In 4th semester' "Anreen Siddiqui(1602638)" achieved 8.72 SGPA.
- In 6th Semester' "Sanreeti Sharma(1503274)" achieved 9.18 SGPA.

PATENTS FILED BY ECE DEPARTMENT

- ASSISTED PROTECTION WITH COLLISION INDICATOR (APCI)
- MONITORING OF WATER SUPPLY SYSTEM AND A METHOD FOR THE SAME
- MULTIFUNCTIONAL SERVICE SYSTEM FOR HOUSING SOCIETY
- APPARATUS AND METHOD FOR MOTOR OPERATED PARACHUTE RELEASE
- AN APPARATUS FOR DEPLOYMENT OF ACTIVE HEAT SHIELD
- AN APPARATUS FOR HEAT SHIELD RELEASE MECHANISM

A book by MS. Nidhi Chahal on Communication system has been published by Laxmi Publications

Chief Editor Message

I am pleased to say that the management & staff is excellent & do not hesitate to put in their best in all college activities & up-gradation. I would like to thank students, teaching & non-teaching staff for your kind & continued support to the editorial board. May Almighty God shower his choicest blessings upon all.

Chief Editor

Chanpreet Kaur

Chief Editor : Ms. Chanpreet Kaur

Editor : Ms. Anjana Sharma

Student Editor :

Nitesh

Bhawa

ni Magotra