



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.

Projects under IEDC

- Water Distribution and conservation system by Chetan Chadha, Himanshu Chawla with there mentor DR. Parveen Singla , Dr. Harpal Singh for Skill development in Designing of automation system
- Advance Early Flood warning device by Ashish Chauhan, Ayushi Sharma,

Abhishek , Akash Bawa with there mentor Dr, pooja Sahni, Dr, sukhdeep Kaur

INDUSTRIAL VISIT IATC-SIEMENS



The main objective of the industrial visit on Oct 1st, 2018 was to make

students of ECE(AB) learn about the automation industry and trends going on in the pre-programmed mechanized world. The team of students and faculty was welcomed by Mr. Nakul (Asstt. Manager Projects). Then the students interacted for 15 mins. with Mr. Dinesh Sharma (Dir. Training, IATC). Mr. Nakul and Mr. Mandeep Singh provided us with a brief introduction about the PLC (Programmable Logic Circuit) followed by the lecture on Actuators & Sensors. A High-Tea was served by the company to all the students along with faculty members. Apart from this students were divided in groups and they were directed to visit another subsidiary plant at F-207, Phase-2, Industrial. The Special-Purpose-Machinery and highly sophisticated and advanced robotics equipment are manufactured here and various products like Stapler.



RECENT WEARABLES

TREND

Sensors play an important role in the wearable space, and are beginning to be designed into gloves, exercise wear, outerwear, and other garments by innovators like BeBop Sensors that offer fabric-based sensor technology. Of the wearable devices such as fitness bands and smartwatches currently available, most do one or two key things users want – typically, counting steps or monitoring heart rate -but they're increasingly incorporating more complex functionality. With a device that touches the skin, these can include tracking skin temperature, monitoring hydration by measuring skin salt levels, providing blood oxygen level via pulse-oximetry, etc. Because many readings still need to be confirmed by looking at one's smartphone, a flexible display that adapts well to a variety of temperatures and environments. China seems to have taken over the lead in this emerging market, with Xiaomi taking the leadership position in this space. Even before the wearable technology entered the consumer market, these wearable devices were used in the field of military technology. In fact, these devices were an

integral part of the medical and healthcare sector in the military forces. Devices like 'Wearable Motherboards' or 'Smart Shirts' used to monitor the health and wellbeing of the patients and send back information to the hub station in real time. The biggest challenge for the wearable industry is to get a



sustainable customer engagement. Many wearable electronics are short lived because of its short term customer

engagement. Bad quality, pain to sync with smartphones, poor battery life, uncomfortable and awful design, UX problems, are some of the functional reasons which put the user off the device. However, you might find wearable devices that are very strong functionally and physically and still bomb at the market simply because they failed to create any meaningful impact on the users, their lives, habits or behaviors.



EXPERT TALK ON IMPLEMENTATION OF COMPUTER NETWORKING

An Expert talk is arranged for B.Tech. 3rd & 5th Semester of ECE Students on 15th Oct, 2018. The Guest Lecture will be given by **Er. Subhash cha**. The speaker will explain about Implementation of computer networking and data centre services in Defence sector. He will cover how security is important and can be maintained while networking. The lecture will not only include computer networking basics but also interconnected collections of such devices, which



ELECTRIC FLASH

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will include Routers ,switches , hubs ,gateways including networks and other switching systems. The lecture will cover all the networking standards and will be emphasized on how virtualization of networks enables data centre administration. Director ,TBRL, Chandigarh.

RESEARCH PUBLICATIONS

- By Dr. Dinesh Arora on Energy Efficient Technique of Wireless Sensor Networks under conference International Journal of Innovative Technology and Exploring Engineering (IJITEE) in OCTOBER 2018.
- By Dr. Mohit Srivastav On “Fifth generation security characteristics and challenges” under “CGC International Journal of Contemporary Technology & Research,” on NOVEMBER 2018.
- BY Dr. Pooja Sahni on ” under “CGC International Journal of Contemporary Technology and Research” On NOVEMBER 2018.
- By Dr. Rinkesh Mittal on “Security Techniques of WSN:A Review” under “International journal of computer science and mobile computing” on NOVEMBER 2018.
- By Dr. Harbinder Singh on “Energy Efficient Technique of Wireless Sensor Networks: A Review” under “2nd International conference on Science, Technology & Management (ICSTM-2018)” On OCTOBER 2018.
- By Nidhi Chahal on “Area-Delay-Power Efficient Fixed-Point LMS Adaptive Filter with Low Adaptation-Delay” under “IJSRD - International Journal for Scientific Research & Development|” on NOVEMBER 2018.

PATENTS FROM ECE DEPARTMENT

- PERSONAL FITNESS AND TRACKING SYSTEM
- INTELLIGENT SOUNDLESS SYSTEM AND METHOD
- EARTHQUAKE SAFETY AND RESPONSE SYSTEM
- SYSTEM FOR LOCATING INFRARED TARGETS BY FUSION OF INFRARED AND VISIBLE IMAGES
- RAINWATER DRAINAGE SYSTEM

A Book Title “Hybrid technique to reduce PAPR in OFDM in Futuristic Trends in Network and Communication Technologies” under publication “Springer CCIS Series” authorised by Dr. Dinesh Arora.



COLLEGE TOPPERS

- In the 3rd Semester, “Huma Guhar(1703019)” achieved 9.85 SGPA.
- In the 5th Semester, “Amreen Siddiqui(1602638)” achieved 8.81 SGPA.
- In the 7th Semester, “Samreeti(1503274)” achieved 9.2 SGPA.

An Article by Dr. Dinesh Arora on Hybrid technique to reduce PAPR in OFDM in Futuristic Trends in Network and Communication Technologies has been published Springer CCIS Series

EDITOR'S MESSAGE



Chanpreet Kaur

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. This enhances the documentation culture of the institute. This would definitely create an impact in the minds of readers, by way of providing larger visibility and dimension to the campus. I hope that this culture of releasing Newsletter continues forever and becomes a quoted example for all other colleges to follow.

•Study hard play hard and be smart

Chief Editor : Ms. Chanpreet Kaur
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