



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.

MOU SIGNED WITH EESPL



The MoU is made between CEC Landran and EESPL, Mohali for technical transfer and Knowledge upgradation, for planning and setting up of labs for M.Tech courses, providing consultancy and conducting faculty development programmes. The MOU was one of day. The event attended by Director Principal CEC, Mr.

Gurmeet Sharma, Director EESPL, Dr.Ruchi, HOD ECE and Dr.Harpal, Professor, ECE and organised by ECE Department on 23.11.2016.

PATENT Filed:

AIR PURIFIER BASED ON CATALYTIC CONVERTOR AND A CONTROL METHOD

“RECENT TRENDS: Robotics & Automation

Robotics is a field of engineering that deals with design and application of robots and the use of computers for their manipulation and processing. Robots are used in industries for speeding up the manufacturing process. They are also used in the field of nuclear science, sea-exploration, servicing of transmission electric



signals, designing of bio-medical equipment etc. Robotics requires the application of computer integrated manufacturing, mechanical engineering, electrical engineering, biological mechanics, software engineering. Automation and Robotics Engineering is the use of control systems and information technologies to reduce the need for human work in the production of



goods and services. In the scope of industrialization, automation is a step beyond mechanization. A specialization in robotics engineering may lead to potential career opportunities in manufacturing, research and engineering, agriculture, mining, nuclear, power-plant maintenance and a variety of other areas. Besides, there is great scope for qualified experts and researchers to associate themselves with different segments of R & D in robotics. As the recent global career trend in robotics suggests, fields as diverse as surgery, modern

testing, Quality control, PCB and component testing departments. Students were sent into the wiring section, testing, measurements, R&D and designing. The industrial visit was one of day and organized by ECEC Department. The industrial visit was attended by Mr. Sandeep Singh, Mrs. Sakshi Sharma and B.Tech 5th semester students of Group-C+D on 22.10.2016.

SKILL DEVELOPMENT PROGRAMME

To enhance the skills of laboratory staff



warfare and nanotechnology have registered a remarkable increase recently in their demand for technical experts and researches in robotics.

INDUSTRIAL VISIT TO MARS EDPAL

An Industrial Visit was organized for B.Tech 5th semester students at Mars EdPal Instruments Pvt. Ltd. Ambala Cantt. Mars is a company engaged in providing reliable quality and competitively priced Electronic, Electrical and Scientific Instruments. Its main product range comprises highly user friendly training systems, laboratory standards, testing and measuring instruments for Institutions, Industry and Research. The students visited production,



members by considering project designing issues, circuit simulation using multisim software, operating system and PC hardware, Basics of Networking, DSP concepts for practical work. That programme was for five days. Dr. Parminder Singh delivered the Lecture on Basics of Networking. It is a great experience for all of the teachers who have attended. The venue of Skill Development Programme M.Tech ECE Lab, Lab 11, ECE Dept. on 02.-09.2106 onwards and organized by Project Club/ ECE Dept. / CEC, Landran.

“With the new day comes new strength and thoughts”

INTER state Students Achievements:



- This event held at IIT Roorkee, from our college 3 students participated in PROJECT HUNGER and secured top 2nd position.
- IOT Based Pollution Monitoring System event was held at Pushpa Gujral Science City, Kapurthala, from our college 4 students participated in this event and secured top 1st position.
- Bot Karrom event was held at UIET, Chandigarh, from our college. 2 students participated in this event & secured 2nd position.
- ROBO RACE named event was held at PU Chandigarh, from our college 2 students participated in this event & secured top 1st position.

RESEARCH PUBLICATIONS

- “Effective Algorithm for augmented security aware wireless environment using dynamic cryptography” **under** “Indian Journal of Science and Technology (Scopus indexed)” on NOVEMBER 2016.
- “A Robust Approach for Reducing Peak to Average Power Ratio In OFDM System” **under** “IJRET: International Journal of Research in Engineering and Technology” On NOVEMBER 2016.
- “Review of Different Optimization Techniques used for Multi-User Detection in CDMA Network” **under** “International Journal of Engineering and Innovative Technology” in OCTOBER 2016.
- “Development of Efficient and low cost wireless electricity transfer using Mutual Induction” **under** “IJIR” On NOVEMBER 2016.
- “A Review on Base Transceiver Station and Swarm Intelligent Techniques” **under** “International Journal of Innovations in

- Engineering and Technology (IJIET)” in OCTOBER 2016.
- “A Review on Base Transceiver Station and Swarm Intelligent Techniques” **under** “International Journal of Innovations in Engineering and Technology (IJIET)” in OCTOBER 2016.
- “ANN Training: a survey of classical and Soft Computing Approaches” **under** “International Journal of Control Theory and Applications” on DECEMBER 2016.
- “Sliding mode control with nonlinear disturbance observer based on genetic algorithm for inverted pendulum with mismatched disturbances” **under** “Conference REDSET-2016, Springer” on OCTOBER 2016.
- “A Review Paper on Coverage Recovery Mechanism Using Dynamic Sink SSOA with MOMC Rule” **under** “International Journal of Innovations in engineering and technology.” On OCTOBER 2016.
- “A Color, Texture and Shape Based Hybrid Approach for Clothing Retrieval Techniques” **under** “IJMA” On DECEMBER 2016.
- “Analysis on security threats of mobile ad-hoc cloud” **under** “International Journal of Innovations in Engineering and Technology” in OCTOBER 2016.
- “Review on Signature Recognition using Neural Network, SVM, Classifier Combination of HOG and LBP features” **under** “International Journal of Engineering Development and Research” on DECEMBER 2016.
- “Routing in WSN Network using neural Network (NN) and SPEED Protocol” **under** IEEE International Conference on DECEMBER 2016.

FACULTY ACHIEVEMENT



- Bhawna Tandon associate professor of ECE department has presented her paper entitled "Sliding mode control with nonlinear disturbance observer based on genetic algorithm for inverted pendulum with mismatched disturbances" in Conference, REDSET-2016, Springer October 21-22 2016. All the papers presented in this conference were scopus indexed.



MESSAGE BY EDITOR

Mid-way through editing and designing a pile of articles which I was nose deep in and with the thoughts of the zillion things that 'JUST HAD TO BE DONE'; I pulled at my hair for the very first time. This was the first of many such moments (hours)! Putting a newsletter together was no cake walk. I would like to thank all my editorial team members for helping me pull this through.



Chief Editor: Ms. Chanpreet kaur
Editor: Ms. Anjana Sharma
Student Editor : Chetan, Rubal