



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.

ELECTROFUSION 2K24” ON 4TH -5TH APRIL 2024



ECE department: ElectroFusion 2K24



Department of Electronics and Communication Engineering , Chandigarh Engineering College-CGC, Landran ,Mohali organized Inter-Departmental Technical , Non- Technical cum Cultural event **“ElectroFusion 2K24”** on 4th -5th April 2024 with primary objective to provide students the opportunity for exposure and a platform to exhibit their talents and skills across diverse fields. The program started with an Inaugural ceremony taking the blessings of Goddess Saraswati .The Inter-Departmental activities executed with a total number of 9 events which were planned and focused on different categories: Technical and Non-Technical, along with cultural event. . The event was folded in various sub-events like Expert Talk on recent advancements in ECE by Dr. Balwinder Singh Joint Director & Head, ACSD,CDAC Mohali Syntax Hack, Circuito, Robo-championship, Battle Arena, Debate Dome, Rangoli Making, Couture Canva ,Talent Hunt. Winners were awarded with cash prizes and certificates.



Inaugural speech by HOD-ECE



PATENTS

ECE department has got 24 patents with CBR no. and 12 patents granted during the month of April-May 2024.

S.No	Title of Invention
1	SOUNDLESS HORN SYSTEM
2	PORTABLE TIFFIN BOX WITH TEMPERATURECONTROL SOLUTION
3	GARBAGE SEGREGATION SYSTEM BASED ON MACHINELEARNING/ARTIFICIAL INTELLIGENCE (AI/ML)
4	A SYSTEM FOR THREE-DIMENSIONAL VISUALIZATIONOF THE BLUEPRINT
5	A METHOD FOR THREE-DIMENSIONAL BIOPRINTING
6	A SYSTEM FOR A KEY REMINDER
7	EMERGENCY RESCUE SYSTEM
8	LOCATION DETECTION SYSTEM
9	SMART SHOCK PROOF SOCKET
10	BRAINTEC HELMET
11	UNDERWATER PIPELINE INSPECTION AND MAINTENANCE SYSTEM
12	FRUIT AND VEGETABLE QUALITY TESTER
13	CENTRALIZED MONITORING SYSTEM FOR STREET LIGHT FAULT DETECTION AND LOCATION TRACKING.
14	AN INTELLIGENT PLANT CARE AND MONITORING SYSTEM
15	FOLLOW WAGON
16	AGRIQUAPONICS
17	AUTOMATIC HEIGHT ADJUSTABLE BRIDGE
18	MODULAR PHASE DETECTING ELECTRIC SOCKET
19	FRUIT CONSUMPTION ASSISTIVE DEVICE FOR CHILD
20	SECURED KEY HOLDING DEVICE
21	HOLE DIGGING ASSISTIVE DEVICE
22	MODULAR ZIPPER PULL TAB DEVICE
23	MODULAR DRAWING PRACTICING ASSISTIVE DEVICE
24	AUTOMATED TODDLER SECURING DEVICE



ELECTRIC FLASH

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PATENT GRANTED

The Patent Office, Government Of India	
पेटेंट नं. / Patent No.	524404
आवेदन नं. / Application No.	201811019976
प्राप्त करने की तिथि / Date of Filing	28/05/2018
पेटेंटी / Patentee	Chandigarh Group of Colleges
आविष्कारकों का नाम (Name of inventor(s))	1.Surinder Singh 2.Gaurav Kumar 3.Gaganpreet Kaur 4.Manmeet Kaur 5.Preeti Bansal 6.Gurmeet kaur 7.Lalit Saroya 8.Sanket Sharma

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में उल्लेखित AN APPARATUS FOR HEAT SHIELD RELEASE MECHANISM नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख 28th 2018 के अद्यतन दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदान किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled AN APPARATUS FOR HEAT SHIELD RELEASE MECHANISM as disclosed in the above mentioned application for the term of 20 years from the 28th day of May 2018 in accordance with the provisions of the Patents Act,1970.

The Patent Office, Government Of India	
पेटेंट नं. / Patent No.	533882
आवेदन नं. / Application No.	2019 11012806
प्राप्त करने की तिथि / Date of Filing	30/03/2019
पेटेंटी / Patentee	Chandigarh Group of Colleges
आविष्कारक (नाम सहित) / Inventor(s)	1.Dr. Parveen Singla 2.Dr. Rajdeep Singh 3.Dr. Rinkesh Mittal 4.Ashima Kalra 5.Sonia Jindal 6.Chetan Chadha 7.Himanshu Chawla 8.Anmol

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में उल्लेखित HEAT SHIELD DEVICE FOR PROTECTING ATMOSPHERIC RE-ENTRY OF SPACE PROBE AND ITS METHOD THEREOF नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख 30th 2019 के अद्यतन दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदान किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled HEAT SHIELD DEVICE FOR PROTECTING ATMOSPHERIC RE-ENTRY OF SPACE PROBE AND ITS METHOD THEREOF as disclosed in the above mentioned application for the term of 20 years from the 30th day of March 2019 in accordance with the provisions of the Patents Act,1970.

अनुदान की तिथि / Date of Grant : 20/04/2024

नोट - The term for renewal of this patent, if it is to be maintained will fall / has fallen due on 30th day of March 2021 and on the same day in every year thereafter.

Patent Number- 533882

Date of Patent- 30/03/2019

Title- HEAT SHIELD DEVICE FOR PROTECTING ATMOSPHERIC RE-ENTRY OF SPACE PROBE AND ITS METHOD THEREOF

Inventors: Dr. Parveen Singla, Dr. Rajdeep Singh, Dr. Rinkesh Mittal, Ashima Kalra, Sonia Jindal, Chetan Chadha, Himanshu Chawla, Anmol, Tanvi gupta, Ayushi Sharma, Hardyal Singh Mann, Amanjot Singh, Hardiq Verma, Ravikant, Divakar Sharma



Patent Number- **524404**

Date of Patent- **28/05/2018**

Title- **AN APPARATUS FOR HEAT SHIELD RELEASE MECHANISM**

Inventors: **Surinder Singh, Gaurav Kumar, Gaganpreet Kaur, Manmeet Kaur, Preeti Bansal, Gurmeet kaur, Lalit Saroya, Shanky Grover, Diwakar Singh, Navneet Kalsi, Harmanpreet Singh, Shubham Rohilla, Vibhi Pupreja**

PUBLICATIONS

- Dr. Ashima Kalra published book chapter on “Applications of artificial intelligence across Industry 4.0” in CRC book Machine Learning for Sustainable Manufacturing in Industry 4.0.
- Dr. Ramanpreet Kaur published research paper on “Predictive Modelling for Heating and Cooling Load Systems of Residential Building” in 2024 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI).
- Parveen Singla; Shabnam Thakur; Dinesh Arora; Rinkesh Mittal et al. published research paper on “Blacklist techniques for isolation of black hole attack in mobile ad hoc network” in Scopus indexed AIP conference proceeding
- Ms.Nidhi Chahal published book chapter on “Blockchain, Evolution and Future Scope: An Overview” in CRC book Convergence of Blockchain and Internet of Things in Healthcare.

FACULTY CERTIFICATIONS

We have got online certifications on different courses from different platforms like AWS, Lernx and google etc during the month of April to June 2024.

S.No	Name	Name of course
1	Dr. Tarun Singhal	Mastery in Javascript
2	Dr. Abhishek Sharma	Python 3 Bootcamp
3	Dr. Ramanpreet kaur	Python 3 Bootcamp
4	Dr. Pooja Sahni	Python 3 Bootcamp
5	Dr. Ashima Kalra	Ethical Hacking
6	Dr. Deepak Dadwal	Python 3 Bootcamp
7	Dr. Bhawna Tandon	Python 3 Bootcamp
8	Dr. Gagandeep	Creating Apps in python
9	Rachna MAnchanda	Mastery in Javascript
10	Dr. Pradeep Kumar Gaur	Python 3 Bootcamp
11	Priyanka Sood	AWS Course on data analyst



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12	Dr. Sukhdeep Kaur	Creating Apps in python
13	Dr. Mohit Srivastava	Python 3 Bootcamp
14	Dr. Simarpreet Kaur	Creating Apps in python
15	Dr. Mandeep Singh	Creating Apps in python
16	Dr. Komal	Learn Python 3 with turtle
17	Dr. Rinkesh Mittal	Project Management
18	Preeti Bansal	Creating Apps in python
19	Dr. Ankur Singhal	Project Management
20	Priyanka Sood	Mastery in Javascript
21	Dr. Gagandeep	Aws courses on cyber security and data analyst
22	Nidhi Chahal	Creating Apps in python
23	Priyanka Sood	AWS Course on data analyst

SWAYAM –NPTEL CERTIFICATION

- We have got approx. **120 student MOOC certifications** from different online certification platforms like Coursera, Udemy, Swayam, AWS, future learn ,skill up, AWS Educate, Great Learning, GUVI etc. in the month of June 2024 .





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- We have **50+** student SWAYAM-NPTEL certifications and 4 faculty SWAYAM-NPTEL certifications on Course “Microprocessor and Microcontrollers” and “Digital Circuits” till the Month of April 2024.



NPTEL Online Certification


(Funded by the MoE, Govt. of India)

This certificate is awarded to
VARENDER SINGH
for successfully completing the course
Microprocessors and Microcontrollers
with a consolidated score of **49** %

Online Assignments	19.31/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **437**

Jan-Apr 2024
(12 week course)


Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



PLACEMENT

ECE students have got placed in reputed companies like Capgemini, Cognizant etc with highest package of **5.04 LPA**.

Name	Company	Package(LPA)	Profile
Aditya	Pearce Services Global Private Limited	5.04	Design Intern
Rishikesh	Pearce Services Global Private Limited	5.04	Design Intern
Ankit Kumar	HAVI DESIGN INDIA LLP.	3	Design & Estimation Engineer



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Pooja Yadav	Capgemini India Pvt Ltd.	4	Network Engineer
Ruchi Bisht	Capgemini India Pvt Ltd.	4	Network Engineer

CHIEF EDITOR MESSAGE

This newsletter is intended to be published quarterly in a year. This issue is a brief account of the important events held up from April to June 2024. 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 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: Dr. Ashima Kalra

Student Editor : Mehak , Sahil Rohella