CHANDIGARH
ENGINEERING COLLEGE
CGC, LANDRAN, MOHALI
Building Careers. Transforming lives.

Chandigarh Engineering College-CGC
Landran, Mohali

Quality of Student Projects

Project Areas with Relevance

S. No.	Project Areas	Relevance
P1	Antenna & Wireless Communication	To understand and implement different wireless technologies for different applications.
P2	VLSI and Image/Speech Processing	To design the algorithms used in VLSI field, video, image and speech processing for application development.
P3	Robotics and Embedded System	To get knowledge about the use of various types of microprocessors and microcontroller for different applications.
P4	Artificial Intelligence & Neural Networks	To get the knowledge in the field of artificial intelligence and Neural base networks
P5	Application Specific (Software/ IOT)	To widen the knowledge in developing systems having specific application for society and industry based on various technologies.
P6	Any Other(not included above)	To understand and implement the concepts of other emerging trends

Head of Department
Electronic & Communication Engineering
Chandigarh Engineering College
CGC, Landran, Mohali

Details of Projects completed in Academic Year 2023-24
Project-I (2021-25 Batch)

Sr. No.	Title of the Project	Research Area	Skill Developed	Category
1	Self controlled irrigation monitoring system using an application	Wireless Technologies	Knowledge of IOT and Wireless Technology	Excellent
2	Accident prevention and safety kit for automobiles	Robotics & Embedded system	Knowledge of microcontroller and AI	Excellent
3	IOT based Mining Safety Helmet	AI and Neural Network	Knowledge of IOT and Wireless Technology	Excellent
4	Wireless Charging Station for EVs	Application Specific	Knowledge of IOT and Wireless Technology	Excellent
5	Smart water serving system	AI and Neural Network	Knowledge of microcontroller and AI	Excellent

Head of Department
Electronic & Communication Engineering
Chandigarh Engineering College
CGC, Landran, Mohali

Details of Projects completed in Academic Year 2023-24
Project-II (2020-24 Batch)

Sr. No.	Title of the Project	Research Area	Skill Developed	Category
1	Self controlled irrigation monitoring system using an application	Wireless Technologies	Knowledge of IoT & wireless communication	Excellent
2	Accident prevention and safety kit for automobile	Robotics & Embedded system	Knowledge of Microcontroller and its application	Excellent
3	IOT based Mining Safety Helmet	AI and Neural Network	Knowledge of AI & Image processing	Excellent
4	Wireless Charging Station for EVs	Application Specific	Knowledge of Microcontroller and its application	Excellent
5	Smart water serving system	AI and Neural Network	Knowledge of AI & ML	Excellent

Head of Department
Electronic & Communication Engineering
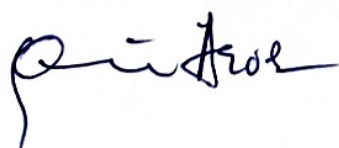Chandigarh Engineering College

Details of Projects Completed in academic year 2022-2023
Project –II by 2019 Batch

Sr. No.	Title of the Project	Research Area	Skill Development	Category
1	Modern farming	Artificial Intelligence & Neural Networks	Knowledge of AI & Image Processing	Excellent
2	Contact Less Hygienic examination Conduction system	Application Specific (Software/ IOT)	Knowledge of IOT and Wireless Technology	Excellent
3	Anti theft system for e commerce & delivery	Application Specific (Software/IOT	Knowledge of IOT and Wireless Technology	Excellent
4	Pipe Inspection Robot	Robotics and Embedded System	Knowledge of Microcontroller and its applications	Excellent
5	Smart & effective Borewell Rescue Operation device	Robotics and Embedded System	Knowledge of Microcontroller and its applications	Excellent

Details of Projects Completed in academic year 2021-2022
Project –I by 2019 Batch

Sr. No.	Title of the Project	Research Area	Skill Development	Category
1	Dog robot	Application Specific	Knowledge of IOT & Wireless technology	Excellent
2	Contact Less Hygienic examination Conductionsystem	Application Specific (Software/ IOT)	Knowledge of IOTand Wireless Technology	Excellent
3	Modern farming	Robotics and Embedded system	Knowledge of Microcontroller and its applications	Excellent
4	Pipe Inspection Robot	Robotics and Embedded system	Knowledge of Microcontroller and its applications	Excellent
5	Size Detection & Sorting over conveyer Belt	Robotics and Embedded system	Knowledge of Microcontroller and its applications	Excellent

Head of Department
Electronic & Communication Engineering
Chandigarh Engineering College
CGC, Landran, Mohali

Details of Projects Completed in academic year 2021-2022
Project –II by 2018 Batch

Sr. No.	Title of the Project	Research Area	Skill Development	Category
1	Smart Garbage dumping system by the use of image processing & Machine learning	Artificial Intelligence & Neural Networks	Knowledge of AI & Image Processing	Excellent
2	Automatic IV Drip system IOT Based	Application Specific (Software/ IOT)	Knowledge of IOT and Wireless Technology	Excellent
3	System & Method for crop mapping and water accounting	Application Specific (Software/ IOT)	Knowledge of IOT and Wireless Technology	Excellent
4	Fingerprint door Lock system with Face Recognition	Application Specific (Software/	Knowledge of IOT and Wireless Technology	Excellent
5	Drone Based Rapid Fire Controller	Robotics and Embedded System	Knowledge of Microcontroller and its applications	Excellent

Details of Projects Completed in academic year 2020-2021
Project –I by 2018 Batch

Sr. No.	Title of the Project	Research Area	Skill Development	Category
1	IOT Based Electricity Energy meter using ESP 32 & Blynk	Application Specific	Knowledge of IOT & Wireless technology	Excellent
2	Circuit breaker using password	Robotics and Embedded system	Knowledge of Microcontroller and its applications	Excellent
3	Fingerprint door lock system with face mask detection	Robotics and Embedded system	Knowledge of Microcontroller and its applications	Excellent
4	Smart Phone Controlled Home Automation system	Wireless Technologies	Knowledge of IOT and Wireless Technology	Excellent
5	Robotic Spy Snake	Robotics and Embedded system	Knowledge of Microcontroller and its applications	Excellent

Head of Department
Electronic & Communication Engineering
Chandigarh Engineering College
CGC, Landran, Mohali

Details of Major Projects Completed in academic year 2020-21(2017)

Sr. No.	Title of the Project	Research Area	Skill Development	Category
1	Smart Defense System for Forest Protection	Wireless Technologies and Embedded system	Knowledge of GSM& Wireless technology	Excellent
2	Wheel Chair Electric add on	Robotics and Embedded system	Knowledge of Microcontroller and its applications	Excellent
3	Autonomous Mending System	Robotics and Embedded system	Knowledge of Microcontroller and its applications	Excellent
4	Automatic Railway Crossing	Robotics and Embedded system	Knowledge of Microcontroller and its applications	Excellent
5	IOT Based Water Monitoring	Wireless Technologies	Knowledge of IOT and Wireless Technology	Excellent

Details of Major Projects Completed in academic year 2019-20 (2016 Batch)

Sr. No.	Title of the Project	Research Area	Skill Development	Category
1	Pollution monitoring system	Robotics and Embedded system	Knowledge of Microcontroller and its applications	Excellent
2	Coronory glove	Robotics and Embedded system	Knowledge of Microcontroller and its applications	Excellent
3	Automatic Seat Locator	Robotics and Embedded system	Knowledge of Microcontroller and its applications	Excellent
4	Soundless horn	Wireless & Embedded	Knowledge of Wireless Technology	Excellent
5	Android control fighter tank	Robotics and Embedded system	Knowledge of Microcontroller and its applications	Excellent

Head of Department
Electronic & Communication Engineering
Chandigarh Engineering College
CGC, Landran, Mohali

Details of Major Projects Completed in academic year 2018-19

Sr. No.	Title of the Project	Research Area	Skill Development	Category
1	Head Motion Controlled Wheel Chair	Robotics and Embedded System	Knowledge of Microcontroller and its applications	Excellent
2	Smart Mushroom Cultivation System	Application Specific	Knowledge of developing Automated systems	Excellent
3	Farmer Relief System	Application Specific	Knowledge of developing Automated systems	Excellent
4	RC Aircraft	Application Specific	Knowledge of developing smart systems	Excellent
5	Sahyog	Application Specific	Knowledge of developing Automated systems	Excellent

Details of Major Projects Completed in academic year 2017-18

Sr. No.	Title of the Project	Research Area	Skill Development	Category
1	Advanced Weather &Air Quality Management System	Robotics and Embedded System	Knowledge of Microcontroller and its applications	Excellent
2	Address to Blind	Application Specific	Knowledge of developing Automated systems	Excellent
3	Electro -Tiles	Application Specific	Knowledge of developing Automated systems	Excellent
4	Object Recognition using MATLAB	Application Specific	Knowledge of developing smart systems	Excellent
5	Smart Plant Watering System	Application Specific	Knowledge of developing Automated systems	Excellent

Head of Department
Electronic & Communication Engineering
Chandigarh Engineering College
CGC, Landran, Mohali