

Major project list

2023-24

S. No.	Project Title	Types	Relevance to PO's and PSO's
1.	Energy Consumption Predictor Using Machine Learning Model	Simulation	PO1, PO2, PO4, PO5, PO7, PO12, PSO1
2.	Design and Implementation of IoT Based Health Monitoring System	Hardware	PO1, PO3, PO5, PO6, PO7, PO10, PSO2
3.	Smart Street Lightning System With IoT Based Weather Monitoring System	Hardware	PO1, PO3, PO5, PO7, PO11, PSO1, PSO2
4.	Blockchain Based Voting Application	Simulation	PO1, PO5, PO6, PO8, PO9, PO10, PSO2
5.	Inhalesafe IoT-Powered Indoor Air Pollution Surveillance System	Hardware	PO1, PO3, PO5, PO6, PO7, PSO2
6.	Development of IoT Enabled Smart Energy Meter	Hardware	PO1, PO2, PO3, PO5, PO6, PO7, PSO1, PSO2
7.	Hybrid Source Selector	Hardware	PO1, PO2, PO5, PO6, PO7, PO11, PSO1, PSO3
8.	Enhancing RES Integration in FET Campus of Jamia	Simulation	PO1, PO3, PO6, PO7, PO11, PSO1
9.	Reducing Electricity Bill by Making Power Factor Most Economical	Hardware	PO1, PO2, PO5, PO7, PO11, PSO1
10.	Protection of Transformer Using Microcontroller Based Relay	Hardware	PO1, PO2, PO3, PO5, PO6, PO11, PSO1, PSO2
11.	Priority Based Traffic Signal Based on Vehicle Density and Emergency	Hardware	PO1, PO3, PO5, PO6, PO9, PO11, PSO2
12.	Active Cell Balancing in Battery Management System	Hardware	PO1, PO3, PO5, PO7, PO11, PSO3
13.	Simulation & Implementation of TSC for Voltage Stability Improvement	Simulation	PO1, PO3, PO5, PO7, PO11, PSO1, PSO3
14.	Demand Response Implementation in Smart Home	Hardware	PO1, PO3, PO5, PO6, PO7, PSO1
15.	Assessment of Cardiac Output Using Non-Invasive Techniques	Hardware	PO1, PO3, PO4, PO5, PO10, PSO2
16.	Image Super-Resolution Using Generative Adversarial Networks	Simulation	PO1, PO2, PO4, PO5, PO10, PSO2,
17.	Machine Learning based Inverter Fault Detection in Grid-Connected PV System	Simulation	PO1, PO2, PO4, PO5, PO7, PSO1, PSO3
18.	IoT Based RFID Attendance System Using Googlesheet	Hardware	PO1, PO3, PO5, PO9, PO10, PSO2
19.	Detecting the Solar Module Degradation using Machine Learning	Simulation	PO1, PO2, PO5, PO7, PO12, PSO1
20.	IPT Based Wireless Charging System for Electric Vehicles	Hardware	PO1, PO3, PO5, PO6, PO7, PO11, PSO3
21.	Order Management & Data Analysis for Restaurant	Simulation	PO1, PO5, PO9, PO10, PO11, PSO2
22.	ML Based Analysis of Push Pull Effect on Aircraft Pilot	Simulation	PO1, PO2, PO4, PO5, PO10, PSO2
23.	Fast Charging of Electric Vehicles	Hardware	PO1, PO3, PO5, PO6, PO7, PO11, PSO3
24.	Speed Control of Induction Motor in EV	Hardware	PO1, PO3, PO5, PO7, PO11, PSO3
25.	Battery Thermal Management System	Hardware	PO1, PO3, PO5, PO7, PO11, PSO3

Mapping of projects with POs and PSO (2023-2024)

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
P1	3	3	3	3	3	2	3	3	3	3	2	3	3	3	1
P2	3	3	3	3	3	3	3	3	3	3	2	3	2	3	1
P3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	1
P4	3	3	3	3	3	3	3	3	3	3	3	3	1	3	1
P5	3	3	3	3	3	3	3	3	3	3	3	3	1	3	1
P6	3	3	3	3	3	3	3	3	3	1	1	1	3	3	3
P7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
P8	2	2	2	2	3	3	3	3	3	3	3	3	3	2	1
P9	3	3	2	2	3	3	3	3	3	3	3	3	3	1	1
P10	3	3	3	2	3	3	2	2	3	1	1	1	3	3	1
P11	3	3	3	3	3	3	3	3	3	1	1	1	1	3	3
P12	3	1	3	1	3	1	3	3	3	3	3	1	2	3	3
P13	3	3	3	3	3	3	3	2	3	3	3	1	3	1	3
P14	3	1	2	1	3	2	3	3	3	1	1	3	3	3	3
P15	3	2	3	3	3	1	1	3	3	3	1	1	1	3	1
P16	3	3	2	3	3	1	1	2	3	3	1	2	1	3	3
P17	3	3	1	3	3	1	1	3	2	3	1	1	3	1	3
P18	3	3	3	3	3	3	1	2	3	3	1	1	1	3	3
P19	3	3	1	2	3	2	3	3	2	1	2	3	3	1	3
P20	3	1	3	1	3	3	3	3	2	3	3	1	3	1	3
P21	3	2	2	2	3	1	1	3	3	3	3	1	1	3	1
P22	3	3	2	3	3	1	1	2	2	3	2	1	1	3	1
P23	3	1	3	2	3	3	2	3	3	2	2	3	3	1	3
P24	3	2	3	2	3	2	3	3	2	2	3	3	1	1	3
P25	3	2	3	2	3	2	3	3	2	2	3	3	1	1	3
AVERAGE	3	2.76	2.68	2.64	3	2.68	2.8	2.84	2.88	2.8	2.64	2.52	2.28	2.32	2.12

2022-23

S. No.	Project Title	Types	Relevance to PO's and PSO's
1.	Speed Control of BLDC motor using Arduino (Hardware)	Hardware	PO1, PO3, PO5, PO7, PO11, PSO3:
2.	Music Generation using LTSM	Simulation	PO1, PO4, PO5, PO12, PSO2
3.	Smart Metering Infrastructure	Hardware	PO1, PO3, PO5, PO6, PO7, PO11, PSO1 , PSO2
4.	Intelligent Smart Dry and Wet Garbage Segregation Trashbin	Hardware	PO1, PO3, PO5, PO6, PO7, PSO2
5.	Air Quality Index Estimation using Image Analysis	Simulation	PO1, PO2, PO4, PO5, PO7, PSO2
6.	Lane Detection for Autonomous Vehicle	Simulation	PO1, PO2, PO4, PO5, PO6, PO7, PSO2
7.	Transformer based Neural Network for Answer Selection in Question Answering	Simulation	PO1, PO2, PO4, PO5, PO12, PSO2
8.	Smart Queue Analytics	Simulation	PO1, PO3, PO5, PO9, PO10, PSO2
9.	IoT Based Smart Agriculture System	Hardware	PO1, PO3, PO5, PO6, PO7, PSO2
10.	Multi-Class Medical Diagnosis using Various Deep Learning Techniques	Simulation	PO1, PO2, PO4, PO5, PO10, PSO2
11.	Smart Control for Home Automation	Simulation	PO1, PO3, PO5, PO6, PO7, PO11, PSO2
12.	Devnagri to Roman Transliteration	Simulation	PO1, PO5, PO9, PO10, PO12, PSO2
13.	IoT Based Smart Home Automation System	Hardware	PO1, PO3, PO5, PO6, PO7, PO11, PSO2
14.	Sign Language Recognition	Simulation	PO1, PO2, PO5, PO6, PO9, PO10, PSO2
15.	Assessment of Self Perceived Fatigue in Relation to Body Composition & Physical Outcomes using Machine Learning	Simulation	PO1, PO3, PO4, PO5, PO6, PSO2
16.	IoT Based Flood Detection System	Hardware	PO1, PO3, PO5, PO6, PO7, PSO2
17.	IoT Enabled Smart Charging Station for Electric Vehicles	Hardware	PO1, PO3, PO5, PO6, PO7, PO11, PSO3
18.	Electricity Price Forecasting Using Machine Learning	Simulation	PO1, PO2, PO4, PO5, PO12, PSO1
19.	Fault Detection and Classification in Transmission Line Using Fuzzy Logic	Simulation	PO1, PO2, PO5, PO7, PO11, PSO1
20.	Smart Street Lightning System with IoT Based Weather Monitoring System	Hardware	PO1, PO3, PO5, PO7, PO11, PSO1, PSO2
21.	Automatic Speed Control System for Vehicle Using RF Signal	Hardware	PO1, PO3, PO5, PO6, PO9, PSO2
22.	Design of Eddy Current Braking System	Simulation	PO1, PO3, PO5, PO7, PO11, PSO3
23.	Fault Detection in Transmission Line	Simulation	PO1, PO2, PO5, PO7, PO11, PSO1
24.	Wireless Robot Car Using DTMF Module	Hardware	PO1, PO3, PO5, PO9, PO11, PSO2:
25.	Obstacle Detection with Intelligent Braking System	Hardware	PO1, PO3, PO5, PO6, PO7, PSO2:

Mapping of projects with POs and PSO (2022-2023)

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
P1	3	3	3	2	3	2	3	3	3	3	3	2	1	3	3
P2	3	2	2	3	3	2	2	3	3	3	2	2	1	3	1
P3	3	2	3	2	3	3	2	3	2	2	3	2	3	3	1
P4	3	2	3	2	3	3	3	3	2	2	2	2	1	3	1
P5	3	3	3	3	3	3	3	3	3	3	2	2	1	3	1
P6	3	3	3	3	3	3	3	3	2	2	2	2	1	3	1
P7	3	3	2	3	3	2	2	3	2	2	2	3	1	3	1
P8	3	3	3	3	3	2	2	3	3	3	2	2	1	3	1
P9	3	3	3	3	2	2	2	3	3	2	3	2	1	3	1
P10	3	3	3	3	2	2	3	3	3	2	3	2	1	3	1
P11	3	3	3	3	2	2	2	3	3	3	2	3	1	3	1
P12	3	2	3	2	3	3	3	3	2	2	2	3	1	3	1
P13	3	2	3	2	3	3	3	3	2	3	2	3	1	3	3
P14	3	3	2	2	3	3	2	3	2	2	2	2	1	3	1
P15	3	2	3	2	3	3	2	3	2	3	2	3	1	3	1
P16	3	2	3	2	3	3	3	3	3	2	3	2	1	3	1
P17	3	3	2	2	3	3	3	3	2	3	2	2	1	3	1
P18	3	3	3	3	3	3	2	3	2	2	3	2	3	1	1
P19	3	3	2	2	3	2	3	3	2	2	3	2	3	1	1
P20	3	3	3	3	3	3	3	3	2	2	2	2	3	3	1
P21	3	2	3	2	3	3	2	3	3	3	2	3	1	3	1
P22	3	3	3	2	2	3	2	3	2	2	3	3	1	3	1
P23	3	3	3	3	3	2	3	3	3	2	3	2	3	3	1
P24	3	3	3	3	3	3	2	3	3	2	3	2	1	3	1
P25	3	2	3	2	3	3	3	3	2	3	2	3	1	3	3
AVERAGE	3	2.64	2.8	2.48	2.84	2.64	2.52	3	2.44	2.4	2.4	2.32	1.4	2.84	1.24

2021-22

S. No.	Project Title	Types	Relevance to PO's and PSO's
1.	Noninvasive technique for cardiac output measurement	Hardware	PO1, PO2, PO4, PO5, PO6, PO10, PSO2:
2.	SOLAR BASED CHARGER	Hardware	PO1, PO3, PO5, PO7, PO11, PSO3
3.	SENTIMENT ANALYSIS USING MACHINE LEARNING ALGORITHMS	Simulation	PO1, PO2, PO4, PO5, PO12, PSO2:
4.	TRASH SEPARATOR	Hardware	PO1, PO3, PO5, PO6, PO7, PSO2:
5.	Prototype For IoT Based Home Automation System Over a Cloud	Hardware	PO1, PO3, PO5, PO6, PO7, PO11, PSO2:
6.	Implementing an end-to-end object detection and lane tracking system for autonomous vehicle	Simulation	PO1, PO2, PO4, PO5, PO6, PO7, PO11, PSO2:
7.	Artificial Intelligence Based Control of Grid Connected Inverter	Simulation	PO1, PO2, PO3, PO5, PO7, PO11, PSO3
8.	Prototype of Wind Turbine System With Inverter	Hardware	PO1, PO3, PO5, PO7, PO11, PSO3
9.	Power System Fault Detection and classification Using Neural Networks	Simulation	PO1, PO2, PO4, PO5, PO7, PO11, PSO1
10.	State of Charge and Range Estimation of Electric Vehicle using MATLAB	Simulation	PO1, PO2, PO5, PO6, PO7, PSO3
11.	IoT based monitoring of Power electronics converter for Electric Vehicles.	Hardware	PO1, PO3, PO5, PO6, PO7, PO11, PSO3
12.	Design And Implementation of Smart Energy Meter	Hardware	PO1, PO3, PO5, PO6, PO7, PO11, PSO1
13.	Use of Distance relay to protect power System	Hardware	PO1, PO2, PO3, PO5, PO6, PO11, PSO1
14.	AUTONOMOUS VEHICLE	Hardware	PO1, PO3, PO4, PO5, PO6, PO7, PO11, PSO2:
15.	Speed Control of BLDC motor	Hardware	PO1, PO3, PO5, PO7, PO11, PSO3
16.	Social Distancing Monitor	Hardware	PO1, PO3, PO5, PO6, PO9, PO10, PSO2:

Mapping of projects with POs and PSO (2021-2022)

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
P1	3	2	2	3	3	3	2	3	3	3	2	2	1	3	1
P2	3	3	3	3	3	3	3	3	2	2	3	2	3	1	3
P3	3	3	2	3	3	2	2	3	2	2	2	3	1	3	1
P4	3	3	3	2	3	3	3	3	2	2	2	2	1	3	3
P5	3	3	3	2	3	3	3	3	2	2	3	2	1	3	1
P6	3	3	3	2	3	3	2	3	2	2	3	2	1	3	3
P7	3	3	3	3	3	2	3	3	2	2	2	2	3	1	3
P8	3	3	3	2	3	3	3	3	2	2	3	2	3	1	3
P9	3	3	3	3	3	3	2	3	2	2	3	2	3	3	1
P10	3	2	3	2	3	2	3	3	2	2	2	2	1	3	3
P11	3	2	3	2	3	2	3	3	2	2	2	2	1	3	3
P12	3	3	3	2	3	2	3	3	2	2	2	2	3	3	1
P13	3	3	3	2	3	2	2	3	2	2	2	2	3	3	1
P14	3	3	3	2	3	3	2	3	2	2	2	2	1	3	3
P15	3	3	3	2	3	2	2	3	2	2	2	2	1	3	3
P16	3	3	3	2	3	3	2	3	2	2	2	3	1	3	1
AVERAGE	3	2.81	2.87	2.31	3	2.56	2.5	3	2.06	2.06	2.31	2.12	1.75	2.62	2.12