

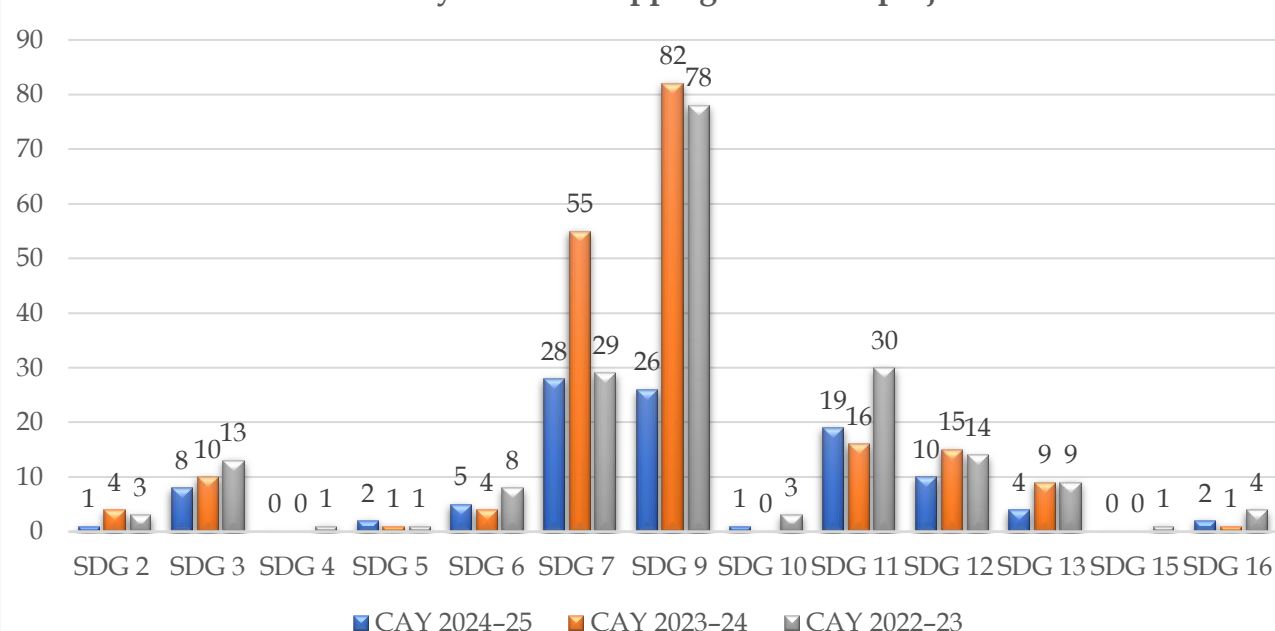
DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Mapping of mini-project titles from CAY 2024-25, CAY-m1 2023-24, and CAY-m2 2022-23 with the most relevant Sustainable Development Goals (SDGs)

Overall Summary of SDG Mapping Across All Years

SDG	CAY 2024-25	CAY 2023-24	CAY 2022-23	Total
SDG 2	1	4	3	8
SDG 3 (Good Health & Well-being)	8	10	13	31
SDG 4 (Quality Education)	0	0	1	1
SDG 5	2	1	1	4
SDG 6 (Clean Water & Sanitation)	5	4	8	17
SDG 7 (Affordable & Clean Energy)	28	55	29	112
SDG 9 (Industry, Innovation & Infrastructure)	26	82	78	186
SDG 10	1	0	3	4
SDG 11 (Sustainable Cities & Communities)	19	16	30	65
SDG 12 (Responsible Consumption & Production)	10	15	14	39
SDG 13	4	9	9	22
SDG 15 (Life on Land)	0	0	1	1
SDG 16 (Peace, Justice & Strong Institutions)	2	1	4	7

Summary of SDG Mapping with mini projects



Key Insights & Trends

1. Top 3 SDGs Addressed Across All Years:

- **SDG 9 (Industry, Innovation & Infrastructure)** – Most dominant, reflecting EEE focus on tech innovation.
- **SDG 7 (Affordable & Clean Energy)** – Strong emphasis on renewable energy, EV tech, and power systems.
- **SDG 11 (Sustainable Cities & Communities)** – Growing focus on smart city applications like IoT, automation, and safety.

2. Emerging Themes:

- **EV & Wireless Charging** – Consistent growth across all years.
- **IoT & Smart Automation** – Pervasive in home, grid, and urban systems.
- **Health & Safety Tech** – Steady presence, especially in driver safety and assistive devices.

3. Less Addressed SDGs:

- **SDG 4 (Quality Education)** and **SDG 15 (Life on Land)** – Minimal coverage.
- **SDG 5** – Limited to women's safety projects.

4. Yearly Shift:

- **2024-25** – More balanced across SDGs 7, 9, 11.
- **2023-24** – Heavy focus on SDG 9 (power electronics and grid systems).
- **2022-23** – Broader smart city and automation projects.

Details of mini-projects related to SDGs (CAY 2024-25)

Summary Table: CAY 2024-25

SDG	Count of Projects	Key Project Themes
SDG 7 (Affordable & Clean Energy)	28	Solar tracking, wireless EV charging, renewable grid integration, portable solar power
SDG 9 (Industry, Innovation & Infrastructure)	26	Automation, robotics, motor control, fault detection, smart grid, IoT systems
SDG 11 (Sustainable Cities & Communities)	19	Smart parking, garbage monitoring, street light control, safety systems
SDG 12 (Responsible Consumption & Production)	10	Energy monitoring, waste management, water control systems
SDG 3 (Good Health & Well-being)	8	Health monitoring, driver safety, gas detection, assistive devices
SDG 6 (Clean Water & Sanitation)	5	Water level control, irrigation automation
SDG 13	4	Solar energy systems, renewable integration
SDG 5	2	Women's safety devices
SDG 16 (Peace, Justice & Strong Institutions)	2	Theft detection, safety systems
SDG 10	1	Assistive tech for visually impaired
SDG 2	1	Automated irrigation

Total Projects: 6

Most Addressed SDGs: 7, 9, 11

Mapping of CAY 2024-25

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification	Name of the Supervisor
1	B22EE001	Electricity theft detection using gsm technology	SDG 9 , SDG 16	Prevents energy theft, promotes efficient energy use and fair access.	V. Ramaiah
2	B22EE002	Design of a robotic arm and gripper	SDG 9	Enhances automation, productivity, and innovation in manufacturing and healthcare.	V. Ramaiah
3	B22EE003	Gps tracking	SDG 9 , SDG 11	Improves logistics, safety, and efficient transportation systems.	V. Ramaiah
4	B22EE004	Automatic room temperature control system using ARDUINO uno r3 and dht11 sensor	SDG 7 SDG 12	Reduces energy consumption and enhances comfort through smart automation.	V. Ramaiah
5	B22EE005	Smart parking system using ARDUINO	SDG 9 , SDG 11	Reduces traffic congestion and pollution through efficient parking management.	C Venkatesh
6	B22EE006	Smart garbage monitoring and alert system	SDG 11 , SDG 12	Improves waste management efficiency and promotes cleaner cities.	C Venkatesh
7	B22EE007	Automated water level monitoring and control system	SDG 6 , SDG 12	Optimizes water usage and prevents wastage in residential and agricultural systems.	C Venkatesh
8	B22EE008	Empowering women safety system	SDG 5 , SDG 16	Uses technology to enhance personal safety and security for women.	C Venkatesh
9	B22EE009	Solar trackers to harness maximum energy	SDG 7 SDG 13	Increases solar energy efficiency, promoting renewable energy adoption.	V Rajagopal

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification	Name of the Supervisor
10	B22EE010	Power generation using human footsteps	SDG 7 SDG 11	Harnesses renewable energy from human movement, promoting clean energy innovation.	V Rajagopal
11	B22EE011	Wireless charger of electric vehicles	SDG 7 SDG 11	Supports EV adoption and reduces reliance on fossil fuels.	V Rajagopal
12	B22EE012	Automatic street light control based on vehicle movement	SDG 7 SDG 11	Reduces energy wastage and enhances public safety through smart lighting.	V Rajagopal
13	B22EE013	Gas level monitoring system using NodeMCU	SDG 3 , SDG 11	Prevents gas leaks and ensures safety in residential and industrial areas.	M Narasimha Rao
14	B22EE014	Short circuit protection	SDG 9 , SDG 11	Enhances electrical safety and prevents fire hazards.	M Narasimha Rao
15	B22EE015	Sun tracking solar panel	SDG 7 SDG 13	Maximizes solar energy capture, promoting clean energy use.	M Narasimha Rao
16	B22EE016	Automatic fire extinguisher	SDG 9 , SDG 11	Improves fire safety and response in homes and industries.	M Narasimha Rao
17	B22EE017	Design and development of a solar powered electric vehicle car	SDG 7 SDG 13	Promotes clean transportation and reduces carbon emissions.	G Rajender
18	B22EE018	Fault detection and analysis in underground cable transmission system	SDG 9 , SDG 11	Enhances reliability and safety of power distribution networks.	G Rajender
19	B22EE019	Design and simulation of solar pv system	SDG 7 SDG 13	Promotes renewable energy integration and system optimization.	G Rajender
20	B22EE020	Wireless charging system for an	SDG 7 SDG 13	Supports sustainable EV	G Rajender

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification	Name of the Supervisor
		electric vehicle through renewable grids		infrastructure powered by renewables.	
21	B22EE021	Gsm based fire detection system using ARDUINO	SDG 9 , SDG 11	Enhances fire safety through early detection and alerts.	B Jagadish Kumar
22	B22EE022	ARDUINO based footstep power generation using piezo electric material	SDG 7 SDG 11	Converts human motion into clean energy, promoting sustainable power sources.	B Jagadish Kumar
23	B22EE024	Detection of driver drowsiness using eye blink sensor	SDG 3 , SDG 9	Reduces road accidents by monitoring driver alertness.	B Jagadish Kumar
24	B22EE025	Fire alarm	SDG 9 , SDG 11	Improves fire safety and early warning systems.	M Santosh
25	B22EE026	Automatic irrigation control system using ARDUINO uno	SDG 2 , SDG 6	Optimizes water use in agriculture, promoting sustainable farming.	M Santosh
26	B22EE027	Portable solar power bank	SDG 7 SDG 13	Provides renewable energy access for portable devices.	M Santosh
27	B22EE028	Ultrasonic object detection	SDG 9 , SDG 11	Enhances safety in vehicles and automation systems.	M Santosh
28	B22EE029	Alcohol detector using mq-3 sensor and ARDUINO	SDG 3 , SDG 16	Promotes road safety by preventing drunk driving.	G Sudheer Kumar
29	B22EE031	Solar-powered mobile phone charger tapping in sustainable energy	SDG 7 SDG 13	Provides clean energy access for mobile communication.	G Sudheer Kumar
30	B22EE032	Password based circuit breaker	SDG 7 SDG 9	Enhances electrical safety and access control.	G Sudheer Kumar
31	B22EE033	Sinewave inverter using mosfet	SDG 7 SDG 9	Improves power conversion efficiency for renewable systems.	B Vijay Kumar
32	B22EE034	Smart blind stick	SDG 3 , SDG 10	Assists visually impaired	B Vijay Kumar

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification	Name of the Supervisor
				individuals, promoting inclusivity.	
33	B22EE035	Dc to dc boost converter using mosfet	SDG 7 SDG 9	Enhances renewable energy system efficiency.	B Vijay Kumar
34	B22EE036	Touch sensor with 555 timer	SDG 9	Demonstrates basic electronics and automation principles.	B Vijay Kumar
35	B22EE037	Wireless charging system from electric vehicles	SDG 7 SDG 13	Supports EV infrastructure and clean energy integration.	P Nagarjuna Reddy
36	B22EE038	Single phase to three phase ac to ac converter	SDG 7 SDG 9	Enhances motor and industrial system efficiency.	P Nagarjuna Reddy
37	B22EE039	Design of an overload alert with automatic shutdown	SDG 9 , SDG 11	Prevents electrical overloads and enhances safety.	P Nagarjuna Reddy
38	B22EE040	High voltage shock generator	SDG 9	Educational tool for high-voltage system understanding.	P Nagarjuna Reddy
39	B22EE041	Four quadrant dc motor speed control by using ARDUINO	SDG 7 SDG 9	Improves motor control efficiency for industrial and EV applications.	C Pavan Kumar
40	B22EE042	Laser security system	SDG 9 , SDG 11	Enhances security for homes and institutions.	C Pavan Kumar
41	B22EE043	ARDUINO based digital thermometer for temperature measurement applications	SDG 9 , SDG 12	Enables precise temperature monitoring for energy efficiency.	C Pavan Kumar
42	B22EE044	Design and implementation of rfid-based door unlock system	SDG 9 , SDG 11	Enhances security and access control in buildings.	C Pavan Kumar
43	B22EE046	ARDUINO based buck-boost converter for pv solar system	SDG 7 SDG 13	Optimizes solar power conversion and storage.	K Ajith

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification	Name of the Supervisor
44	B23EE061L	Automatic plant watering system using ARDUINO uno	SDG 2 , SDG 6	Promotes efficient water use in agriculture and gardening.	T Praveen Kumar
45	B23EE062L	Rfid based train collision avoidance system	SDG 9 , SDG 11	Enhances railway safety and prevents accidents.	T Praveen Kumar
46	B23EE063L	Automatic solar tracking	SDG 7 SDG 13	Maximizes solar panel efficiency for clean energy generation.	T Praveen Kumar
47	B23EE064L	Temperature controlled fan system	SDG 7 SDG 12	Reduces energy consumption through smart climate control.	T Praveen Kumar
48	B23EE065L	Iot based home automation using NodeMCU	SDG 7 SDG 11	Enhances home energy efficiency and convenience.	Y Manjusree
49	B23EE066L	Real time reactive power compensation using upfc	SDG 7 SDG 9	Improves power grid stability and efficiency.	Y Manjusree
50	B23EE067L	Power failure indicating system	SDG 7 SDG 9	Enhances power outage response and grid reliability.	Y Manjusree
51	B23EE068L	Transmission line fault detection and safety system	SDG 9 , SDG 11	Improves electrical grid safety and reliability.	Y Manjusree
52	B23EE069L	Automatic road reflector light	SDG 9 , SDG 11	Enhances road safety through improved visibility.	D Rakesh Chandra
53	B23EE070L	Auto water pump switcher	SDG 6 , SDG 12	Optimizes water pumping and reduces energy use.	D Rakesh Chandra
54	B23EE071L	Speed control of a dc motor by pwm technique using ARDUINO	SDG 7 SDG 9	Improves motor efficiency and control in various applications.	D Rakesh Chandra
55	B23EE072L	Iot based energy meter	SDG 7 SDG 12	Enables real-time energy monitoring and efficient usage.	D Rakesh Chandra
56	B23EE073L	Automatic lpg gas detection and activation of	SDG 3 , SDG 11	Prevents gas poisoning and enhances indoor air	A Rajasekhar

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification	Name of the Supervisor
		exhaust fan		safety.	
57	B23EE074L	Automatic water controlling device	SDG 6 , SDG 12	Reduces water wastage in domestic and agricultural systems.	A Rajasekhar
58	B23EE075L	Obstacle detector using ir proximity sensor	SDG 9 , SDG 11	Enhances safety in vehicles and robotics.	A Rajasekhar
59	B23EE076L	Street light system	SDG 7 SDG 11	Improves public lighting and energy efficiency.	A Rajasekhar
60	B23EE077L	Speed control of dc motor using ic555	SDG 7 SDG 9	Demonstrates basic motor control for energy-efficient applications.	G.Sunil Kumar
61	B23EE078L	Battery health monitoring system	SDG 7 SDG 9	Extends battery life and promotes efficient energy storage.	G Sunil Kumar
62	B23EE079L	Iot based air & sound pollution monitoring system	SDG 3 , SDG 11	Tracks environmental pollution for better urban health management.	G Sunil Kumar
63	B23EE080L	Door safety alarm	SDG 9 , SDG 11	Enhances home and building security.	G Sunil Kumar
64	B23EE081L	Home automation through android mobile app using ARDUINO	SDG 7 SDG 11	Improves energy efficiency and convenience in homes.	M Srinivas
65	B23EE082L	Single axis solar tracking system	SDG 7 SDG 13	Increases solar energy capture efficiency.	M Srinivas
66	B22EE128L	Rpm display for bldc motor with speed controller	SDG 7 SDG 9	Enhances motor control efficiency for industrial and EV systems.	T Praveen Kumar

Mapping of Student Projects Linked to SDGs details of mini-projects related to SDGs. (CAY 2023-24)

Summary Table: CAY 2023-24 (2023-24)

SDG	Count of Projects	Key Project Themes
SDG 7 (Affordable & Clean Energy)	55	Solar/wind converters, inverters, EV charging, energy management
SDG 9 (Industry, Innovation & Infrastructure)	82	Grid management, power electronics, IoT automation, fault analysis
SDG 3 (Good Health & Well-being)	10	Health monitoring, driver safety, medicine reminders
SDG 11 (Sustainable Cities & Communities)	16	Smart lighting, traffic control, pollution monitoring
SDG 12 (Responsible Consumption & Production)	15	Energy monitoring, load management, waste control
SDG 13	9	Renewable systems, climate monitoring
SDG 6 (Clean Water & Sanitation)	4	Water level control, irrigation
SDG 5	1	Women's safety IoT device
SDG 16 (Peace, Justice & Strong Institutions)	1	Electricity theft detection
SDG 2	4	Smart agriculture, irrigation

Total Projects: 118

Most Addressed SDGs: 9, 7, 11

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
1	B21EE001	Design and Implementation of Step-Up Cycloconverter	SDG 7 SDG 9	Improves power conversion efficiency for renewable systems.
2	B21EE002	Z-Source-Based High Step-Up DC-DC Converters for Photovoltaic Applications	SDG 7 SDG 13	Enhances solar power efficiency and integration.
3	B21EE003	Over Voltage and Under Voltage Protection System	SDG 9 , SDG 11	Protects electrical systems from damage, improving safety and reliability.
4	B21EE004	The Voltage Multiplier Circuit	SDG 7 SDG 9	Enhances voltage levels for efficient power conversion.
5	B21EE005	Transformer less Power Supply for Low Power Applications	SDG 7 SDG 12	Reduces energy loss and size in power supplies.
6	B21EE007	Single Phase Dual Input Split Source Inverter	SDG 7 SDG 9	Supports hybrid energy systems for

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
				improved reliability.
7	B21EE008	IoT Based Fault Detection in Underground Cable Transmission System Using ARDUINO UNO	SDG 9 , SDG 11	Enhances grid reliability and maintenance efficiency.
8	B21EE009	Solar Powered Mobile Charging System	SDG 7 SDG 13	Provides renewable energy access for portable devices.
9	B21EE010	Loss Allocation Due to Reactive Power in Distributed Generations	SDG 7 SDG 9	Improves power grid efficiency and management.
10	B21EE012	EV BMS With Charging Monitor and Fire Protection	SDG 7 SDG 9	Enhances EV safety and battery efficiency.
11	B21EE013	Infrared (IR) Remote Tester	SDG 9	Educational tool for electronics testing and maintenance.
12	B21EE014	IoT Temperature based Automation Fan Speed Control and Monitoring System	SDG 7 SDG 12	Optimizes energy use in cooling systems.
13	B21EE015	12 Pulse Converters for Power Quality Improvement	SDG 7 SDG 9	Enhances power quality in industrial and grid systems.
14	B21EE017	Single Phase Five Level Transformer less Inverter for Photovoltaic Applications	SDG 7 SDG 13	Improves solar inverter efficiency and reduces losses.
15	B21EE018	Design of Inverter Using One Transistor	SDG 7 SDG 9	Simple and efficient inverter design for low-power applications.
16	B21EE019	Power Efficient Mini Inverter Project	SDG 7 SDG 12	Promotes energy-efficient power conversion.
17	B21EE020	IoT Based Street Light Management System	SDG 7 SDG 11	Reduces energy wastage in public lighting.
18	B21EE021	Automation in Load Shedding Using IoT	SDG 7 SDG 9	Improves grid stability and efficient load management.
19	B21EE022	Wireless Charging System for an Electric Vehicle Through Renewable Grids	SDG 7 SDG 13	Supports sustainable EV infrastructure.
20	B21EE023	GSM Based Fire Detection Alarm System	SDG 9 , SDG 11	Enhances fire safety through remote

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
				alerts.
21	B21EE025	Wind Energy Conversion system based on Permanent magnetic Synchronous Generator	SDG 7 SDG 13	Promotes wind energy generation and clean power.
22	B21EE027	Loss Allocation Due to Active Power in Loads	SDG 7 SDG 9	Improves power system efficiency and loss management.
23	B21EE028	IoT Based Heart Rate Monitoring System	SDG 3, SDG 9	Enables remote health monitoring and early intervention.
24	B21EE029	Center-Tapped Step-Down Cycloconverter: A Robust Approach to AC Frequency Manipulation	SDG 7 SDG 9	Enhances power control in industrial applications.
25	B21EE030	Step-Up Cycloconverter Utilizing Thyristor with Center-Tapped Configuration	SDG 7 SDG 9	Improves power conversion for renewable and industrial systems.
26	B21EE031	Differential Protection of Overhead Transmission Lines Using MATLAB Simulink	SDG 9, SDG 11	Enhances transmission line safety and reliability.
27	B21EE032	Wireless Cell Phone Detection System	SDG 9	Demonstrates RF detection for security and monitoring applications.
28	B21EE034	The Street Light Automatic Intensity Controller	SDG 7 SDG 11	Reduces energy consumption through adaptive lighting.
29	B21EE035	IoT Based Anti-Sleep Alarm and Braking System for alerting the drives	SDG 3, SDG 9	Enhances driver safety and prevents accidents.
30	B21EE036	Power Generation from Solar Pannels	SDG 7 SDG 13	Promotes solar energy adoption and clean power generation.
31	B21EE038	Power Management System of a Particle Swarn Optimization Controlled Grid Integrated Hybrid PV/WIND/FC/Battery Distributed Generation System	SDG 7 SDG 9	Optimizes hybrid renewable energy systems for grid stability.
32	B21EE039	Piezoelectric Electricity Generation with Acupressure Walking Tracks	SDG 7 SDG 11	Harnesses human motion for clean

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
				energy generation.
33	B21EE040	High-Gain Two-Source DC-DC Boost Converter with Soft-Switching	SDG 7 SDG 9	Improves power conversion efficiency for renewable systems.
34	B21EE041	Implementation of Pulse Width Modulation Using ARDUINO	SDG 7 SDG 9	Demonstrates efficient motor and power control techniques.
35	B21EE043	Power Management System of a Particle Swarn Optimization Controlled Grid Integrated Hybrid PV/WIND/FC/Battery Distributed Generation System	SDG 7 SDG 9	Optimizes hybrid renewable energy systems for grid stability.
36	B21EE044	Design of a Smart Safety Device Using IoT for Women	SDG 5, SDG 16	Enhances women's safety through IoT-based alerts.
37	B21EE045	IoT Based Smart Power Grid Monitoring and Control Using ARDUINO	SDG 7 SDG 9	Improves grid monitoring and management for reliability.
38	B21EE046	Automatic Street Light Controlling System Using RTC	SDG 7 SDG 11	Enhances energy efficiency in public lighting.
39	B21EE047	Drone Technology	SDG 9	Supports innovation in surveillance, delivery, and monitoring.
40	B21EE048	Bridge Type Step-Down Cycloconverter	SDG 7 SDG 9	Improves power conversion efficiency in industrial systems.
41	B21EE049	Loss Allocation Due to Active Power in Distributed Generations	SDG 7 SDG 9	Enhances power system efficiency and management.
42	B21EE050	USB Mobile Charger Unit	SDG 7	Provides efficient charging solutions for mobile devices.
43	B21EE052	Smoke Detector Alarm	SDG 9, SDG 11	Enhances fire safety in homes and buildings.
44	B21EE054	Detection Of Faults in Overhead Transmission line Using Wavelet Approach	SDG 9 , SDG 11	Improves fault detection and grid reliability.
45	B20EE047	Loss Allocation Due to Reactive	SDG 7 SDG 9	Enhances power

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
		Power in Loads		system efficiency and loss management.
46	B22EE121L	Improvement of Power Factor and Voltage Stability by shunt compensation	SDG 7 SDG 9	Improves power quality and grid stability.
47	B22EE122L	Improvement of Power Factor and Voltage Stability by shunt compensation	SDG 7 SDG 9	Improves power quality and grid stability.
48	B22EE123L	Temperature Based Fan Speed Controller Using ARDUINO	SDG 7 SDG 12	Optimizes energy use in cooling systems.
49	B22EE124L	Power Management System of a Particle Swarn Optimization Controlled Grid Integrated Hybrid PV/WIND/FC/Battery Distributed Generation System	SDG 7 SDG 9	Optimizes hybrid renewable energy systems for grid stability.
50	B22EE125L	Speed Control of Induction Motor Using ARDUINO	SDG 7 SDG 9	Enhances motor control efficiency in industrial applications.
51	B22EE126L	Density Based Traffic Signal Control System Using ARDUINO	SDG 9, SDG 11	Reduces traffic congestion and emissions.
52	B22EE127L	Automatic Load Sharing of Transformer Using ARDUINO	SDG 7 SDG 9	Improves transformer efficiency and reliability.
53	B22EE129L	Power Management System of a Particle Swarn Optimization Controlled Grid Integrated Hybrid PV/WIND/FC/Battery Distributed Generation System	SDG 7 SDG 9	Optimizes hybrid renewable energy systems for grid stability.
54	B22EE130L	IoT Based Home Automation Using NODE MCU	SDG 7 SDG 11	Enhances home energy efficiency and convenience.
55	B22EE131L	Speed Control of a DC Motor by PWM Technique Using ARDUINO	SDG 7 SDG 9	Improves motor control efficiency for various applications.
56	B22EE132L	Improvement of Power Factor and Voltage Stability by shunt compensation	SDG 7 SDG 9	Improves power quality and grid stability.
57	B22EE133L	Automatic Mains Changeover Switch for Uninterrupted Power Supply	SDG 7 SDG 9	Ensures continuous power supply and grid reliability.

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
58	B22EE134L	Improvement of Power Factor and Voltage Stability by shunt compensation	SDG 7 SDG 9	Improves power quality and grid stability.
59	B22EE135L	Automatic Watering the Plants Using ARDUINO	SDG 2, SDG 6	Promotes efficient water use in agriculture.
60	B21EE066	Power flow management of a hybrid distribution generation system using Bat search algorithm simulation	SDG 7 SDG 9	Optimizes hybrid power system management and efficiency.
61	B21EE067	DC to AC converter for mini loads	SDG 7 SDG 9	Provides efficient power conversion for small applications.
62	B21EE069	Portable Solar based DC AC converter	SDG 7 SDG 13	Enables portable renewable energy solutions.
63	B21EE070	Forecasting EV charging station demand using BILsim	SDG 7 SDG 11	Supports efficient EV infrastructure planning.
64	B21EE071	ARDUINO ultrasonic sensor using LEDs	SDG 9	Demonstrates sensor-based automation and control.
65	B21EE072	Smart street lights using IoT	SDG 7 SDG 11	Enhances energy efficiency in public lighting.
66	B21EE073	Use of LSTM model for event prediction in EV charging environment	SDG 7 SDG 9	Improves EV charging station management through AI.
67	B21EE074	Power flow management of a hybrid distribution generation system using Bat search algorithm simulation	SDG 7 SDG 9	Optimizes hybrid power system management and efficiency.
68	B21EE075	Power flow management of a hybrid distribution generation system using Bat search algorithm simulation	SDG 7 SDG 9	Optimizes hybrid power system management and efficiency.
69	B21EE076	Temperature based speed control	SDG 7 SDG 12	Optimizes energy use in motor and fan control.
70	B21EE077	Study of charging control of Lead acid battery for EV	SDG 7 SDG 9	Enhances EV battery efficiency and lifespan.
71	B21EE079	Portable therapy cycle Machine	SDG 3	Supports physical

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
				therapy and rehabilitation.
72	B21EE080	Smart energy meter and monitoring system using IoT	SDG 7 SDG 12	Enables real-time energy monitoring and efficiency.
73	B21EE081	Speed controller of DC motor using PWM	SDG 7 SDG 9	Improves motor control efficiency in various applications.
74	B21EE083	Study of classical battery performance of solar based system with motors for EV applications	SDG 7 SDG 13	Optimizes solar-powered EV systems for better performance.
75	B21EE084	IoT based on smart energy meters	SDG 7 SDG 12	Enhances energy monitoring and efficient usage.
76	B21EE085	Transmission line fault detection using IoT	SDG 9, SDG 11	Improves grid reliability and fault management.
77	B21EE086	Multilevel Inverter circuit	SDG 7 SDG 9	Enhances power conversion efficiency and quality.
78	B21EE087	ARDUINO human following robot	SDG 9	Demonstrates robotics and automation for assistance.
79	B21EE088	Dynamic wireless charging system for electric vehicles	SDG 7 SDG 13	Supports efficient EV charging on the move.
80	B21EE089	Faulty analysis on line to ground and line using line fault detection in over load lines	SDG 9, SDG 11	Enhances transmission line safety and fault analysis.
81	B21EE090	Laser security system	SDG 9, SDG 11	Enhances security for homes and institutions.
82	B21EE091	GSM based smart energy meter using ARDUINO for battery	SDG 7 SDG 12	Enables remote energy monitoring and management.
83	B21EE092	Multilevel voltage monitoring for lithium battery peaks in EVs	SDG 7 SDG 9	Improves EV battery safety and performance monitoring.
84	B21EE093	IoT based Agriculture monitor system	SDG 2, SDG 9	Enhances precision farming and resource

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
				optimization.
85	B21EE094	Smart street lighting using IoT	SDG 7 SDG 11	Reduces energy wastage in public lighting.
86	B21EE095	IoT based electricity theft detection system	SDG 9, SDG 16	Prevents energy theft and promotes fair access.
87	B21EE097	IoT based smart energy meter for advanced metering	SDG 7 SDG 12	Enhances energy monitoring and billing accuracy.
88	B21EE098	Electronic water level controller device	SDG 6, SDG 12	Optimizes water usage and prevents wastage.
89	B21EE099	Wireless power transfer	SDG 7 SDG 9	Promotes efficient and contactless power delivery.
90	B21EE100	Design and Analysis of a TV remote controller switching in Home application	SDG 7 SDG 12	Enhances home energy efficiency through smart control.
91	B21EE103	Automatic irrigation system using ARDUINO UNO	SDG 2, SDG 6	Promotes efficient water use in agriculture.
92	B21EE104	Designing open loop of isolated fly back converter	SDG 7 SDG 9	Enhances power conversion efficiency in isolated systems.
93	B21EE105	Designing of Boost converter using MATLAB	SDG 7 SDG 9	Improves power conversion efficiency for renewable systems.
94	B21EE106	Portable solar power bank	SDG 7 SDG 13	Provides renewable energy access for portable devices.
95	B21EE107	Tripping mechanism of over voltage and under voltage system	SDG 9, SDG 11	Protects electrical systems from voltage fluctuations.
96	B21EE108	Testing of life cycle of electric loads using down converter	SDG 7 SDG 12	Evaluates energy efficiency and lifespan of electrical devices.
97	B21EE109	Automatic exhaust fan control coupled detection with ARDUINO alert using GSM with SMS alert	SDG 3, SDG 11	Enhances indoor air quality and safety through automation.
98	B21EE110	Vehicle accident alert system	SDG 3, SDG 9	Improves emergency

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
				response and road safety.
99	B21EE111	Designing of Buck converter using MATLAB	SDG 7 SDG 9	Enhances power conversion efficiency for low-voltage applications.
100	B21EE113	Hybrid Inverter with solar battery charger	SDG 7 SDG 13	Integrates solar power and battery storage for efficient energy use.
101	B22EE136L	Anti-sleep alarm detector using drives	SDG 3, SDG 9	Prevents accidents caused by driver fatigue.
102	B22EE137L	Power flow management of a hybrid distribution generation system using Bat search algorithm simulation	SDG 7 SDG 9	Optimizes hybrid power system management and efficiency.
103	B22EE138L	Alarm based solar fencing and pump control	SDG 7 SDG 9	Enhances security and irrigation efficiency using solar power.
104	B22EE139L	Overvoltage and under voltage protection system	SDG 9, SDG 11	Protects electrical systems from voltage fluctuations.
105	B22EE140L	Simulation on ANN based prediction of EV charging station demand	SDG 7 SDG 9	Uses AI to optimize EV charging infrastructure planning.
106	B22EE141L	GPS GSM based vehicle location tracking system with ARDUINO	SDG 9, SDG 11	Enhances vehicle security and logistics management.
107	B22EE142L	Solar powered water quality monitoring system	SDG 6, SDG 13	Monitors water quality using renewable energy.
108	B22EE143L	Short circuit protection using a relay for Batteries	SDG 7 SDG 9	Enhances battery safety and system reliability.
109	B22EE144L	Weather monitoring system using IoT	SDG 9, SDG 13	Provides real-time environmental data for climate monitoring.
110	B22EE145L	EV charging station demand and event prediction using GRNN	SDG 7 SDG 9	Uses neural networks to optimize EV charging demand

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
				forecasting.
111	B22EE146L	Battery Management system for lead acid battery used in EVs	SDG 7 SDG 9	Improves EV battery efficiency, safety, and lifespan.
112	B22EE147L	Home automation using ARDUINO	SDG 7 SDG 11	Enhances home energy efficiency and convenience.
113	B22EE148L	Study of classical battery performance of solar based system with motors for EV applications	SDG 7 SDG 13	Optimizes solar-powered EV systems for better performance.
114	B22EE149L	Study of classical battery performance of solar based system for EV applications	SDG 7 SDG 13	Enhances solar EV system efficiency and reliability.
115	B22EE150L	IoT based solar energy monitoring	SDG 7 SDG 9	Enables real-time monitoring of solar energy systems.
116	B22EE151L	PIR motion sensor light	SDG 7 SDG 12	Reduces energy wastage through motion-activated lighting.
117	B22EE152L	Study of classical battery performance of solar based system for EV applications	SDG 7 SDG 13	Optimizes solar EV battery performance and integration.
118	B22EE153L	Automatic Temperature control by cooling fans	SDG 7 SDG 12	Optimizes energy use in temperature regulation systems.

Student Projects Linked to SDGs details of mini-projects related to SDGs. (CAY 2022-23)

Summary Table: CAY 2022-23

SDG	Count of Projects	Key Project Themes
SDG 9 (Industry, Innovation & Infrastructure)	78	Robotics, automation, sensors, motor control, security systems
SDG 7 (Affordable & Clean Energy)	29	Solar systems, wireless power, energy harvesting
SDG 11 (Sustainable Cities & Communities)	30	Smart home, traffic control, waste management, safety systems
SDG 3 (Good Health & Well-being)	13	Health monitoring, safety helmets, driver alert systems
SDG 12 (Responsible Consumption & Production)	14	Energy monitoring, water control, automation
SDG 6 (Clean Water & Sewerage)	8	Water management, irrigation, sewage treatment

Sanitation)		control
SDG 13	9	Weather monitoring, flood alert, solar tracking
SDG 5	1	Safety gloves for women
SDG 16 (Peace, Justice & Strong Institutions)	4	Security systems, theft prevention
SDG 10	3	Assistive tech for visually impaired
SDG 4 (Quality Education)	1	School bell automation
SDG 15 (Life on Land)	1	Plant communication study
SDG 2	3	Smart farming, automated harvesting

Total Projects: 128

Most Addressed SDGs: 9, 11, 7

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification	Name of the Supervisor
1	B20EE001	Solar Power battery charging IoT voltage monitoring	SDG 7 SDG 9	Monitors solar battery systems for efficient energy management.	Prof. V. Ramaiah
2	B20EE003	Smart Helmet for accident detection and notification	SDG 3 , SDG 9	Enhances rider safety through accident detection and alerts.	Prof. V. Ramaiah
3	B20EE004	Mobile phone charging using Walking moments	SDG 7 SDG 11	Harnesses human motion for clean energy generation.	Prof. V. Ramaiah
4	B21EE123L	IoT based Smart Energy Grid System	SDG 7 SDG 9	Improves grid monitoring and management for reliability.	Prof. V. Ramaiah
5	B21EE124L	Underground Cable Fault Detection	SDG 9 , SDG 11	Enhances grid reliability and maintenance efficiency.	Prof. V. Ramaiah
6	B20EE005	IoT based speed control of DC motor using PWM technique	SDG 7 SDG 9	Improves motor control efficiency in industrial applications.	Prof. C. Venkatesh
7	B20EE006	Vehicle counting system	SDG 9 , SDG 11	Enhances traffic management and planning.	Prof. C. Venkatesh
8	B20EE007	IoT based Decibel meter	SDG 3 , SDG 11	Monitors noise pollution for better urban health management.	Prof. C. Venkatesh
9	B20EE008	Smart Irrigation system using	SDG 2, SDG 6	Optimizes water use in agriculture	Prof. C. Venkatesh

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification	Name of the Supervisor
		ESP8266		through IoT.	
10	B21EE121L	LPG gas Leakage detection system with IoT using ESP 8266 module	SDG 3, SDG 11	Prevents gas leaks and ensures safety in homes and industries.	Prof. C. Venkatesh
11	B21EE122L	Fault Analysis on Three phase Transmission Lines and its detection	SDG 9, SDG 11	Enhances transmission line reliability and fault management.	Prof. C. Venkatesh
12	B20EE009	RFID based smart electronic trolley	SDG 9, SDG 12	Improves retail efficiency and inventory management.	Prof. V. Rajagopal
13	B20EE010	An Automatic Temperature controller using ARDUINO	SDG 7 SDG 12	Optimizes energy use in temperature control systems.	Prof. V. Rajagopal
14	B20EE011	Touch sensor-based DC motor controller	SDG 9	Demonstrates touch-based motor control for automation.	Prof. V. Rajagopal
15	B20EE012	Water Tank monitoring and controlling using ARDUINO	SDG 6 , SDG 12	Optimizes water storage and usage.	Prof. V. Rajagopal
16	B21EE125L	IoT based Health Monitoring system development and Analysis	SDG 3 , SDG 9	Enables remote health monitoring and early intervention.	Prof. V. Rajagopal
17	B21EE126L	Air Quality Monitoring system using ARDUINO	SDG 3 , SDG 11	Monitors air pollution for better urban health management.	Prof. V. Rajagopal
18	B20EE013	Obstacle avoid using ARDUINO with Bluetooth control Robot car	SDG 9	Demonstrates robotics and automation for navigation.	Sri M. Narasimha Rao
19	B20EE014	Traffic Light Controller using 555 Timer IC's	SDG 9 , SDG 11	Improves traffic management and safety.	Sri M. Narasimha Rao
20	B20EE015	LDR-based automatic street light control with AC supply input	SDG 7 SDG 11	Enhances energy efficiency in public lighting.	Sri M. Narasimha Rao
21	B20EE016	ARDUINO based	SDG 3 ,	Assists visually	Sri M.

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification	Name of the Supervisor
		Smart blind stick	SDG 10	impaired individuals, promoting inclusivity.	Narasimha Rao
22	B20EE017	Stepper motor control using 8051 Microcontroller	SDG 9	Demonstrates precise motor control for automation.	Dr. G. Rajendar
23	B20EE018	IR Proximity sensor	SDG 9	Demonstrates sensor-based detection for automation.	Dr. G. Rajendar
24	B20EE019	Laser Security System	SDG 9, SDG 11	Enhances security for homes and institutions.	Dr. G. Rajendar
25	B20EE020	Driver Anti sleep Device Project	SDG 3, SDG 9	Prevents accidents caused by driver fatigue.	Dr. G. Rajendar
26	B20EE021	Brake failure indicator circuit using 555 Timer	SDG 9, SDG 11	Enhances vehicle safety through brake monitoring.	Dr. B. Jagadish Kumar
27	B20EE022	ARDUINO based third eye for Blind people	SDG 3, SDG 10	Assists visually impaired individuals, promoting inclusivity.	Dr. B. Jagadish Kumar
28	B20EE023	Turn CD/DVD in to a Solar panel	SDG 7 SDG 12	Promotes recycling and renewable energy innovation.	Dr. B. Jagadish Kumar
29	B20EE024	Automatic Vehicle Headlight Management System to Prevent Accidents Due to Headlight Glare	SDG 3, SDG 9	Reduces road accidents through adaptive headlight control.	Dr. B. Jagadish Kumar
30	B19EE027	Power Generation using SEE-SAW	SDG 7 SDG 11	Harnesses playful motion for clean energy generation.	Dr. B. Jagadish Kumar
31	B20EE025	Burglar Alarm using 555 Timer	SDG 9, SDG 11	Enhances home and building security.	Dr. G. Rajender Naik
32	B20EE026	Advanced Wireless Power Transmission System	SDG 7 SDG 9	Promotes efficient and contactless power delivery.	Dr. G. Rajender Naik
33	B20EE027	Fire detection Alarm cost effective at Industrial places	SDG 9, SDG 11	Enhances industrial safety through affordable fire detection.	Dr. G. Rajender Naik
34	B20EE029	Electromagnetic	SDG 9	Demonstrates	Dr. G. Sudheer

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification	Name of the Supervisor
		Pulse Gun		electromagnetic pulse technology for educational purposes.	Kumar
35	B20EE030	Sound Operated Timer using Timer IC	SDG 9	Demonstrates sound-based control for automation.	Dr. G. Sudheer Kumar
36	B20EE031	Design and Construction of Remote-control switching device for Household Appliances Application	SDG 7 SDG 12	Enhances home energy efficiency through remote control.	Dr. G. Sudheer Kumar
37	B20EE032	Wireless Speed and Direction control of DC motor using Bluetooth	SDG 9	Demonstrates wireless motor control for automation.	Dr. G. Sudheer Kumar
38	B20EE033	Speed Checker for Highway	SDG 9, SDG 11	Enhances road safety through speed monitoring.	Dr. B. Vijay Kumar
39	B20EE034	Touch Sensor using IC 555 Timer's	SDG 9	Demonstrates touch-based sensing for automation.	Dr. B. Vijay Kumar
40	B20EE035	Rain Alarm	SDG 9, SDG 13	Provides early warning for rainfall, useful for agriculture and safety.	Dr. B. Vijay Kumar
41	B20EE036	Solar based Cool cap	SDG 7 SDG 3	Provides personal cooling using renewable energy, enhancing comfort.	Dr. B. Vijay Kumar
42	B20EE037	Short Circuit Protection	SDG 9, SDG 11	Enhances electrical safety and prevents fire hazards.	Dr. P. Nagarjuna Reddy
43	B20EE038	Single Axis solar Tracker System	SDG 7 SDG 13	Increases solar panel efficiency for clean energy generation.	Dr. P. Nagarjuna Reddy
44	B20EE039	[Title Missing]	SDG 9	Assumed to be related to electronics or automation.	Dr. P. Nagarjuna Reddy
45	B20EE040	Temperature Controlled Immersion Water	SDG 7 SDG 12	Optimizes energy use in water heating systems.	Dr. P. Nagarjuna Reddy

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification	Name of the Supervisor
		heater			
46	B20EE041	ARDUINO Microcontroller-based Smart dustbin for smart cities	SDG 11 , SDG 12	Improves waste management efficiency in urban areas.	Sri. C. Pavan Kumar
47	B20EE042	Power Efficient Mini Inverter	SDG 7 SDG 12	Promotes energy-efficient power conversion.	Sri. C. Pavan Kumar
48	B20EE043	Piezo Vibration Touch Sensor based Light Bulb Control	SDG 7 SDG 12	Enhances energy efficiency through touch-based lighting control.	Sri. C. Pavan Kumar
49	B20EE044	Intelligent Medicine Reminder using ARDUINO	SDG 3	Supports medication adherence and health management.	Sri. C. Pavan Kumar
50	B20EE045	Flood Alert system using RF Technology	SDG 9 , SDG 13	Provides early warning for floods, enhancing community safety.	Sri K. Ajith
51	B21EE127L	Automatic Temperature control System using ARDUINO	SDG 7 SDG 12	Optimizes energy use in temperature regulation systems.	Sri K. Ajith
52	B21EE128L	ARDUINO based Solar panel dirt cleaning using color recognition sensor	SDG 7 SDG 9	Maintains solar panel efficiency through automated cleaning.	Sri K. Ajith
53	B21EE129L	Automatic Building Shopping Trolley	SDG 9 , SDG 12	Enhances retail automation and convenience.	Sri T. Praveen Kumar
54	B20EE050	Sensor-based Vehicle collision alert	SDG 3 , SDG 9	Prevents accidents through early collision detection.	Sri T. Praveen Kumar
55	B20EE051	Automatic Rain wiper sensor	SDG 9 , SDG 11	Enhances vehicle safety through automated rain sensing.	Sri T. Praveen Kumar
56	B20EE052	IoT based Smart Home Automation	SDG 7 SDG 11	Improves home energy efficiency and convenience.	Sri T. Praveen Kumar
57	B20EE053	Water sewage Management using ARDUINO	SDG 6 , SDG 11	Optimizes wastewater management in urban areas.	Dr. Y. Manjusree

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification	Name of the Supervisor
58	B20EE054	ARDUINO Based Wattmeter	SDG 7 SDG 9	Enables precise energy consumption measurement.	Dr. Y. Manjusree
59	B20EE055	LDR Sensor based DC motor Control	SDG 7 SDG 9	Demonstrates light-dependent motor control for automation.	Dr. Y. Manjusree
60	B21EE130L	Automatic Railway Gate Control System	SDG 9, SDG 11	Enhances railway safety and automation.	Dr. Y. Manjusree
61	B20EE057	IoT based traffic light control system for emergency vehicles	SDG 9, SDG 11	Improves emergency response through smart traffic management.	Dr. D. Rakesh Chandra
62	B20EE060	Distance measurement of an object using Ultrasonic Sensor-HCSR04	SDG 9	Demonstrates ultrasonic sensing for distance measurement.	Dr. D. Rakesh Chandra
63	B21EE131L	Car Parking Detection using ARDUINO	SDG 9, SDG 11	Enhances parking efficiency and reduces congestion.	Dr. D. Rakesh Chandra
64	B21EE132L	Heart Attack detection and Temperature Monitoring	SDG 3, SDG 9	Enables early detection of heart issues and body temperature monitoring.	Dr. D. Rakesh Chandra

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
65	B20EE061	Automatic Room Light Cotroller With Visitor Count	SDG 7 SDG 12	Optimizes lighting based on occupancy, reducing energy waste.
66	B20EE062	Design And Implementation Of Smart Energy Meter	SDG 7 SDG 12	Enables real-time energy monitoring and efficient usage.
67	B20EE065	Iot Based Garbage Monitoring System Using ARDUINO	SDG 11 , SDG 12	Improves waste management efficiency in urban areas.
68	B20EE066	Solar Powered Mobile Phone Charger	SDG 7 SDG 13	Provides renewable energy access for mobile communication.
69	B20EE067	Automatic Plant Watering System	SDG 2 , SDG 6	Promotes efficient water use in agriculture and gardening.
70	B20EE068	Automatic Water	SDG 6 , SDG 12	Optimizes water usage and prevents

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
		Level Controller		wastage.
71	B20EE070	Visitor Counter Display And Power Saving System	SDG 7 SDG 12	Reduces energy consumption based on visitor count.
72	B20EE071	Digital Thermometer Using ARDUINO Uno	SDG 9	Demonstrates temperature measurement for various applications.
73	B20EE072	Street Light Automation Using Iot	SDG 7 SDG 11	Enhances energy efficiency in public lighting.
74	B20EE075	Rfid Based Automated Toll Tax Collecting Using ARDUINO	SDG 9 , SDG 11	Improves toll collection efficiency and reduces traffic delays.
75	B20EE076	Automatic Road Reflector Light	SDG 9 , SDG 11	Enhances road safety through improved visibility.
76	B20EE077	Bluetooth Controlled Leafy Vegetable Harvester With ARDUINO	SDG 2 , SDG 9	Automates harvesting, improving agricultural efficiency.
77	B20EE078	Ultra Advanced Parking System	SDG 9 , SDG 11	Enhances parking efficiency and reduces congestion.
78	B20EE080	Object Detection Based Street Light System Using ARDUINO	SDG 7 SDG 11	Reduces energy wastage through object-aware lighting.
79	B20EE081	Solar Ups	SDG 7 SDG 13	Provides backup power using solar energy, promoting clean energy use.
80	B20EE083	Bluetooth Controlled Robot Using ARDUINO	SDG 9	Demonstrates robotics and wireless control for automation.
81	B20EE084	Ir Proximity Sensor Using Lm-358	SDG 9	Demonstrates IR sensing for proximity detection.
82	B20EE087	Automatic Fan Speed Control System Based On Temperature	SDG 7 SDG 12	Optimizes energy use in cooling systems.
83	B20EE088	Accident Prevention Road Safety System	SDG 3 , SDG 9	Enhances road safety through accident prevention measures.
84	B20EE092	Automatic Plant Moisture Monitoring System	SDG 2 , SDG 6	Optimizes irrigation based on soil moisture, conserving water.
85	B20EE093	Pill Alarm	SDG 3	Supports medication adherence and health management.
86	B20EE095	Automatic Sensing And Switching The Water Pump	SDG 6 , SDG 12	Optimizes water pumping and reduces energy use.

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
87	B20EE096	Piezo Electricity	SDG 7 SDG 9	Harnesses piezoelectric effect for clean energy generation.
88	B20EE097	Underground Cable Fault Detection Method	SDG 9 , SDG 11	Enhances grid reliability and maintenance efficiency.
89	B20EE098	Smart Helmet Using Solar Power	SDG 7 SDG 9	Provides solar-powered safety features for helmets.
90	B20EE099	Voice Detecting Door Lock System	SDG 9 , SDG 11	Enhances security through voice-based access control.
91	B20EE100	Walk And Charge	SDG 7 SDG 11	Harnesses human motion for clean energy generation.
92	B20EE101	Electrical Gloves For Women Safety	SDG 5 , SDG 16	Enhances personal safety for women through self-defense technology.
93	B20EE102	Wireless Power Transfer Using Tesla Coil	SDG 7 SDG 9	Demonstrates wireless energy transmission for educational purposes.
94	B20EE103	ARDUINO Based Fire Fighting Robot	SDG 9 , SDG 11	Enhances fire safety through robotic assistance.
95	B20EE104	Laser Security System	SDG 9 , SDG 11	Enhances security for homes and institutions.
96	B20EE105	Track A Vehicle On Google Maps Using ARDUINO	SDG 9 , SDG 11	Enhances vehicle tracking and logistics management.
97	B20EE106	Harvesting Power And Wireless Utilization	SDG 7 SDG 9	Combines energy harvesting and wireless power transmission.
98	B20EE111	ARDUINO Based Third Eye For Blind People	SDG 3 , SDG 10	Assists visually impaired individuals, promoting inclusivity.
99	B20EE113	Mobile Jammer	SDG 9 , SDG 16	Demonstrates RF jamming for security applications.
100	B20EE115	Scada System Implementation	SDG 9	Enhances industrial automation and monitoring.
101	B20EE116	Rain Detection Alarm	SDG 9 , SDG 13	Provides early warning for rainfall, useful for agriculture and safety.
102	B20EE118	Password Based Circuit Breaker	SDG 7 SDG 9	Enhances electrical safety and access control.
103	B20EE119	Auto Electronic School Bell	SDG 4 (Quality Education), SDG 9	Automates school bell systems, improving time management.
104	B21EE133L	Line Tracker Following Car With Ir Sensor	SDG 9	Demonstrates autonomous vehicle navigation using IR sensors.
105	B21EE134L	Surveillance Car	SDG 9 , SDG 16	Enhances security through remote

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
		Using Esp32 Camera Module		surveillance.
106	B21EE135L	Eye Blink Sensing System	SDG 3, SDG 9	Monitors eye blink patterns for health and safety applications.
107	B21EE136L	Wireless Mobile Battery Charger	SDG 7 SDG 9	Provides contactless charging for mobile devices.
108	B21EE137L	Solar Based Inverter Design	SDG 7 SDG 13	Designs efficient inverters for solar power systems.
109	B21EE138L	Over Voltage And Under Voltage Protection	SDG 9 , SDG 11	Protects electrical systems from voltage fluctuations.
110	B21EE139L	Wireless Stepper Motor Controller	SDG 9	Demonstrates wireless control of stepper motors for automation.
111	B21EE140L	Iot BASED WEATHER MONITORING SYSTEM USING ARDUINO	SDG 9 , SDG 13	Provides real-time weather data for climate monitoring.
112	B21EE141L	Ionic Wind Propulsion	SDG 9	Demonstrates ionic propulsion for educational purposes.
113	B21EE142L	Railway Gate Automation Using ARDUINO	SDG 9, SDG 11	Enhances railway safety and automation.
114	B21EE143L	Automatic Breaking System	SDG 9, SDG 11	Enhances vehicle safety through automated braking.
115	B21EE144L	Variable Dc Power Supply For Multiple Devices	SDG 7 SDG 9	Provides adjustable power supply for various electronics.
116	B21EE145L	Automatic Dual Axis Solar Tracking System	SDG 7, SDG 13	Maximizes solar energy capture through dual-axis tracking.
117	B21EE146L	Iot BASED EMERGENCY HEALTH MONITORING SYSTEM	SDG 3 , SDG 9	Enables remote health monitoring in emergencies.
118	B21EE147L	Solar Powered Smart River Flood Alert System	SDG 6 , SDG 13	Provides early flood warnings using solar power.
119	B21EE148L	Radar Using ARDUINO And Ultrasonic Sensor	SDG 9	Demonstrates radar-like sensing for object detection.
120	B21EE149L	Automatic Headlight Control Of Lights	SDG 9 , SDG 11	Enhances vehicle safety through adaptive headlights.
121	B21EE150L	Automatic Vehicle	SDG 9 , SDG 11	Prevents battery drain by automatically

S. No.	Roll No.	Mini Project Title	SDGs Addressed	Justification
		Indicator Turning Off System		turning off indicators.
122	B21EE151L	Communicating With Plants Using Electrical Signals	SDG 9 , SDG 15 (Life on Land)	Explores plant-electrical interaction for agricultural research.
123	B21EE152L	Gas Detector Using ARDUINO	SDG 3 , SDG 11	Detects harmful gases for safety and air quality monitoring.
124	B21EE153L	Iot Based Fire Alarm Detection System and Controlling System	SDG 9 , SDG 11	Enhances fire safety through IoT-based detection and control.
125	B21EE154L	Automatic Breaking System	SDG 9 , SDG 11	Enhances vehicle safety through automated braking.
126	B21EE155L	Contact Less Tachometer Using Hall Effect Sensor	SDG 9	Measures rotational speed without contact, useful in automation.
127	B21EE156L	Traffic Signal Management	SDG 9 , SDG 11	Improves traffic flow and safety through signal management.
128	B21EE157L	Clap Based Fan Switching System	SDG 7 SDG 12	Enhances energy efficiency through voice-activated fan control.