



# **lendi** Institute of Engineering & Technology

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## **DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

### **Classification of Projects for A.Y:23-24**

<b>S.No</b>	<b>Classification</b>	<b>No.of Projects</b>
<b>1</b>	Research-focused projects	33
<b>2</b>	Prototype based projects	14
<b>3</b>	Application based projects	22
	<b>Total</b>	<b>69</b>


### **List of Projects**

<b>S.No</b>	<b>Project Title</b>
1	Tri band Circularly Polarized by using Reactive Impedance surface
2	Development of enhanced sheep behaviour recognition system in grazing environments using Yolo V8
3	Autonomous Vehicle based on Lane detection through Computer Vision using Node MCU
4	Design & Implementation of 32 bit High Speed & Low power ALU
5	Design and Development of dielectric and Meta Material based Antenna
6	Development of Machine Learning model for Vehicle number plate recognition in Hazy Environment
7	Design of Hexagonal Shaped plus slot Embedded two port MIMO Antenna for Wireless Applications
8	Design of Compact broad band MIMO antenna with reduced mutual coupling and improved diversity Gain
9	Integrated LPG safety and Automation system for Enhanced Household Security
10	Design and Development of Meta Material based Tri band and Wideband Hybrid Dielectric Resonator Antenna
11	Design of CSRR AND Stub Loaded Miniaturised Tri-band patch antenna for 5G base station application
12	Design and Implementation of River Cleaning Robot using NodeMCU

13	Investigation on Multiband Micro strip fed MINKOWSKI fractal slot antennas with split ring resonators for sub 6GHz applications
14	Design of Dual band Dual mode Micro strip fed dipole- loop antenna enhanced by Helical Integration for pattern diversity Arrays
15	Classification of Low light Vehicle using transfer Learning & CNN
16	Analysis of UWAC transmission parameters using Wide-Sense stationary Uncorrelated Scattering channel Modeling system
17	Modulation analysis with Joint power and rate control in under water fading channel
18	Smart Agriculture Monitoring and Irrigation system
19	Dual band Circularly polarized Dielectric Resonator Antenna for C & X band Applications
20	Investigation on Variations in Total Electron content and Earth's magnetic field during Quiet Days and Disturbed days
21	Fish detection and species recognition from low Quality Underwater Videos
22	Design & Implementation of Approximation 4:2 compressor for Low power Approximate Multiplier
23	Air Quality Monitoring System using IoT
24	Design of an AI based obstacle Detection and Avoidance system by using NVIDIA Jetbot
25	Design of IoT Based Monitoring and Safeguarding of Chickens in Poultry from Illness
26	Secure Water Marking in the spatial domain for protecting cultural Images
27	The future of Diabetes diagnosis : Exploring Machine Learning Techniques(KNN, Gradient boosting, Stacking Classifier, XGB, Logistic regression, Random forest, Decision tree & SVM)
28	Investigations On MIMO antenna design with High Isolation using frequency selective surfaces
29	Development of Machine Learning techniques for Melanoma Skin Cancer Classification and Segmentation
30	Design of Compact 4x4 MIMO Antenna for high speed connectivity in the X-band Applications
31	Designing a predictive system for detecting heart & Diabetics conditions Exploring ML Techniques
32	Investigation of Ultra wide band Antenna with dual band characteristics
33	Design & Implementation of waste segregation system using IoT
34	Implementation of integrated circularly polarized wideband antenna system with gain enhanced slotted patch DRA and meta surface substrate
35	Design of underwater Acoustic Communication using scooter model
36	Enhancing Fruit classification accuracy through CNN
37	Design of IoT based Earthquake detection system

38	Design an IoT based Automated Fish farm water quality monitoring system
39	Implementation of super pixel segmentation and Guidance filter for Dehazing real time underwater Images
40	Stock Price prediction with LSTM using python
41	Implementation of highway surveillance enhancement convolution networks and motion Analysis for vehicle detection
42	Designing of computer vision based safety gear detection using Yolo V8 and Jetson Nano
43	Design of coin sensor based mobile charging system
44	Implementation of smart parking solutions for On-street, Off-street parking using IoT
45	Comparative study of Inexact adders & design of an Inexact carry propagation adder for Error Tolerant Applications
46	Detection of Plant Diseases using Machine Learning and Displaying Suggestions
47	Identification and Visualisation of Hazardous Gases
48	Design of Cattle Health Monitoring System Using Internet of Things
49	Implementation of Blind Watermarking Algorithm using Walsh Hadamard Transform
50	Comparative Analysis of Different Multiplication Algorithm
51	Design and Development of CSRR Loaded Tri-band Antenna and Co-linearly polarized Multi-Antenna Configuration for phased array and Intelligent Transportation Applications
52	Development of Deep Learning Model for Brain Tumour Detection and Classification
53	Air Quality Tracking and Purification System
54	Implementation of Head Gesture-Based Smart Wheel chair for Assisting Physically challenged people using Arduino Technology
55	Implementation of Plant Leaf Disease detection using CNN(Re-Lu) and Flask Frame Work
56	Fake currency detection using Image Processing and Machine Learning Algorithms
57	The Intelligent Walking Companion for the Visually Impaired People
58	Implementation of Railway Track Faulty Detection system
59	Development of IoT based Flood Monitoring and Alerting System
60	Design of GDI based Low power Reversible 8 bit Full Adder
61	Enhancing Diabetic Care with Retinal Image Analysis for Early Retinopathy Detection
62	Implementation of Soldier Health Monitoring and Position Tracking System
63	Meta material Loaded Wide band Dual Frequency Patch Antenna For C-band Applications
64	Wi-Fi Controlled Vehicle With Image Classification and Object Detection

65	Implementation of Underwater Image Enhancement Through Deep Residual Framework
66	Design of Deep Learning-Based Mobile Application for Early Diagnosis of Pneumonia in Rural Areas
67	Implementation of Autonomous Human Following Trolley system
68	LPG level detection and Automatic Booking Notification
69	Design and Implementation of smart Movable Road Divider

  
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