



DEPARTMENT OF MECHANICAL ENGINEERING

List of IPD Projects Completed by Students

Academic Year: 2024-25

1. Design and Analysis of Shell and Tube Heat Exchanger
2. Design and Fabrication of Mechanism for Capturing Space Debris.
3. NC Drilling Machine
4. Gas Leakage Detection and Prevention Using Arduino
5. Camp Push Type Clamp
6. NC Drilling Machine-Mechanical
7. Line Following Robot
8. 2 Axis CNC Solar Panel Cleaning Machine
9. Backflow Prevention Valve by Ratchet Mechanism
10. Reliability, Availability and Maintainability (RAM) Analysis of Dragline System
11. Heat Insulated Delivery Box
12. Autonomous Underwater Vehicle (AUV) For Waste Collection
13. Solar Tracking System
14. Water Purifier
15. Mini Belt Grinder
16. Autonomous Water Surface Cleaning Robot
17. Smart Cleaning for Solar Panels: A Hybrid Solar-Battery Robot for Enhanced Efficiency
18. Solar Powered Variable Height Lawn Mower
19. Predictive Maintenance of a Machine Tool by Recording Real Time Tool Forces and Optimizing Cutting Parameters
20. Enhancing Work Holding Accuracy by Intelligent Decision-Making for Machine Tool
21. Motorised Lifeguard Boat



22. Design of Beach Cleaning Robot
23. Planetary Probe Lander
24. Automatic Bike Stabd Slider
25. Lifeguard Drone
26. Dynamic Intelligent High Beam Assist
27. Automatic Water Tank Cleaner
28. Automated Scarecrow Machine
29. Automated Line Follower and Cleaning Robot
30. Automated Solar Grass Cutter
31. Waste Heat Energy Harnessing Module
32. Centralised Monitoring System for Street Light Fault Detection
33. Development of Machine Learning Model for The Fault Detection of Solar PV System
34. Robotic Snake: A Novel Approach to Rescue and Exploration
35. Underwater Drone
36. Plastic Waste Management
37. Agricultural Drone
38. Design and Development of Automatic Skate Shoes
39. Implementing Conducting Charging in Ev Buses
40. Mineral Matrix Device
41. Fire Suppression System
42. Tilt-Wing Martian Quadcopter
43. Design and Development of Solar Toaster.
44. Smart Hydroponic Urban Agriculture
45. Multipurpose Drones