



Shri Vile Parle Kelavani Mandal's

DWARKADAS J.SANGHVI COLLEGE OF ENGINEERING

(Empowered Autonomous) Affiliated to the University of Mumbai



DEPARTMENT OF MECHANICAL ENGINEERING

List of IPD Projects Completed by Students

Academic Year: 2025-26

1. Automated gutter cleaner
2. Digital analysis of spring system
3. Industry project 19: A1- fence
4. Altitude and heading reference system using ESP 32 for educational aid
5. Harvesting kinetic energy: sustainable electricity generation via innovative speed breaker mechanisms
6. IOT enabled self-stabilizing spoon for Parkinson's patients.
7. Thermoelectric cooler for vaccine storage
8. Hydraulic tractor attachment for fruit harvesting
9. Divider plant watering system.
10. 3d printed hub motor
11. Design and development of multipurpose storage basket
12. Poseidon's eye-uus (unmanned underwater submarine) for exploration and pollution monitoring
13. Reconnaissance rover
14. Biplane blade design for improved efficiency in turbines
15. Automated beach cleaning robot
16. Reversible jaw plate system
17. Pick and place robotic arm for colour detection and sorting
18. Aerodynamic optimization of automotive bodywork using CFD
19. Design, analysis & testing of bipropellant liquid rocket engine
20. Smart flotation system
21. Smart irrigation system using IOT
22. Portable biogas to energy unit
23. Redesigned mechanical ventilator



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24. Cargo transportation drone
25. Gym equipment based electricity generation
26. Bicycle breaking system parking light esp32
27. 2r robotic arm manipulator
28. Drone assisted gas detection
29. Designing innovative mechanical kiosks that integrate electronic systems
30. Aero sprout
31. Sensor wire cutting automation
32. Analysis of problems associated with soldering
33. Balancing of multirotor system
34. Passive cooling system using phase change materials
35. Dampening properties of liquid using microcontroller
36. Design and development of bio-inspired spiral robotic arm for versatile object manipulation
37. Design, analysis & testing of bipropellant liquid rocket engine
38. Performance improvement of cut-to-length systems via rake angle correction and hydraulic system optimization
39. Digital impact test analysis using freeware tools
40. Atron-6 (all terrain robotic navigator)
41. Effects of different types of damping media on torsional vibration using mems gyro
42. Digital impact test analysis using freeware tools
43. Industry project: a1- fence
44. Industry project: V-Grown Tech PVT. LTD.
45. Design and manufacturing of gyro test rig
46. IOT enabled agricultural rover for autonomous irrigation and precision spraying
47. Design and development of umbrella drying machine
48. Health monitoring wearable device (pets)
49. Gas leakage detection and prevention using Arduino