

PAUL OMARI

Mechanical Engineer (Diploma Level)

Kenya

PROFILE SUMMARY

Diploma-trained Mechanical Engineer with practical experience in mechanical systems, design, maintenance,

and engineering project development. Skilled in thermodynamics, fluid mechanics, automotive technology,

renewable energy concepts, and technical reporting.

EDUCATION

Diploma in Mechanical Engineering

Siaya National Polytechnic

2020 – 2025

KEY SKILLS

- Mechanical Design & Drafting
- Maintenance & Repair of Mechanical Systems
- Thermodynamics & Fluid Mechanics
- Automotive Engineering
- CAD (AutoCAD, SolidWorks, Fusion 360)
- Engineering Calculations
- Renewable Energy & EV Concepts
- Technical Reporting & Documentation
- Troubleshooting & Diagnostics

ENGINEERING PROJECTS

Regenerative Braking System for Electric Vehicles

- Designed a regenerative braking concept to enhance energy recovery.

- Calculated braking torque, motor-generator efficiency, and battery recharge flow.

Electric Bicycle Powered Water Pump

- Designed a bicycle-driven pump system for rural water supply.
- Developed pump power, flow-rate, and battery sizing calculations.

Predictive Tyre Burst Detection Sensor

- Developed a conceptual early-warning tyre failure sensor system.

WORK EXPERIENCE

Mechanical Technician / Engineering Intern

(Details can be added upon request)

CERTIFICATIONS

- AutoCAD / SolidWorks Certification (optional)
- Safety & Health Certificate (optional)

INTERESTS

Automotive & Mechanical Systems, Electric Vehicles, Machine Design, Football (■)