

# **Upskilling Program for Senior Zimbabwean Government Officials Centurion University of Technology and Management, Odisha.**

## **1. Program Objectives**

This upskilling initiative was developed to address the urgent need for practical, industry-oriented skill development among senior government officials from Zimbabwe. The program focused on three core sectors: Electric Vehicle (EV) Manufacturing, Transformer Design and Fabrication, and Apparel Production.

### **1.1 Capacity Enhancement**

To strengthen technical competencies by delivering intensive, hands-on training in identified high-priority trades.

### **1.2 Replication and Knowledge Transfer**

To equip participants with the knowledge and tools necessary to replicate training models within Zimbabwean vocational institutions and government skill initiatives.

### **1.3 Hands-on Industrial Exposure**

To provide real-world exposure through live demonstrations, guided practical sessions, and workshop-based learning that mirrors actual industry environments.

### **1.4 Leadership and Supervision Development**

To build managerial capabilities for supervising production units, implementing safety protocols, and maintaining quality control in diverse work environments.

### **1.5 Design Thinking and Innovation**

To promote creativity in manual product and process design, and to nurture critical problem-solving skills essential for localized manufacturing systems.

### **1.6 Sustainability and Entrepreneurship Promotion**

To instill awareness of eco-friendly practices and introduce business models suitable for small and medium-sized enterprises (SMEs) within Zimbabwe.

### **1.7 Bilateral Cooperation and Institutional Linkages**

To enhance South-South cooperation through collaborative frameworks between Centurion University and Zimbabwean institutions under the Pan-African National Skills Development (PaNSD) initiative.

## **2. Key Outcomes of the Training Program**

### **2.1 Technical Skill Acquisition**

- Electric Vehicle Assembly: Motor installation, battery integration, transmission systems, testing and diagnostics.
- Transformer Manufacturing: Core preparation, winding techniques, insulation systems, cooling solutions, and protection mechanisms.
- Apparel Production: Manual pattern drafting, fabric cutting, stitching, finishing, and garment component construction.

### **2.2 Manual Design and Product Development**

- EV structural and chassis design (manual layout planning).
- Transformer core and coil configuration without CAD tools.
- Apparel pattern creation and construction sequencing.

### **2.3 Workshop Practice and Process Simulation**

- Industrial workflow simulations and assembly line setup.
- Fault identification, diagnostics, and component-level maintenance.
- Real-time adherence to safety, efficiency, and operational discipline.

### **2.4 Supervisory and Quality Management Skills**

- Production planning, task scheduling, and performance monitoring.
- Quality control methodologies and inspection procedures.
- Effective team coordination and resource allocation strategies.

### **2.5 Sustainable Manufacturing Practices**

- Adoption of low-waste practices, particularly in apparel cutting and layout.
- Basic implementation of green principles in transformer and EV production.
- Environmental and safety compliance aligned with MSME operations.

### **2.6 Entrepreneurial Development and Business Planning**

- Cost estimation, budgeting, and pricing strategies.
- Value chain understanding for domestic and export markets.
- Planning for local enterprise establishment and skill center development.

### **2.7 Institutional Collaboration and Policy Impact**

- A long-term partnership framework was established between Centurion University and Zimbabwean institutions.
- Participants are now positioned to act as Master Trainers, Institutional Resource Persons, and Advisors in national skill development policy formulation and implementation.

### 3. Conclusion

The program has successfully delivered on its mandate to upskill senior Zimbabwean government officials in mission-critical manufacturing sectors. Participants are now equipped with the technical proficiency, leadership capacity, and entrepreneurial insight required to drive scalable, community-level industrial growth and training ecosystems in Zimbabwe.

This initiative not only demonstrates the transformative potential of cross-national collaboration in skills development but also reinforces Centurion University's commitment to inclusive, future-ready education through strategic international partnerships.

