



Device Repair, Refurbishment and E-Waste Skills

ZTH-HRD-001 | Digital Transformers | Core | Hardware, repair and networks

12 weeks

duration

60 hours

learning time

2 x 2.5h

live sessions per week

US\$120.00

fee per learner

In this course you will diagnose, repair, clean, upgrade, securely wipe and re-image laptops, desktops, phones and tablets, and dispose of e-waste safely.

Delivery

Offline-ready: can run without internet

Suitable for

Secondary-age 14-18, Tertiary and university, Small businesses and traders, Women and girls, NGOs and community hubs, Working professionals

What you will be able to do

- Diagnose, repair, clean, upgrade, securely wipe and re-image laptops, desktops, phones and tablets, and dispose of e-waste safely.

Syllabus

1. Electronics and safety, anti-static practice, tools.
2. Laptop and desktop hardware: disassembly, batteries, memory, storage, screens, keyboards, power adapters.
3. Diagnosis: POST codes, fault trees, test equipment.
4. Phones and tablets: screens, batteries, charging ports.
5. Secure data erasure and certificate of wipe.
6. Operating systems: licensed, Linux and ChromeOS-type installs, re-imaging, driver and update handling.
7. Quality control and grading of refurbished units.
8. E-waste: sorting, hazardous parts, battery safety, take-back and recycling partners.
9. Running a repair business: pricing, warranty, customer records.

Hands-on practical work

- Each learner completes 10 supervised repairs on donated or salvaged devices, 5 secure wipes with certificates, 5 re-images, and one full refurbishment from intake to graded, warranty-ready unit.

Resources and equipment

Precision tool kit, anti-static mats and wrist straps, multimeter, USB boot drives, spare parts stock, battery tester, ventilated workbench, solar bench lighting and power for sites without grid power.

Off-grid and solar option

Mode C ready: runs offline on a solar-supported device and local server.





Assessment

Practical diagnosis test on a seeded fault; portfolio of 10 repair records; refurbish and hand over a lab-ready laptop to a school or hub.

Career direction

Repair technician, refurbishment technician for Zambesi or partners, own repair micro-business, IT support assistant, school ICT technician. Progression to ZTH-NET-001 and ZTH-ENE-002.

Large flows of second-hand devices, high repair costs and weak e-waste handling create steady demand for skilled technicians.

Next steps

60 contact hours over 10 to 12 weeks; entry ZTH-FND-002 or equivalent; ages 15 and over.

Enrol

Skills first, certificate second: you finish with something you can do and a QR-verifiable certificate to prove it.

Enrol online at <https://zambesi.ac.zw/course.php?slug=device-repair-refurbishment-and-e-waste-skills> or contact info@zambesi.ac.zw / +263 7X XXX XXXX.

