



Accredited Africa Training Institute for Capacity Development

Unit FO409, Hatfield Plaza · 1122 Burnett St, Hatfield 0028 · Pretoria, Gauteng · South Africa

Tel: +27 12 004 8389 · Mobile: +27 65 077 6310

Email: apply@aaticd.co.za · Website: www.aaticd.co.za

COURSE BROCHURE

Low Medium Voltage Overhead Network Inspection Testing Maintenance Repair Training

Physical Planning and Construction / Electrical Infrastructure Construction

Unit Standard 113866 · NQF Level 3 · 8 Credits · 5 Days

COURSE OVERVIEW

This course equips learners with the skills to inspect, test, maintain, and repair low and medium voltage overhead networks in compliance with South African standards. It covers safe work practices, fault diagnosis, and corrective actions to ensure network reliability and safety.

Category	Physical Planning and Construction
Subfield	Electrical Infrastructure Construction
Unit Standard	113866
Accreditation	SAQA Accredited · NQF Level 3 · 8 Credits
Duration	5 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply safety procedures and use appropriate personal protective equipment when working on overhead networks.
- Inspect low and medium voltage overhead lines to identify defects, wear, or damage.
- Test network components using approved instruments and interpret results to determine condition.
- Perform maintenance tasks such as tightening connections, replacing insulators, and vegetation control.
- Repair faults including conductor breaks, pole damage, and transformer issues using correct techniques.
- Document inspection, testing, maintenance, and repair activities in accordance with regulatory requirements.

WHO SHOULD ATTEND

- This course is designed for electrical technicians, linesmen, and maintenance personnel responsible for the operation and upkeep of overhead power distribution networks.

COURSE OUTLINE

Day 1: Introduction to Low Medium Voltage Overhead Networks and Safety

- Overview of LMV overhead network components (poles, conductors, insulators, transformers)
- South African regulations (OHS Act, SANS 10280, SANS 10142-1)
- Hazard identification: electrical shock, arc flash, falls, weather
- Personal protective equipment (PPE) requirements
- Safe work procedures and permit-to-work systems
- Introduction to network documentation and single-line diagrams

Day 2: Inspection Techniques and Procedures

- Visual inspection of poles, crossarms, insulators, conductors
- Thermal imaging for hot spots and loose connections
- Inspection of pole hardware, guy wires, and stays
- Vegetation management and clearance requirements
- Inspection of transformers and switchgear
- Reporting and record-keeping procedures

Day 3: Testing and Diagnostic Methods

- Insulation resistance testing (Megger) on cables and equipment
- Continuity testing of conductors and bonds
- Earth resistance measurement (fall-of-potential method)
- Testing of protection devices (fuses, reclosers)
- Fault location techniques (time-domain reflectometer)
- Interpretation of test data and comparison to standards

Day 4: Maintenance and Repair Operations

- Maintenance scheduling and planning
- Pole top and substation maintenance (cleaning, tightening, lubrication)
- Conductor splicing and repair methods
- Replacement of insulators, crossarms, and hardware
- Transformer oil sampling and maintenance
- Introduction to live-line maintenance (hot sticks, rubber gloves)
- Safe isolation and earthing procedures

Day 5: Practical Integration and Assessment

- Simulated overhead network scenario (field or workshop)
- Conducting a full inspection and testing routine
- Performing a planned maintenance activity
- Executing a repair or replacement task
- Documenting all findings and actions
- Final assessment and feedback

ASSESSMENT & CERTIFICATION

Delegates are assessed through exercises and a final test. A mark of **50% or above** earns an **AATICD Certificate of Completion**, issued digitally with a unique verification code. This course carries **8 NQF credits** at **NQF Level 3**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 23,000.00	R 23,000.00
1	In-House	R 29,900.00	R 29,900.00
1	On-Campus (Pretoria)	R 34,500.00	R 34,500.00

UPCOMING SESSIONS

Start	End	Method	Venue
10 Aug 2026	14 Aug 2026	On-Campus	Durban, South Africa
10 Aug 2026	14 Aug 2026	On-Campus	Abu Dhabi, UAE
10 Aug 2026	14 Aug 2026	On-Campus	Pretoria, South Africa
10 Aug 2026	14 Aug 2026	On-Campus	Dubai, UAE
10 Aug 2026	14 Aug 2026	On-Campus	Cape Town, South Africa
10 Aug 2026	14 Aug 2026	On-Campus	Mauritius
17 Aug 2026	21 Aug 2026	On-Campus	Dubai, UAE
17 Aug 2026	21 Aug 2026	On-Campus	Pretoria, South Africa

Contact us if no suitable date is listed – on-demand sessions can be arranged for groups.

HOW TO GET A QUOTE OR APPLY

1. **Get an instant quotation online:** visit www.aaticd.co.za, open the page for this course (Unit Standard 113866) and click **Get A Quote / Apply**. Select your training method and number of delegates – your quotation is generated immediately and emailed to you with the course brochure attached.
2. **Apply by email:** send the course title, your preferred training method (Online, In-House or On-Campus Pretoria), the number of delegates and your preferred dates to apply@aaticd.co.za – our team will reply with a formal quotation.
3. **Apply by phone or WhatsApp:** call **+27 12 004 8389** or WhatsApp **+27 65 077 6310** and we will prepare your quotation and reserve your seats.
4. **Confirm your booking:** accept the quotation and settle the invoice. As soon as payment is confirmed your delegates are enrolled and receive their AATICD LMS login details by email, along with joining instructions for their chosen training method.

Group discounts apply automatically – the more delegates you enrol, the lower the price per delegate. No payment is required to request a quotation.

Accredited Africa Training Institute for Capacity Development

Unit FO409, Hatfield Plaza, 1122 Burnett St, Hatfield 0028, Pretoria, Gauteng, South Africa
Tel: +27 12 004 8389 · WhatsApp: +27 65 077 6310 · apply@aatid.co.za · www.aatid.co.za