



Accredited Africa Training Institute for Capacity Development

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

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COURSE BROCHURE

Medium Voltage Transformer Installation For Electricians Training

Physical Planning and Construction / Electrical Infrastructure Construction

Unit Standard 113886 · NQF Level 2 · 6 Credits · 3 Days

COURSE OVERVIEW

This course equips electricians with the specialized knowledge and practical skills required for the safe and efficient installation of medium voltage transformers. Participants will learn to interpret transformer specifications, execute installation procedures, and comply with relevant South African standards and safety regulations. The training ensures that electricians can confidently handle medium voltage transformer installations in commercial and industrial settings.

Category	Physical Planning and Construction
Subfield	Electrical Infrastructure Construction
Unit Standard	113886
Accreditation	SAQA Accredited · NQF Level 2 · 6 Credits
Duration	3 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply relevant South African standards and safety regulations to medium voltage transformer installation.
- Interpret transformer nameplate data and technical specifications to determine installation requirements.
- Demonstrate proper procedures for receiving, inspecting, and handling medium voltage transformers.
- Implement correct earthing and bonding techniques for medium voltage transformer installations.
- Perform pre-commissioning tests and inspections to verify installation integrity.
- Evaluate installation quality against industry best practices and regulatory requirements.

WHO SHOULD ATTEND

- This course is designed for qualified electricians who wish to expand their expertise into medium voltage systems, particularly those involved in the installation and maintenance of transformers in industrial or utility environments.

COURSE OUTLINE

Day 1: Fundamentals of Medium Voltage Transformer Installation

- Introduction to medium voltage transformers: types, construction, and applications.
- Safety requirements: lockout/tagout, PPE, arc flash boundaries.
- Regulations and standards: SANS 10142-1, OHS Act, and manufacturer specifications.
- Site assessment: environmental conditions, access, and foundation requirements.
- Transformer nameplate data: voltage, kVA, impedance, and cooling class.
- Handling and storage: lifting points, oil preservation, and inspection upon receipt.
- Pre-installation testing: insulation resistance, winding resistance, and turns ratio.
- Documentation and quality control procedures.

Day 2: Installation Procedures and Electrical Connections

- Lifting and positioning: use of cranes, slings, and spreader bars.
- Foundation mounting: bolting, vibration pads, and leveling.
- Primary cable termination: stress cones, potheads, and cable lugs.
- Secondary connection: busbar and cable connections to switchgear.
- Grounding: neutral grounding resistor, ground grid, and bonding jumper.
- Tap changer operation: no-load and on-load tap changer adjustment.
- Auxiliary connections: cooling fans, temperature sensors, and alarms.
- Wiring of control circuits: RTDs, oil level indicators, and pressure relief devices.

Day 3: Testing, Commissioning, and Troubleshooting

- Insulation testing: megger, PI, and DAR tests.
- Winding resistance and turns ratio verification.
- Power factor and capacitance testing.
- Oil testing: dielectric strength, moisture, and dissolved gas analysis.
- Energization procedure: step-by-step sequence and safety checks.
- Load testing: temperature rise and efficiency measurement.
- Troubleshooting: common issues like overheating, humming, and oil leaks.
- Handover: test reports, as-built drawings, and maintenance plan.

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 **6 NQF credits** at **NQF Level 2**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 17,900.00	R 17,900.00
1	In-House	R 23,300.00	R 23,300.00
1	On-Campus (Pretoria)	R 26,800.00	R 26,800.00

UPCOMING SESSIONS

Start	End	Method	Venue
05 Aug 2026	07 Aug 2026	On-Campus	Dubai, UAE
05 Aug 2026	07 Aug 2026	On-Campus	Johannesburg, South Africa
10 Aug 2026	12 Aug 2026	On-Campus	Abu Dhabi, UAE
10 Aug 2026	12 Aug 2026	On-Campus	Cape Town, South Africa
11 Aug 2026	13 Aug 2026	On-Campus	Durban, South Africa
11 Aug 2026	13 Aug 2026	On-Campus	Dubai, UAE
12 Aug 2026	14 Aug 2026	On-Campus	Pretoria, South Africa
12 Aug 2026	14 Aug 2026	On-Campus	Mauritius

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 113886) 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.

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