



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

Working On Energised Low Voltage Electrical Networks Training

Physical Planning and Construction / Electrical Infrastructure Construction

Unit Standard 113889 · NQF Level 3 · 8 Credits · 5 Days

COURSE OVERVIEW

This course equips learners with the knowledge and practical skills required to work safely on energised low voltage electrical networks. It covers the legal framework, risk assessment, safe work procedures, and the use of appropriate personal protective equipment (PPE) to prevent electrical incidents. Successful learners will be able to perform tasks on energised low voltage systems in compliance with South African health and safety regulations.

Category	Physical Planning and Construction
Subfield	Electrical Infrastructure Construction
Unit Standard	113889
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 the requirements of the Occupational Health and Safety Act and relevant regulations when working on energised low voltage networks.
- Demonstrate the correct selection, inspection, and use of personal protective equipment (PPE) and insulated tools for live work.
- Analyze the risks associated with working on energised low voltage systems and implement appropriate control measures.
- Implement safe work procedures, including the use of permits-to-work and job safety analyses.
- Evaluate emergency response procedures for electric shock and arc flash incidents.
- Perform basic tasks on energised low voltage networks under supervision, following approved methods.

WHO SHOULD ATTEND

- This course is intended for qualified electricians, electrical technicians, and other authorised persons who are required to work on or near energised low voltage electrical networks as part of their job functions.

COURSE OUTLINE

Day 1: Introduction to Low Voltage Electrical Networks and Safety

- Overview of low voltage electrical networks (LV definitions, typical installations)
- Legal framework: OHS Act, Electrical Installation Regulations, SANS 10142-1
- Hazard identification: electric shock, arc flash, fire, explosion
- Risk assessment methodology and safe work procedures
- Personal protective equipment (PPE) for LV work
- Incident reporting and emergency procedures

Day 2: Theory of Electricity and Safe Work Practices

- Electrical theory: Ohm's law, Kirchhoff's laws, AC/DC basics
- Physiological effects of electric shock and arc flash
- Isolation procedures: lockout/tagout (LOTO), proving dead
- Earthing systems: TN, TT, IT configurations
- Protective devices: types, ratings, coordination
- Reading and understanding electrical drawings and schematics

Day 3: Tools, Equipment, and PPE for Energised Work

- Insulated tools: classification, care, and maintenance
- Voltage detectors: non-contact, contact, proving units
- Personal protective equipment: gloves, face shields, arc-rated clothing
- Approach boundaries: limited, restricted, prohibited
- Equipment inspection and testing schedules
- Safe use of multimeters and clamp meters on energised circuits

Day 4: Practical Procedures for Energised LV Work

- Job planning: permit to work, risk assessment, method statement
- Safe isolation procedure: identify, isolate, lock, test, prove dead
- Earthing and short-circuiting for LV work
- Switching operations: isolation, paralleling, load transfer
- Fault finding techniques on energised circuits
- Documentation: logbooks, test results, incident reports

Day 5: Assessment, Integration, and Emergency Response

- Simulated work scenario: planning, execution, and close-out
- Emergency response: shock rescue, first aid, fire extinguisher use
- Summative practical assessment (OSA and practical exam)
- Review of key learning outcomes and common errors
- Continuous improvement: incident analysis, feedback, and updates
- Certification requirements and career pathways

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
29 Jun 2026	03 Jul 2026	On-Campus	Kigali, Rwanda
29 Jun 2026	03 Jul 2026	On-Campus	Luanda, Angola
29 Jun 2026	03 Jul 2026	On-Campus	Mombasa, Kenya
29 Jun 2026	03 Jul 2026	On-Campus	Mbabane, Eswatini
29 Jun 2026	03 Jul 2026	On-Campus	Nairobi, Kenya
29 Jun 2026	03 Jul 2026	On-Campus	Maseru, Lesotho
06 Jul 2026	10 Jul 2026	On-Campus	Mbabane, Eswatini
06 Jul 2026	10 Jul 2026	On-Campus	Mombasa, Kenya

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 113889) 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