



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

Jointing Medium And High Voltage Cables Training

Physical Planning and Construction / Electrical Infrastructure Construction

Unit Standard 113874 · NQF Level 4 · 8 Credits · 5 Days

COURSE OVERVIEW

This course equips learners with the theoretical knowledge and practical skills required to joint medium and high voltage cables safely and effectively. It covers industry standards, safety protocols, and testing procedures to ensure reliable electrical connections in power distribution networks.

Category	Physical Planning and Construction
Subfield	Electrical Infrastructure Construction
Unit Standard	113874
Accreditation	SAQA Accredited · NQF Level 4 · 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 risk assessment techniques when jointing medium and high voltage cables.
- Demonstrate the correct preparation and stripping of cable ends for jointing.
- Implement proper jointing techniques using appropriate materials and tools.
- Analyze joint integrity through visual inspection and electrical testing.
- Evaluate completed joints against industry standards and specifications.
- Document jointing procedures and test results for quality assurance.

WHO SHOULD ATTEND

- This course is designed for electricians, cable jointers, technicians, and engineers involved in the installation, maintenance, and repair of medium and high voltage cables in the electrical power industry.

COURSE OUTLINE

Day 1: Introduction to Cable Types and Safety

- Overview of MV and HV cables (XLPE, PILC, EPR)
- Cable construction: conductor, insulation, screens, sheath, armour
- Safety standards: SANS 10092-1, OHS Act
- PPE requirements and safe work procedures
- Introduction to jointing accessories and tools
- Cable handling and storage guidelines

Day 2: Cable Preparation and Termination Principles

- Cable measurement, cutting, and stripping
- Removing semi-conductive layers and insulation
- Cleaning and abrading insulation surfaces
- Termination types: indoor, outdoor, GIS, transformer
- Stress control and grading principles
- Introduction to heat shrink and cold shrink technologies
- Insulation resistance testing basics

Day 3: Jointing Techniques for Medium Voltage Cables

- Types of MV joints: straight, branch, transition
- Heat shrink jointing procedure step-by-step
- Cold shrink jointing procedure step-by-step
- Earthing and bonding of cable screens and armour
- Filling compounds and moisture barriers
- Testing: continuity, phase rotation, insulation resistance

Day 4: High Voltage Cable Jointing and Accessories

- HV jointing challenges: higher stress, thicker insulation
- Prefabricated slip-on joints and accessories
- Field-moulded joints using resin or tape
- Connector types: shear bolts, crimp, compression
- Partial discharge testing principles
- HV withstand test procedure and safety
- Documentation and quality records

Day 5: Quality Assurance, Fault Analysis, and Practical Integration

- Review of common jointing defects: voids, moisture, contamination
- Fault location techniques: TDR, bridge methods, acoustic
- Cable refurbishment and repair strategies
- Final assessment: full jointing project (MV or HV)
- Quality assurance documentation
- Course review and certification requirements

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 4**.

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 113874) 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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