



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

Air Conditioning Refrigeration Materials Piping Fittings Jointing Methods Training

Manufacturing, Engineering and Technology / Manufacturing and Assembly

Unit Standard 116230 · NQF Level 2 · 4 Credits · 1 Day

COURSE OVERVIEW

This course equips learners with the knowledge and skills to select, handle, and joint materials and piping used in air conditioning and refrigeration systems. It covers various piping materials, fittings, and jointing methods, ensuring safe and effective installation and maintenance practices in compliance with industry standards.

Category	Manufacturing, Engineering and Technology
Subfield	Manufacturing and Assembly
Unit Standard	116230
Accreditation	SAQA Accredited · NQF Level 2 · 4 Credits
Duration	1 day
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Identify and describe different types of materials and piping used in air conditioning and refrigeration systems.
- Select appropriate fittings and jointing methods based on system requirements and material compatibility.
- Demonstrate safe handling and preparation of piping materials for jointing.
- Apply correct jointing techniques, including brazing, soldering, and mechanical joining.
- Inspect and test joints for integrity and leak tightness according to industry standards.
- Evaluate the suitability of jointing methods for specific applications and operating conditions.

WHO SHOULD ATTEND

- This training is designed for technicians, installers, and maintenance personnel in the air conditioning and refrigeration industry who require practical skills in piping and jointing methods.

COURSE OUTLINE

Day 1: Air Conditioning Refrigeration Materials, Piping, Fittings & Jointing Methods

- Introduction to materials: copper, steel, brass, and aluminium – properties and applications.
- Piping types: hard-drawn, annealed, and flexible lines – selection criteria.
- Fittings: elbows, tees, couplings, reducers, and service valves.
- Jointing methods: brazing, soldering, flaring, and mechanical connections.
- Safety precautions: handling tools, fire safety, and ventilation during brazing.
- Practical demonstration: preparing and brazing a copper pipe joint.
- Leak testing and quality checks: pressure testing and visual inspection.
- Overview of relevant SANS and SAQA standards for piping work.

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 **4 NQF credits** at **NQF Level 2**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 12,800.00	R 12,800.00
1	In-House	R 16,600.00	R 16,600.00
1	On-Campus (Pretoria)	R 19,200.00	R 19,200.00

UPCOMING SESSIONS

Start	End	Method	Venue
31 Jul 2026	31 Jul 2026	On-Campus	Dar es Salaam, Tanzania
03 Aug 2026	03 Aug 2026	On-Campus	Johannesburg, South Africa
04 Aug 2026	04 Aug 2026	On-Campus	Mauritius
05 Aug 2026	05 Aug 2026	On-Campus	Cape Town, South Africa
06 Aug 2026	06 Aug 2026	On-Campus	Dubai, UAE
07 Aug 2026	07 Aug 2026	On-Campus	Pretoria, South Africa
07 Aug 2026	07 Aug 2026	On-Campus	Lagos, Nigeria
10 Aug 2026	10 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 116230) 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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