



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

Demonstrate And Apply Knowledge Of Pipes Associated Fittings And Valves Training

Physical Planning and Construction / Building Construction

Unit Standard 119049 · NQF Level 2 · 5 Credits · 2 Days

COURSE OVERVIEW

This course equips learners with the knowledge and skills to identify, select, and apply pipes, associated fittings, and valves in various industrial and domestic contexts. It covers the principles of pipe systems, material properties, and safety considerations, ensuring competent and safe installation and maintenance.

Category	Physical Planning and Construction
Subfield	Building Construction
Unit Standard	119049
Accreditation	SAQA Accredited · NQF Level 2 · 5 Credits
Duration	2 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Identify different types of pipes, fittings, and valves and describe their applications.
- Explain the properties and suitability of materials used for pipes, fittings, and valves.
- Demonstrate the correct selection and assembly of pipe components for given scenarios.
- Apply safety procedures and regulations when working with pipe systems.
- Interpret technical drawings and specifications related to pipe installations.
- Evaluate the integrity of pipe systems and perform basic troubleshooting.

WHO SHOULD ATTEND

- This course is designed for plumbers, pipefitters, maintenance technicians, and construction workers who require formal recognition of their skills in pipe systems.
- It is also suitable for apprentices and newcomers to the trade seeking foundational knowledge.

COURSE OUTLINE

Day 1: Introduction to Pipes, Fittings, and Valves

- Overview of piping systems: materials (steel, copper, PVC, etc.) and applications.
- Types of fittings: elbows, tees, couplings, reducers, flanges, and their uses.
- Valve classification: gate, globe, ball, check, butterfly valves and their mechanisms.
- Pipe joining methods: threading, welding, soldering, compression, and solvent cementing.
- Identification of pipe schedules and pressure ratings.
- Safety practices: personal protective equipment (PPE), handling hazardous materials.
- Practical exercise: identifying and selecting appropriate fittings and valves for given scenarios.
- Introduction to relevant SANS and ISO standards.

Day 2: Application, Installation, and Maintenance of Piping Components

- Step-by-step installation of pipe assemblies: cutting, threading, and joint assembly.
- Valve installation: orientation, support, and actuator connections.
- Pressure testing procedures: hydrostatic and pneumatic tests.
- Leak detection techniques: visual inspection, soap test, and pressure drop monitoring.
- Common faults and troubleshooting: leaks, blockages, valve failure.
- Maintenance practices: lubrication, packing replacement, and corrosion prevention.
- Documentation: recording test results and maintenance logs.
- Practical assessment: install a pipe section with fittings and a valve, then perform a pressure test.

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 **5 NQF credits** at **NQF Level 2**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 15,400.00	R 15,400.00
1	In-House	R 20,000.00	R 20,000.00
1	On-Campus (Pretoria)	R 23,100.00	R 23,100.00

UPCOMING SESSIONS

Start	End	Method	Venue
03 Aug 2026	04 Aug 2026	On-Campus	Dubai, UAE
03 Aug 2026	04 Aug 2026	On-Campus	Mauritius
03 Aug 2026	04 Aug 2026	On-Campus	Lagos, Nigeria
05 Aug 2026	06 Aug 2026	On-Campus	Pretoria, South Africa
05 Aug 2026	06 Aug 2026	On-Campus	Cape Town, South Africa
05 Aug 2026	06 Aug 2026	On-Campus	Johannesburg, South Africa
11 Aug 2026	12 Aug 2026	On-Campus	Mauritius
11 Aug 2026	12 Aug 2026	On-Campus	Dubai, UAE

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 119049) 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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