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

Pressure Testing of Pipes and Pipe Systems

Manufacturing, Engineering and Technology / Manufacturing and Assembly

Unit Standard 253587 · NQF Level 4 · 6 Credits · 3 Days

COURSE OVERVIEW

This course equips learners with the knowledge and practical skills required to perform hydrostatic pressure testing procedures on pipes and pipe systems safely and accurately. It focuses on the correct preparation, execution, monitoring and documentation of pressure tests in accordance with applicable standards and site-specific requirements. Learners will understand the critical role of hydrostatic testing in verifying the integrity, strength and leak-tightness of piping systems before commissioning.

Category	Manufacturing, Engineering and Technology
Subfield	Manufacturing and Assembly
Unit Standard	253587
Accreditation	SAQA Accredited · NQF Level 4 · 6 Credits
Duration	3 days
Training Method	On-Campus
Certificate	Issued via AATICD LMS — verifiable online

LEARNING OUTCOMES

- Demonstrate an understanding of the purpose, principles and legal requirements of hydrostatic pressure testing on pipes and pipe systems.
- Apply safe work procedures and hazard control measures when preparing and conducting hydrostatic pressure tests.
- Prepare pipes, fittings, equipment and test media for hydrostatic pressure testing according to relevant standards and specifications.
- Conduct hydrostatic pressure tests by pressurising, monitoring and maintaining test pressure for the required duration.
- Evaluate test results to identify leaks, defects or pressure losses and take appropriate corrective action within scope of responsibility.
- Complete accurate test records, reports and documentation, and restore the work area and system after testing.

WHO SHOULD ATTEND

- This course is intended for pipe fitters, plumbers, mechanical artisans, maintenance technicians, site supervisors and quality controllers who are responsible for or involved in the pressure testing of piping systems.
- It is also suitable for individuals seeking to formalise their skills and obtain recognition against a registered unit standard.

COURSE OUTLINE

Day 1: **Fundamentals of Hydrostatic Pressure Testing**

- Introduction to hydrostatic pressure testing: definition, purpose, and applications.
- Legal and safety framework: Occupational Health and Safety Act, SANS standards, and site-specific procedures.
- Fluid mechanics basics: pressure, head, force, and the relationship between pressure and depth.
- Test equipment overview: pumps, gauges, valves, fittings, and data logging devices.
- Pipe system materials and their pressure ratings.
- Test medium selection: water quality, additives, and environmental considerations.
- Risk assessment and permit-to-work systems for pressure testing.
- Documentation requirements: test certificates, records, and reporting.

Day 2: **Planning and Conducting Hydrostatic Tests**

- Test planning: scope, boundaries, isolation, and venting.
- Determining test pressure: design pressure, allowable stress, and code requirements.
- Test duration and hold times: stabilisation, creep, and acceptance criteria.
- Step-by-step test procedure: filling, venting, pressurising, holding, and depressurising.
- Leak detection methods and repair procedures.
- Safety during pressurisation: exclusion zones, barricades, and communication.
- Record keeping: pressure-time charts, gauge calibration, and witness signatures.
- Case studies of successful and failed hydrostatic tests.

Day 3: **Advanced Applications, Troubleshooting, and Integration**

- Testing of large-diameter, high-pressure, and multi-branch systems.
- Special considerations: elevated temperatures, expansion, and support movement.
- Pneumatic vs hydrostatic testing: when and why.
- Troubleshooting pressure losses, air locks, and gauge anomalies.
- Post-test activities: draining, drying, preservation, and reinstatement.
- Integration with flushing, cleaning, and disinfection processes.
- Review of test documentation and handover requirements.
- Continuous improvement: root cause analysis and feedback loops.

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 4**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 13,200.00	**R 13,200.00**
1	In-House	R 17,800.00	**R 17,800.00**
1	On-Campus (Pretoria)	R 19,800.00	**R 19,800.00**

UPCOMING SESSIONS

Start	End	Method	Venue
02 Dec 2026	04 Dec 2026	On-Campus	Victoria Falls, Zimbabwe
02 Dec 2026	04 Dec 2026	On-Campus	Mauritius
08 Dec 2026	10 Dec 2026	On-Campus	Bangkok, Thailand
08 Dec 2026	10 Dec 2026	On-Campus	Blantyre, Malawi
08 Dec 2026	10 Dec 2026	On-Campus	Nairobi, Kenya
08 Dec 2026	10 Dec 2026	On-Campus	Kinshasa, DRC
08 Dec 2026	10 Dec 2026	On-Campus	Johannesburg, South Africa
08 Dec 2026	10 Dec 2026	On-Campus	Abu Dhabi, UAE

Contact us if no suitable date is listed — on-demand sessions can be arranged for groups.

HOW TO GET A QUOTATION OR APPLY

1. **Get an instant quotation online:** visit www.aaticd.co.za, open the page for this course (Unit Standard 253587) and click **Get A Quotation**. 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@aaticd.co.za · www.aaticd.co.za