



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

Industrial Ventilation Systems

Custom Courses / Engineering & Technical Maintenance

Unit Standard AATICD-0254 · NQF Level 5 · 10 Credits · 5 Days

COURSE OVERVIEW

This course equips learners with the knowledge and skills required to understand, operate, and maintain industrial ventilation systems. Participants will learn to assess ventilation needs, identify hazards, and ensure compliance with occupational health and safety regulations in industrial environments.

Category	Custom Courses
Subfield	Engineering & Technical Maintenance
Unit Standard	AATICD-0254
Accreditation	SAQA Accredited · NQF Level 5 · 10 Credits
Duration	5 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Explain the principles of industrial ventilation and its role in controlling airborne contaminants.
- Identify and evaluate ventilation system components and their functions.
- Perform basic calculations for airflow and pressure requirements.
- Inspect and maintain ventilation systems to ensure optimal performance.
- Apply relevant South African health and safety regulations to ventilation practices.
- Demonstrate troubleshooting techniques for common ventilation system issues.

WHO SHOULD ATTEND

- This course is designed for maintenance personnel, safety officers, engineers, and supervisors responsible for managing ventilation systems in industrial or manufacturing settings.

COURSE OUTLINE

Day 1: Fundamentals of Industrial Ventilation

- Introduction to industrial ventilation and workplace health
- Types of contaminants: dusts, fumes, gases, vapours
- Principles of airflow: pressure, velocity, and volume
- Dilution ventilation vs local exhaust ventilation (LEV)
- Overview of relevant South African legislation and standards

Day 2: System Design and Components

- Hoods: types, design, and capture velocity
- Ductwork: sizing, materials, and layout
- Fans: types, selection, and performance curves
- Air cleaning devices: filters, cyclones, scrubbers
- Pressure loss calculations and system balancing

Day 3: Measurement and Testing Techniques

- Anemometers, manometers, and pitot tubes
- Measuring static pressure, velocity pressure, and total pressure
- Traverse methods for duct velocity
- Smoke tubes for qualitative airflow visualisation
- Introduction to standard testing protocols (e.g., HSE, ACGIH)

Day 4: Maintenance, Troubleshooting and Compliance

- Routine inspection checklists and logbooks
- Troubleshooting: blockages, fan imbalance, filter loading
- Legal compliance: OHS Act, regulations, and SANS standards
- Risk assessment for ventilation system failure
- Case studies of ventilation issues in South African industries

Day 5: Practical Application and Integration

- Group exercise: design a ventilation system for a workshop
- Conducting a walk-through survey and measurement
- Reporting and recommending corrective actions
- Hierarchy of controls: ventilation in context
- Course review and assessment

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 **10 NQF credits** at **NQF Level 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 24,200.00	R 24,200.00
1	In-House	R 31,400.00	R 31,400.00
1	On-Campus (Pretoria)	R 36,200.00	R 36,200.00

UPCOMING SESSIONS

Start	End	Method	Venue
03 Aug 2026	07 Aug 2026	On-Campus	Pretoria, South Africa
03 Aug 2026	07 Aug 2026	On-Campus	Dubai, UAE
10 Aug 2026	14 Aug 2026	On-Campus	Durban, South Africa
10 Aug 2026	14 Aug 2026	On-Campus	Abu Dhabi, UAE
17 Aug 2026	21 Aug 2026	On-Campus	Harare, Zimbabwe
17 Aug 2026	21 Aug 2026	On-Campus	Shenzhen, China
24 Aug 2026	28 Aug 2026	On-Campus	Bangkok, Thailand
24 Aug 2026	28 Aug 2026	On-Campus	Victoria Falls, Zimbabwe

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 AATICD-0254) 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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