



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

Brake Systems and Brake Tests Understanding

Services / Transport, Operations and Logistics

Unit Standard 256204 · NQF Level 4 · 8 Credits · 5 Days

COURSE OVERVIEW

This course provides a comprehensive understanding of automotive brake systems, including their components, operation, and maintenance. Participants will learn to perform and interpret brake tests to ensure vehicle safety and compliance with South African road regulations.

Category	Services
Subfield	Transport, Operations and Logistics
Unit Standard	256204
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

- Demonstrate understanding of the principles of hydraulic and pneumatic brake systems.
- Analyze brake system components and their functions.
- Evaluate brake performance using standard test procedures.
- Implement safe practices during brake inspection and testing.
- Interpret brake test results to identify faults and recommend corrective actions.
- Apply knowledge of relevant South African standards and regulations.

WHO SHOULD ATTEND

- This course is designed for automotive technicians, mechanics, fleet managers, and vehicle inspectors who need to understand brake system principles and testing procedures.

COURSE OUTLINE

Day 1: Fundamentals of Brake Systems

- Introduction to braking principles
- Components: master cylinder, brake lines, calipers, drums, pads, shoes
- Hydraulic theory: Pascal's law, force multiplication
- Brake fluid types, specifications, and contamination risks
- Overview of drum vs. disc brakes
- Basic safety precautions when working with brakes

Day 2: Brake System Components and Operation

- Drum brake assembly: shoes, wheel cylinders, springs, adjusters
- Disc brake assembly: rotors, calipers, pads, pistons
- Brake boosters: vacuum and hydraulic types
- Proportioning valves, pressure differential valves, and load-sensing valves
- Wear patterns and diagnostic clues
- Manufacturer specifications: tolerances, clearances, torque values

Day 3: Brake Test Procedures and Standards

- Regulatory framework: SANS 10047, NRTA requirements
- Roller brake tester: setup, operation, and safety
- Interpreting printouts: brake force, efficiency, imbalance
- Visual inspection: lines, hoses, pads, linings, fluid level
- Functional test: pedal feel, travel, warning lights
- Calculation of brake efficiency and imbalance

Day 4: Advanced Brake Systems and Diagnostics

- Anti-lock braking system (ABS): components and operation
- Electronic brake-force distribution (EBD) and electronic stability control (ESC)
- Diagnostic trouble codes (DTCs) and scan tool usage
- ABS sensor testing and wheel speed signal analysis
- Brake bleeding methods: manual, pressure, vacuum, gravity
- Brake fluid flushing and contamination prevention

Day 5: Practical Integration and Assessment

- Comprehensive brake system inspection
- Performing a roller brake test and interpreting results
- Diagnosing a given brake fault scenario
- Repair recommendation report writing
- Written assessment (theory)
- Practical assessment (hands-on inspection and 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 **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
03 Aug 2026	07 Aug 2026	On-Campus	Pretoria, South Africa
03 Aug 2026	07 Aug 2026	On-Campus	Dubai, UAE
03 Aug 2026	07 Aug 2026	On-Campus	Cape Town, South Africa
03 Aug 2026	07 Aug 2026	On-Campus	Mauritius
03 Aug 2026	07 Aug 2026	On-Campus	Johannesburg, South Africa
03 Aug 2026	07 Aug 2026	On-Campus	Lagos, Nigeria
10 Aug 2026	14 Aug 2026	On-Campus	Mauritius
10 Aug 2026	14 Aug 2026	On-Campus	Cape Town, 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 256204) 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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