



MAINTENANCE MANAGEMENT TRAINING

Braking, Steering and Suspension Systems

3 day course

Classroom, online or in-house

Course overview

These are the systems that decide whether a vehicle stops and stays on the road, which makes a shortcut here different in kind from a shortcut anywhere else in a workshop. This course treats them accordingly. Delegates work through braking principles, then through hydraulic brake systems including master cylinders, callipers, fluid specification and the moisture absorption that causes fade. Air brake systems are covered in detail for heavy vehicles: compressor, reservoirs, valves, slack adjusters, chambers and the spring brake behaviour that must be understood before anybody works under a vehicle. Brake testing and the legal performance requirements are addressed. Antilock and stability systems are covered at a diagnostic level. Steering systems follow, including geometry, camber, castor and toe, and the tyre wear pattern each fault produces. Power steering and its failure modes are addressed. Suspension is covered across leaf, coil and air systems with the effect of each on load and handling. The course closes on wheel bearing service, on torque discipline and on road testing safely.

What you will learn

- Service hydraulic brake systems and specify fluid correctly
- Maintain air brake components including slack adjusters and chambers
- Work safely around spring brakes
- Test brake performance against legal requirements
- Diagnose antilock and stability system faults
- Set steering geometry and read tyre wear patterns
- Service leaf, coil and air suspension, and apply torque discipline

Who should attend

- Vehicle and heavy truck technicians
- Fleet workshop staff and foremen
- Roadworthiness inspectors
- Bus and coach maintenance teams
- Safety officers responsible for vehicle condition

Course outline

- 01 A shortcut different in kind
- 02 Braking principles and hydraulic systems
- 03 Fluid specification and moisture absorption
- 04 Air brakes, valves and slack adjusters
- 05 Spring brakes and working safely
- 06 Brake testing and legal performance
- 07 Steering geometry and tyre wear patterns
- 08 Suspension types, wheel bearings and road testing

Upcoming dates



Dates	Venue	Format	Fee per delegate
28 to 30 September 2026	Cape Town, South Africa	Classroom	R14,950
2 to 4 November 2026	Durban, South Africa	Classroom	R14,950
11 to 13 November 2026	Pretoria, South Africa	Classroom	R14,950
30 November to 2 December 2026	Online	Online	R6,500

Fees and how to register

This 3 day course is **R6,500** per delegate online, **R14,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 995** in the classroom elsewhere in Africa. In-house training is quotation on request. Book 2 or more delegates on this course and save 10%.

To register or request an in-house proposal, visit www.afrisciencegroup.com, email info@afriScience.co.za, or WhatsApp us on **+27 63 479 1136**.

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