



MAINTENANCE MANAGEMENT TRAINING

Undercarriage and Ground Engaging Tool Management

2 day course

Classroom, online or in-house

Course overview

Undercarriage is commonly the largest single maintenance cost on a tracked machine, and most of that cost is decided by how the machine is operated and how the tracks are tensioned rather than by the hours it has run. This course targets those two. Delegates work through undercarriage components and how each wears, covering track chain, shoes, rollers, idlers and sprockets and the wear relationship between them. Measurement is addressed practically, including the wear gauges and percentages that turn inspection into a replacement plan. Track tension is covered as the adjustment with the largest cost consequence in either direction. Operating practice is addressed directly: turning, side slopes, reversing and travel speed, and what each does to wear rate. Ground conditions and material abrasiveness are covered. Ground engaging tools follow, including bucket teeth, adapters, cutting edges and the retention systems that fail. Replacement timing and rebuild options are addressed. The course closes on cost per hour, on operator feedback and on machine application matching.

What you will learn

- Explain how each undercarriage component wears and interacts
- Measure wear and convert inspection into a replacement plan
- Set track tension and understand the cost of getting it wrong
- Relate turning, slopes and travel speed to wear rate
- Account for ground conditions and abrasiveness
- Manage bucket teeth, adapters, edges and retention systems
- Time replacement, cost per hour and match machine to application

Who should attend

- Plant maintenance supervisors and technicians
- Mine and quarry equipment managers
- Earthmoving contractors
- Machine operators and trainers
- Procurement staff buying undercarriage and wear parts

Course outline

- 01 Decided by operation, not hours
- 02 Chain, shoes, rollers, idlers and sprockets
- 03 Wear relationships between components
- 04 Measurement, gauges and percentages
- 05 Track tension in both directions
- 06 Turning, slopes and travel speed
- 07 Ground conditions and abrasiveness
- 08 Teeth, adapters, retention, replacement timing and cost per hour

Upcoming dates



Dates	Venue	Format	Fee per delegate
14 to 15 October 2026	Kampala, Uganda	Classroom	USD 795
17 to 18 December 2026	Gaborone, Botswana	Classroom	R11,950
6 to 7 January 2027	Dar es Salaam, Tanzania	Classroom	USD 795
8 to 9 February 2027	Harare, Zimbabwe	Classroom	USD 795

Fees and how to register

This 2 day course is **R6,500** per delegate online, **R11,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 795** 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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