



ENGINEERING AND TECHNICAL TRAINING

Non Destructive Testing Methods

5 day course

Classroom, online or in-house

Course overview

Every non destructive method is blind to something, and applying the wrong one to a component produces a clean report and a false sense of integrity. This course covers matching method to defect. Delegates work through visual, penetrant, magnetic particle, ultrasonic, radiographic and eddy current testing, learning the physical principle behind each, what it detects reliably, what it misses and what surface or access it demands. Technique selection for a given component and damage mechanism is the central exercise. Interpretation, sizing and reporting are covered. Personnel qualification and the meaning of certification levels follow. The course closes on advanced methods and on specifying inspection in a maintenance or fabrication scope.

What you will learn

- Explain the physical principle behind each major method
- State what each method detects reliably and what it misses
- Select a technique for a given component and damage mechanism
- Prepare surfaces and secure the access a method requires
- Interpret, size and report an indication
- Understand personnel qualification and certification levels
- Specify inspection within a maintenance or fabrication scope

Who should attend

- Inspection and integrity staff
- Maintenance and reliability engineers
- Quality assurance and control personnel
- Welding and fabrication supervisors
- Engineers commissioning inspection work

Course outline

- 01 Every method is blind to something
- 02 Visual inspection
- 03 Penetrant and magnetic particle testing
- 04 Ultrasonic testing
- 05 Radiographic testing
- 06 Eddy current and electromagnetic methods
- 07 Technique selection by damage mechanism
- 08 Interpretation, qualification and scope specification

Upcoming dates

Dates	Venue	Format	Fee per delegate
26 to 30 October 2026	Pretoria, South Africa	Classroom	R19,950
25 to 29 January 2027	Lagos, Nigeria	Classroom	USD 1,325
15 to 19 February 2027	Online	Online	R8,500
15 to 19 March 2027	Durban, South Africa	Classroom	R19,950



Fees and how to register

This 5 day course is **R8,500** per delegate online, **R19,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 1,325** 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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