



ENGINEERING AND TECHNICAL TRAINING

Setting Out and Construction Surveying

3 day course

Classroom, online or in-house

Course overview

A setting out error is discovered when something physical will not fit, by which time the cost is demolition rather than correction, and the error is nearly always a control point or a check that was skipped. This course builds the discipline. Delegates work through control networks and why a site needs its own control before anything is set out. Levelling is covered, including instrument checks, closing a level run and the misclose that means a result must not be used. Total station work follows, covering setting up, orientation, coordinate setting out and the independent check that catches an orientation mistake. Satellite positioning is addressed for site work, including its accuracy limits and where it should not be trusted. Setting out is worked through for buildings, roads and drainage, with grid lines, offsets, profiles and batter rails. As built survey and verification follow. The course closes on records, on tolerance and on what to do when a discrepancy is found.

What you will learn

- Establish and check a site control network
- Level accurately, close a run and act on a misclose
- Set up and orientate a total station with an independent check
- Use satellite positioning within its accuracy limits
- Set out buildings, roads and drainage
- Produce as built surveys and verify constructed work
- Keep records, apply tolerances and act on a discrepancy

Who should attend

- Site engineers responsible for setting out
- Survey technicians and chainmen
- Construction supervisors and foremen
- Quantity surveyors verifying measurement
- Graduate engineers entering site roles

Course outline

- 01 Discovered when something will not fit
- 02 Site control networks
- 03 Levelling, closing and misclose
- 04 Total station setup and orientation
- 05 The independent check
- 06 Satellite positioning and its limits
- 07 Setting out buildings, roads and drainage
- 08 As built survey, tolerance and discrepancies

Upcoming dates



Dates	Venue	Format	Fee per delegate
7 to 9 October 2026	Online	Online	R6,500
16 to 18 November 2026	Port Louis, Mauritius	Classroom	USD 995
2 to 4 December 2026	Durban, South Africa	Classroom	R14,950
16 to 18 December 2026	Gaborone, Botswana	Classroom	R14,950

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@afiscience.co.za, or WhatsApp us on **+27 63 479 1136**.

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