



LABORATORY TRAINING

Intermediate Statistics for Laboratory Professionals

3 day course

Classroom, online or in-house

Course overview

For laboratory staff who have the basics and need the methods that answer real analytical questions. Delegates work through regression and calibration curve construction including weighting and the treatment of a nonlinear response, analysis of variance for comparing methods, analysts and instruments, and the interpretation of repeatability and reproducibility studies. Method comparison is covered properly, including why correlation is the wrong test for agreement. The course also addresses non parametric alternatives for data that will not behave, and closes on presenting a statistical conclusion to a technical audience that will act on it without reading the underlying analysis.

What you will learn

- Construct calibration curves including weighted and nonlinear cases
- Apply analysis of variance to compare methods, analysts and instruments
- Interpret repeatability and reproducibility studies
- Compare two methods correctly, and explain why correlation is the wrong test
- Apply non parametric alternatives where assumptions fail
- Assess trend and drift in control data
- Present a statistical conclusion to a technical audience

Who should attend

- Experienced laboratory analysts
- Method validation and development staff
- Quality and technical managers
- Metrologists
- Internal auditors reviewing statistical claims

Course outline

- 01 Regression and calibration curve construction
- 02 Weighting and nonlinear response
- 03 Analysis of variance for method, analyst and instrument comparison
- 04 Repeatability and reproducibility studies
- 05 Method comparison and the correlation trap
- 06 Non parametric alternatives
- 07 Trend and drift in control data
- 08 Presenting a conclusion that will be acted on

Upcoming dates

Dates	Venue	Format	Fee per delegate
26 to 28 September 2026	Lagos, Nigeria	Classroom	R11,995
5 to 7 November 2026	Kampala, Uganda	Classroom	R11,995
15 to 17 November 2026	Dubai, UAE	Classroom	R11,995
23 to 25 November 2026	Dar es Salaam, Tanzania	Classroom	R11,995



Fees and how to register

Online **from R6,500** per delegate, classroom **from R11,995** per delegate, 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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