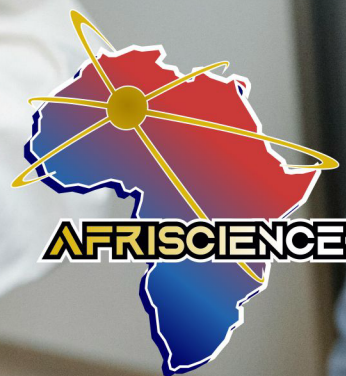


Design of Experiments (DOE) for Method Validation & Laboratory Studies



Who Should Attend?

Target learners include Laboratory Managers, Engineers, Scientists, or Technicians.

Course Overview

This course covers the design of experiments (DOE) and analysis of laboratory generated data. Laboratory applications of DOE include Measurement System Analysis (MSA), designed studies used in method validation and improvement, verification of competency, and evaluations of components of measurement uncertainty. The participant will learn the basic tools and potential pitfalls of experimental design and analysis of variance (ANOVA) by studying laboratory examples.

Prerequisites

Intermediate Statistics for Laboratory Professionals (EMU 200) or equivalent knowledge.

Equipment Needed

The participant will need to bring a laptop computer (PC or MAC) with Microsoft Excel or similar spreadsheet installed. Please note that the tablet and smart phone versions of Excel and other spreadsheets do not have the full functionality of the PC versions and the participant may not be able to utilize all the power of the spreadsheet covered during the trainin

Target Attendees

Target learners include Laboratory Managers, Engineers, Scientists, or Technicians.

DURATION: 8 – 10 July 2026
VENUE : Online
COST : USD595.00pp

REGISTER NOW

Switchboard: +27 (68 633 8497
Email: afriscience@afriscience.co.za

Attendance by two or more representatives of your compensation committee or organization will foster teamwork and enhance the program's impact

Learning Outcomes

After successful completion of this course, the participant will be able to:

- Explain the difference between discrete and continuous variables, and dependent and independent variables;
- Develop a DOE plan to meet specific objectives;
- Describe and apply randomization and blocking;
- Set-up and interpret outcomes of Measurement System Analysis (MSA);
- Interpret outputs of DOE analysis; and
- Apply DOE to Method Validation, improvement and components of measurement uncertainty

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Dates and Venues

13 – 15 May	
23 – 26 June	
20 -23 July	
19 – 21 August	
16 -18 September	
20 – 22 October	
4- 6 November	



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