



AI AND DIGITAL TRANSFORMATION TRAINING

Python for Data Analysis and Automation

5 day course

Classroom, online or in-house

Course overview

A great deal of analytical work is repeated monthly by hand because the person doing it has no way to automate it, and Python is the shortest route from that position to a script that runs itself. This course teaches it for that purpose. Delegates work through the language fundamentals needed for data work rather than a full programming syllabus, then reading data from files, databases and interfaces. Cleaning, reshaping and merging datasets are covered in depth, since that is where the time goes. Summarising, grouping and charting follow. Automation is addressed: scheduling, error handling and writing a script somebody else can run. The course closes on reproducibility and on knowing when a spreadsheet is still the right answer.

What you will learn

- Use the language fundamentals that data work requires
- Read data from files, databases and interfaces
- Clean, reshape and merge datasets reliably
- Summarise, group and chart results
- Automate a recurring task including scheduling and error handling
- Write a script another person can run and maintain
- Judge when a spreadsheet remains the better tool

Who should attend

- Analysts repeating manual work each month
- Finance, operations and reporting staff
- Engineers and scientists processing data
- Internal auditors handling large extracts
- Anyone moving beyond spreadsheet limits

Course outline

- 01 From monthly by hand to a script that runs itself
- 02 Language fundamentals for data work
- 03 Reading data from files and databases
- 04 Cleaning and reshaping
- 05 Merging and joining datasets
- 06 Summarising, grouping and charting
- 07 Automation, scheduling and error handling
- 08 Reproducibility and choosing the right tool

Upcoming dates

Dates	Venue	Format	Fee per delegate
19 to 23 October 2026	Mbabane, Eswatini	Classroom	R19,950
26 to 30 October 2026	Johannesburg, South Africa	Classroom	R19,950
23 to 27 November 2026	Harare, Zimbabwe	Classroom	USD 1,325
7 to 11 December 2026	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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