



Advanced Excel Analytical Reporting and Automation Training Course

29 November – 3 December 2026
Johannesburg

Advanced Excel Analytical Reporting and Automation Training Course

Ref: 847_164139 **Date:** 29 November – 3 December 2026 **Location:** Johannesburg **Fees:** 4500 Euro

Overview

Advanced Excel Analytical Reporting and Automation Training Course is a one-week course for professionals who use spreadsheets for analysis, reporting, modelling, controls, and decisions, who leave with an Analytical Workbook Pack. Participants engineer advanced formulas, prepare refreshable data, build relational models and PivotTables, design dashboards, automate repeatable steps, and test workbook controls. The course turns fragmented techniques into a traceable reporting workflow. Agile Leaders Training Center develops advanced Excel reporting and automation capability.

Who Should Attend

- Analysis functions responsible for recurring calculations and decision models
- Reporting functions responsible for management packs and performance views
- Finance functions responsible for reconciliations, forecasts, and variance analysis
- Operations functions responsible for trackers and exception reporting
- Project functions responsible for schedules, resources, and progress reporting
- Control functions responsible for spreadsheet review and reliability

The course assumes participants can build basic formulas, format tables, sort and filter data, and create simple charts, and leaves out introductory spreadsheet navigation, enterprise database administration, and certification preparation.

Departments and Industries

The course supports departments and industries that depend on controlled spreadsheet analysis and repeatable reporting.

- Finance, audit, risk, and performance management
- Operations, supply chain, procurement, and projects
- Sales, marketing, customer service, and human resources
- Manufacturing, construction, energy, and transport
- Healthcare, education, hospitality, and professional services

Learning Objectives

By the end of this course, participants will be able to:



- Apply advanced formulas and structured references
- Build refreshable Excel Power Query automation
- Analyze data through models, measures, and PivotTables
- Evaluate scenarios, exceptions, and calculation risks
- Build decision-ready dashboards with interactive controls
- Apply testing, protection, documentation, and review controls

Course Agenda

Day 1: Engineer Reliable Formulas

- Excel Table and Structured Reference Design
- Advanced Excel Formulas and Named Logic
- XLOOKUP, INDEX, MATCH, and Retrieval Patterns
- Dynamic Array and Error-Handling Methods
- Formula Audit and Calculation Control Checklist

Day 2: Prepare Refreshable Data

- Source Connection and Query Plan
- Excel Power Query Automation Workflow
- Type, Null, Duplicate, and Error Treatment
- Merge, Append, Group, and Reshape Operations
- Refresh, Parameter, and Source-Control Register

Day 3: Model and Analyze Data

- Table Relationship and Data Model Diagram
- Calculated Column and Measure Selection
- Foundational DAX Measure Patterns
- Excel PivotTable Analysis and PivotCharts
- What-If, Goal Seek, Scenario, and Solver Uses

Day 4: Design Decision Dashboards

- Audience, Question, and KPI Definition
- Chart Selection and Visual Hierarchy
- Slicer, Timeline, and Interaction Design
- Excel Dashboard Controls and Exception Flags
- Management Reporting Layout and Commentary



Day 5: Automate and Control Reporting

- Exercise: Assemble a Refreshable Reporting Flow
- Exercise: Record and Review a Simple Macro
- Exercise: Test Formulas, Queries, and Measures
- Exercise: Protect Inputs and Document Assumptions
- Capstone: Analytical Workbook Pack

Practical Exercises

The course uses suggested activities based on recurring finance, operations, sales, and project reports.

- Suggested activity: restructure a source table and build controlled lookup, aggregation, dynamic-array, and error-handling formulas.
- Suggested activity: import, clean, merge, reshape, and refresh files through a documented Power Query workflow.
- Suggested activity: create relationships, measures, PivotTables, scenarios, and a dashboard for management questions.
- Suggested activity: test calculations, protect input areas, document assumptions, and package a repeatable reporting process.

FAQs

Who suits an advanced Excel reporting course, and what does it assume?

Analysts, reporting, finance, operations, project, and control functions suit the course; it assumes confident use of basic formulas, tables, sorting, filtering, and simple charts.

How does an advanced Excel reporting course differ from a basic Excel course?

Advanced training combines complex formulas, query-based preparation, data models, analytical tools, dashboards, automation, and controls, while basic training concentrates on workbook navigation, simple calculations, formatting, and lists.

When should Excel Power Query automation be used?

Power Query suits repeatable connections and transformation steps such as changing types, filtering, merging, appending, grouping, reshaping, and refreshing source data.

What makes Excel PivotTable analysis reliable?

Reliable PivotTable analysis starts with structured, typed, complete source data; defined relationships and measures; controlled refresh; appropriate aggregation; and reconciliation to source totals.



Which Excel dashboard controls improve review?

Input separation, validation rules, visible assumptions, exception flags, reconciliations, protection, version notes, refresh records, and formula checks improve dashboard review.

Conclusion

Participants take back an Analytical Workbook Pack containing structured inputs, advanced formulas, query steps, a data model, PivotTables, measures, scenarios, dashboards, automation notes, tests, and controls. It changes manual spreadsheet handling into a repeatable reporting workflow. The pack supports analysis, review, refresh, handover, and controlled adaptation for recurring management decisions.