DATA & ICT · SHORT COURSE

Data Analytics with Power BI & Advanced Excel

Many organizations collect large volumes of operational, financial, project, and performance data. However, despite having access to data, institutions often:

DATES	30 Nov – 4 Dec 2026	DURATION	5-day course
COURSE FEE	TZS 1,300,000 · per participant	VAT	Fee excludes VAT
VENUE	Arusha, Tanzania	DAILY HOURS	8:30 AM – 4:30 PM
FEE INCLUDES	Course materials, lunch and refreshments	CERTIFICATE	Certificate of attendance
TRAINER	Elly International training team	APPLICATIONS	Open for applications

Overview

Many organizations collect large volumes of operational, financial, project, and performance data. However, despite having access to data, institutions often:

- Rely on manual reporting processes
- Use static spreadsheets with limited automation
- Struggle with data cleaning and consistency
- Produce delayed or inaccurate reports
- Lack interactive dashboards for management
- Fail to translate raw data into decision-ready insights

Manual reporting increases the risk of errors, delays, duplication of effort, and poor decision-making.

With growing demands for accountability, performance monitoring, and evidence-based planning, there is a strong need for practical skills in:

- Data cleaning and transformation
- Data modelling
- Automated reporting
- Interactive dashboards
- KPI tracking and visualization

This course addresses the urgent need to move from manual spreadsheet reporting to structured, automated, and insight-driven data analytics using Advanced Excel and Power BI.

Course content

Day 1: Data Foundations & Advanced Excel Essentials

Module 1: Data Fundamentals

- Types of data (structured vs unstructured)
- Data quality principles
- Common data errors and inconsistencies
- Data cleaning strategies

Module 2: Advanced Excel Tools

- Advanced formulas (IF, INDEX, MATCH, XLOOKUP)
- Logical and text functions
- Data validation
- Conditional formatting
- Sorting and filtering best practices

Practical Session (Hands-On)

- Cleaning messy datasets
- Applying advanced formulas
- Preparing structured reporting sheets

Day 2: Excel Data Modelling & Dashboard Design

Module 3: Pivot Tables & Analytical Techniques

- Pivot Tables and Pivot Charts
- Slicers and dynamic filtering
- Data summarization techniques
- Trend and variance analysis

Module 4: Excel Dashboard Development

- Designing KPI dashboards
- Layout and visualization principles
- Linking multiple datasets
- Automating reports using formulas

Practical Session (Hands-On)

- Build a financial or project monitoring dashboard
- Create automated performance reports

Day 3: Introduction to Power BI & Data Transformation

Module 5: Power BI Fundamentals

- Power BI interface overview
- Data import from Excel and databases
- Data transformation using Power Query
- Data cleaning inside Power BI

Module 6: Data Modelling in Power BI

- Relationships between tables
- Star schema basics
- Calculated columns and measures
- Introduction to DAX fundamentals

Practical Session (Hands-On)

- Import and clean real datasets
- Build a structured data model

Day 4: Power BI Visualizations & KPI Reporting

Module 7: Creating Visual Reports

- Charts and visual types
- Tables and matrix visuals
- Slicers and filters
- Drill-down functionality
- Designing management-ready dashboards

Module 8: KPI & Performance Reporting

- Designing KPIs and performance indicators
- Budget vs actual analysis
- Trend monitoring
- Creating executive dashboards
- Publishing and sharing reports

Practical Session (Hands-On Labs)

- Develop a full Power BI dashboard
- Create interactive performance reporting

Day 5: Automation, Insight Presentation & Capstone

Module 9: Automating Reporting Workflows

- Linking Excel and Power BI
- Refreshing data automatically
- Report standardization
- Data governance and version control

Module 10: Presenting Data for Decision-Making

- Storytelling with data
- Visual clarity principles
- Communicating insights to management
- Avoiding misleading visualizations

Capstone Practical Simulation
Participants will complete an end-to-end analytics project, including:

- Cleaning raw data
- Creating a data model
- Designing KPI dashboards
- Generating management-ready insights
- Presenting findings

Course Wrap-Up

- Practical evaluation
- Feedback session
- Facilitator recommendations
- Certificate guidance

Who should attend

Target Group

This course is suitable for:

- Monitoring & Evaluation (M&E) Teams
- Finance and Budget Officers
- Statisticians
- Planning Officers
- ICT/Data Officers
- Department Heads
- Project Managers and Project Teams
- Business Analysts
- Research and Reporting Officers

Recommended Prerequisites

- Basic Excel knowledge
- Experience working with data or reports

- No prior Power BI experience required

How to apply

Apply online at ellyinternational.co.tz. Your place is confirmed only after we review your application and contact you, within 1 working day.

Apply for this course | Ask on WhatsApp | Email us

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Details correct as of 28 November 2026.