DATA & ICT · SHORT COURSE

Data Management and Analysis

Build confidence in organising and working with information for better decisions.

DATES	7–11 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	Few places left

Overview

Data Management and Analysis is a comprehensive short course that provides an in-depth introduction to the concepts, tools, techniques, and practices involved in collecting, managing, analyzing, and interpreting data. This course focuses on the necessary skills to effectively work with data, ranging from data cleaning and manipulation to data analysis and visualization. The training is structured to combine theoretical learning with practical exercises using software tools like Excel and Python and any other useful tool deemed fit for the purpose, which are widely used in data management and analysis.

Rationale

As we enter into an era where data is being referred to as the "new oil", the ability to manage and analyze data is becoming increasingly critical. Every sector, from business to healthcare to government, relies on data to make informed decisions. This has led to a high demand for professionals who possess skills in data management and analysis. Hence, this course has been designed to meet this rising need and equip learners with the relevant skills that can give them a competitive edge in various fields.

Objectives

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

1. Understand the fundamentals of data management, including data collection, storage, security, and quality assurance.
2. Apply key techniques for data manipulation and cleaning.
3. Conduct basic and complex data analysis using standard statistical methods.
4. Understand and apply data visualization techniques to represent data effectively.
5. Utilize popular data management and analysis tools, including Excel and Python
6. Understand the ethical considerations and implications associated with data management and analysis.
7. Develop problem-solving skills and apply these in a data context.

Course content

1. Introduction to Data Management
   - Importance of data management
   - Data lifecycle

    - Data quality and data cleaning
    - Data security and privacy
    - Ethical considerations in data management
2. Data Manipulation Techniques
    - Data types and structures
    - Data transformations
    - Merging, reshaping, and aggregating data
    - Data cleaning techniques
3. Introduction to Data Analysis
    - Overview of data analysis
    - Basic statistical methods for data analysis
    - Hypothesis testing and confidence intervals
    - Regression analysis
4. Data Visualization Techniques
    - Importance of data visualization
    - Principles of good data visualization
    - Creating visualizations using various tools
    - Interpretation of data visualizations
5. Tools for Data Management and Analysis
    - Introduction to Excel for data management and analysis
    - Data analysis with Python
    - Case studies and exercises with each tool
6. Ethics in Data Management and Analysis
    - Understanding the role of ethics
    - Privacy and data security
    - Bias and fairness in data analysis
    - Responsible data reporting

Who should attend

This course is intended for:

- Professionals seeking to up skill or transition into roles that involve data management or data analysis, such as data analysts, data scientists, research analysts, etc.
- Business managers or entrepreneurs who want to make data-driven decisions.
- Academics and individuals in fields like economics, social sciences, or natural sciences that need to manage and analyze data for research purposes.
- IT professionals who want to expand their skill set to include data management and analysis.

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.