ICTAM
ICT ASSOCIATION OF MALAWI

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DATA ANALYTICS TRAINING

02-06 MAR 2026 | 8:30AM TO 4:30PM

Sigelege Beach Resort
Salima

FEES

Members
KK890,000

Non Members
K990,000

40 CPD Hrs

Don't miss out! Register now.

TO REGISTER Mtendere Mzumara +265 881 586 027
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DATA ANALYTICS TRAINING FOR IT PROFESSIONALS

What you'll learn and the skills you'll gain

- Gain an immersive understanding of the practices and processes used in the data analytics ecosystem
- Apply analytical tools effectively: Use statistical techniques, SQL, Python and Power BI to solve data challenges.
- Learn how to prepare, visualize and present data findings in dashboards and reports
- Develop independent and critical thinkin g, learn how to interpret models, question assumptions and work with limited guidance.

Training period

- 5 days

Requirements and materials

- No previous knowledge is necessary for this course
- A laptop with internet access
- A thirst for learning something new.

Awarded qualification

- You'll be awarded ICTAM Certificate of attendance in Data Analytics upon successful completion.

FACILITATOR

WIZA MSUKU

MSc | BSc | Data Science | Machine Learning | OCA | Project Management

Wiza is a seasoned Data Scientist and trainer with over a decade of experience in Data Analytics across Telecommunications, Finance and Health sectors. He specializes in transforming data into actionable insights that enhance decision-making, optimize operations, drive business growth and measure impact. With deep expertise in Advanced Analytics, Business Intelligence and statistical analysis, He tailors data-driven solutions to meet industry-specific needs, equipping professionals with essential analytical skills.

TRAINING TIMETABLE

DAY 1: Fundamental Concepts of Data Analytics

1.1. Objectives:

Understand the role of data analytics in business decision-making.
Learn key concepts, workflow and terminology

1.2. Content Outline

- What is Data Analytics
- Process Overview (from raw data to decisions)
- Fundamental Building Blocks of Data Analytics
- Types of Data Analytics
- Statistics as the foundation of Analytics
- Data Analytics Lifecycle
- Popular Technology Stack
- Soft skills

1.3. Hands-on

- install and configure tools (MySQL, Python & Power BI)

DAY 2: RELATIONAL DATABASES AND SQL

2.1. Objectives:

Understand relational database concepts and structures.
Learn SQL fundamentals for querying and managing data.

2.2. Content outline

- Introduction to Relational Databases
- Core Relational Database Concepts
- Database Structure and Design
- Introduction to SQL
- Data Definition & Data Manipulation
- Querying Data with SQL
- Working with Multiple Tables
- Basic Query Optimization and Performance

2.3. Hands-on exercise

DAY 3: PYTHON FOR DATA ANALYTICS

3.1. Objectives:

Use Python to collect, clean, transform and manage datasets.

3.2. Content Outline:

- Fundamental concepts of Python programming
- Libraries for data management: pandas, numpy
- Importing/exporting data (CSV, Excel, SQL)
- Handling missing values, duplicates, and outliers
- Data wrangling: merging, reshaping, aggregating
- Practical Applications and Use Cases
- Code optimization and best practices

3.3. Hands-on exercise

DAY 4: COMMUNICATING INSIGHTS WITH POWER BI

4.1. Objectives:

Build interactive dashboards to communicate findings.

4.2. Content Outline:

- Core components of Power BI
- Elements of Power BI
- Power BI interface and workflow
- Connecting to data sources
- Data modeling in Power BI
- Visualization best practices
- Creating measures with DAX
- Build and publish dashboards
- Telling a Compelling Story

4.3. Hands-on exercise

DAY 5: INTRODUCTION TO MACHINE LEARNING AND INTEGRATED CAPSTONE PROJECT

5.1. Objectives

Understand ML concepts and apply basic models

Apply SQL, Python, Power BI, and ML in a real-world scenario

5.2. Content:

- What is Machine Learning?
- Types of Machine Learning
- Regression
- Classification basics (decision trees, random forest)
- Clustering (k-means)
- Model evaluation (accuracy, precision, recall, confusion matrix)
- Deploying a model
- Linear Regression deep-dive

5.3. Hands-on exercise

5.4. Capstone project