NeXTra

Code . Create . Inspire

Data Analytics Bootcamp

Turning Numbers into Narratives

Learn how to translate complex data into clear, compelling insights that guide smarter business decisions.

Through practical projects and real-world datasets, discover the power of analytics as a tool for storytelling, prediction, and growth.

Course Overview

Data Analytics is the art of translating raw, complex information into clear, compelling insights that directly influence smarter business decisions. This course equips you with the tools and techniques to perform practical analysis on real-world datasets, allowing you to discover the power of analytics as a foundation for storytelling, prediction, and measurable business growth.

Why NeXTra?

Applied Learning:

Engage in hands-on, project-based sessions using real-world datasets and industry-grade simulations to develop practical, job-ready skills in data interpretation and reporting.

Elite Mentors:

Gain insights directly from seasoned data scientists and Business Intelligence (BI) professionals who bring real industry experience and guidance to every session.

Career Growth Support:

Receive end-to-end career support, from mentorship and skill refinement to connecting with top employers in data-driven industries.

Flexible Study Options:

Choose a learning path that fits your schedule, with personalized guidance in portfolio development, interview preparation, and job readiness.

Community & Collaboration:

Learn within a vibrant, supportive community that fosters teamwork, idea sharing, and growth—whether you study full-time, part-time, or through our hybrid model.

Thriving Network:

Become part of a powerful community of analysts, decision-makers, and tech leaders shaping the future of data and strategy.

What You'll Master in This Program

Gain expertise in data wrangling, exploratory data analysis, and statistical modeling - using Python and other tools - to extract meaningful insights.

Build strong skills in data visualization and effective communication using Python libraries alongside industry tools such as Power BI, Tableau, and advanced Excel.

Achieve proficiency in core analytical tools, including SQL, Python-based analysis workflows, and leading visualization platforms.

Understand and apply data ethics and privacy principles to ensure responsible, compliant data practices.

Who Can Join?

This course is designed for individuals who want to specialize in analyzing data, generating insights, and supporting decision-making. Ideal for beginners transitioning into analytics, students, and professionals seeking analytical skills for the modern workplace.

Ideal Candidates

This program is perfectly suited for you if are focused on:

01 **Starting a Career in Analytics:**

You have basic math and computer skills and want to move into data analysis with no coding background needed.

02 **Learning Practical Tools**

You want to work with SQL, Excel, Power BI, Tableau, and Python for analytics.

03 **Making Insight-Driven Decisions**

You aim to understand data trends and present insights that influence business decisions.

Meeting The Requirements:

To join, you'll need:

1. Curiosity and willingness to learn
2. Laptop (At least Core i5, 8GB RAM, 216GB storage - SSD preferred)
3. English proficiency
4. Stable internet

Our Flexible Learning Paths & Schedules

Mode	Duration	Schedule	Fees
Full-time Hybrid (In-person & Online)	4 Months	Mon - Fri (9 AM - 2 PM)	Ksh. 90,000
Full-time Online	4 Months	Mon - Fri (9 AM - 2 PM)	Ksh. 75,000
Part-time online	6 Months	Mon - Fri (6 PM-9 PM)	Ksh. 90,000

Course Outline:

This program provides deep technical proficiency in the core tools of modern data analysis, combining spreadsheet mastery, database querying, statistical rigor, and business intelligence reporting.

Tools Covered: Advanced Excel, Microsoft SQL Server (SSMS), Python (NumPy, Pandas, Matplotlib/Seaborn), Power BI, Tableau.

Full-Time Schedule (16 Weeks)

Module 1: Foundations & Excel Mastery			
Week	**Module**	**Topic**	**Key Concepts and Deliverables**
1	Kickoff & Excel Essentials	Orientation, Data Quality & Privacy, Analytics Approaches (Descriptive, Predictive). Excel Basics, Data Cleaning (Text, Dates).	Cleaned Dataset using Excel functions.
2	Advanced Excel Functions	Mastering VLOOKUP/INDEX/MATCH, Conditional Formatting, Data Validation, Pivot Tables and Slicers.	Interactive Pivot Table Summary Report.
3	Excel Power Tools & BI	Power Query (Get & Transform, M-Language), Power Pivot Introduction, Introduction to DAX (Calculated Columns).	Data transformation workflow in Power Query.
4	Excel Dashboarding & Modeling	Designing Dashboards, Advanced Visuals. Introduction to Decision Modeling: Break-Even Analysis, Prescriptive Model Pricing.	Interactive Excel Dashboard and simple Prescriptive Model.

Module 2: Statistics & Data Querying			
Week	**Module**	**Topic**	**Key Concepts and Deliverables**
5	SQL Fundamentals	Working with Databases, Basic Querying (SELECT, WHERE, ORDER BY, LIMIT), Data Types.	SQL Script for basic data retrieval.
6	Advanced SQL	Aggregation (GROUP BY), SQL Joins (INNER, LEFT, RIGHT), Set Theory (UNION/UNION ALL), Subqueries and CTEs, DML (INSERT, UPDATE).	Multi-table data analysis using Joins and Aggregation.
7	Statistics I: Foundations	Descriptive Statistics (Mean, Median, Z-Score, Variability), Probability, Normal Distribution, Central Limit Theorem, Types of Sampling.	Statistical Summary Report (Excel/Python).
8	Statistics II: Hypothesis Testing	Hypothesis Testing Fundamentals (Null/Alternate Hypotheses, Errors), T-Tests (One & Two-Sample), Introduction to ANOVA (F-Test Theory).	Completed T-Test Hypothesis Test with interpretation.

Module 3: Python for Data Science			
Week	**Module**	**Topic**	**Key Concepts and Deliverables**
9	Python Essentials	Installation (Google Colab/Jupyter), Data Structures (Lists, Dictionaries), Control Statements (If, For), Functions.	Python scripts for core logic functions.
10	NumPy & Pandas I (Prep)	NumPy Arrays and Vectorized Operations. Pandas DataFrames, Indexing, Data Cleaning (Handling Missing Data, Outliers).	Dataset loaded and cleaned using Pandas.
11	Pandas II (Manipulation)	Advanced Pandas: Merging, Joining, Grouping Data (.groupby()), Pivot Tables, Time Series Data handling.	Complex data aggregation and transformation using Pandas.
12	Visualization & Regression (Python)	Matplotlib/Seaborn Basics, Plotting Distributions (Univariate, Bivariate), Correlation Analysis, Simple Linear Regression Modeling (Statsmodels/Scikit-learn).	EDA Report with visualizations and Regression output.

Module 4: Business Intelligence & Modeling			
Week	**Module**	**Topic**	**Key Concepts and Deliverables**
13	Power BI I: Data & Model	Power BI Interface, Connecting to Sources (SQL, Excel), Power Query Editor for advanced transformations, Data Modeling (Relationships, Star Schema).	Structured Data Model in Power BI.
14	Power BI II: DAX & Reports	Mastering DAX (Calculated Columns & Measures), Time Intelligence functions. Creating complex Visuals (Numeric, Graphic), Implementing Slicers.	Interactive Power BI Report utilizing DAX measures.
15	Tableau & Visual Storytelling	Tableau Interface, Connecting to Data, Creating Visual Analytics (Charts, Plots), Dashboarding in Tableau, Visual Storytelling Best Practices.	Tableau Dashboard and Story Presentation.
16	Decision Modeling & Capstone	Advanced Decision Trees (Maxi-Min, Maxi-Max), Monte Carlo Simulation Introduction. Final Project Development, Synthesis, and Presentation.	Final Capstone Project Submission and Presentation.

Part-Time Schedule (24 Weeks)

Module 1: Foundations & Spreadsheets		
Week	**Module**	**Topic**
1	Course Kickoff & Data Basics	Orientation, System Setup, Ethics & Data Privacy, Approaches to Data Analysis.
2	Excel Essentials	Data Import, Formatting, Basic Functions (SUM, AVERAGE, IF), Data Quality & Cleaning.
3	Advanced Excel Functions	Mastering VLOOKUP, INDEX/MATCH, Date/Time Functions, Conditional Formatting.
4	Excel Data Preparation	Text-to-Columns, Data Validation, Data Consolidation, Introduction to Statistical functions.
5	Excel Power Query	Connecting to external data, M-Language basics, Advanced data transformation workflows.
6	Excel BI & Dashboards	Pivot Tables, Slicers, Power Pivot, Basic DAX, Designing and building an interactive Excel Dashboard.

Module 2: Statistics & Database Fundamentals		
Week	**Module**	**Topic**
7	Relational Databases & SQL I	Database Fundamentals, SQL Data Types, Basic Querying (SELECT, FROM, WHERE, ORDER BY, LIMIT).
8	SQL Aggregation & Joins	Aggregate Functions (COUNT, SUM), GROUP BY, HAVING. Introduction to INNER and LEFT JOINs.
9	Advanced SQL	RIGHT and FULL JOINs, Set Theory (UNION), Subqueries and Nested Queries, Common Table Expressions (CTEs).
10	Statistical Foundations I	Descriptive Statistics (Mean, Median, Mode, Variability, Z-Score, Outliers), Types of Data, Data Profiling.
11	Statistical Foundations II	Probability, Random Variables, Normal Distribution, Central Limit Theorem, Normality Tests, Types of Sampling.
12	Hypothesis Testing (T-Tests)	Null/Alternate Hypothesis, Types of Errors, Critical Value & P-Value Methods, One and Two-Sample T-Tests.

Module 3: Python for Data Analysis		
Week	**Module**	**Topic**
13	Python Setup & Basics	Installation (Google Colab), Python Data Structures (Lists, Dicts, Sets), Control Flow (If, For, While).
14	Python Functions & NumPy	Defining custom functions, NumPy Arrays, Vectorized Operations, Array Aggregations.
15	Pandas I: DataFrames	Creating and manipulating DataFrames, Indexing, and Selection. Loading data from various file types.
16	Pandas II: Cleaning & Munging	Handling Missing Data (Imputation), Removing Outliers, Data Transformation, Cleaning Text and Date data.
17	Pandas III: Advanced Manipulation	Merging, Joining, Grouping Data (.groupby()), Pivot Tables using Pandas.
18	Python Visualization & Correlation	Matplotlib/Seaborn Basics, Plotting Distributions (Univariate/Bivariate), Correlation Analysis and visualization.

Module 4: Business Intelligence & Decision Modeling		
Week	**Module**	**Topic**
19	Power BI I: Data Preparation	Power BI Interface, Connecting to Sources, Power Query Editor, Cleaning Data with Power Query M-Language.
20	Power BI II: Data Modeling	Implementing Star Schema, Managing relationships, Performance Optimization.
21	Power BI III: Advanced DAX	Creating complex Measures, Calculated Columns, Time Intelligence functions (Year-Over-Year, YTD).
22	Tableau & Visual Storytelling	Tableau Interface, Creating Visual Analytics (Charts, Plots), Dashboarding, Choosing the right visualization for the audience.
23	Advanced Modeling	Non-Parametric Tests (Chi-Square), Simple Linear Regression in Python, Introduction to Decision Trees (Maxi-Min, Maxi-Max).
24	Capstone & Deployment	Final Project Synthesis and Development, Monte Carlo Simulation Introduction, Deploying and Maintaining Assets (Power BI Service). Final Presentation and Exam Prep.

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Contact Details

Phone
+254 740 612 191

Address
Carwash, Roysambu, Nairobi

Website
www.gonextra.com

WhatsApp
+254 740 612 191

Emails

General Inquiries
info@gonextra.com

Corporate/Consulting Inquiries
corporate@gonextra.com

Admission Inquiries
admissions@gonextra.com

@gonextra

@nextraofficial

@gonextra

@nextra.official

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- Full-Stack Website Development Bootcamp
- Data Science Bootcamp
- Data Analytics Bootcamp
- Generative AI Essentials Bootcamp,

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- SQL
- Power BI
- Tableau
- R
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- Advanced Excel
- Stata
- CSS & HTML
- JavaScript

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- Tech Explorers Junior