blue nile analytica

2023 Education Brochure

Welcome to
Blue Nile Analytica

I am thrilled to introduce Blue Nile Analytica, a company established with a mission to empower institutions in Africa to meet the growing demand for Data Science professionals in the job market.

Data Science is rapidly transforming every sector, and there is a critical need for institutions to equip their students with the necessary knowledge and skills to succeed in today's data-driven world. However, many institutions face challenges in keeping up with the latest trends and technologies in Data Science, and this is where Blue Nile Analytica comes in.

Our company is dedicated to bridging the gap between academia and industry by providing cutting-edge training, consulting, and recruitment services. We work closely with institutions to understand their specific needs and goals, and we tailor our solutions to meet those needs.

Our team consists of experienced Data Science professionals who are passionate about sharing their knowledge and expertise with the next generation of Data Science professionals. We are committed to delivering high-quality services to our clients, and we are constantly staying up-to-date with the latest trends and technologies in Data Science.

At Blue Nile Analytica, we believe that Data Science has the power to transform Africa, and we are proud to play a part in shaping the future of Data Science education and employment in Africa.

Thank you for your interest in Blue Nile Analytica. We look forward to working with you to empower institutions in Africa to meet the demand for Data Science professionals in the job market.

Pius Odhiambo
Director General, Blue Nile Analytica

Who We Are.

Blue Nile Analytica is a data science and technology related company registered in the Republic of Kenya. The name Blue Nile Analytica is derived from the name of the longest river in Africa (River Nile). River Nile is historically considered the longest river in the world. It flows from Lake Victoria in Uganda through Southern Sudan, Sudan, Egypt and finally into Mediterranean Sea. Communities living around the river depends on it for their livelihood. Its water is Blue.

We are a team of experienced Data Science professionals, educators, and consultants, passionate about sharing our knowledge and expertise with the next generation of Data Science professionals. Our team has a deep understanding of the latest trends and technologies in Data Science, and we are dedicated to delivering high-quality services to the people we serve.

What we do.

Blue Nile Analytica under the leadership of Pius Odhiambo was established to empower institutions in Africa meet the demand for Data Science professionals in the job market. This will make Africa remain competitive as it joins the rest of the world in Data revolution era.

We offer a range of services designed to help institutions in Africa meet the demand for Data Science professionals in the job market. These services include:

Training:
We provide cutting-edge training in Data Science, including courses in Data Analysis, Machine Learning, and Data Visualization. Our training programs are tailored to meet the specific needs of each institution, and we work closely with our clients to ensure that our training programs are effective and impactful. Our trainees range from University Students, Tertiary Colleges and Highly motivated High School students who would then be able to acquire the technological skills demanded by the growing tech industry.

Consulting:
We offer consulting services to institutions seeking to optimize their operations using Data Science. Our team works closely with our clients to understand their specific needs and goals, and we develop customized solutions to help them achieve their objectives.

Student Recruitment and Staffing:
We provide recruitment services to organisations seeking to hire Data Science professionals all over Africa. Our team has a deep understanding of the Data Science job market in Africa, and we work closely with our clients to identify and recruit top talent.

The Leadership.

The company has 4 Directors, 1 administrator and 15 Management trainees. The company intends to roll out 3 signature programs in collaboration with like-minded institutions of higher education in Africa and technology companies. The 4 signature programs are:

1. Certificate in Data Science,
2. Diploma in Data Science
3. Postgraduate Diploma in Data Science
4. Postgraduate Diploma In Machine Learning & Artificial Intelligence

Mr. Pius Odhiambo is a Senior Data Scientist Consultant based in Washington DC, in the United States of America.

Mr. Odhiambo holds a Bachelors degree in Education Science (Mathematics / Statistics and Physics) from Kenyatta University, Masters of Science in I.T. (Database Systems Technology Specialization) from the University of Maryland Global Campus in Adelphi, USA, Post Graduate Diploma in Artificial Intelligence and Machine Learning from University of Texas at Austin in Texas, USA and is currently a Doctor of Science in Computer Science (Artificial Intelligence & Machine Learning specialization) student at Bowie State University, in Bowie, Maryland, USA where his area of research is in Natural Language Processing.

Levi Bushuru
Director, Blue Nile Analytica

Geoffrey Odallo
Director, Blue Nile Analytica

Reuben Chemitei
Director, Blue Nile Analytica

Certificate In Data Science (9 Months)

Enrollment Minimum Requirements
KCSE C (plain), English :C (plain), Maths /Physics:C(plain) or equivalent

Course Details

Semester 1

	CREDITS
Mathematics for Science	3
Object Oriented Programming in C++	3
Computer Systems and Architecture	3
Probability and Statistics I	3

Semester 2

	CREDITS
Object Oriented Programming in Python	6
Calculus I (Methods of differentiation and its applications)	3
Probability and Statistics II	3
Business Statistics with Numpy I	3

Semester 3

	CREDITS
Python for Data Science	3
Calculus II (Methods of integration and its applications)	3
Business Statistics with Numpy II	3
Database Systems Technology I	3

Diploma In Data Science (12 Months)

Enrollment Minimum Requirements
KCSE C+, English :C+, Maths /Physics:C+

Course Details

Semester 1

	CREDITS
Mathematics for Science	3
Object Oriented Programming in C++	3
Computer Systems and Architecture	3
Probability and Statistics I	3

Semester 2

	CREDITS
Object Oriented Programming in Python	3
Calculus I (Methods of differentiation and its applications)	3
Probability and Statistics II	3
Business Statistics with Numpy I	3

Semester 3

	CREDITS
Python for Data Science	3
Business Statistics with Numpy II	3
Database Systems Technology I	3
Machine Learning & Artificial Intelligence I	3

Semester 4

	CREDITS
Ordinary Differential Equations	3
Data Science Capstone Project	3
Data Structures & Algorithms in C++	3
Data Science on Cloud with AWS / Azure/ GCP	3
Database Systems Technology II	3
Machine Learning & Artificial Intelligence II	3

Postgraduate Diploma In Data Science (12 Months)

Enrollment Minimum Requirements

KCSE C+ (plus)
Bachelors Degree in any STEM /Quantitative Field or Equivalent

Course Details

Semester 1

	CREDITS
Object Oriented Programming in C++	3
Business Statistics with Numpy	3
Database Systems Technology	3

Semester 2

	CREDITS
Data Structures and Algorithms in C++	3
Advanced Business Statistics with Numpy	3
Data Science on Cloud with AWS / Azure/ GCP	3

Semester 3

	CREDITS
Python for Data Science & Introduction to Machine Learning	3
Database Administration	3
Technology Management	3

Semester 4

	CREDITS
Machine Learning & Artificial Intelligence	3
Data Science Capstone Project	3
Data Mining using R	3

Postgraduate Diploma In Machine Learning & Artificial Intelligence (12 Months)

Enrollment Minimum Requirements

KCSE C+ (plus)
Bachelors Degree in any STEM /Quantitative Field

Course Details

Semester 1

	CREDITS
Object Oriented Programming in C++	3
Business Statistics with Numpy	3
Database Systems Technology	3

Semester 2

	CREDITS
Data Structures and Algorithms in C++	3
Advanced Business Statistics with Numpy	3
Data Science on Cloud with AWS / Azure/ GCP	3

Semester 3

	CREDITS
Python for Data Science & Introduction to Machine Learning	3
Database Administration	3
Technology Management and introduction to Applied Research	3
Data Mining using R	3

Semester 4

	CREDITS
Data Science on Cloud with AWS / Azure/ GCP	3
Machine Learning & Artificial Intelligence	3
Data Science Capstone Project	3
Applied Research Methods in Machine Learning & Artificial Intelligence	3

Advanced Excel Functions For Data Science

Enrollment Minimum Requirements

- Basic Computer skills
- Laptop
- Access to internet

Day: Saturdays . Time: 3.00 Pm -5.00 Pm Nairobi Local Time

Course Details

IF function
SumIfS
CountIfS
Trim
Concatenate
Left / Right
Vlookup
Xlookup
IfError
Value
Unique
Sort
Filter
Linear regression using Excel
Power Query
Box Plots (Q1, Q2, Q3 , Q4)
Outlier Detection using Boxplots
Removing noise using moving averages
Computing Z Scores

Tableau Data Analyst Certification

Enrollment Minimum Requirements

• Basic Computer skills
• Laptop
• Access to internet

Course Details

Domain 1: Connect to and Transform Data

- Connect to data sources
- Prepare data for analysis
- Perform data transformation in Tableau Prep
- Customize fields

Domain 2: Explore and Analyze Data

- Creating calculated fields
- Creating quick table calculations
- Creating and using filters
- Structuring the data

Domain 3: Create Content

- Creating charts
- Creating dashboards and stories
- Adding interactivity to dashboards
- Formating dashboards

Domain 4: Publish and Manage Content on Tableau Server and Tableau Online

- Publishing Content
- Manage Published workbooks
- Create subscriptions

Oracle Database Administration

Enrollment Minimum Requirements

- Basic Computer skills
- Laptop
- Access to internet

Course Details

Oracle Database SQL Certified Associate (1Z0-071

For any data analyst using this training for exam preparation, our Oracle Database SQL Certified Associate course maps to the Oracle 1Z0-071 exams objectives, and covers topics such as:

- Learn about Relational Databases

- Tables, views, and queries in Relational DBs

- Introduction to Structured Query Language (SQL)

- Oracle Database Structure and Schema

- Aggregating, Manipulating, and Retrieving Data

- Restricting and sorting query results

Programming In Python

Enrollment Minimum Requirements

• Basic Computer skills
• Laptop
• Access to internet

Course Details

Module 1: Basic Concepts
Module 2: Data Types, Evaluations, and Basic I/O Operations
Module 2: Data Types, Evaluations, and Basic I/O Operations
Module 3: Control Flow – loops and conditional blocks
Module 4: Data Collections – Lists, Tuples, and Dictionaries
Module 5: Functions

Business Statistics With Numpy

Enrollment Minimum Requirements

• KCSE Maths C+ or Bachelor's Degree from recognized University.

Course Details

Getting familiar with the terms

Introduction to Data Science and modeling

Descriptive statistics: Variance

Concept of central values - Mean, Median and Mode with examples

Distributions and characteristics of a well -defined the stable process

Descriptive Statistics: Visualising your Data using Pairplot

Descriptive Statistics: Hands-on approach

Inferential Statistics

How probability plays a key role in building models

Binomial Distribution: Definition, formula, and examples.

Poisson Distribution: Definition, formula, and examples

Understanding Joint and Conditional Probability with some examples.

Inferential Statistics: Introduction and it is important in deciding the quality of data

Hypothesis Testing

Hypothesis Testing: Null vs Alternate Hypotheses

Chi-Square test- Definition, formula, and examples

Normal Deviate Z Test - Definition, formula and examples

Code Analysis: Understanding Statistics

Inferential Statistics

One sample t-test

Types of t-tests: One tail & two-tail tests

Analysis of Variance (ANOVA)

Making Sense of the Two-Sample T-Test

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Get In Touch Today

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