DATA ANALYTICS COURSES 2024



DATA ANALYTICS TRAINING CONCEPT

Data Analytics in the current world is crucial in decision making in every industry. Artificial intelligence and machine learning fully relies on data. Data collection and management methods remain important aspects before data is analyzed and interpreted for decision making.

In order to understand data analytics, one must know the types of data and the suitable data analytics software for data management and analysis as expected in the industry. USIU-Africa through the data analytics laboratory offers training on data analytics using Power BI, SPSS, STATA, R and NVIVO.

One may choose to register for data analytics classes depending on the area preference as explained below. The training will be hands on with exercises done in class.

COURSES

- Data Analytics using Power BI
- Data Management and Analytics using SPSS
- Qualitative Data Analysis using NVIVO
- STATA for Beginners
- STATA for Advanced Level
- R for Beginners
- R for Advanced Level

DATA ANALYTICS USING POWER BI

Data Analytics through Power BI enables one to learn how to export, transform, load, visualize, and mine data for decision making.

Course Description:

The training will focus on ensuring learners understand the process of getting insights from data using Microsoft's Power BI. Data from different data sources will be used. The course will be purely technical and hands-on.

By the end of the training learners will be able to:

- a) Create Dashboard
- b) Analyze Dashboard
- c) Import data from different sources
- d) Visualize Data
- e) Make decisions using the data

Qualified individuals to join the Program

The course is designed for learners who want to learn how to analyze data from scratch and learners who want to get better at analyzing data. These may include;

- Students
- · Researchers with own projects/data
- Data and IT practitioners
- · Business Managers and Intelligence Analysts

Duration of the Training: 30 hours and the timing details depends on your selected training schedule.

Training Fee: Depend on the training schedule selected



DATA MANAGEMENT AND ANALYTICS USING SPSS

Statistical Analysis using SPSS course is one of the best ways to be introduced into the world of quantitative data analytics for social sciences. This course will focus on data management, outputs, and advanced statistical procedures. SPSS is often sought by analysts and social data scientists who need to perform sophisticated statistical data analysis, interpretation, and presentation. SPSS allows users to analyze data with a range of statistics, provides advanced statistical procedures and visuals, introduces a scripting language for automation and customization, and supports big data with a variety of data access options. Industries use this powerful tool for pattern forecasting, predicting outcomes, and decision-making through comprehensive statistical analysis.

Course Outline

The sessions will be purely practical. The participants will manage to interpret the outputs and write reports for decision making.

The course outline includes the following:



Introduction to SPSS: Learning features of SPSS including windows that is important for data management and analysis



Data Management: Includes data importation, cleaning and coding into the SPSS. Creation of variables and recording



Descriptive Analysis: Includes data presentations inform of frequency tables, graphs, charts and APA formats where necessary.

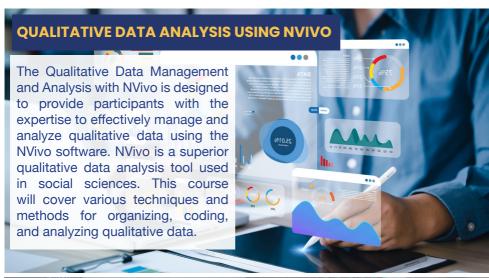


Inferential Statistics: This will be analysis for conclusions based on statistical level of significance. This will include correlations, regressions, chi-square, t-tests and F-tests (ANOVA).

Qualified individuals to join the Program

Researchers, Statisticians, Economists, M&E professionals, Students, Research supervisors, Project/Program staff in NGOs, Agri-business, Social Sciences and Education and anyone who wants to learn SPSS for the first time

Duration of the Training: 30 hours and the timing details depends on your selected training schedule.



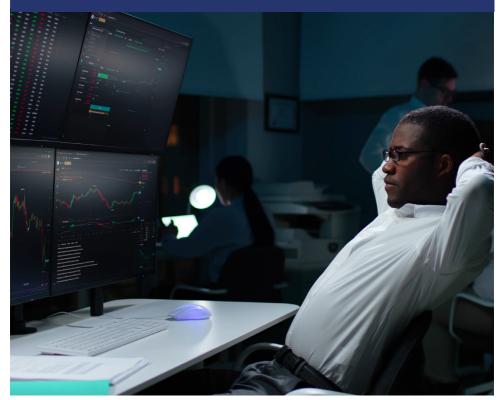


Course Objectives:

- Understand the fundamentals of qualitative research and data analysis.
- · Learn how to import, organize, and manage qualitative data in NVivo.
- Develop proficiency in coding and categorizing qualitative data using NVivo.
- Explore different techniques for data analysis, including thematic analysis, content analysis, and grounded theory.
- · Gain insights into analyzing multimedia and visual data in NVivo.
- Learn advanced features of NVivo for data exploration and interpretation.
- Practice writing memos, creating reports, and visualizing qualitative data using NVivo.
- Enhance research rigor and validity in qualitative data analysis.

Targeted Group

- Researchers and scholars involved in qualitative research projects
- Social scientists and anthropologists
- Market researchers and consumer insights professionals
- Policy analysts and evaluators
- Academic researchers and students in qualitative research disciplines
- Professionals involved in qualitative data analysis and interpretation

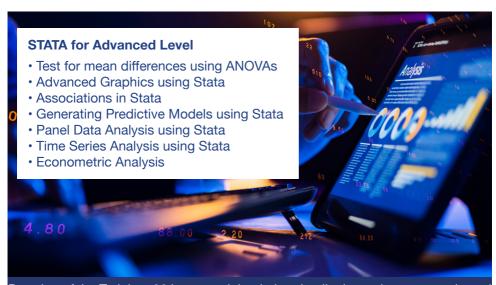


Duration of the Training: 30 hours and the timing details depends on your selected training schedule.

DATA ANALYTICS USING STATA

STATA is statistical data software that provides for data analysis, data management and graphics. The training targets researchers and other professionals who would like to strengthen their capacity using STATA. The training will enhance the knowledge and skills of the participants to analyze data in a fast, accurate and easier manner by using Stata software and will know how to interpret and present the results.





Duration of the Training: 30 hours and the timing details depends on your selected training schedule.



Course Outline

R-for beginners

- Installation of R
- R features
- R-codes
- · Data structures in R
- · Basic Arithmetic in R:
- Importing, saving & exporting data
- Data manipulation: inspect, filter, sort, create, rename, replace, transform, and merge
- Basic data analysis: Frequencies and cross-tabulations, measures of association and summarizing
- Data Visualizations
- Correlations

R-for Advanced Level

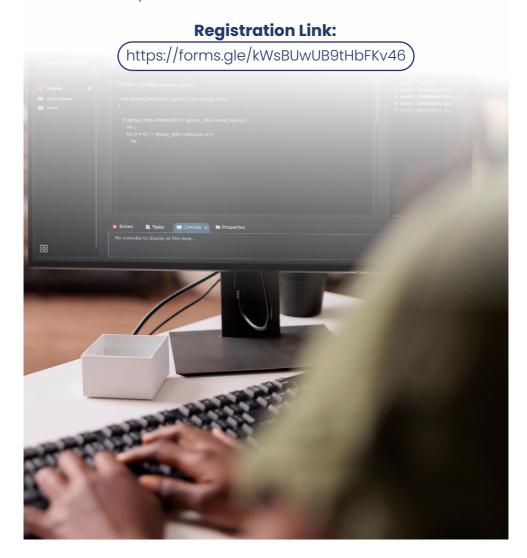
- Predictive techniques
- Mean difference tests
- Grouping Methods (Machine learning methods)



Duration of the Training: 30 hours and the timing details depends on your selected training schedule.

IMPORTANT INFORMATION ABOUT THE COURSES

- Requirements for the Training: Laptop with the software of interest installed
- Mode of Learning: Face-to-Face, Hybrid, at USIU-Africa or Online depending on the Training schedule you have selected
- **Timelines:** Every training takes 30 hours each. The Specific dates will depend on the Training schedule you have selected.
- Contact: coyogo@usiu.ac.ke or 0730 116 351 or Mobile: 0701-494892 for more information
- · Certificate of completion will be awarded.



SCHEDULE AND COSTS

Date	Time	Mode of Learning	Venue	Fee	Package
22nd-26th January 2024	8am-5pm	Face-to-Face or Hybrid	USIU-Africa campus	Ksh 75,000	Power BI
22nd January -2nd February 2024	6pm-9pm (Evening)	Online	Zoom	Ksh 65,000	
22nd-26th January 2024	8am-5pm	Face-to-Face or Hybrid	USIU-Africa campus	KSh 45,000	SPSS
22nd January -2nd February 2024	6pm-9pm (Evening)	Online	Zoom	Ksh 35,000	
12th-16th February 2024	8am-5pm	Face-to-Face or Hybrid	USIU-Africa campus	Ksh 75,000	NVIVO
12th-23rd February 2024	6pm-9pm (Evening)	Online	Zoom	Ksh 65,000	
12th-16th February 2024	8am-5pm	Face-to-Face or Hybrid	USIU-Africa campus	Ksh 75,000	STATA for Beginners
12th-23rd February 2024	6pm-9pm (Evening)	Online	Zoom	Ksh 65,000	
4th-8th March 2024	8am-5pm	Face-to-Face or Hybrid	USIU-Africa campus	Ksh 85,000	STATA for Advanced Level
4th-15th March 2024	6pm-9pm (Evening)	Online	Zoom	Ksh 75,000	
4th-8th March 2024	8am-5pm	Face-to-Face or Hybrid	USIU-Africa campus	Ksh 75,000	R for Beginners
4th-15th March 2024	6pm-9pm (Evening)	Online	Zoom	Ksh 65,000	
25th-29th March 2024	8am-5pm	Face-to-Face or Hybrid	USIU-Africa campus	Ksh 85,000	R for Advanced Level
25th March -5th April 2024	6pm-9pm (Evening)	Online	Zoom	Ksh 75,000	

^{*} Lunch and Refreshments provided at USIU-Africa Campus













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