Training Course on Data Management, Analysis, and Graphics using STATA

Professional Development Training Course Outline

Category	Research and Data Analysis	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Data is the backbone of informed decision-making in today's data-driven world. The Data Management, Analysis, and Graphics using STATA Training Course is designed to equip professionals with the essential skills to manage, analyze, and visualize data effectively using STATA. This course caters to beginners and experienced users, offering practical insights into STATA's powerful tools for data manipulation, statistical analysis, and graphical representation.

STATA is a leading software for statistical analysis, favored by researchers, academics, and industry professionals worldwide. This training emphasizes hands-on learning, guiding participants through real-world data challenges and teaching them how to navigate STATA's user-friendly interface. By mastering STATA, participants can enhance their analytical capabilities and contribute to data-driven decision-making within their organizations.

Programme Curriculum

Training Course on Data Management, Analysis, and Graphics using STATA

Introduction

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Effective data visualization is crucial for presenting complex findings clearly and compellingly. This course covers STATA's advanced graphics capabilities, enabling participants to create publication-quality charts and graphs that communicate insights effectively. From data cleaning to advanced statistical techniques, participants will gain confidence in handling diverse datasets with precision.

By the end of this course, participants will not only understand the core functionalities of STATA but also learn to apply its tools to solve real-world problems. Whether you work in academia, healthcare, business, or government, this training will empower you to unlock the full potential of your data.

Course Duration

5 Days

Course Objectives

1. Learn the fundamentals of STATA for data management and analysis.
2. Understand how to import, clean, and organize datasets.
3. Master data manipulation techniques, including merging and reshaping data.
4. Explore descriptive and inferential statistical methods using STATA.
5. Create advanced data visualizations and publication-ready graphics.
6. Perform regression analysis and other statistical modeling techniques.
7. Utilize STATA commands and syntax for efficient analysis.
8. Automate repetitive tasks using STATA's do-files.
9. Interpret and report analysis results effectively.
10. Apply STATA skills to real-world datasets through case studies.

Organizational Benefits

1. Improved data management and analysis capabilities within the organization.
2. Enhanced decision-making through accurate and efficient data analysis.
3. Reduced dependency on external data consultants, saving costs.
4. Access to precise, insightful visualizations for stakeholder presentations.
5. Greater accuracy in research, monitoring, and evaluation initiatives.
6. Increased capacity to handle large and complex datasets.
7. Development of in-house expertise in statistical analysis and data visualization.
8. Standardized data processes for consistency and reliability.
9. Ability to derive actionable insights from diverse datasets.

10. Strengthened organizational competitiveness through data-driven strategies.

Target Participants

- Data analysts and statisticians.
- Researchers and academicians.
- Monitoring and evaluation officers.
- Public health professionals and epidemiologists.
- Business intelligence and market research professionals.
- Policy analysts and government officials.
- NGO and development sector staff involved in data-driven projects.
- Corporate professionals handling operational and financial data.
- Anyone interested in acquiring skills in data analysis and visualization using STATA.

Course Outline

Module 1: Introduction to STATA and Data Management

1. Overview of STATA's interface and tools.
2. Importing and exporting data from various sources.
3. Data cleaning and handling missing values.
4. Organizing and labeling datasets for clarity.
5. Case study: Data preparation for a healthcare project.

Module 2: Data Manipulation Techniques

1. Merging and appending datasets.
2. Reshaping data from wide to long formats and vice versa.
3. Generating and recoding variables.
4. Sorting and filtering datasets for specific analyses.
5. Case study: Merging survey and administrative data.

Module 3: Descriptive Statistics and Exploratory Analysis

1. Summarizing datasets using descriptive statistics.
2. Exploring data distributions and trends.
3. Creating frequency tables and cross-tabulations.
4. Identifying outliers and patterns in data.
5. Case study: Exploratory analysis of socioeconomic data.

Module 4: Statistical Analysis Using STATA

1. Introduction to hypothesis testing.
2. Conducting t-tests, ANOVA, and chi-square tests.
3. Regression analysis: Linear, logistic, and multivariate models.
4. Time-series and panel data analysis basics.
5. Case study: Regression analysis of market trends.

Module 5: Data Visualization and Graphics

1. Creating bar charts, histograms, and scatter plots.
2. Customizing graph aesthetics for publication quality.
3. Visualizing regression results and time-series data.
4. Exporting graphics for reports and presentations.
5. Case study: Visualization of public health data trends.

Module 6: Advanced Features and Automation

1. Writing and running STATA do-files.
2. Automating repetitive tasks using macros and loops.
3. Using STATA commands for efficient workflows.
4. Exporting analysis outputs to reports.
5. Case study: Automating monthly monitoring reports.

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

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