Business Intelligence with Streamlit Training Course

Professional Development Training Course Outline

Category	Business Intelligence	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In the modern data-driven world, organizations need intuitive and interactive business intelligence solutions to convert raw data into actionable insights. Business Intelligence with Streamlit Training Course equips professionals with the skills to create dynamic dashboards, visualizations, and reports using Python and Streamlit. Participants will gain hands-on experience in building user-friendly BI applications that support strategic decision-making, improve data analysis efficiency, and drive operational excellence. This course emphasizes practical skills, real-world use cases, and advanced analytics techniques to empower participants to turn complex datasets into business value.

Streamlit has emerged as a leading framework for quickly developing interactive applications without extensive front-end coding. By leveraging Streamlit, participants will learn to streamline data storytelling, integrate various data sources, and build scalable dashboards suitable for organizational needs. The training provides a blend of theoretical concepts and practical workshops, allowing learners to apply knowledge immediately and create impactful BI solutions. Professionals from diverse industries will benefit from mastering Streamlit to improve productivity, enhance reporting capabilities, and foster data-driven decision-making across all organizational levels.

Programme Curriculum

Business Intelligence with Streamlit Training Course

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Course Objectives

1. Master the fundamentals of Streamlit for building interactive BI dashboards.
2. Understand data visualization best practices to enhance insights delivery.
3. Develop interactive charts, graphs, and widgets using Python and Streamlit.
4. Integrate multiple data sources including Excel, SQL, and APIs.
5. Implement advanced filtering, grouping, and data transformation techniques.
6. Learn to deploy Streamlit applications on cloud platforms efficiently.
7. Apply real-world business scenarios in dashboard design and development.
8. Utilize Streamlit to improve reporting automation and data storytelling.
9. Gain expertise in designing scalable and maintainable BI applications.
10. Leverage Python libraries such as Pandas, Matplotlib, and Plotly in Streamlit.
11. Optimize performance and ensure user-friendly experiences in dashboards.
12. Explore case studies to identify best practices in BI solution development.
13. Develop problem-solving skills through hands-on projects and exercises.

Organizational Benefits

- Enhance decision-making with real-time insights.
- Streamline reporting processes and reduce manual effort.
- Foster a data-driven culture across teams.
- Improve collaboration between IT, analytics, and business teams.
- Increase efficiency in monitoring KPIs and business metrics.
- Accelerate dashboard development and deployment cycles.
- Minimize errors and inconsistencies in reporting.
- Encourage proactive performance analysis and forecasting.
- Promote cost-effective analytics solutions.
- Strengthen strategic planning with actionable intelligence.

Target Audiences

1. Business Analysts seeking advanced visualization skills.
2. Data Analysts aiming to build interactive dashboards.
3. Data Scientists interested in practical application development.
4. IT Professionals involved in analytics and reporting.
5. Managers requiring real-time business insights.
6. BI Developers looking to enhance dashboard efficiency.
7. Python Programmers expanding into business intelligence.

8. Entrepreneurs and decision-makers leveraging data for growth.

Course Duration: 5 days

Course Modules

Module 1: Introduction to Business Intelligence and Streamlit

- Overview of business intelligence concepts
- Role of interactive dashboards in decision-making
- Streamlit installation and environment setup
- Introduction to Streamlit widgets and layout
- Case Study: Building a simple sales KPI dashboard
- Hands-on practical exercises

Module 2: Data Handling and Preparation

- Loading datasets from Excel, CSV, and SQL databases
- Data cleaning and preprocessing using Pandas
- Handling missing values and data inconsistencies
- Data transformation and aggregation techniques
- Applying filters and groupings for BI insights
- Case Study: Cleaning and transforming sales data for dashboards

Module 3: Data Visualization in Streamlit

- Creating line, bar, and pie charts
- Using Matplotlib, Seaborn, and Plotly with Streamlit
- Interactive charts with dynamic filtering
- Color schemes, themes, and design best practices
- Customizing charts for better user experience
- Case Study: Visualizing monthly revenue and expenses

Module 4: Advanced Streamlit Widgets

- Using sliders, dropdowns, radio buttons, and date pickers
- Building interactive filters for dashboards
- Multi-page dashboard implementation
- User input handling and data validation
- Real-time data updates and interactivity
- Case Study: Interactive dashboard for customer segmentation

Module 5: Dashboard Design and User Experience

- Principles of effective dashboard design
- Layout optimization and component arrangement
- Responsive dashboards for different devices
- Integrating charts, tables, and KPIs seamlessly
- Storytelling with data for business audiences
- Case Study: Designing an executive KPI dashboard

Module 6: Connecting to External Data Sources

- Integrating APIs for real-time data
- Connecting to SQL and NoSQL databases
- Fetching and visualizing dynamic datasets
- Automating data refresh in dashboards
- Handling authentication and security for external sources
- Case Study: Real-time stock price monitoring dashboard

Module 7: Deployment and Collaboration

- Deploying Streamlit apps locally and on the cloud
- Version control with Git for BI projects
- Collaboration techniques for dashboard development
- Best practices for sharing dashboards securely
- Monitoring app performance and user feedback
- Case Study: Deploying a company-wide KPI dashboard

Module 8: Capstone Project and Real-World Applications

- End-to-end dashboard development from scratch
- Applying BI concepts to organizational scenarios
- Integrating multiple datasets and visualizations
- Optimizing dashboards for speed and usability
- Presentation of dashboards to stakeholders
- Case Study: Comprehensive sales and operations dashboard

Training Methodology

- Interactive lectures and concept discussions
- Hands-on exercises and practical workshops
- Real-world case studies and problem-solving sessions
- Collaborative group projects to reinforce learning
- Step-by-step guidance on dashboard development
- Continuous assessment and feedback on exercises

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

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Register Online Now

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