Integrated Data Analysis with Excel and Power BI Training Course

16 - 20 Nov 2026

Boston

7500 € (Per Person)

Ref: #DM2991_89897

Course Introduction / Overview:

This course provides a comprehensive journey into the world of modern data analysis, seamlessly integrating the robust capabilities of Microsoft Excel with the dynamic visualization power of Power BI. In today's data-driven landscape, the ability to not only process data but also to tell a compelling story with it is a critical skill for any professional. This program is designed to transform participants from data users into data strategists, capable of building end-to-end business intelligence solutions. We will move beyond basic functions to explore advanced data modeling, transformation, and visualization techniques. As authors like Alberto Ferrari and Marco Russo emphasize in their seminal work, "The Definitive Guide to DAX," mastering the language of data is key to unlocking profound business insights. BIG BEN Training Center has structured this course to provide a practical, hands-on experience, ensuring that participants can immediately apply their new skills to solve real-world business challenges, enhance reporting accuracy, and drive informed decision-making. This training is your gateway to mastering the synergy between Excel and Power BI, creating a powerful toolkit for any data professional aiming for excellence and efficiency in their analytical tasks.

Target Audience / This training course is suitable for:

- Data Analysts and Business Analysts.
- Financial Analysts and Accountants.
- Marketing and Sales Professionals.
- IT Professionals involved in data management.
- Project Managers and Team Leaders.
- Operations Managers and Supply Chain Analysts.
- Human Resources Professionals.
- Business owners and entrepreneurs seeking to leverage data.
- Anyone looking to transition into a data-focused career.

Target Sectors and Industries:

- Banking and Financial Services.
- Healthcare and Pharmaceuticals.
- Retail and E-commerce.
- Manufacturing and Logistics.
- Technology and Telecommunications.
- Consulting and Professional Services.
- Governmental bodies and public sector organizations.
- Energy and Utilities.
- Education and Research Institutions.

Target Organizations Departments:

- Finance and Accounting Departments.
- Marketing and Sales Departments.
- Operations and Supply Chain Management.
- Information Technology (IT) and Data Management Teams.
- Human Resources Departments.
- Business Intelligence and Analytics Units.
- Executive Management and Strategy Teams.
- Customer Service and Support Departments.
- Research and Development (R&D) Departments.

Course Offerings:

By the end of this course, the participants will have able to:

- Master advanced Excel functions for complex data manipulation and analysis.
- Perform data cleaning and transformation using Power Query for both Excel and Power BI.
- Build robust and scalable data models by creating relationships in Power Pivot and Power BI.
- Write powerful DAX (Data Analysis Expressions) formulas to create insightful calculations and measures.
- Design and develop interactive and visually appealing dashboards and reports in Power BI.
- Implement data storytelling techniques to communicate insights effectively to stakeholders.
- Publish reports to the Power BI service and manage data refresh schedules.
- Integrate Excel and Power BI to create a seamless and efficient analytics workflow.
- Apply best practices for dashboard design and business intelligence implementation.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be immersive, practical, and highly interactive, ensuring that participants gain tangible skills they can apply immediately. Our approach moves beyond theoretical lectures to focus on hands-on learning and real-world application. The course is structured around a series of practical exercises, case studies, and collaborative projects that mirror the challenges professionals face in their daily roles. Participants will work with sample datasets to build complete business intelligence solutions from the ground up. Each session includes interactive discussions, Q&A segments, and live demonstrations to clarify complex concepts. Our expert instructors facilitate a supportive learning environment, encouraging peer-to-peer knowledge sharing and providing personalized feedback. We believe in learning by doing, and this principle is at the core of our delivery. This active learning model ensures a deeper understanding of the tools and techniques, empowering participants to confidently tackle any data analysis task and drive data-driven decisions within their organizations.

Course Agenda (Course Units):

Unit One: Advanced Data Preparation and Analysis in Excel

- Foundations of advanced data analysis.
- Mastering lookup functions like VLOOKUP, INDEX-MATCH, and XLOOKUP.
- Advanced PivotTables and Pivot Charts for data summarization.
- Utilizing What-If Analysis tools like Goal Seek and Scenario Manager.
- Introduction to Power Query for data cleaning and transformation within Excel.
- Automating data preparation tasks with Power Query steps.
- Consolidating data from multiple sources and formats.

Unit Two: Introduction to Power BI and Data Transformation

- Understanding the Power BI ecosystem (Desktop, Service, Mobile).
- Navigating the Power BI Desktop interface.
- Connecting to various data sources (Excel, CSV, SQL, Web).
- Deep dive into the Power Query Editor in Power BI.
- Advanced data shaping and transformation techniques.
- Understanding and applying M language for custom transformations.
- Ensuring data quality and handling errors during the ETL process.

Unit Three: Data Modeling and DAX Fundamentals

- Principles of effective data modeling.
- Creating and managing relationships between tables.
- Understanding star schema and snowflake schema concepts.
- Introduction to DAX (Data Analysis Expressions).
- Differentiating between calculated columns and measures.
- Writing fundamental DAX functions (SUM, AVERAGE, COUNT, DISTINCTCOUNT).
- Using the CALCULATE function to manipulate filter context.

Unit Four: Advanced Visualization and Report Design

- Creating compelling reports in Power BI.
- Choosing the right visuals for your data.
- Formatting visuals and pages for maximum impact.
- Implementing interactivity with slicers, filters, and cross-filtering.
- Using bookmarks and buttons to create dynamic user experiences.
- Applying principles of data storytelling and dashboard design.
- Importing and using custom visuals from the marketplace.

Unit Five: Publishing, Sharing, and Advanced Analytics

- Publishing reports from Power BI Desktop to the Power BI Service.
- Creating and configuring dashboards in the Power BI Service.
- Sharing reports and dashboards with colleagues.
- Managing workspaces and user permissions.
- Configuring scheduled data refreshes.
- Implementing Row-Level Security (RLS) to restrict data access.
- Integrating Excel and Power BI for a complete analytical workflow.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How can the principles of data storytelling transform a standard business report into a compelling call to action that drives strategic change?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by focusing on the powerful synergy between Excel and Power BI, treating them not as separate tools but as an integrated ecosystem for end-to-end data analysis. While many courses teach these applications in isolation, our curriculum is built around the practical workflow professionals use daily, starting with complex data preparation in Excel and seamlessly transitioning to advanced modeling and visualization in Power BI. We emphasize the "why" behind the techniques, not just the "how." The core of our approach is rooted in business intelligence strategy and data storytelling, ensuring participants learn to create reports that are not only technically sound but also strategically insightful and persuasive. The curriculum moves beyond tool-specific functions to instill a deep understanding of data modeling principles and the logic of DAX, which are transferable skills critical for long-term career growth in the analytics field. By focusing on real-world case studies and hands-on projects, the course ensures that participants leave with a portfolio of work and the confidence to solve complex business problems, making it a transformative experience rather than just a technical training.