



Information Technology

# Business Statistics using Excel and Power BI

## Course Introduction

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In today's data-driven business environment, proficiency in conducting business statistics using Excel and Power BI is indispensable for professionals across industries. The ability to analyze and interpret data accurately empowers decision-makers to derive actionable insights, identify trends, and make informed strategic choices.

This comprehensive course equips participants with the essential skills and knowledge required to harness the full potential of Excel and Power BI for data management, analysis, and visualization. Participants will delve into the fundamentals of business statistics, learning key concepts and techniques to interpret and analyze data effectively. Additionally, participants will discover the capabilities of Power BI, mastering the art of creating interactive dashboards, data modeling, and advanced reporting to drive business performance and enhance stakeholder communication. By the course's conclusion, participants will emerge equipped with the tools and techniques necessary to leverage Excel and Power BI effectively, positioning themselves as valuable assets in the pursuit of organizational success.

### Training Course Methodology

This training course is designed to be interactive and participatory, and includes various learning tools to enable the participants to operate effectively and efficiently in a multifunctional environment. The course will use lectures and presentations, and group discussions.

## Target Audience

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- Cloud Computing Engineer
- Computer Network Specialist
- Computer Support Specialist
- Database Administrator
- Information Technology Analyst
- Information Technology Leadership
- Information Security Specialist

- Software/Application Developer
- Web Developer
- Technology sales consultant

## Learning Objectives

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- Gain a comprehensive understanding of business statistics fundamentals and their relevance in decision-making processes within organizations.
- Develop proficiency in using Microsoft Excel for data management, analysis, and visualization, including advanced techniques such as regression analysis and forecasting.
- Master the basics of Power BI for creating interactive dashboards, data modeling, and advanced reporting to derive actionable insights from business data.
- Acquire practical skills and knowledge necessary to leverage statistical analysis tools to enhance decision-making, drive business growth, and improve operational efficiency.

## Course Outline

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### • Day 01

#### **Introduction to Business Statistics and Excel**

##### Understanding Business Statistics Fundamentals

- Introduction to key concepts in business statistics, including descriptive and inferential statistics.
- Explanation of the role of statistics in business decision-making and problem-solving contexts.
- Overview of statistical software tools available for data analysis in business.

#### **Data Management and Analysis in Excel**

- Overview of Excel as a powerful tool for data management and analysis.

- Discussion on data entry techniques, formatting options, and data validation in Excel.
- Explanation of how Excel can be used to organize and clean data sets for analysis.

## **Exploratory Data Analysis**

- Techniques for exploring and visualizing data using Excel charts and graphs.
- Explanation of frequency distributions, histograms, and box plots for data analysis.
- Overview of how exploratory data analysis can uncover patterns and trends in data sets.

### **• Day 02**

## **Advanced Data Analysis Techniques in Excel**

### **Regression Analysis and Forecasting**

- Overview of regression analysis and its applications in business forecasting.
- Explanation of regression models, coefficients, and significance testing.
- Discussion on how regression analysis can be used to predict future trends and outcomes.

## **Data Analysis Tools in Excel**

- Overview of advanced data analysis tools in Excel, including pivot tables and data mining techniques.
- Explanation of filtering and sorting options for analyzing large data sets.
- Discussion on the importance of data analysis tools for deriving insights and making informed decisions.

### **• Day 03**

## **Advanced Excel Techniques and Introduction to Power BI**

### **Advanced Excel Techniques**

- Advanced Excel features and functions for enhanced data analysis.
- PivotTable and PivotChart capabilities for dynamic data summarization.
- Discussion on integrating advanced Excel techniques with business statistics.

### **Introduction to Power BI for Data Visualization**

- Overview of Power BI as a business analytics tool for data visualization and reporting.
- Explanation of Power BI's interface, data import options, and visualization features.

- Discussion on how Power BI can be used to create interactive dashboards and reports.

## • Day 03

### **Advanced Data Visualization and Analysis with Power BI**

#### **Creating Interactive Dashboards in Power BI**

- Techniques for designing interactive dashboards in Power BI using visualizations, filters, and slicers.
- Explanation of best practices for dashboard layout, navigation, and user experience.
- Discussion on how interactive dashboards can be used to monitor key performance indicators (KPIs) and trends.

#### **Data Modeling and Analysis in Power BI**

- Explanation of data modeling concepts in Power BI, including relationships and measures.
- Overview of advanced data analysis features such as DAX (Data Analysis Expressions) functions.

## • Day 05

### **Advanced Reporting and Collaboration with Power BI**

#### **Advanced Reporting and Sharing in Power BI**

- Techniques for creating and sharing interactive reports in Power BI Service.
- Explanation of security and permissions settings for sharing dashboards and reports.
- Discussion on how Power BI reports can be used to communicate insights and drive decision-making across an organization.

#### **Final Review and Q&A Session**

- Recap of key concepts and skills covered throughout the training course.
- Open forum for participants to ask questions, seek clarification, and discuss practical applications of the learned techniques.

# Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
June 23, 2025	June 27, 2025	5 days	4950.00 \$	Spain - Barcelona
July 7, 2025	July 11, 2025	5 days	4250.00 \$	UAE - Dubai
Oct. 6, 2025	Oct. 10, 2025	5 days	4250.00 \$	UAE - Abu Dhabi