Scandinavian Academy

for Training and Development AB

Course: Advanced Data Analysis and Reporting with Power BI

Code	City	Hotel	Start	End	Price	Language - Hours
840	Milan (Italy)	Hotel Meeting	2026-02-02	2026-02-06	5450 €	En - 25

Course Introduction

In the era of big data and smart decision-making, data analysis has become essential for both organizations and individuals. Microsoft Power BI provides powerful solutions for data analysis, report generation, and the creation of interactive dashboards that support data-driven decision-making.
This course is designed to equip participants with the necessary skills to effectively use Power BI, starting with data import and cleansing, followed by data analysis and visualization, and concluding with professional report sharing and collaboration.

This course aims to enable participants to analyze data and create professional reports using Microsoft Power BI by developing their skills in importing and preparing data from multiple sources, designing efficient data models, creating interactive visualizations, and performing advanced data analysis to support strategic decision-making. The course also focuses on enhancing participants` ability to share reports and dashboards securely and efficiently within their organizations.

Course Objective

- Understand the fundamentals of Business Intelligence (BI) and data analysis.
- Import, clean, and prepare data from various sources.
- Design optimized data models and use DAX (Data Analysis Expressions) for advanced calculations.
- Create professional reports and interactive dashboards using Power BI.
- Optimize performance and apply advanced data analysis techniques for decision-

making.
- Share reports securely through Power BI Service and collaborate with teams effectively.

Target Audience

- Data analysts and AI specialists looking to enhance their Power BI expertise.
- Business managers and decision-makers who rely on data-driven insights.
- Finance, marketing, and sales professionals who need to analyze and visualize business data.
- Individuals looking to develop their data analysis skills and make informed decisions.
- Developers and engineers who need to understand Business Intelligence tools.

Course Outline

Day 1: Introduction to Power BI and Fundamentals of Data Analysis

- Introduction to Business Intelligence (BI) and its significance in organizations.
- Overview of Microsoft Power BI and its interactive environment.
- Components of Power BI: Power BI Desktop, Power BI Service, and Power BI Mobile.
- Data import from multiple sources (Excel, SQL, Web, APIs).
- Data cleaning and transformation using Power Query.
- Hands-on workshop: Importing and analyzing data from various sources.

Day 2: Data Modeling and Relationship Building

- Importance of data models in Power BI.
- Establishing relationships between tables and understanding Model View.
- Optimizing data models using Star Schema and Snowflake Schema.
- Using DAX (Data Analysis Expressions) to create custom measures and calculated

columns.
- Practical applications: Designing efficient data models and linking tables effectively.

Day 3: Data Analysis and Visualization Techniques

- The role of data visualization in decision-making.
- Different chart types in Power BI and selecting the most suitable ones.
- Designing interactive dashboards with meaningful insights.
- Enhancing reports using Conditional Formatting and Custom Visuals.
- Adding filters, slicers, and interactivity to reports.
- Hands-on workshop: Creating a professional report with financial or business data.

Day 4: Advanced Analysis and AI-Powered Insights

- Predictive analytics using AI Insights in Power BI.
- Creating advanced DAX measures for financial and business performance analysis.
- Identifying trends and forecasting future data patterns.
- Integrating Azure Machine Learning for AI-powered data analysis.
- Case study: Analyzing sales data and predicting future trends.

Day 5: Report Sharing, Security, and Best Practices

- Publishing reports to Power BI Service.
- Managing user permissions and security settings for data sharing.
- Scheduling automatic data refresh in Power BI.
- Integrating Power BI with Excel, SharePoint, and Microsoft Teams.
- Best practices for designing efficient and secure reports and dashboards.
- Final project: Each participant will create a fully functional dashboard based on real-world business scenarios.

The Scandinavian Academy for Training and Development adopts the latest scientific and professional methodologies in training and human resource development, aiming to enhance the efficiency of individuals and organizations. Training programs are delivered through a comprehensive approach that includes:

- Theoretical lectures supported by PowerPoint presentations and visual materials (videos and short films).
- Scientific evaluation of participants before and after the program to measure progress and knowledge acquisition.
- Brainstorming sessions and practical role-playing to simulate real-life scenarios.
- Case studies tailored to align with the training content and participants work nature.
- Assessment tests conducted at the end of the program to evaluate the achievement of training objectives.

Each participant receives the training material (both theoretical and practical) in printed form and saved on a CD or flash drive. Detailed reports, including attendance records, final results, and overall program evaluations, are also provided.

Training materials are prepared professionally by a team of experts and specialists in various fields. At the end of the program, participants are awarded a professional attendance certificate, signed and accredited by the Scandinavian Academy for Training and Development.

Program Timings:

- 9:00 AM to 2:00 PM in Arab cities.
- 10:00 AM to 3:00 PM in European and Asian cities.

The program includes:

- A daily buffet provided during the sessions to ensure participants comfort.