

€ TRAINING

Certified Data Analyst Training Program





Certified Data Analyst Training Program

Introduction:

This program is tailored specifically to prepare participants for the certification exam. It provides a thorough grounding in the key skills and knowledge required for success in data analysis. Participants will gain hands-on experience with tools such as Power BI, learning to extract, analyze, and visualize data effectively to support informed, data-driven business decisions.

Program Objectives:

By the end of this program, participants will be able to:

- Apply advanced data analysis techniques to interpret and extract insights from complex datasets.
- Create interactive and visually appealing reports and dashboards using Power BI.
- Develop sophisticated data models to support analysis and reporting.
- Apply principles of data governance to ensure data quality, security, and compliance.
- Prepare for and achieve certification as a professional data analyst.

Target Audience:

- Data Analysts.
- Business Intelligence Professionals.
- Data Scientists.
- IT Specialists.
- Professionals Seeking Data Analysis Skills.

Program Outline:

Unit 1:

Introduction to Data Analysis:

- Overview of data analysis and its role in business decision-making.
- Identifying different types of data and their sources.

- Techniques for collecting and preparing data for analysis.
- Conducting Exploratory Data Analysis EDA to summarize and visualize data.
- Analyzing real-world examples of successful data analysis projects.

Unit 2:

Fundamentals of Power BI:

- Overview of Power BI and its components.
- Installing and setting up Power BI Desktop.
- Importing data from various sources into Power BI.
- Using Power Query to clean and transform data.
- Creating basic charts and graphs in Power BI.

Unit 3:

Data Preparation and Transformation:

- Handling missing data, outliers, and inconsistencies.
- Advanced data transformation techniques using Power Query.
- Merging and appending data from multiple sources.
- Introduction to DAX and its application in data modeling.
- Real-world examples of effective data preparation.

Unit 4:

Advanced Data Analysis Techniques:

- Applying statistical methods to analyze data.
- Building and evaluating predictive models using historical data.
- Analyzing time-series data to identify trends and patterns.
- Understanding and applying regression techniques for predictive modeling.
- Exploring advanced data analysis projects in various industries.

Unit 5:

Data Modeling in Power BI:

- Understanding data models and their importance.
- Establishing relationships in Power BI models.
- Implementing hierarchies and drill-downs for detailed analysis.
- Using DAX to create calculated columns and measures.
- Analyzing successful data models in business applications.

Unit 6:

Advanced Power BI Visualization:

- Adding and customizing visuals in Power BI.
- Designing interactive dashboards that enhance user experience.
- Sharing and collaborating on Power BI reports and dashboards.
- Integrating Power BI reports into other applications.
- Reviewing advanced visualization techniques in real-world scenarios.

Unit 7:

Data Governance and Security:

- Understanding data governance and its importance.
- Ensuring the accuracy, completeness, and reliability of data.
- Implementing data security measures to protect sensitive information.
- Understanding and adhering to data privacy regulations.
- Exploring examples of effective data governance strategies.

Unit 8:

Reporting and Communication of Results:

- Designing reports that clearly communicate data insights.
- Using data to tell compelling stories and drive decision-making.

- Ensuring clarity, accuracy, and accessibility in report design.
- Using Power BI to distribute reports within an organization.
- Reviewing successful data reporting and communication strategies.

Unit 9:

Exploring and Applying Advanced Data Analysis Tools:

- Exploring the latest tools and techniques in data analysis.
- Using machine learning techniques for data analysis.
- Applying cloud solutions for processing and analyzing large datasets.
- Enhancing visualization skills using advanced tools.
- Analyzing real-world case studies showcasing the impact of modern techniques across various industries.

Unit 10:

Preparing for Data Analyst Certification:

- Overview of the Certification Exam Structure.
- Key Topics and Areas of Focus for the Exam.
- Study Techniques and Exam Strategies.
- Sample Questions and their Potential Answers.
- Developing strategies to pass the certification exam.
- Learning from the experiences of certified professionals.

Note: This program is designed to prepare participants for the certification exam only.