BOOST
THE LEADING TRAINING PROVIDER

Internationally Certified Training Programs

# Certified Data Analysis Professional

## Course Introduction

The Certified Data Analysis Professional is the first level of our Data Analysis Program. It is a hands-on training course aimed at equipping you with the necessary concepts and tools needed to perform basic statistical and analytical reporting activities, in order to generate value out of the existing data. The course provides you with the knowledge required for understanding distinct methods used in analyzing data, statistical interpretation of quantitative and qualitative data, and becoming proficient in using key Microsoft Excel features, by building frequency and conditional tables, creating different types of charts, finding correlations and relationships between variables, hypothesis testing and statistical modeling.

## Target Audience

- The course is designed for anyone who has basic mathematical training and basic competences in using Microsoft Excel. Statistical knowledge, intermediate or advanced knowledge of Excel, practical experience with data analysis and related duties are not necessary but may contribute to a better understanding and more in-depth coverage of the course content. Diversity of participants' background may help in a thorough coverage of the entire syllabus.
- The course is addressed to managers, Human Resources Representatives, analysts, auditors or logistics and acquisitions experts, as well as to professionals from other business areas, who deal with data and analysis on daily basis.
- The course may also be a starting point for those interested in pursuing career opportunities in data analysis, data modelling and related activities (e.g. campaign management, data mining, statistics, risk management, reporting, data processing for survey analysis etc.).

## Learning Objectives

**By the end of this training course, participants will be able to:**

- Developing a hands-on, practical overview of data analysis and connected topics;
- Integrating statistical concepts and analysis tools that are widely used in corporate analytics environments;
- Analyzing examples of practical applications for statistical methods, used in solving real-life business issues;
- Acquiring mastery of Microsoft Excel Data Analysis features, by learning to use statistical
- techniques through practical examples

## Course Outline

- **01 Day One**

  **Understanding Data Analysis:**

  **Course context:**

    - Introduction of the participants
    - Expectations setting
    - Learning objectives formulation
    - Course agenda presentation

  **Business Understanding:**

    - Definition of Data Analysis
    - Types of Data Analysis

- Data Analysis Process
- Data Analysis Governance
- Data Analysis in Business Capabilities

**Data Preparation:**

- Types of Data Sets
- Data Quality
- Data Cleaning
- Data Aggregating

- **02 Day Two**

**Understanding Data Analysis:**

**Data Exploration:**

- Frequency Tables
- Qualitative Charts
- Quantitative Charts
- Structure Charts

**Descriptive Statistics:**

- Univariate Analysis
- Bivariate Analysis

**Sampling:**

- Population and Sample
- Sampling Techniques
- Sampling Determinations

- **03 Day Three**

**Core of Data Analysis:**

**Estimation of Population:**

- Inferential Statistics Types
- Sources of Estimation Errors
- Central Limit Theorem
- Normal Distribution and T-Distribution
- Population Interval Estimation

**Hypothesis Testing:**

- Hypothesis Testing Procedure
- Type I and Type II Errors
- Level of Significance and p-Value
- Different Types of Hypothesis Testing

**Z-Test and T-Test:**

- One Sample Analysis
- Two Independent Samples Analysis
- Two Dependent Samples Analysis

• **04 Day Four**

**Advanced Data Analysis:**

**Analysis of Variance:**

- F-Distribution
- ANOVA Test Procedure
- Three or more Independent Samples Analysis

**Chi-Square Tests:**

- Chi-Square Distribution
- Goodness of Fit Test
- Test of Independence

**Linear Regression Analysis:**

- Least Squares Method
- Coefficient of Determination and Correlation
- Standardization; Homogeneity.

- **05 Day Five**

**Advanced Data Analysis:**

**Multiple Regression Analysis:**

- Multiple Coefficient of Determination
- Multicollinearity
- Variance Inflation Factor

**Time Series:**

- Trend Component
- Cyclical Component
- Seasonal Component
- Irregular component
- Moving Average

**Review and certification exam:**

- Course Review
- Certification Exam

## Confirmed Sessions

| FROM | TO | DURATION | FEES | LOCATION |
|---|---|---|---|---|
| May 26, 2025 | May 30, 2025 | 5 days | 1500.00 $ | Virtual - Online |
| Aug. 4, 2025 | Aug. 8, 2025 | 5 days | 1500.00 $ | Virtual - Online |
| Oct. 20, 2025 | Oct. 24, 2025 | 5 days | 1500.00 $ | Virtual - Online |