



*Data Analytics and Visualization*

*Manama (Bahrain) - Fraser Suites Seef Bahrain*

*15-12-2024*

# Data Analytics and Visualization

Course code: SC221 From: 15-12-2024 Venue: Manama (Bahrain) - Fraser Suites Seef Bahrain Course Fees: 3300 £

## Introduction

Welcome to the "Data Analytics and Visualization" training program. In today's data-driven world, the ability to extract meaningful insights from data is a crucial skill. This program is designed to equip participants with the knowledge and tools needed to analyze and visualize data effectively, enabling informed decision-making.

## Course Objectives of Data Analytics and Visualization

Upon completing this program, participants will be able to:

- Understand the fundamentals of data analytics and visualization.
- Gain proficiency in using popular data analytics tools and platforms.
- Learn to clean, process, and transform raw data into actionable insights.
- Develop skills in creating compelling visualizations to communicate data findings.
- Explore advanced analytics techniques for predictive and prescriptive analysis.
- Apply data analytics skills to real-world scenarios through hands-on exercises.

## Course Methodology of Data Analytics and Visualization

This program will employ a combination of engaging learning methods, including:

- Lectures and Expert Insights: Leading industry experts will share their insights and best practices.
- Case Studies: Analyze real-world talent acquisition challenges and solutions.
- Group Discussions: Engage in meaningful discussions and share experiences with peers.
- Role-Playing and Simulations: Practice scenarios to enhance skills.

## Organizational Impact of Data Analytics and Visualization

This training program will have a positive impact on organizations by:

- Improved data-driven decision-making processes.
- Enhanced efficiency in extracting insights from large datasets.
- Increased competitiveness through a data-savvy workforce.
- Better identification of business opportunities and risks.

## Personal Impact of Data Analytics and Visualization

Participants will experience personal growth and development, including:

- Enhanced analytical and problem-solving skills.
- Proficiency in using industry-standard data analytics tools.
- Improved ability to communicate complex data findings through visualization.
- Increased marketability in roles requiring data analytics expertise.

## Who Should Attend

This training program is ideal for:

- Data Analysts seeking to upgrade their skills.
- Business Analysts interested in leveraging data for insights.
- Managers and decision-makers aiming to enhance their data literacy.
- Professionals transitioning into roles that involve data analytics.

## Course Outline

### Day 1

#### Introduction to Data Analytics

- Understanding the Data Analytics Landscape
- Basics of Descriptive and Inferential Statistics
- Introduction to Data Exploration and Visualization

### Day 2

#### Data Cleaning and Preprocessing

- Techniques for Data Cleaning and Transformation
- Handling Missing Data and Outliers
- Exploratory Data Analysis (EDA) Techniques

### Day 3

#### Tools and Platforms for Data Analytics

- Overview of Popular Data Analytics Tools (e.g., Python, R, SQL)
- Introduction to Data Visualization Tools (e.g., Tableau, Power BI)
- Hands-on Session: Getting Started with a Data Analytics Tool

### Day 4

#### Advanced Analytics Techniques

- Predictive Analytics: Regression and Classification
- Introduction to Machine Learning for Data Analytics
- Time Series Analysis and Forecasting

### Day 5

#### Data Visualization Best Practices

- Principles of Effective Data Visualization
- Creating Interactive Dashboards
- Case Studies and Real-world Applications