

Data Science using Power BI

A **DATA SCIENCE** COURSE PRESENTED BY



— SIGNIFY —

LEARNING ACADEMY

where learning becomes a journey

INTRODUCTION

For organizations to become more effective and profitable in today's fast-paced business environment, Business Intelligence (BI) capabilities are more important than ever. Microsoft Power BI is becoming the world's most powerful self-service BI platform. This business analytical tool delivers insights into any organization and provides the ability to drive and direct informed and agile business decisions.

In this course, you will learn about the basics of Power BI and how to analyse and visualise data. At the end of this course, you will:

- understand the key concepts of BI and Power BI
- understand how to plan projects with Power BI
- know the Power BI Desktop and its major components
- be able to create tables and visualizations
- know how to connect to and transform data using the Power Query Editor
- be able to create data models and calculations
- be able to use the DAX Formula language to develop calculations
- be able to create, modify and customize visualizations and reports

WHO SHOULD ATTEND?

This course is for anyone interested in the field of data analysis and data science. If you are new to BI or you are a business analyst or other technical or non-technical user who is new to Power BI, then this course is for you. No prior experience in BI or Power BI is required in order to proceed.

COURSE OVERVIEW

The course is divided into 3 main study units:

□ **Introduction to Power BI, Tables and Visualizations**

In this study unit, we are introduced to key concepts of business intelligence, an overview of the Power BI ecosystem, licensing options for Power BI, and the Power BI Desktop and

Power BI Service. We are further introduced to the major components of the Power BI Desktop and the creation of tables and visualizations.

□ **Project planning, Importing and Transforming Data**

In this study unit, we are introduced to the planning of projects with Power BI and the Power Query Editor for importing and transforming data, including transposing data, creating custom columns, adding index columns, splitting columns, referencing queries and appending and merging queries.

□ **Creating Data Models and Calculations, Unlocking Insights and the Final Report**

In this study unit, we learn how to create a data model by using the model view to create relationships between tables, and how to create data analysis calculations. We are further introduced to analysis concepts, advanced analysis techniques and advanced visuals. Lastly we learn how to create a professional, multi-page report that provides data insights

MORE INFORMATION



Duration

Part-time: 3 weeks – 10 to 12 hrs/week (a focused, dedicated 12 hours)



Location

Blended learning with virtual/online sessions. – eLearning modules complimented with expert facilitator input and ask the expert/e-tutor sessions



Certification / Recognition

Upon completion, the learner will receive a Certificate of Achievement.

ENTRY REQUIREMENTS

It is assumed that you have:

- ☐ Basic computer literacy
- ☐ Grade 12 mathematics

It is important to have access to the internet as well as a laptop with the following software:

- Microsoft Office: You may need to make use of the Google office suite, which is free to anyone with a Gmail account. Alternatively, Microsoft Office applications (such as Excel, PowerPoint, and Word) may be used.
- Power BI
- To complete our courses, you will need a current email account and access to a computer and the internet, as well as a PDF Reader.
- We recommend using Google Chrome to access our courses, but any popular browser will suffice.

Hardware requirements:

- Operating System: Since we make use of Windows based apps, Windows 10 is recommended (Windows 7 minimum).
- Processor: Minimum i3. Baseline higher than 2GHz
- RAM: Minimum 4GB
- Bandwidth: 20GB data per month should be sufficient, but will vary based on your personal activity
- Communication: Webcam and Microphone