# **Data Analyst Diploma**



In a world driven by data and the insights derived from it, Data Analysts have become key team members of any business or agency that aims to leverage data to drive product, strategy and decision-making.

This training is ideal for those who are new to data analysis and also appropriate for those who may already be working in tech or data science and would like to specialise and become proficient with the tools and techniques of data analysis.

#### **DIPLOMA OUTLINE**

Today's world is driven by data. More than ever, companies are striving to understand how to improve their operations by dissecting the data they collect to understand clients' needs and industry trends.

As a Data Analyst, you could find yourself working within a wide range of organisations across a variety of sectors, but the common denominator is the need to glean insights from data. Data comes in a variety of forms and is stored in a variety of database management systems. And your first and foremost goal is to gather insights from the data. Often, you will be dealing with unstructured data stored in different types of data management systems. To achieve meaningful analytical results, several skills must be mastered.

In this diploma, you'll gain practical analytical skills as you work through the courses. Not only will you find out more about how data is created and managed, but you'll also look at the fundamentals of research methods and statistical analysis. You will also develop a strong foundation with the most powerful programming languages available for data manipulation, cleaning, and analysis.

## **AIMS AND OBJECTIVES**

With this diploma, you'll acquire a solid foundation of knowledge and skill to become a junior Data Analyst. You'll work with Python and R, two programming languages widely used in the field of data analysis.

And you'll develop valuable skills with SQL, used for querying databases, and Tableau, which is widely used for data visualisation.

#### **PRE-REQUISITES**

Successful candidates will be proficient with Microsoft Excel and have a solid background in mathematics (e.g.,algebra) and strong critical-thinking and problem-solving skills. Previous exposure to coding is a plus.

#### **CAREER PATHS**

There are many options available in this field. You could become a data science professional, pursuing jobs such as data analyst or database developer; or you could go into an data analytics-related role, such as business analyst or data-driven manager. The opportunities are countless!

### **CORE COURSES**

## **Excel Expert**

Our Excel Expert course will provide you with the knowledge and skills to use this popular spreadsheet programme to an advanced level. You'll learn how to work efficiently with PivotTables and PivotCharts, automate processes with macros, create complex visualisations of your data, establish connections between various data sources, and use Excel's data analysis tools to make data-driven decisions.

# **Data Research & Statistical Techniques**

This course has been designed to give learners a strong foundation in data research and statistics. Data analysts are challenged to extract meaningful insights from their data. To learn various strategies toward that goal, this course exposes you to the fundamental research methodology and modelling concepts that are key to performing robust data analytics, visualisation, and data interpretation. This course also emphasises essential statistical methods.

# **Python for Data Analysts**

Python is an all-purpose programming language. It's used for a variety of applications, from web / software development, game development, to AI, machine learning, and data analysis. This course aims to tackle every corner of Python the Data Analyst must master.

## **SQL** for Data Analysts

Structured Query Language (SQL) is a programming language used to extract and organise data stored in a relational database. This course aims to help you develop the skills to first identify the critical characteristics of database design and management and then be able to work with relational databases.

## **R Programming and Statistical Analysis**

R is widely recognised as a powerful programming language and environment for data manipulation, statistical computing, and graphical display. It provides a variety of tools and techniques and is easily extensible. R is open-source and a vital tool for data wrangling and analysis. R includes a robust data handling and storage facility, as well as an extensive, integrated collection of tools for data analysis and graphical display. In this course, you'll learn the fundamentals of the R programming language using Jupyter Notebooks and RStudio, while running descriptive and inferential analysis with different types of data structure.

## **Data Visualisation with Tableau**

This course covers best practice for visualising data. Using the right charts and graphics helps tell the story that the data has revealed and identify patterns and trends within the data. In this course, you'll explore essential types of analysis. visualisation, and graphic tools useful for conveying meaning from your data.

#### **Fundamentals of AI & Machine Learning**

This course seeks to provide you with the essential concepts that will allow you to operate in a modern and sophisticated environment. The world of artificial intelligence (AI) includes many areas in computing, which makes it a complex field, combining computer science and robust datasets to enable problem-solving. Al leverages computers and machines to mimic the problemsolving and decision-making capabilities of the human brain.

### **Project Management for Data Analysts**

This course aims to introduce you to the essential tools used in data-driven projects and collaborations. You'll learn the concepts of Lean, Agile, and Scrum methodologies and their applications.



CPD Points: 200 (Awarded CPD points upon successful completion)



To discuss your current skills and aspirations call now:

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