
Python for Data Analysis – One Day Course Agenda

Overview

We are moving to a data-driven culture and more than ever, it's important that you and your team have the ability to search through data to find insights to inform decisions. Data analysis and programming using data science is becoming a key skill that helps to explore different types of data and prepare and perform statistical analysis on data sets to predict future trends.

The Python for Data Analysis course helps you take the first steps into data science and analyse data using Python. This course will take you from the basics of Python, to preparing data for analysis, performing simple statistical analysis, as well as creating predictions from data.

Learning Outcomes

At the end of this course delegates should be able to:

- Learn SQL fundamentals and how to use SQL to answer business problems
 - Present and store data using Python
 - Import datasets
 - Cleanse data
 - Manipulate data
 - Summarise data
 - Build machine learning regression models
 - Version control
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| # | Topic |
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| 1. | Introduction to SQL <ul style="list-style-type: none">• Introduction to SQL• SQL fundamentals• Joins, aggregations, subqueries• Solve business problems with SQL |
| 2. | Python Programming <ul style="list-style-type: none">• Present and store data using Python data types• Use conditionals and loops• Data structures including lists, sets, dictionaries |
| 3. | Datasets <ul style="list-style-type: none">• Importing datasets• Cleaning the data• Data frame manipulation• Summarise the data• Machine learning regression models• Data pipelines |
| 4. | Version Control <ul style="list-style-type: none">• Learn how to implement version control• Learn how to share your work broadly |
| 5. | Summary and Close |