



Data Analytics with Python and Tableau Training Program

This course is recommended For IT Graduates specialising in:

- Programming
- Software Development
- Database Management
- Data Analytics
- ERP
- Data Science
- Information Systems



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Data Analytics with Python and Tableau Training Program

About the Program:

You will learn how to use the programming language Python to harvest insights from a vast pool of information.

You will gain practical knowledge in Tableau visualisation tool, step by step with Tableau Certification Guidance.

About the Instructor:

Our instructors are industry practitioners not academics, who have the latest technical skills, at least 3 years of relevant industry experience and are passionate about technology and training future talent.

Career Path:

- Python Developer
- Data Analyst
- Data Scientist

Skill Level:

Beginner to Intermediate

Program Duration:

Lecture: 30 hours, Assignment: 15 hours, Internship: 270 hours

Program Delivery:

2 weeks of classroom training followed by 12 weeks of in-company internship (optional)

Program Fee:

\$750 Online Training OR
\$1,500 Inclassroom

Internship Fee:

\$1,750

Timetable Option 1:

Monday to Friday, 10am to 1pm

Timetable Option 2:

Monday to Friday, 6pm to 9pm (Online only)

Internship Timetable:

Monday to Friday, 9am to 5pm (3 to 5 days)

Intake Dates:

Fortnightly

Melbourne Location:

Elizabeth Street, Melbourne VIC 3000

Sydney Location:

Quay Street, Sydney NSW 2000

Online:

ZOOM

COURSE SYLLABUS

Module 1: Introduction to Data Science

- What is Data Science?
- What is Machine Learning?
- What is Deep Learning?
- What is AI?
- Data Analytics & its types

Module 2: Introduction to Python

- What is Python?
- Why Python?
- Installing Python
- Python IDEs
- Jupyter Notebook Overview

Module 3: Python Basics

- Python Basic Data types
- Lists
- Slicing
- IF statements
- Loops
- Dictionaries
- Tuples
- Functions
- Array
- Selection by position & Labels

Module 4: Python Packages

- Pandas
- Numpy
- Sci-kit Learn
- Mat-plot library

Module 5: Importing data

- Reading CSV files
- Saving in Python data
- Loading Python data objects
- Writing data to csv file

Module 6: Manipulating Data

- Selecting rows/observations
- Rounding Number
- Selecting columns/fields
- Merging data
- Data aggregation
- Data munging techniques

Module 7: Statistics Basics

- Central Tendency
 - Mean
 - Median
 - Mode
 - Skewness
 - Normal Distribution
- Probability Basics
 - What does mean by probability?
 - Types of Probability

- ODDS Ratio?
- Standard Deviation
 - Data deviation & distribution
 - Variance
- Bias variance Trade off
 - Underfitting
 - Overfitting
- Distance metrics
 - Euclidean Distance
 - Manhattan Distance
- Outlier analysis
 - What is an Outlier?
 - Inter Quartile Range
 - Box & whisker plot
 - Upper Whisker
 - Lower Whisker
 - Scatter plot
 - Cook's Distance
- Missing Value treatments
 - What is a NA?
 - Central Imputation
 - KNN imputation
 - Dummification
- Correlation
 - Pearson correlation
 - Positive & Negative correlation
- Error Metrics Duration-3hr
 - Classification
 - Confusion Matrix
 - Precision
 - Recall
 - Specificity
 - F1 Score
- Regression
 - MSE
 - RMSE
 - MAPE

Module 8: Tableau Introduction

- Start Page
- Show Me
- Connecting to Excel Files
- Connecting to Text Files
- Connect to Microsoft SQL Server
- Connecting to Microsoft Analysis Services
- Creating and Removing Hierarchies
- Bins
- Joining Tables
- Data Blending

Module 9: Learn Tableau Basic Reports

- Parameters
- Grouping Example 1
- Grouping Example 2
- Edit Groups
- Set
- Combined Sets
- Creating a First Report

- Data Labels
- Create Folders
- Sorting Data
- Add Totals, Sub Totals, and Grand Totals to Report

Module 10: Learn Tableau Charts

- Area Chart
- Bar Chart
- Box Plot
- Bubble Chart
- Bump Chart
- Bullet Graph
- Circle Views
- Dual Combination Chart
- Dual Lines Chart
- Funnel Chart
- Traditional Funnel Charts
- Gantt Chart
- Grouped Bar or Side by Side Bars Chart
- Heatmap
- Highlight Table
- Histogram
- Cumulative Histogram
- Line Chart
- Lollipop Chart
- Pareto Chart
- Pie Chart
- Scatter Plot
- Stacked Bar Chart
- Text Label
- TreeMap
- Word Cloud
- Waterfall Chart

Module 11: Learn Tableau Dashboards

- Create a Dashboard
- Format Dashboard Layout
- Create a Device Preview of a Dashboard
- Create Filters on Dashboard
- Dashboard Objects
- Create a Story

Why learn from Appskill?

- Our training programs offer what no other university degree or education program can: real industry experience.
- You will attend live training in classroom or online via Zoom delivered by industry professionals, not academics.
- Our trainers bring in-depth experience from the field to the classroom each day, providing invaluable insights into succeeding on the job.
- We limit our class sizes at 10 students so you can ask all the questions you want.
- We organise internships in reputable host companies who are looking to hire staff so you get a chance to practice and improve your skills while getting assessed for employment.
- We try our best to convince host companies to make a job offer, thus most internships lead to employment.
- We provide Satisfaction Guarantee, which means if you are not completely satisfied with the quality of training delivered by our trainer or the work experience provided by host company, we will offer a replacement training program and internship at no extra cost.

What training programs are on offer?

- Amazon Web Services
- Microsoft Azure
- Agile Scrum Master
- Data Analytics with Python and Tableau
- Full Stack Web Development
- Android Application Development
- Salesforce Administration
- Digital Marketing

Why get trained now?

- Many organisations are migrating their IT infrastructure and databases into cloud.
- Many traditional shop-front businesses are going online for e-commerce.
- Most organisations are using data analysis and business intelligence to make impactful business decisions.
- Millions of IT jobs are available worldwide in spite of a global recession.
- Earn above \$100,000 pa after a few years of industry experience.

Join a Free Demo Lesson for an hour

Join a free demo lesson to assess the quality of our training programs and trainers.

Register now by sending your resume to: appskill@studyandwork.com.au.

Call us on 1300 79 80 69 to speak to a Course Advisor.