



## Python Data Analysis & Visualization HRDC Reg No - 10001392674

## **HRDC Fully Claimable Training**

## **DESIGNED FOR**

Data Scientists, Business Analysts, Aspiring Data professionals, Al engineers & ML engineers and individuals seeking to elevate their Python data analysis skills

**29, 30 - May 2024** 

9 AM - 5 PM

AC hotel, Marriott, Penang, Malaysia





## Master Python Data Analysis & Visualization: Unleash **Insights for Informed Decision-Making**

#### Who is this course for?

This course is designed for professionals seeking to harness the power of Python for data analysis and visualization, including data scientists, business analysts, aspiring data professionals, AI engineers, and ML engineers. Whether you're working with structured or unstructured data, this course equips you with the essential skills to extract actionable insights and drive informed decision-making.

## →Why you should join?

Our "Python Data Analysis & Visualization" course offers a comprehensive foundation in data science, combining computer science, statistics, and domain expertise to empower participants to extract meaningful insights from data. By mastering key data analysis concepts and techniques, you'll gain the ability to leverage data effectively to make informed business decisions, enhancing your value as a data-driven professional.

## What We Offer:

With our course, we provide:

- In-depth Learning: Dive deep into Python programming syntax, data frames, data manipulation, and visualization techniques, guided by experienced instructors.
- **Practical Applications:** Gain hands-on experience with real-world data analysis scenarios and learn how to apply Python libraries such as NumPy, Pandas, and Matplotlib to solve complex data challenges.
- **X** Expert Guidance: Receive personalized guidance and support from industry experts, ensuring a comprehensive understanding of data analysis principles and techniques.
- Post-Training Support: Access ongoing support and resources to reinforce your learning and continue your data analysis journey beyond the course.







## Course Outline

#### **Module 1: Basic Programming**

- Jupyter as development IDE
- Programming in Python
- Python programming syntax and constructs

#### Module 2: Data frames & Datasets

- Inspecting Data Frames: head(), tail(), etc.
- Datatype and info()

#### **Module 3: Data Frame Methods and Computations**

- Min, Max, Sum, and Count
- Mean, Median, & Mode
- Describe With Numeric Values
- Describe With Objects (Text) Values

#### **Module 4: Series and Columns**

- Selecting A Single Column
- A Closer Look At Series
- Important Series Methods
- unique & nunique
- nlargest & nsmallest
- Selecting Multiple Columns
- The powerful value\_counts() method
- Using plot() to visualize
- Adding / Removing Columns

#### Module 5: Organizing Data and Working With Dates/Times

- Indexing / Creating a MultiIndex
- Sorting
- Filtering DataFrames
- Condition Operators AND / OR
- Dates and DataFrame
- Date Math & TimeDeltas









## Course Outline

#### Module 6: Python for Data Analysis with NumPy

- Numpy and usage in Data Analysis
- Numpy Arrays
- Numpy Array indexing
- Numpy Operations

#### Module 7: Python for Data Analysis - Panda

- Panda and usage in Data Analysis
- DataFrames
- Analyze Missing Data
- Merging, Joining and Concatenating raw data
- Operations
- Data Input and Output

#### **Module 8: Data Visualization with Matplotlib**

- Importing data into Matplotlib
- Matplotlib in Visualizing data
- Additional tool for Visualization Seaborn
- Plotting graphs
- Enhance the look of Visuals
- Apply, Map & Applymap

#### **Module 9: Working With Text**

- The String Datatype Vs. Object Datatype
- Indexing String Series With []
- Text related functions

#### **Module 10: Combining Series & DataFrames**

- Concatenating Series
- Concatenating Series By Index
- Inner vs. Outer Joins
- Concatenating DataFrames By Index

#### Module 11: Intro to Seaborn

- Seaborn Scatterplots
- Seaborn Lineplots
- Seaborn Histograms
- Seaboard Categorical Plots







## By the end of this course!

#### You will gain:

- **X Proficiency** in Python programming for data analysis, including data manipulation, visualization, and statistical analysis.
- **XAbility** to work with data frames, organize data, and perform advanced computations using NumPy and Pandas.
- **Skills** to create insightful visualizations using Matplotlib and Seaborn, enhancing your ability to communicate data-driven insights effectively.
- **Confidence** to tackle real-world data analysis projects and make datadriven decisions that drive business success.

#### If you struggle with:

- ♣Python data analysis and visualization
- Data organization and manipulation
- **♣**Visual communication of insights
- Keeping up with data science evolution
- ♣Applying theory to real-world scenarios





### Implementing our Python Data Analysis & Visualization course will lead to:

- Enhanced analysis skills and confidence
- Improved efficiency in data tasks
- Better visual communication
- Continued growth in data science
- Career advancement in data-driven roles

## **Timmins Training Consulting**

Timmins Training is a leading provider of training services in Malaysia, offering HRDC Claimable Trainings, Corporate Trainings, Corporate Onboarding Training, and Consulting services.

With over 8 years of experience, we serve various domains including Embedded Software Development, Full Stack Development, Mobile App Development, 5G, Business Intelligence, and more.

Our trainers are subject-matter experts with years of hands-on experience in their specialized areas. They bring practical insights to help you excel in your journey.

Empower yourself with Timmins Training Consulting and elevate your Excel skills to new heights!



# **CONTACT US! Secure Your Spot!**















+60 111 667 4727

raj@timmins-consulting.com

