

Certificate of participation

Issued to : Ruiqi TAN

Title of the course :

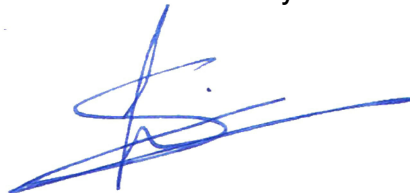
Data Analysis with Python

Date of the course : from 10.02.2025 to 13.02.2025

Hours of training : 28 (100 %)

Attendance rate : 100 %

Esch-sur-Alzette: 17 February 2025



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Data Analysis with Python

Content:

Introduction to Python Programming

Syntax
Variables
Inputs

Control Flow

Loops
Conditions

Functions and Modules

Functions
Modules

Object-Oriented Programming (OOP)

Classes and Objects
Inheritance

Data Analysis with Python

Introduction to DataFrames
Reading CSV Files

Cleaning Data

Handling Empty Cells



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Removing Data Duplication

Data Visualization

Plotting Data
Customizing Plots



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Learning Outcomes:

On completion of this course, learners will be able to:

- Write clean Python code and develop small projects proficiently.
- Utilize object-oriented programming (OOP), inheritance, and polymorphism to create and interact with objects, effectively passing data between them.
- Apply OOP principles to integrate data analysis modules in Python, enabling efficient manipulation and analysis of data sets.
- Retrieve data from Excel sheets and perform customized processing, facilitating the transformation and injection of data into new Excel sheets.
- Demonstrate mastery of course concepts by leveraging acquired knowledge to design and execute a comprehensive data analysis project encompassing all necessary steps.



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