Macrosoft

Vzdelávanie s trvalým efektom

DOCUMENT

Course syllabus

CATEGORY

Java, Python courses

TRAINING FORMAT

In Bratislava or online with a lecturer

PRICE EXCL. VAT

290,00 €

PRICE INCL. VAT

356,70 €

including 23 % VAT

Macrosoft školiace centrum

Aktuálne informácie na Macrosoft.sk

PDF SYLLABUS

Python - Basics of Data Analysis

Clear overview of course topics, training scope and key information.

The Basics of Data Analysis course is intended for all applicants who want to find employment in the dynamically growing segment of data analysis. The course covers key knowledge that applicants need for the position of a data analyst working with Python.

COURSE CONTENT

01

Introduction to Data Analysis

What data analysis is

Roles: data analyst, data engineer, data scientist

02

Advanced Techniques for Working with Data

Advanced work with functions

Selection, filtering and sorting of data

Grouping data

Working with float and Decimal types

Use of dataclass and namedtuple

03

Working with Data Sources

CSV, JSON and XML formats

Processing Excel files using the openpyxl module

04

Data Visualization

Creating charts using the Matplotlib library

Chart types: scatter, line, bar, pie

Working with subplots

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05 Web Scraping - Obtaining Data from the Web

HTTP requests using the httpx module
Parsing HTML with the selectolax module

06 Working with Databases

Working with SQLite and PostgreSQL databases
Basics of SQL language
sqlite3 and psycopg2 modules

07 Introduction to the Pandas Library

Working with data frames (DataFrames)
Loading and exporting data
Selection, sorting and grouping of data

08 AI in Data Analysis

Use of AI tools for data analysis
ChatGPT and LLM for working with data
Automation of reports using AI
OpenAI library and API

This document serves as an informational overview of the course syllabus. Current dates, venue and availability are listed at Macrosoft.sk.

https://www.macrosoft.sk/en/courses/python-basics-of-data-analysis