Python - data analysis (Pandas)

Course code: PYTHON_DATAN

The course is designed for all those who are looking for a flexible data analysis tool, those interested in data processing in the Python programming language, who plan to use it for data manipulation, analysis and visualization, respectively.

Affiliate	Duration	Course price	ITB
Praha	5	28 500 Kč	50
Brno	5	28 500 Kč	50
Bratislava	5	1 140 €	50

The prices are without VAT.

Course terms

	Date	Duration	Course price	Type	Course language	Location
🔨	15.06.2026	5	1 140 €	Telepresence	CZ/SK	GOPAS Bratislava
🔨	15.06.2026	5	28 500 Kč	Telepresence	CZ/SK	GOPAS Brno
🔨	15.06.2026	5	28 500 Kč	Telepresence	CZ/SK	GOPAS Praha

The prices are without VAT.

What we teach you:
- Course participants will learn to use the Pandas library and other supporting libraries that are needed to work with data, analyze and visualize it.

Who the course is for:
- Data Scientist, data analysts, especially in the Big Data environment, is the primary auditor for this intensive course.
- Software developers who are familiar with Python at least at intermediate and advanced levels and aim to create data-intensive allocations using the SPARK Big Data (Cloud) engine.
- Data architects

Required skills:
- Basic knowledge of Python at the PYTHON_INTRO level

Teaching methods:
- Professional explanation with practical samples and examples.

Teaching materials:
- Powerpoint handouts and module printouts.

Course syllabus:
Introduction to IPython
- Tools for online work with data (Jupyter Notebook and Jupyter Lab)
- Export output to PDF and other formats

Overview of data structures in Python
- Sheet, tuple, etc.

Pandas module
- Objects for working with tay (Series, DataFrame)

NumPy module

- Work with multidimensional data structures

Import data from different sources
- CSV
- HTML
- JSON
- SQL

Work with data
- Transformation
- Filling in missing values
- Mapping
- Replacement

Advanced work with data
- Concat merge join
- Pivoting, stacking, unstacking
- Melting

Aggregation and grouping of data
- Split apply combine
- Transformation
- Filtering

Time lines
- Representation of date, time, and time intervals
- Timestamp, Timedelta, DateTimeIndex, and more

Visualization
- IPython graphing
- Loading data into charts from Pandas objects
- Work with charts of different types
- Data aggregation into graphs

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