

Training: Python Academy
Numerical Calculations with NumPy

FORM OF TRAINING	MATERIALS	PRICE	DURATION
Traditional	Hardcopy	350 EUR	1 day
Traditional	CTAB Tablet	500 EUR	1 day
Distance learning	Hardcopy	350 EUR	1 day
Distance learning	CTAB Tablet	350 EUR	1 day

LOCATIONS

Krakow - 5 Tatarska Street, II floor, hours: 9:00 am - 4:00 pm

Warsaw - 17 Bielska Street, hours: 9:00 am - 4:00 pm

TRAINING GOALS:

The library **NumPy** is the de facto standard for the work with arrays and linear algebra. It provides array processing capabilities comparable with MATLAB and offers a high-level tool for efficient and convenient work with numerical data.

CONSPECT:

- Standard arrays and linear algebra library
- Array-constructions and array-properties in examples
- Speed comparison between dynamically determined Python data types with explicitly specified NumPy arrays
- Correspondence between NumPy and C data types
- Slicing and Broadcasting
 - Reading and writing to arbitrary parts of arrays
 - Applying broadcasting for arrays with different shapes
- Universal Functions
 - Applying many operations on whole arrays independent from their dimensions
 - Examples of use
- Numerical algebra.
- Working with missing values - masked and NA-masked arrays to handle arrays with missing or not valid values.
- Customizing error handling - NumPy offers a fine-grained approach to handle errors without

impacting the performance.

- Testing support - NumPy includes helpers to write to test code - course introduces to testing basics with it.

REQUIREMENTS:

- Basic knowledge of **Python** language.

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by Python Academy.

TRAINER:

Authorized Python Academy Trainer.