

Python - Introduction to Machine Learning

Course code: PYTHON_ML

The training provides the necessary introduction to the issue of machine learning in the Python programming language. During five days we will take over the issue of machine learning in practical cases with and without a teacher (supervised and unsupervised learning). The course takes the form of live coding and is therefore extremely intensive. We recommend the candidate to take the previous courses PYTHON_DATAAN and PYTHON_STAT. The course is intended for anyone who is interested in machine learning technology, has the ambition to become a data scientist (Data Scientist) and address the issue of advanced analytics. Training can also be a good source of information for project managers and decision-makers who face the challenge of deploying machine learning for the analysis and interpretation of company data and thus gain additional added value to support business activities or to support business managers.

Requirements per participant

- Knowledge of Python programming at the PYTHON_INTRO course level
- Knowledge of the basics of data analysis at the level of the course PYTHON_DATAAN
- Knowledge of the basics of statistical processing in Python at the level of the PYTHON_STATS course

Teaching methods

- Expert explanation with practical examples, exercises on computers.

Study materials

- Online presentation of the subject matter and exercises.

Course syllabus

- Introduction
- Data collection
- Data preparation
- What is machine learning
- Supervising learning
- Un-supervising learning
- Scikit-Learn module
- Hyperparameters and model validation
- Classifications
- Regression models
- Decision trees
- Clustering - data clustering
- Deep learning
- Conclusion

GOPAS Praha

Na Strži 2097/63
140 00 Praha 4 - Krč
Tel.: +420 226 201 390
info@gopas.cz

GOPAS Brno

Nové sady 996/25
602 00 Brno
Tel.: +420 530 513 590
info@gopas.cz

GOPAS Bratislava

Dr. Vladimíra Clementisa 10
Bratislava, 821 02
Tel.: +421 902 903 132
info@gopas.sk



Copyright © 2026 GOPAS, a.s.,
All rights reserved