

## Machine Learning with Python \*

In this training, participants gain an overview of the topic machine learning and learn to apply ML-methods with the programming language Python to their own questions. The central topics of the training are classification and regression tasks as well as cluster analysis.

Each of the procedures will be theoretically introduced and then applied in Python by using small data sets. 'Real world' questions, which are formulated based on sample data sets, serve as a thread through the procedures.

In addition to the algorithms themselves, the training tries to give an impression of machine learning processes. It will be demonstrated what steps are necessary to solve a machine learning task and how they are implemented in concrete terms. Thus, not only the algorithm / method becomes topic of discussion, but also further aspects such as data pre-processing, model requirements and the interpretation of the results.

### Objectives

- Introduction to the methodological basics of machine learning
- Introduction to basic machine learning techniques with Python
- Model creation and model evaluation with Python

### Please note

This course is intended for people who are interested in the field of data science or want to expand their knowledge of the subject area "Machine Learning".

Prior knowledge of Python is a prerequisite for productive participation. This means that the basic data types are known, and classes, functions and methods can be safely distinguished.

This workshop cannot be credited as qualification measures at the Department of Mechanical Engineering. However, you are welcome to participate.

**Trainer:** Andreas Wygrabek

**This course will be held in English and online.**

### WHEN

24.11.2021	09:00 - 12:00, 14:00 - 17:00
25.11.2021	09:00 - 12:00
26.11.2021	09:00 - 12:00

[\*\*BOOK HERE\*\*](#)