

Python for Experts

Complex Code Examples

The goal of this Python training is to teach advanced Python topics to programmers who are familiar with the basics of Python and have already worked with Python. This covers working with IDEs, advanced object orientation, advanced programming techniques and practical applications. All topics are supported by extensive exercises.

Course Contents

- Working with IDEs
- Advanced Object Orientation
- Advanced Programming Techniques
- Practical Applications
- Functional Programming with Python

All topics are supported by extensive exercises. You will work with the trainer during the course using Python's interactive JupyterLabs. You are welcome to bring examples from your daily work. If time allows, the trainer will include them in the course. We ask that you provide such examples in advance of the course.

For this Python training you will receive the documentation in electronic form in English.

Target Group

The course is intended for anyone with an interest in advanced topics in Python. It uses extensive interactive exercises for direct application and subsequent consolidation of understanding.

Prerequisites

Good Python knowledge is assumed. This can be acquired, for example, in the course Python Basics for Programmers - Fast Entry.

This Course in the Web



You can find the up-to-date information and options for ordering under the following link:

www.expertech-training.com/go/PYFF

Reservation

On our Website, you can reserve a course seat for 7 days free of charge and in a non-committal manner. This can also be done by phone under +49 6074/4868-0.

Guaranteed Course Dates

To ensure reliable planning, we are continuously offering a wide range of guaranteed course dates.

Your Tailor-Made Course!

We can precisely customize this course to your project and the corresponding requirements.

Training	Prices, excl. of V.A.T.	
Classes in Germany	4 Days	€ 2,595
from 1. January 2025	5 Days	€ 3,195
Online Training	4 Days	€ 2,595
from 1. January 2025	5 Days	€ 3,195
Date/course venue	Course language German 	
07/04-11/04/25  Düsseldorf	07/04-11/04/25  Online	

Status 10/14/2024



Table of Contents

Python for Experts – Complex Code Examples

Working with IDEs

Interactive experimentation with JupyterLab
Advanced Object Orientation (Day 1 and 2)

Review object orientation basics

Special (magic) methods

Properties and slots

Abstract base classes

Multiple inheritance and Mixins

Basic Design Patterns

Advanced Programming Techniques (Day 2 and 3)

Generators and iterators

Function and class decorators

Context Manager

Dynamic Code Execution

Recursion

Function Annotations

FunctorsPraktische Anwendungen

Practical Applications (Day 3)

Modules and packages

Deployment

Regular expressions with Python

Functional Programming with Python (Day 4)

In addition to imperative programming (procedural and object-oriented), Python supports several features that are useful for functional programming.

This course part covers these features:

“Pure“ functions with Python

Functions details

Working with map and reduce

Operators as functions

List, set, and dictionary comprehensions

Working with immutable data types

Using iterators

Working with more_itertools

Working with toolz

