

# Master Class: Advanced Python (Associate Training) (PYTHON03)

ID PYTHON03 Price CHF 2,550.—(excl. VAT) Duration 3 days

#### Who should attend

Entry-level Python developers who want to deepen their knowledge and skills and Python developers who want to make the step from script to application.

#### This course is part of the following Certifications

Certified Professional in Python Programming 2 (PCPP2) Certified Professional in Python Programming 1 (PCPP1) Certified Associate in Python Programming (PCAP)

# **Prerequisites**

Previous course <u>Entry into Programming with Python (PYTHON01)</u> or <u>Python for Software Developers (PYTHON02)</u> or equivalent knowledge

#### **Course Objectives**

After this course you will be able to use Python in a deeper and more efficient way to develop more complex scripts or whole applications.

#### **Course Content**

# 1. Organizing and Structuring Projects in Python

- Virtual Python environment
- · Version management

## 2. Modularisation

- Global modules
- · Local modules
- Packages
- Importlib

#### 3. Iterators

- Comprehension
- · Chained lists
- Generators

# 4. Object-Oriented Programming in Python

- · Classes and objects
- Access to attributes
- Inheritance

#### 5. Naming Conventions and Best Practices

#### 6. System Functions

- The modules os, sys, psutil
- Standard input and output
- · Working with files

#### 7. Working with Third-Party Packages

- Numpy
- Matplotlib
- Pandas
- Scipy
- etc.

#### 8. Testing and Tuning

- Automated testing
- Logging
- Performance Analysis
- Optimization

#### 9. Simple Web Applications with Python

Django

# 10. Outlook Machine Learning with Python

#### 11. Outlook Network Programming with Python

# 12. Python Hosting

- Program Distribution
- · Python in SQL Server
- Python in Power BI

#### 13. Programming Style, Best Practices

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# **Training Centres worldwide**





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