

## 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 [Entry into Programming with Python \(PYTHON01\)](#) or [Python for Software Developers \(PYTHON02\)](#) 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

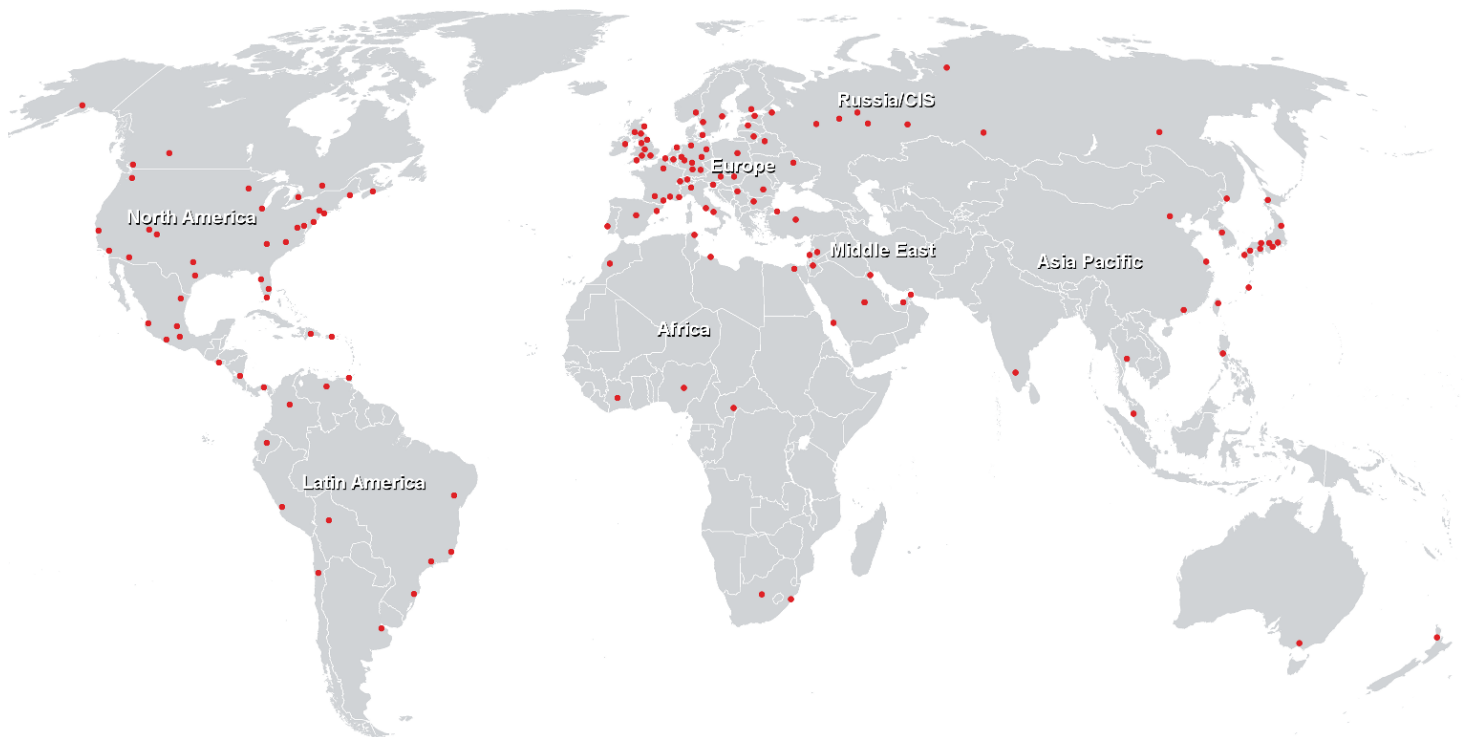
- Program Distribution
- Python in SQL Server
- Python in Power BI

#### 13. Programming Style, Best Practices

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### Training Centres worldwide



### Fast Lane Institute for Knowledge Transfer (Switzerland) AG

Husacherstrasse 3  
CH-8304 Wallisellen  
Tel. +41 44 832 50 80

[info@flane.ch](mailto:info@flane.ch), <https://www.flane.ch>