# Advanced Programming Techniques with Python v1.2

**Category:** Software Development & Programming | **Vendor:** Logical Operations

**Duration:** 24.00 hours (3 days) **19.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

## Course Information

**Delivery Format:** Instructor Led - Online

## Course Overview

Python® continues to be a popular programming language, perhaps owing to its easy learning curve, small code footprint, and versatility for business, web, and scientific uses. Python is useful for developing custom software tools, applications, web services, and cloud applications. In this course, you'll build upon your basic Python skills, learning more advanced topics such as object-oriented programming patterns, development of graphical user interfaces, data management, creating web service-connected apps, performing data science tasks, unit testing, and creating and installing packages and executable applications.

## About This Course

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## Who Should Attend

This course is designed for existing Python programmers who have at least one year of Python experience and who want to expand their programming proficiency in Python 3.

## Learning Outcomes

**Upon successful completion of this course, participants will be able to:**

In this course, you will expand your Python proficiencies. You will:

Select an object-oriented programming approach for Python applications.

Create object-oriented Python applications.

Create a desktop application.

Create data-driven applications.

Create and secure web service-connected applications.

Program Python for data science.

Implement unit testing and exception handling.

Package an application for distribution.

## Detailed Course Outline

### Lesson 1: Selecting an Object-Oriented Programming Approach for Python Applications

- Topic A: Implement Object-Oriented Design
- Topic B: Leverage the Benefits of Object-Oriented Programming

### Lesson 2: Creating Object-Oriented Python Applications

- Topic A: Create a Class
- Topic B: Use Built-in Methods
- Topic C: Implement the Factory Design Pattern

### Lesson 3: Creating a Desktop Application

- Topic A: Design a Graphical User Interface (GUI)
- Topic B: Create Interactive Applications

### Lesson 4: Creating Data-Driven Applications

- Topic A: Connect to Data
- Topic B: Store, Update, and Delete Data in a Database

### Lesson 5: Creating and Securing a Web Service-Connected App

- Topic A: Select a Network Application Protocol
- Topic B: Create a RESTful Web Service
- Topic C: Create a Web Service Client
- Topic D: Secure Connected Applications

### Lesson 6: Programming Python for Data Science

- Topic A: Clean Data with Python
- Topic B: Visualize Data with Python
- Topic C: Perform Linear Regression with Machine Learning

### Lesson 7: Implementing Unit Testing and Exception Handling

- Topic A: Handle Exceptions
- Topic B: Write a Unit Test
- Topic C: Execute a Unit Test

### Lesson 8: Packaging an Application for Distribution

- Topic A: Create and Install a Package
- Topic B: Generate Alternative Distribution Files

# Additional Course Details

Nexus Humans Advanced Programming Techniques with Python v1.2 training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Advanced Programming Techniques with Python v1.2 course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

# Frequently Asked Questions

### Q: What delivery options are available for Advanced Programming Techniques with Python v1.2?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

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### Q: How many CPD hours does this course provide?

The 3-day Advanced Programming Techniques with Python v1.2 course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

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### Q: What is the duration of the Advanced Programming Techniques with Python v1.2 training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

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### Q: Do you provide corporate training for Advanced Programming Techniques with Python v1.2?

Yes, we provide corporate training, dedicated training, and closed classes for Advanced Programming Techniques with Python v1.2. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

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### Q: Why choose Nexus Human for Advanced Programming Techniques with Python v1.2?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

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### Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Advanced Programming Techniques with Python v1.2 training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.


## Nexus Human

**Professional Training & Development**

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