

PCAP™ Study Guide

Python Certified Associate Programmer

Take your Python skills to the intermediate level with an internationally recognised certification. This guide covers exam objectives, study strategies, costs, and resources — aligned with Code College's bootcamp curriculum.

40

Questions

65 Min

Duration

70%

Pass Mark

Python Institute

Issuer

WHAT IS PCAP?

Certification Overview

The PCAP™ (Python Certified Associate Programmer, exam code PCAP-31-03) is the intermediate Python certification issued by the Python Institute. It validates object-oriented programming, module management, advanced data structures, and exception handling.

Exam Code: PCAP-31-03 **Format:** Multiple Choice + Code **Questions:** 40 **Time:** 65 minutes **Pass Mark:** 70%

Issuer: Python Institute

EXAM OBJECTIVES

What You'll Be Tested On

Module 1: Object-Oriented Programming (34%)

- › Classes, objects, attributes and methods
- › Inheritance, polymorphism, and encapsulation
- › Class hierarchies and method overriding
- › Special methods (`__str__`, `__repr__`, `__init__`)
- › Abstract classes and interfaces

Module 2: Modules and Packages (12%)

- › Importing and using modules
- › Creating and organising packages
- › Standard library: `math`, `random`, `os`, `datetime`
- › `pip` and third-party packages

Module 3: Exceptions (14%)

- › Exception hierarchy and built-in exceptions
- › `try / except / else / finally` blocks
- › Raising and creating custom exceptions

Module 4: File I/O and Serialisation (14%)

- › Reading and writing text and binary files
- › Context managers and the `with` statement
- › Working with CSV, JSON, and pickle

Module 5: Advanced Data Structures & Comprehensions (26%)

- › List, dict, and set comprehensions
- › Generators and the `yield` keyword
- › Lambda functions, `map`, `filter`, `reduce`
- › Decorators — writing and applying them
- › Closures and first-class functions

EXAM INVESTMENT

Costs & Budgeting

Official PCAP Exam (Python Institute)

SINGLE EXAM

\$99

Best value for prepared candidates

EXAM + RETAKE

\$149

One guaranteed second attempt

Practice & Preparation Resources

Python Institute Edube

Official practice platform — free tier available

Udemy Courses

\$19–\$49 (frequently discounted)

MyExamCloud

\$30–\$60 (comprehensive mock exams)

Real Python

Free articles and tutorials on all PCAP topics

Recommended Budget for Code College Graduates

- › **Minimum (\$99):** Exam only — suitable after thorough bootcamp review
- › **Recommended (\$130–\$160):** Exam + quality mock exam suite
- › **Premium (\$200+):** Exam with retake + multiple practice platforms

STUDY STRATEGIES

Prepare to Pass

Before the Exam (6–8 weeks)

- › Build at least two OOP projects from scratch to cement class concepts
- › Write decorators and generators by hand — don't just read about them
- › Practice file I/O daily: read, write, append, and serialize JSON/CSV
- › Take at least one full mock exam per week and review every wrong answer
- › Ensure you are comfortable with PCEP material before sitting PCAP

During the Exam

- › Allocate ~95 seconds per question
- › Trace class inheritance chains mentally for OOP questions
- › For code output questions, step through line-by-line
- › Watch for subtle OOP traps: method resolution order (MRO), super()
- › Flag difficult questions and return — don't get stuck

Common Mistakes to Avoid

- › Forgetting that `__init__` is not a constructor in the C++ sense
- › Confusing class attributes with instance attributes
- › Missing that generators are lazy — values produced one at a time
- › Misreading decorator application order (bottom-up)
- › Assuming all exceptions inherit from Exception (BaseException exists)

Recommended Resources

- › **Official:** openedg.org (Python Institute learning portal)
- › **Free:** Real Python, Python Docs, Fluent Python (book)
- › **Practice:** Edube Interactive, MyExamCloud mock exams

FINAL TIPS

You've Got This

The PCAP certification requires a step up from PCEP — OOP fluency is essential. Every student who completes Code College's Web Programming Bootcamp has built real Django projects using OOP principles, which means you already think the way PCAP demands. The exam is validating what you already know.

Keys to Success

- › Revisit your bootcamp projects and identify the OOP patterns used
- › Write, run, and break code intentionally — learn from errors
- › Explain concepts out loud to yourself — it exposes gaps fast
- › Build something new with decorators and generators
- › Trust your bootcamp foundation and preparation

Good luck with your PCAP certification! 🍀

This guide is provided by Code College to support your certification journey. Our bootcamp graduates go on to careers in Python development, Django web development, data analysis, and beyond.

Questions? Let's Connect

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We're here to support your learning journey. Reach out anytime!