

Certificate in Python for Finance (CPF)

Become a Super Quant

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The Python Quants GmbH

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Why the CPF

Master quantitative finance, Python engineering, and AI in a single integrated program. The CPF combines seven proprietary books, 400+ hours of instruction, and 600+ notebooks so you can deploy production-ready analytics and AI in finance.

1 Executive Overview

The **Certificate in Python for Finance (CPF)** is the flagship training program from The Python Quants. It blends rigorous quantitative finance with modern Python, data engineering, and AI. Directed by Dr. Yves J. Hilpisch, the CPF delivers:

- **400+** hours of video instruction and live cohort sessions.
- **3,000+** pages of structured HTML/PDF material and seven published works.
- **600+** Jupyter notebooks and **100k+** lines of production-grade Python.
- Continuous updates, indefinite platform access, and community support.

2 Program Pillars

Financial Domain Expertise Derivatives, algorithmic trading, asset management, risk, and portfolio construction with executable case studies.

Python-Engineering Best practices for testing, packaging, containers, and cloud deployment tailored to reproducible finance workflows.

AI-Fluency Machine learning, reinforcement learning, NLP, and LLM integration for research, automation, and decision support.

3 Program Scale and Structure

Metric	Detail
Duration	16-week guided cohorts or fully self-paced (up to 12 months typical)
Access	Indefinite Quant Platform access with ongoing updates
Format	Video lessons, books, notebooks, quizzes, projects, community
Final Project	Graded research notebook reviewed by Dr. Hilpisch
Bundle Bonus	Limited time inclusion of The AI Engineer program

4 Learning Paths

16-Week Guided Cohort Structured timeline with live guidance and accountability.

Self-Paced (up to 12 months) Learn at your own speed with full resource access.

Flexible Enrollment Start anytime; combine cohort sessions with self-paced study.

5 Curriculum Overview

The curriculum is organized into four clusters. Each module ships with videos, notebooks, datasets, and exercises.

5.1 Foundational Modules

- **Finance with Python** – integrated finance principles and idiomatic Python.
- **Python for Finance Basics** – NumPy, Pandas, vectorization, and tooling.
- **Mathematics Basics** – linear algebra, calculus, optimization, probability.
- **Tools – Skills** – Git, Docker, Linux, shell, packaging, and automation.

5.2 Core Applications

- **Python for Algorithmic Trading** – strategy design to deployment with monitoring.
- **Python for Asset Management** – portfolio optimization, factor models, risk analytics.
- **Python for Computational Finance** – derivatives pricing with DX Analytics and scenario testing.

5.3 Artificial Intelligence Track

- **Data Science Basics** – exploratory data analysis, statistics, visualization.
- **AI in Finance** – supervised/unsupervised ML, model evaluation, production workflows.
- **Reinforcement Learning** – agents for trading, hedging, and stochastic control.
- **Natural Language Processing** – transformers, sentiment, LLM orchestration.

5.4 Extensions & Add-Ons

- **Crypto foundations**: hashing, blockchain, DeFi, custody considerations.
- **Algo trading with GenAI**: code assistants, LLM copilots, and agentic tooling.
- **Quant research clinics**: live deep dives into new datasets, models, and evaluation techniques.

6 Quant Platform

All CPF resources live on the Quant Platform.

- **Video library** with AI-generated summaries and chapters.
- **Execution-ready notebooks** – launch in the browser, no setup required.
- **AI assistant** trained on program content for precise answers.
- **Full-text search** across transcripts, slides, notebooks, and books.
- **Quizzes – exercises** – yes/no checks, MCQs, targeted drills, and full project tests with concise tutorials.
- **Smart note taking** – searchable, time-stamped notes for every video to resume instantly.
- **Global forum – Discord** – 24/7 technical and strategic support, networking, hiring.

7 Director

Dr. Yves J. Hilpisch is the founder and CEO of The Python Quants and The AI Machine. He created DX Analytics, speaks globally on AI-driven finance, and authored seven industry-defining published works. He continues to innovate in AI learning with [The AI Engineer](#). His conferences, bootcamps, keynotes, and publications shape the industry conversation.

8 Published Works

Every CPF cohort receives the complete digital library (PDF + HTML) of Dr. Hilpisch's published works:

- *Python for Finance (2nd Ed.)* – O'Reilly.
- *Python for Algorithmic Trading* – O'Reilly.
- *Artificial Intelligence in Finance* – O'Reilly.
- *Reinforcement Learning for Finance* – O'Reilly.
- *Financial Theory with Python* – O'Reilly.
- *Derivatives Analytics with Python* – Wiley.
- *Listed Volatility & Variance Derivatives* – Wiley.

9 Who Joins the CPF?

Students & Academics Bridge theory with production-ready analytics and code.

Finance Professionals Upgrade quant stacks with Python, automation, and AI.

Career Changers Transition into data-driven roles with a graded portfolio project.

Delegates from **70+ countries** have participated. Support includes live cohort sessions twice to three times per week, 24/7 forums, Discord, expert feedback, and continuous content releases.

10 Enrollment and Pricing

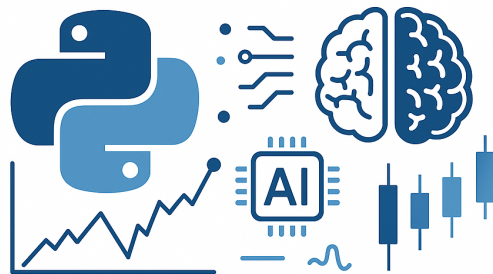
CPF Bundle – €2,999 (excluding VAT if any)

indefinite platform access, all modules, AI extensions, future cohort invitations.

Limited-time bonus: enrollment currently includes **The AI Engineer** program at no extra cost.

Payment options – Stripe checkout or invoiced bank transfer (write to training@tpq.io). Corporate packages available.

CERTIFICATE IN PYTHON FOR FINANCE CPF PROGRAM



THE PYTHON QUANTS

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