

Python Big Data Analytics and AI Certificate Programme

- with the aid of ChatGPT and GitHub Co-pilot

CONNECTION TECHNOLOGY 裝備未來
FUTURE SKILLS

Course Fee: HK\$7,200 (May apply up to HK\$4,800 subsidy)

*Maximum saving, with the final grant subjects to approval.



This course is intended for participants who aspire to stretch their **big data analytics competencies** in the organization using Python best practices to perform **sophisticated analytics processes**, data prepping and modelling tasks for predictive analytics using machine learning, **AI, with the aid of ChatGPT and GitHub Copilot.**

RTTP Training Grant Application

Companies should submit their RTTP training grant application for their employee(s) via <https://rttp.vtc.edu.hk/rttp/login> at least two weeks before course commencement. Alternatively, [application form](#) could be submitted by email to rttp@vtc.edu.hk along with supporting documents.

Programme code	10014364
Duration and time	2 days 9:30am-5pm
Venue	1/F, HKPC Building, 78 Tat Chee Avenue, Kowloon Tong
Language	Cantonese, supplemented with English terminology
Course fee	HK\$7,200 (May apply up to HK\$4,800* subsidy)
Prerequisite	<ul style="list-style-type: none"> • Computer operation & basic internet skill • Any computer language skill • Basic Excel skill
Bring Your Own Device (BYOD)	Windows 7/10 / Mac OS 10.x or above with minimum 2 GB RAM and 20 GB hard disk

Course Description

This 2 days course will use Python as the programming language across all analytics processes. Upon completion of this course, you will be able to use Python in big data analytics and prepare models for predictive analytics. You will learn how to use Pandas and various Python libraries, everything from importing spreadsheet data to processing sets for time-series analysis, machine learning, AI and ChatGPT APIs.

Who Should Attend?

It is highly relevant to participants who involve in the requirements input, design, development, delivery and ultimate use of the digital initiatives including data consumer, digital initiatives decision maker, business analyst, and operational line managers.

This course is an approved Reindustrialisation and Technology Training Programme (RTTP), which offers up to 2/3 course fee reimbursement upon successful applications. For details: <https://rttp.vtc.edu.hk>.

Course Outline

Python for Data Analytics

- ❖ Python programming fundamentals
- ❖ Lambda and Python libraries
- ❖ Data profiling, statistical computation, data cleansing & munging with Pandas
- ❖ Perform big data descriptive and diagnostic analytics with Python
- ❖ Case studies: Finance, Logistics, Airline and Utilities etc.

Machine Learning Essentials

- ❖ Machine Learning (ML) and Artificial Intelligence (AI)
- ❖ Machine Learning and AI models for modern business
- ❖ Real-time data and Financial Algo Trading
- ❖ OpenAI ChatGPT API integrations
- ❖ GitHub Copilot set-up and demo
- ❖ Hands-on exercises

Award of Certificate of Accomplishment

Participant with full attendance of class will be awarded a Certificate of Accomplishment issued by the Hong Kong Productivity Council.

Trainer Information

Dr Patrick TSOI, he is a trainer with over 25 years hands-on data science, Big Data and programming experiences. He is a Doctor of Education graduate from the Hong Kong Baptist University, Master in IT Education graduate from the University of Hong Kong and B.Eng in System Engineering and Engineering Management from the Chinese University of Hong Kong.

Enrolment Methods

1. Scan the QR code to complete the enrolment and payment online OR
2. Mail the crossed cheque with payee name "Hong Kong Productivity Council" (in HK dollar) to HKPC Academy, Hong Kong Productivity Council, 3/F, HKPC Building, 78 Tat Chee Avenue, Kowloon (attention to Mr Desmond CHAN). Please indicate the course name and course code on the envelope.



[Enrolment Link](#)

Supporting Organisations (In arbitrary order)



Inquiry

Ms Emily HO | +852 2788 5598 | emilyho@hkpc.org

Ms YIP | +852 2788 5800 | ecinfo@hkpc.org