

A4AIG002C

(Token- required)

# [ Gifted Programme ]

Artificial Intelligence Course (Level IV):
Al and Health (Phase 2)
Advanced Python for Al: Mastering the
Language of Artificial Intelligence

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## **Intended Learning Outcomes**

Result Release 15 Jan 2025

Upon completion of the gifted programme, gifted students should be able to:

- 1. Analyze and understand the stages of the design thinking process to develop user-centered innovative product solutions;
- 2. Grasp the fundamentals of product development and apply techniques for creative idea generation and concept creation;
- 3. Explore various forms of intellectual property protection and understand the regulatory pathways for product approval; and
- 4. Collaborate with team members to draft project charters that reinforce product design and market analysis processes and strategies.

### Gifted Programme Introduction

In the rapidly evolving world of Artificial Intelligence, Python has emerged as the lingua franca for Al development. This course is designed to equip students with the high-level Python skills essential for using Al frameworks and exploring pre-trained models to build Al applications, with a special focus on health-related solutions.

In Phase II, students will learn the fundamentals of design thinking, product development, and intellectual property. They will apply a human-centered approach to analyze customer needs and market opportunities. Additionally, students will collaborate to create and present a project charter for a new health-related product, enhancing their teamwork and communication skills while preparing for further stages of product development.

The course consists of THREE phases. Selection for each phase will be based on students' performance. Phase 3 is tentatively scheduled as below:

every Sat from 17 May 2025 to 26 July 2025 (\*outing will be arranged, such as visiting start-up company)

### Schedule

Session	Date		Venue
1	08 Feb 2025	2:00p.m. – 5:00p.m.	303
2	15 Feb 2025		G01
3	22 Feb 2025		105
4	01 Mar 2025		G01
5	08 Mar 2025		G01
6	15 Mar 2025		G01
7	29 Mar 2025		G01
8	05 Apr 2025		G01
9	12 Apr 2025		G01
10	26 Apr 2025		G01



#### **Suitable for**

- S3 to S6 HKAGE student members in 2024/25 school year
- Class size: 25
- Priority will be given to members participated who have in A4AIG001C

#### Medium of Instruction

Cantonese with Chinese or English Handouts

# Pre-requisite

Students should be able to understand programming languages, like Python

#### Remarks

Participants are required to bring their own laptop for each lesson (Tablets are recommended. For further not assistance, please contact us).

### Screening

Please answer the screening questions in the online application form.

\*The screening questions are designed to help the applicant to understand the course level and the course content. The questions must be answered by the student applicant and they can only be attempted once. The answers cannot be changed once the application is submitted. Selection is based on students' performance in answering the auestions. Only students who demonstrate motivation and the knowledge of data science and data analysis in the screening question would be selected for the programme.

### Certificate

E-Certificate will be awarded to gifted students who have:

- attended at least 8 sessions; and
- completed all the assignments with satisfactory performance