

A3AIG001C

<u>(Token- required)</u>

[Gifted Programme]

Artificial Intelligence Course (Level III)

Empowering the Deaf Community through Al-Powered Sign Language

Instructors from Parami Co. Limited



Result Release 16 Jun 2025

Intended Learning Outcomes

Upon completion of the gifted programme, gifted students should be ab.

- 1. understand the communication needs of the deaf community;
- 2. brainstorm and finalize feasible solution concepts for sign language recognition;
- 3. master Al object detection and video analysis for sign language recognition;
- 4. develop compassion for the community's needy individuals and contribute to society utilizing their talents.

Gifted Programme Introduction

Can you hear me?! J Hearing impairment is an invisible disability that is easily overlooked by society. If we couldn't hear sounds, how would our lives be different? What challenges would arise in our interactions with one another?

The technological innovations of Artificial Intelligence (A.I.) and generative A.I. create new opportunities for communication and interpersonal interaction for individuals with hearing impairments, enhancing teaching, training, and practical applications in their daily lives.

This programme designed to equip students with the skills to develop innovative solutions for communication barriers faced by the deaf community. Throughout the course, students will engage in market need studies, including site visits to interact with end-users and identify key challenges. They will explore technical feasibility and brainstorm solutions, gaining foundational knowledge in A.I. object detection and video analysis techniques essential for hand gesture recognition.

Students will then develop a working prototype of their app, focusing on user interface and experience design tailored to deaf users. The course culminates in thorough testing and refinement of the prototype, followed by a final presentation to showcase its functionality and impact. Participants will leave with a solid understanding of A.I. applications in accessibility, as well as valuable hands-on experience in problem-solving and innovation.

Outstanding students will have the opportunity to participate in workplace experiences, gaining insight into the application of artificial intelligence technology in the business sector.

Schedule

Session	Date	Time	Venue
1	21 Jul 2025	2:00 p.m. – 5:00 p.m.	HKAGE (Classroom to-be-confirmed)
2	22 Jul 2025		Field visit (To-be-confirmed)
3	23 Jul 2025		HKAGE (Classroom to-be-confirmed)
4	24 Jul 2025		
5	25 Jul 2025		
6	28 Jul 2025		
7	29 Jul 2025		
8	30 Jul 2025		
9	31 Jul 2025		
10	1 Aug 2025		





Suitable for

S1 to S5 HKAGE student members in 2024/25 school year

Class size: 30

Pre-requisite

Students should be able to:

 Understand basic python coding, A.I. experiences preferred (MediaPipe/TensorFlow)

Medium of Instruction

Cantonese assisted with English and with **English Handouts**

Screening

Please answer the screening question in the online application form.

*The screening question is designed to help the applicant understands the course level and the course content. The question must be answered by the student applicant and it can only be attempted once. The answer cannot be changed once the application is submitted. Selection is based on students' performance in answering the question.

Certificate

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

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



