E2INO001C, E2INO001C-2
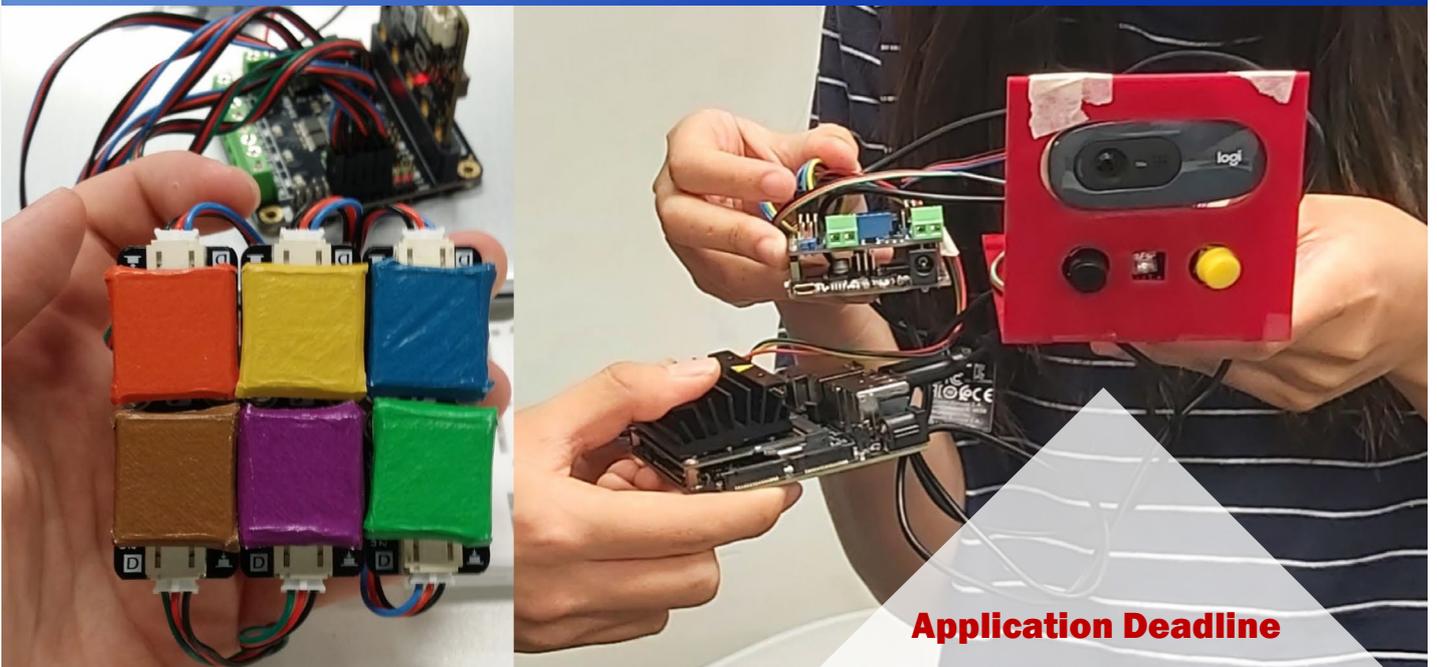
(Token- required)

Innovation Course (Level II):

Artificial Intelligence and Internet of Things Application – Making Innovative Smart Living Products (Phase I)

Mr Chris LEUNG (Decatron Innovation Limited)

Application Deadline
5 Sep 2022 12:00 noon

Result Release
16 Sep 2022

Intended Learning Outcomes

Upon completion of the programme, participants should be able to:

1. describe the concepts and 5-step processes of design thinking;

2. explain the basic knowledge of AI and IoT and their applications in real life;

3. design electronic circuit and coding;

4. make prototypes by using 3D printer and laser cutter;

5. apply creative problem-solving skills.

If student members withdraw from the programme after the Application Deadline, the token will be deducted.

◆ Introduction

This programme series is designed to enhance students' knowledge and interest in Artificial Intelligence (AI) and Internet of Things (IoT) through applying design thinking process to make smart living products. Students will engage in hands-on design challenges that focus on developing empathy, encouraging ideation, developing metacognitive awareness, and fostering creative problem-solving. Throughout the programme, students will acquire skills including computer-aided design (CAD) drawing, making a prototype by using 3D printer, laser cutter, electronic circuit, and computer programming. The group design mini project is targeted to inspire students in creativity, collaboration, and design talent.

◆ Schedule

Admitted students only need to attend either *Class A* or *Class B* below. Please indicate your availability in the last screening question.

Class A (E2IN0001C)

Session	Date	Time	Venue
A1	8 Oct	10:00 a.m. – 12:30 p.m.	Decatron Innovation Limited
A2	15 Oct		
A3	~~22 Oct~~ 29 Oct		
A4	~~29 Oct~~ 5 Nov		

Class B (E2IN0001C-2)

Session	Date	Time	Venue
B1	12 Nov	10:00 a.m. – 12:30 p.m.	Decatron Innovation Limited
B2	19 Nov		
B3	26 Nov		
B4	3 Dec		

Address: Decatron Innovation Limited, Unit 03, 19/F, Yen Sheng Centre, 64 Hoi Yuen Road, Kwun Tong, Kowloon. (MAP)

Remarks:

1. The 25 best-performing students will be promoted to join Phase II. Grades and selection results will be announced after both Class A and Class B have completed, tentatively around 20 – 30 Dec 2022.

2. Tentative schedule for Phase II is 6 sessions on: 14, 21, 28 Jan, 4, 11 & 18 Feb, 2023; at 9:30 a.m. – 12:30 p.m.

◆ Enquiries   📞 3940 0101   ✉ programme@hkage.org.hk

◆ Target Participants

- S1 to S3 HKAGE student members only in 2022/23 school year

- Class size: 25 for Class A, 25 for Class B, totally 50.

◆ Pre-requisite

No special prerequisites are needed

◆ Medium of Instruction

Cantonese with English Handouts

◆ Certificate

E-Certificate will be awarded to participants who have:

- attended at least 3 sessions; and

- completed all the assignments with satisfactory performance.
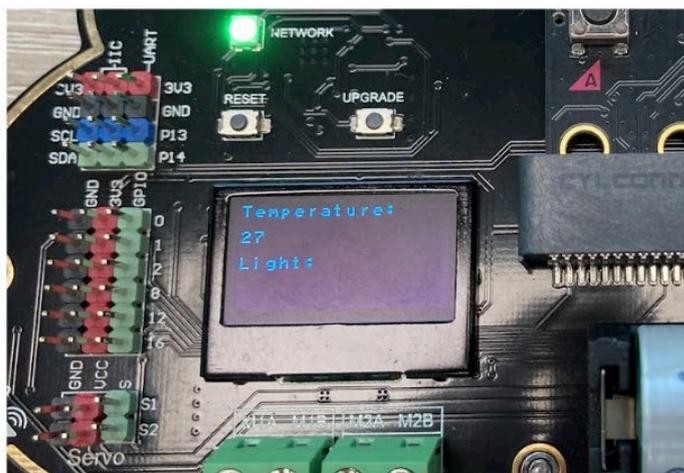
◆ Screening

Please answer the screening questions in the online application form.

*The screening questions are designed to help the applicant understands the course level and the course content. The questions must be answered by the student applicant and it can only be attempted once. The answers cannot be changed once the application is submitted. Selection is based on students' performance in answering the questions. Only students who can demonstrate motivation and knowledge of artificial intelligence and product design in the screening questions can be enrolled in the programme.

◆ Sample Notes

Temperature and Light sensor - Output

Button A is pressed

◆ Enquiries 📞 3940 0101 ✉ programme@hkage.org.hk

Plotting temperature graph

Plotting temperature graph

◆ **Enquiries** 📞 3940 0101 ✉ programme@hkage.org.hk