



## [Gifted Programme]

E3IN0005C

Innovation Course (Level III): Applying Artificial Intelligence to Make Smart Living Products (Phase II)

# Mr Chris LEUNG (Decatron Innovation Limited)



### **Intended Learning Outcomes**

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

- 1. identify and prioritise end users' needs through research and mind mapping;
- 2. apply knowledge of AI and IoT to design smart living products;
- 3. develop collaboration skills via group design project.

#### Gifted Programme Introduction

This programme series integrates Artificial Intelligence (AI) and Internet of Things (IoT) for smart living product innovation. Students will learn computer-aided design (CAD) drawing, 3D printing, laser cutting, electronic circuit design, and Python programming. The curriculum emphasises hands-on design challenges, fostering empathy, ideation, and creative problem-solving. Students will apply design thinking to invent smart living solutions, developing metacognitive awareness. Advanced IoT applications, including data visualisation and AI for gesture and pose detection, will also be explored. Through collaborative group projects, students will conceptualise, design, and prototype products, presenting innovative solutions.

Session	Date	Time	Venue
1	5 Apr	9:30 a.m. – 12:30 p.m.	Decatron Innovation Limited
2	12 Apr		
3	26 Apr		
4	3 May		
5	10 May		
6	17 May		

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

## Suitable for

- S1 to S6 HKAGE student members in 2024/25 school year
- Class size: 25

Students who have satisfactorily completed "Innovation Course (Level III): Applying Artificial Intelligence to Make Smart Living Products (Phase I) (E3IN0004C, E3IN0004C-2)"

#### **Pre-requisite**

No special prerequisites are needed

# Medium of Instruction

Cantonese with English Handouts

# Certificate

Enquiries 📞 3940 0101 📈 programme@hkage.org.hk

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

- attended at least 5 sessions; and
- completed all the assignments with satisfactory performance.