



香港資優教育學苑
The Hong Kong Academy for Gifted Education

香港特別行政區政府教育局資助
Subvented by the Education Bureau, the Government of the HKSAR

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[**Gifted Programme**]

💡 **Academic Introductory Talk Series**

Robotics Talk (Level II)

Robotics within Hong Kong's Development as a Smart City

Dr Darwin Lau

Associate Professor

Department of Mechanical and Automation Engineering

The Chinese University of Hong Kong



Application Deadline

23 Jun 2025

12:00 noon

Intended Learning Outcomes

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

1. explain how robotics can contribute to smarter and safer building construction and maintenance in Hong Kong;
2. explain the lifecycle and subject areas within the research and development for innovative robot solutions;
3. explain how to connect the knowledge of sciences and mathematics learnt in school to engineering and robotics;
4. Gain a perspective and inspiration on the future outlook on developing a smarter Hong Kong.



◆ Gifted Programme Introduction

Hong Kong is a densely populated and modern city with great demand for smart building construction and maintenance. Furthermore, due to the lack of skilled workers due to the ageing workforce, dangerous and harsh working conditions, the building industry is in dire need for technology and automation solutions in all types of construction tasks: including façade painting, window cleaning, building inspection, concrete works, foundation works etc. In this talk, the recent developments robots for building construction and maintenance in Hong Kong will be presented. Furthermore, the design and development process within the R&D of such projects will also be discussed.

This talk is under collaboration of HKAGE and The Department of Mechanical and Automation Engineering, The Chinese University of Hong Kong.

◆ Schedule

Session	Date	Time	Venue
1	15 July	3:00 p.m. – 4:00 p.m.	CUHK (Venue TBC)

◆ Suitable for

- S1 – S6 HKAGE student members in 2024/25 school year.
- Class size: 100
- * First-come, first-served.

◆ Medium of Instruction

English

◆ Certificate

E-Certificate will be awarded to participants who have attended the talk.

◆ Remark

Starting from the 2023/24 school year, after the first review period, ALL student members must complete the following requirements in each school year in order to maintain their membership:

- Attend One Talk; AND
- Participate in One programme or activity of any kind

This talk is one of the items in the four domains of the Holistic Talk Series. The objective is to facilitate the all-round development of student' gifted potential.



The Hong Kong Young Academy of Sciences (YASHK) talk series

Talks are about emerging technology to inspire students' motivation in pursuing knowledge in specialized areas.



Academic Introductory Talk Series

Introduce trendy topics to widen the students' horizons.



Celebrities Talk Series

Celebrities share their life-changing moments to enhance students' aspirations for life.



Future Insight Talk Series

Professionals explain the latest trend in their industry to give students an insight to plan their future.