



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

E1ENG001C

(Token- required)

[Gifted Programme]

Engineering Course (Level I)

Mini 4-Wheel Drive, Ready Go!

Waigo Model Hobbies Limited (Taimiya
STEM Project)



Application Deadline
12 Aug 2024 12:00
noon

Intended Learning Outcomes

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

1. Explain the mini 4-wheel drive structure and race concept;
2. Analyze the scientific principles of factors that affect the speed and stability of a 4WD;
3. Analyze the characteristics of various tracks and make suitable modifications;
4. Creatively modify a 4WD to complete a race with speed and stability;
5. Enhance creativity and thinking skills through 4WD modification;
6. Cultivate a positive mindset to challenge various tracks.

Result Release

14 Aug 2024

◆ Gifted Programme Introduction

The course will focus on a technical competition and explaining the important factors of how to increase the speed of a mini 4WD and how to modify it to run on various difficult tracks. The content focuses on hands-on modification and communication as well as encouraging students to use creativity to face new challenges with limited materials. Students verify their learning with various testing and record the results in class. They would improve their self-confidence and thinking skills through the presentation of their 4WD modification review.

◆ Schedule

Session	Date	Time	Venue
1	26 Aug	2:00 p.m. – 4:00p.m.	Room S214, 2/F, Block A, PMQ, 35 Aberdeen Street, Central, Hong Kong (Location)
2	28 Aug	2:00 p.m. – 4:00p.m.	
3	29 Aug	2:00 p.m. – 4:00p.m.	
4	30 Aug	2:00 p.m. – 4:00p.m.	
5	31 Aug	2:00 p.m. – 4:00p.m.	

◆ Suitable for

- S1 – S3 HKAGE student members in 2023/24 school year.
- Class size: 20
- Student members would be selected randomly by the computer system. The decision of HKAGE on the result of the selection should be final.

◆ Pre-requisite

No special prerequisites are needed. A mini 4WD, tools and parts will be provided.

◆ Medium of Instruction

Cantonese with Chinese handouts

◆ Certificate

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

- attended at least 4 sessions; AND
- completed all the assignments with satisfactory performance