



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

S2IM0001C

[\(Token- required\)](#)

[**Gifted Programme**]

CGMO Training Course

CGMO Training 2024 (Phase II)

Instructor from International Mathematical Olympiad
Hong Kong Committee



**For students
recommended by the
International
Mathematical Olympiad
Hong Kong Committee
ONLY**

Intended Learning Outcomes

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

1. broaden mathematical knowledge in a variety of areas on the basis of senior secondary mathematics curriculum
2. strengthen the problem solving and higher-order thinking skills
3. learn more about the scope of International Mathematical Olympiad Training

◆ Gifted Programme Introduction

- An introductory to advanced level comprehensive mathematics programme which covers a wide range of topics
- Broaden students' mathematical knowledge and strengthen their problem-solving skills
- Consists of 3 phases
- Outstanding students in the programme will represent Hong Kong in China Girls Mathematical Olympiad (CGMO) 2024 held in summer
- This programme is co-organized with International Mathematical Olympiad Hong Kong Committee (IMOHKC)

◆ Schedule

Session	Date	Time	Venue
1	11 May 2024	9:00 – 12:30	Room 204, HKAGE
2	18 May 2024	9:00 – 12:30	Room 205, HKAGE
3	1 Jun 2024	9:00 – 12:30	Room 204, HKAGE
4	8 Jun 2024	9:00 – 12:30	
5	15 Jun 2024	9:00 – 12:30	
6	22 Jun 2024	9:00 – 12:30	
7	29 Jun 2024	9:00 – 12:30	Room 403, HKAGE
8	6 Jul 2024	9:00 – 12:30	Room 204, HKAGE
9	Jul 2024 (TBC)	TBC	TBC
10	13 Jul 2024 (Test 2)	9:00 – 12:30	Room 303, HKAGE

- **The date and time for Test 1 are pending.** For any assessment to be held in the programme, **no make-up** will be arranged.

◆ Suitable for

- Student who have completed CGMO Training 2024 (Phase I) (S1IM0007C) and recommended by the International Mathematical Olympiad Hong Kong Committee **ONLY**

◆ Medium of Instruction

Cantonese with English Handouts

◆ Certificate

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

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

◆ Appendix - IMO-related Programmes (1 Sep 2023 onwards)

- IMO-related programmes is a series of programmes that provide International Mathematical Olympiad (IMO) related training. It aims to equip students with the mathematics knowledge and curriculum of IMO, problem solving skills, and high-order thinking skills progressively.
- The programmes are divided into three levels: Introductory, Intermediate, and Advanced level.
- There are different enrollment methods, e.g. aptitude test. For details, please refer to each programme's poster

Introductory Level

Maths Ignition (MI) Programmes

- For S1-S3 HKAGE student members
- Introductory training in Mathematical Olympiad by topics
- Application for five MI programmes will be open in Apr, Jul & Oct each year
- Enroll through aptitude test

Introductory to Intermediate Level

Introduction to Olympiad Mathematics (ITOM)

- For S1-S6 HKAGE student members
- Two phases of training
- Application will be open in Jan each year
- Enroll through aptitude test; OR
- Students who attained (a) distinction in 2 MI courses; OR (b) merit or above in 3 MI courses; OR (c) completion or above in 4 MI courses could enroll directly

Introductory to Advanced Level

China Girls' Mathematical Olympiad

- For S1-S6 HKAGE female HKAGE student members
- Three phases of training
- Application will be open in Jan each year
- Enroll through aptitude test; OR
- Students who have completed any phase of IMO/CGMO/ITOM Training could enroll directly
- CGMO HK Team members will be selected based on their performance in the trainings

Advanced Level

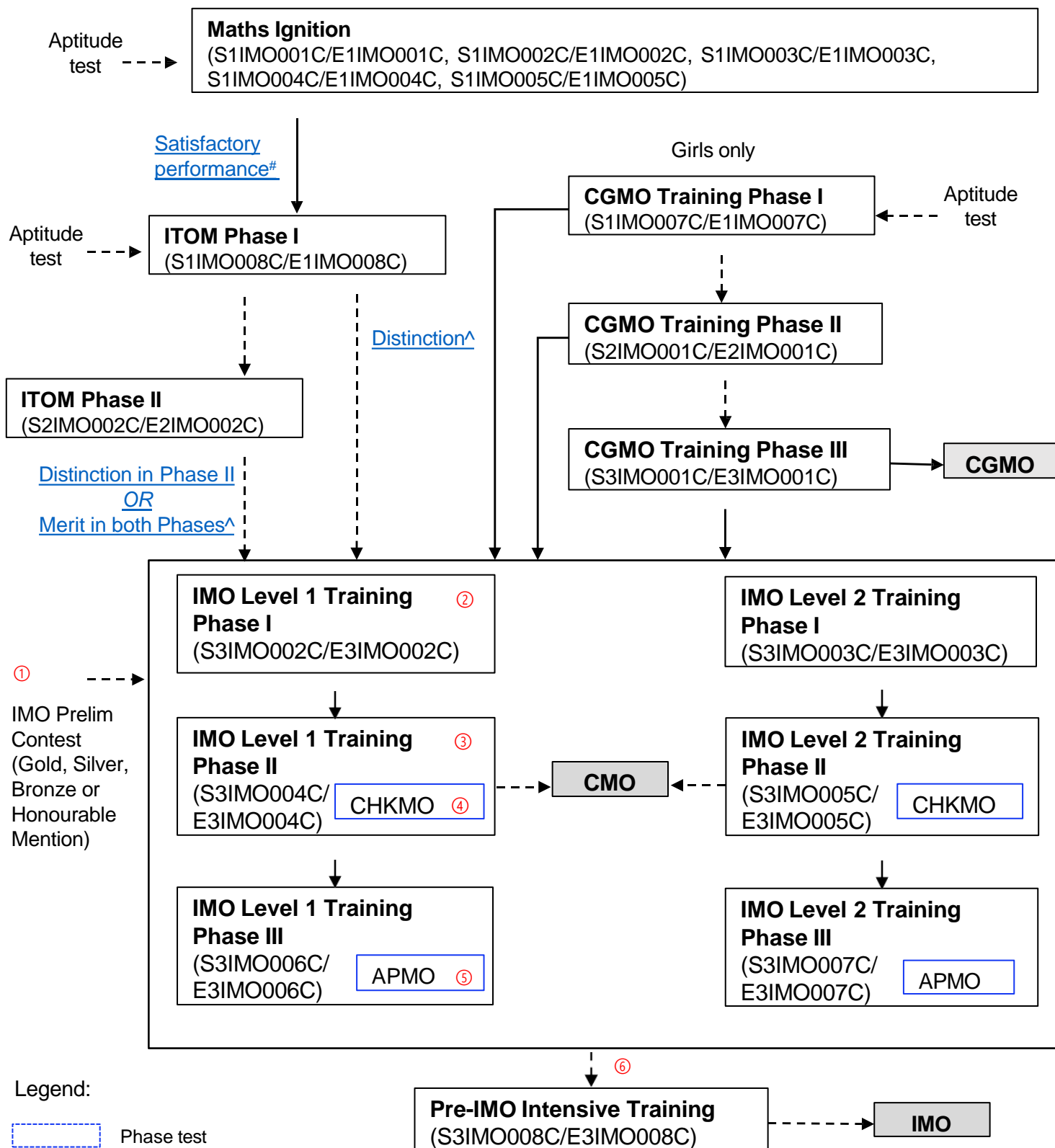
International Mathematical Olympiad (IMO) Trainings

- For all awardees of IMO Preliminary Selection Contest - Hong Kong; OR students who got the certificate of distinction in any phase of ITOM training; OR students who got the certificate of merit in both phases of ITOM training; OR students who have completed any phase of IMO/CGMO training
- Four phases of training
- IMO HK Team members will be selected based on their performance in the tests and trainings

*For detailed flowchart and timeline, please refer to the next page.

International Mathematical Olympiad Related Programmes

(English version only 只提供英文版)



Remarks:

ITOM – Introduction to Olympiad Mathematics
CGMO – China Girls' Mathematical Olympiad
IMO – International Mathematical Olympiad

CHKMO – Hong Kong (China) Mathematical Olympiad
CMO – Chinese Mathematical Olympiad
APMO – Asian Pacific Mathematics Olympiad

IMO2024 HK Team representatives are selected based on their performance in the assessments from ① through ⑥
IMO2025 HK Team representatives are selected based on their performance in the assessments from ② through ⑥

IMPORTANT information for International Mathematical Olympiad (IMO) Training

IMO Training

Eligibility

- IMO Preliminary Selection Contest awardees ① or
- Student members who have completed any phase of the IMO Training or
- Student members who have completed any phase of CGMO Training or
- Student members who have completed any phase of ITOM Training with Distinction
- Student members who have completed both phases of ITOM Training with Merit

Training /Competition	Content	Tentative schedule	Remark
Phase I Training	13 x 3-hr lessons	Jul - Aug	
	Test 1 ② 3 hr, 6 proof problems	Aug	<ul style="list-style-type: none"> ▪ Phase test ▪ No make-up test
Phase II Training	17 x 3-hr lessons	Sep - Dec	
	Test 2 ③ 3 hr, 4 proof problems	Oct	<ul style="list-style-type: none"> ▪ Phase test ▪ No make-up test
	CHKMO ④ 3 hr, 4 proof problems	Dec	<ul style="list-style-type: none"> ▪ Phase test ▪ No make-up test
Phase III Training	8 x 3-hr lessons	Jan - Mar	
	APMO ⑤ 4 hr, 5 proof problems	Mar	<ul style="list-style-type: none"> ▪ End-of-phase test ▪ No make-up test
Selection Tests for Pre-IMO Intensive Training	Test 3 ⑥ 2 days x 4.5 hr, 3 proof problems	Apr or May	<ul style="list-style-type: none"> ▪ About 20 students to be selected based on previous tests ▪ No make-up tests
Pre-IMO Intensive Training	IMO HK Team (6 students) & Alternate Team (6 students)		<ul style="list-style-type: none"> ▪ 12 students to be selected based on previous tests
IMO	2 days x 4.5 hr, 3 proof problems		<ul style="list-style-type: none"> ▪ IMO HK Team
CMO	2 days x 4.5 hr, 3 proof problems		<ul style="list-style-type: none"> ▪ About 6 students to be selected based on previous tests
CGMO	2 days x 4 hr, 4 proof problems		<ul style="list-style-type: none"> ▪ About 8 female students selected via CGMO training

IMO2024 HK Team representatives are selected based on their performance in the assessments from ① through ⑥
 IMO2025 HK Team representatives are selected based on their performance in the assessments from ② through ⑥

Useful websites

IMO official website:	http://www.imo-official.org/
IMO website:	http://imo2023.jp/
Art of Problem Solving:	http://www.artofproblemsolving.com/
Mathematical Excalibur:	http://www.math.ust.hk/excalibur/

#Entering ITOM with Satisfactory Performance in Maths Ignition (MI) Programmes

Starting from 1 September 2023 onwards, students who fulfilled one of the criteria below are eligible to enter ITOM - "Introduction to Olympiad Mathematics (Phase I)" (S1IMO008C):

- good results in aptitude test; **OR**
- distinction in at least 2 different MI courses; **OR**
- merit/distinction in at least 3 different MI courses; **OR**
- pass/merit/distinction in at least 4 different MI courses

[\[back to frontpage\]](#)

^Entering IMO Training with Satisfactory Performance in ITOM or CGMO

Starting from 1 September 2023 onwards, students who fulfilled one of the criteria below are eligible to enter IMO training Phase I Level I (S3IMO002C):

- Non-HKAGE student members / HKAGE student members who were awarded Honourable Mention or above in IMO Preliminary Selection Contest – Hong Kong; **OR**
- HKAGE student members who have completed any phase International Mathematical Olympiad (IMO) Training; **OR**
- HKAGE student members who have completed any phase of CGMO; **OR**
- HKAGE student members who have attained distinction in any phase of ITOM; **OR**
- HKAGE student members who have attained merit in both phases of ITOM

[\[back to frontpage\]](#)