



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

S3IM0002C/S3IM0003C

[**Gifted Programme**]

(Token- required)

Mathematical Olympiad Course (Level III)

International Mathematical Olympiad Training 2024-25 (Phase I) Level 1/2

Dr Ching Tak Wing and other trainers

English version only 只供英文版

Application Deadline

9 Jul 2024 12:00 noon

Intended Learning Outcomes

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

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

Result Release

12 Jul 2024

◆ Gifted Programme Introduction

- A comprehensive mathematics programme which covers such as Algebra, Number Theory, Geometry and Combinatorics
- Introduce the basic curriculum of the International Mathematical Olympiad competition
- Broaden student's mathematical knowledge, strengthen their problem solving, higher order and logical thinking skills
- Training consists of four phases: Phase I (Jul – Aug), Phase II (Sep – Dec), Phase III (Jan – Mar 2025) and Pre-IMO Intensive training.
- Students with outstanding performance in the programme would be selected to represent Hong Kong in the 66th IMO 2025.

The International Mathematical Olympiad Training programmes are co-organized with International Mathematical Olympiad Hong Kong Committee Limited (IMOHKCL)

◆ Suitable for

Non-HKAGE student or HKAGE members who

- were awarded **Honourable Mention or above in IMO Preliminary Selection Contest – Hong Kong**

HKAGE student members who

- **have completed any phase of CGMO,**
- **have attained distinction in any phase of ITOM, or**
- **have attained merit in both phases of ITOM.**

Class size: 60

◆ Medium of Instruction

Cantonese with English handouts

◆ Certificate

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

- Attended and completed the scheduled test(s).

◆ Next Training Phase

Students who have completed this programme will be invited to join the next phase.

◆ Schedule

Session	Date		Time	Venue	
	Level 1	Level 2		Level 1	Level 2
1	27 Jul		2:00 p.m. – 5:00 p.m.	Room 403, HKAGE	Room 204, HKAGE
2	30 Jul				
3	1 Aug				
4	3 Aug				
5	6 Aug				
6	8 Aug				
7	10 Aug				
8	13 Aug				
9	15 Aug				
10	17 Aug				
11	20 Aug				
12	22 Aug				
13	29 Aug (Test 1)			Room 105, HKAGE	

◆ Appendix - IMO-related Programmes

- 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.
- There are different enrollment methods, e.g. aptitude test. For details, please refer to each programme's poster

Level I

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**

Level I to II

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

Level I to III

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

Level III to IV

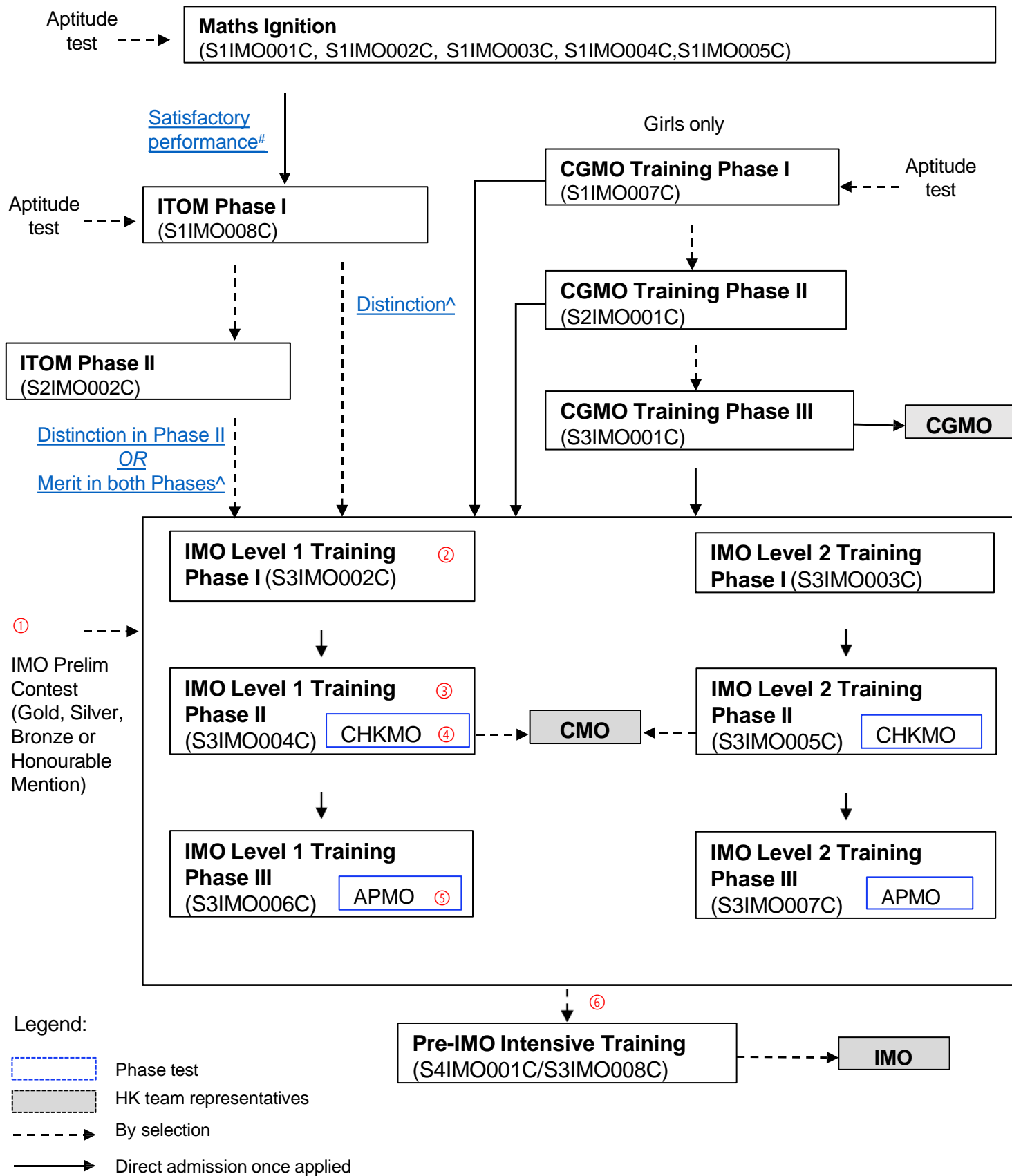
International Mathematical Olympiad (IMO) Trainings

- For all awardees of IMO Preliminary Selection Contest - Hong Kong; and the students with achieved satisfactory performance in the above-mentioned 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

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

Suitable for

- IMO Preliminary Selection Contest awardees ① 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

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://imo2024.uk/
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

^Entering IMO Training with Satisfactory Performance in ITOM or CGMO

Starting from 1 September 2023 onwards, students who fulfilled one of the criteria below will be invited 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 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