



E2IM0001C

(Token- required)

CGMO Training Course

CGMO Training 2022 (Phase II)

Dr Ching Tak Wing and other trainers



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

Intended Learning Outcomes

Upon completion of the programme, participants 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



◆ 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) 2022 held in summer

This programme is co-organized with International Mathematical Olympiad Hong Kong Committee (IMOHKC)

◆ Schedule

Session	Date	Time	Venue
1	14 May	9:00 a.m. – 12:30 p.m.	Room 204, HKAGE
2	28 May	9:00 a.m. – 12:30 p.m.	Room 204, HKAGE
3	4 Jun	9:00 a.m. – 12:30 p.m.	Room 204, HKAGE
4	11 Jun	9:00 a.m. – 12:30 p.m.	Room 204, HKAGE
5	18 Jun	9:00 a.m. – 12:30 p.m.	Room 204, HKAGE
6	25 Jun	9:00 a.m. – 12:30 p.m.	Room 204, HKAGE
7	2 Jul 8 Jul	9:00 a.m. – 12:30 p.m. 4:00 p.m. – 6:00 p.m.	Room 204, HKAGE
8	9 Jul	9:00 a.m. – 12:30 p.m.	Room 203, HKAGE
9	16 Jul	9:00 a.m. – 12:30 p.m.	Room 303, HKAGE

- For any assessment to be held in the programme, **no make-up** will be arranged.

◆ Target Participants

- Student who have completed CGMO Training 2022 (Phase I) (E1IM0007C) 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 participants who have:

- attended **at least 7 sessions**; and
- completed all the assignments with satisfactory performance



◆ Appendix - IMO-related Programmes

- IMO-related programmes is a series of programmes that provide International Mathematics 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
- Students who have completed at least 2 MI programmes could enroll directly

Introductory to Advanced Level

China Girls Mathematics Olympiad (CGMO) Trainings

- For S1-S6 HKAGE female HKAGE student members
- Three phases of training
- Application will be open in Jan each year
- Enroll through aptitude test
- CGMO HK Team members will be selected based on their performance in the trainings

Advanced Level

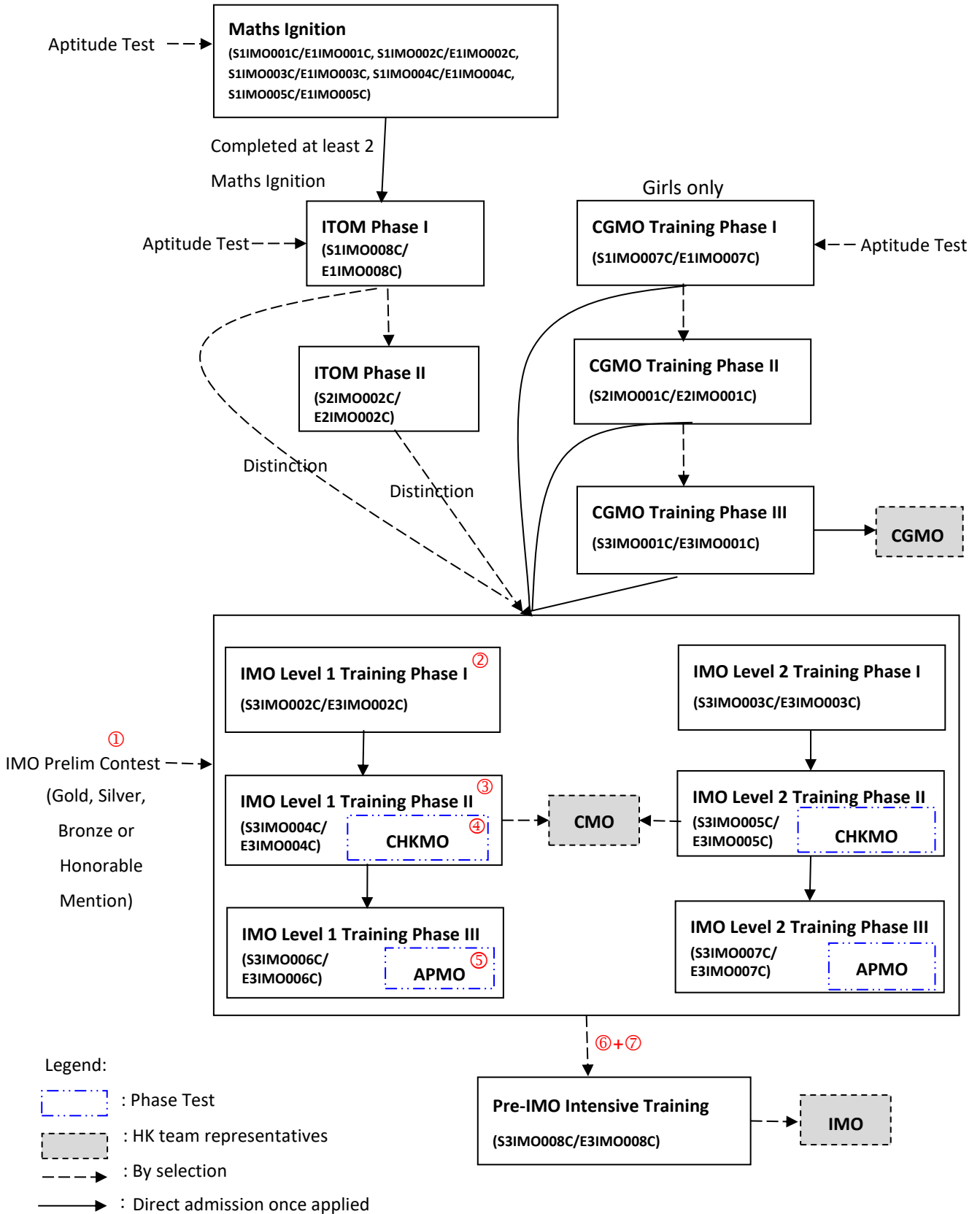
International Mathematics Olympiad (IMO) Trainings

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

*Detail flowchart and timeline, please refer next page.



International Mathematical Olympiad Related Programmes



Remarks:

ITOM – Introduction to Olympiad Mathematics
 CGMO – China Girl’s Mathematical Olympiad
 IMO – International Mathematical Olympiad

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

IMO HK Team representatives are selected based on their performance in the assessments from ① through ⑦

IMPORTANT information for International Mathematical Olympiad (IMO) Training

Phase Trainings			
Eligibility			
<ul style="list-style-type: none"> ● IMO Preliminary Selection Contest awardees ① or ● Student members who have been a trainee in 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 			
Training /Competition	Content	Excepted Schedule	Remark
Phase I Training	13 x 3-hr lessons	Jul - Aug	
	Test 1 ② 3 hr, 6 proof problems	Aug	✧ 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	✧ Phase test ✧ No make-up test
	CHKMO ④ 3 hr, 4 proof problems	Dec	✧ Phase test ✧ No make-up tests
CMO	2 days x 4.5 hr, 3 proof problems	Dec or Jan	6# students selected based on Prelim ①, Test 1 ②, and Test 2 ③
Phase III Training	8 x 3-hr lessons	Jan - Mar	
	APMO ⑤ 4 hr, 5 proof problems	Mar	✧ End-of-phase test ✧ No make-up test
Selection Tests for Pre-IMO Intensive Training	Test 3 ⑥ 4.5 hr, 3 proof problems Test 4 ⑦ 4.5 hr, 3 proof problems	Apr or May	18 students selected based on Prelim ①, Test 1 ②, Test 2 ③, CHKMO ④ and APMO ⑤ ✧ No make-up tests
Pre-IMO Intensive Training	IMO HK Team (6 students) & Alternate Team (6 students),		12 students selected based on Prelim ①, Test 1 ②, Test 2 ③, CHKMO ④, APMO ⑤, Test 3 ⑥ and Test 4 ⑦
IMO	2 days x 4.5 hr, 3 proof problems @		IMO HK Team
CGMO	2 days x 4 hr, 4 proof problems @		8# female students selected via CGMO Training (NOT IMO Training)

Subject to change. May vary from year to year.

IMO HK Team representatives are selected based on their performance in the assessments from ① through ⑧

Useful websites

IMO official website:	www.imo-official.org
IMO 2017 website:	http://www.imo2017.org.br/
Art of Problem Solving:	www.artofproblemsolving.com
Mathematical Database:	www.mathdb.org
IMO 2016 Facebook page:	www.facebook.com/imo2016
IMO 2016 newsletter IMOment:	www.edb.gov.hk/tc/curriculum-development/kla/ma/IMO/IMOment.html
Mathematical Excalibur:	www.math.ust.hk/excalibur/
reference list recommended by IMOHKC	https://docs.google.com/spreadsheets/d/1I4GNYbY2eDPPKCnD4lpnYuqNenJV0-3NgKUMDh6m5ow/edit?usp=sharing