香 港 資 優 教 育 學 苑
The Hong Kong Academy for Gifted Education

International Mathematics Olympiad Training 2017-18 (Phase II) Level I (MATS2132)

Introduction	• A comprehensive mathematics programme which covers such as Algebra, Number Theory, Geometry and Combinatorics • Introduce the basic curriculum of the International Mathematics Olympiad competition • Broaden student's mathematical knowledge, strengthen their problem solving, higher order and logical thinking skills • Training consists of 3 Phases: Phase I (July – August), Phase II (Sept – Dec) and Phase III (Jan – Mar 2017) • Students with outstanding performance in the programme would be selected as the representatives of Hong Kong in the 59th IMO 2018 held in Romania
Programme Type / Level	Intermediate Course in Mathematical Olympiad (Token-required)
Instructor(s)	Dr. Leung Tat Wing and other trainers Co-organized with International Mathematical Olympiad Hong Kong Committee (IMOHKC)
Target Participants	HKAGE Student members who ◆ were awarded **Honourable Mention or above in IMO Preliminary Selection Contest – Hong Kong** ***or*** ◆ have been a trainee **in any phase of International Mathematics Olympiad (IMO) Training** ***or*** ◆ have completed **any Phase of CGMO** ***or*** ◆ have completed **any Phase of ITOM training with Distinction** NON-HKAGE Student members who ◆ were awarded **Honourable Mention or above in IMO Preliminary Selection Contest – Hong Kong** ➢ Class size: 40
Medium of Instruction	Cantonese with English handouts
Certificate	**E-Certificate** will be awarded to participants who have: ❖ Attended **at least 8 sessions AND** ❖ **Satisfactory performance in ALL assessments**
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. Strengthen their problem solving and higher-order thinking skills.
Application Deadline	**13 Sep 2017**
Application Result Release Date	**15 Sep 2017**

Student members may withdraw from the programme on or before the deadline. Otherwise, the token will be deducted.

Schedule

Session	Date	Time	Topic	Trainer	Venue (HKAGE)
1	23 Sep	2:00 p.m. – 5:00 p.m.	Geometry IV (Homothety, spiral similarity)	KK Kwok	Room 303
2	30 Sep		Geometry V (Exploring triangles)	KK Kwok	
3	7 Oct		Number Theory (Quadratic Reciprocity)	LT Chan	
4	14 Oct		Number Theory (Problem Session)	LT Chan	
5	**21 Oct**		**Test 2**	TW Leung	**Room 105**
6	4 Nov		Functional Equation II	KK Kwok	Room 303
7	11 Nov		Inequalities I	CM Hung	TBC
8	18 Nov		Inequalities II	CM Hung	Room G01
9	25 Nov		Miscellaneous Problems	TW Leung	Room 303
10	**2 Dec**		**CHKMO**	TW Leung	**Room 105**

Remarks:

Students **MUST ATTEND** the test held on **21 Oct** and **2 Dec**. No make-up test will be arranged.

Enquiries

For enquiries, please contact us at 3940 0102.

IMPORTANT information for International Mathematical Olympiad (IMO) Training

Activity	Participants		Time (Tentative)	Remarks
① IMO Preliminary Selection Contest HK 3 hr, 20 answer-only questions	6 nominees (max) per school or Awardees of Preliminary Selection Contest in previous years		May	
	Level 1	**Level 2**		
Phase I Training	13 x 3-hr lessons	6 x 3-hr lessons		
	● IMO Preliminary Selection Contest awardees 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		Jul - Aug	
② Test 1 (end-of Phase I test) 3 hr, 6 proof problems			Aug	✧ No make-up tests
Phase II Training	10 x 3-hour lessons	10 x 3-hr lessons	Sep - Dec	
③ Test 2 (Phase II test) 3 hr, 4 proof problems			Oct	✧ No make-up tests
④ CHKMO (end-of Phase II test) 3 hr, 4 proof problems			Dec	✧ No make-up tests
CMO 6# students based on ①Prelim, ②Test 1, ③Test 2 2 days x 4.5 hr, 3 proof problems @			Dec or Jan	
Phase III Training	8 x 3-hr lessons	8 x 3-hr lessons	Jan - Mar	
⑤ APMO (end-of Phase III test) 4 hr, 5 proof problems			Mar	✧ No make-up tests
⑥ Test 3 4.5 hr, 3 proof problems ⑦ Test 4 4.5 hr, 3 proof problems 18 students based on ①Prelim, ②Test 1, ③Test 2, ④CHKMO, ⑤APMO			Apr or May	✧ No make-up tests
38-hr Pre-IMO Intensive Training - IMO HK Team (6 students) & Alternate Team (6 students), based on ①Prelim, ②Test 1, ③Test 2, ④CHKMO, ⑤APMO, ⑥Test 3, ⑦Test 4			Jun - Jul	
IMO - IMO HK Team 2 days x 4.5 hours, 3 proof problems @			Jul	

CWMI 4# students based on ①Prelim, ②Test 1, ③Test 2, ④CHKMO, ⑤APMO 2 days x 4 hours, 4 proof problems @	Aug	
CGMO 8# female students via CGMO training (NOT IMO Training) 2 days x 4 hours, 4 proof problems @	Aug	

Subject to change. May vary from year to year.

Useful websites

IMO official website:	www.imo-offcial.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/1l4GNYbY2eDPPKCnD4lpnYuqNenJVo-3NgKUMDh6m5ow/edit?usp=sharing