



International Mathematics Olympiad Training

2021-22 (Phase II) Level 2 (E3IMO005C)

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 2022)
- Students with outstanding performance in the programme would be selected as the representatives of Hong Kong in the 63rd IMO 2022 in Oman

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

Programme Type / Level

Advanced Course in Mathematical Olympiad ([Token-required](#))

Instructor(s)

Dr Leung Tat Wing and other trainers

Target Participants

NON-HKAGE Student members who

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

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**

Class size: 20

Medium of Instruction

Cantonese with English handouts

Certificate

E-Certificate will be awarded to participants who have:

- ❖ Attended **at least 11 sessions including the last session 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

~~8 Sep 2021~~
10 Sep 2021
12:00 n.n.

Application Result
Release Date

13 Sep 2021

If student members withdraw from the programme after the Application Deadline, the token will be deducted.

Schedule

Session	Date	Time	Topic	Trainer	Venue (HKAGE)
1	18 Sep	2:00 p.m. – 5:00 p.m.	Cyclotomic Polynomials	T W Leung	204
2	25 Sep	2:00 p.m. – 5:00 p.m.	Probabilistic Methods	Omega Tong	
3	2 Oct	2:00 p.m. – 5:00 p.m.	Extremal Combinatorics	Omega Tong	
Postponed	9 Oct (Postponed)	2:00 p.m. – 5:00 p.m. (Postponed)	Geometry in Figures I (Postponed)	C J Lam (Postponed)	204 (Postponed)
5	16 Oct	2:00 p.m. – 5:00 p.m.	Geometry in Figures II Functional Equations	C J Lam Ching Tak Wing	204
6	23 Oct	2:00 p.m. – 5:00 p.m.	Oct Test	T W Leung	105
7	30 Oct	2:00 p.m. – 5:00 p.m.	Functional Equations Geometry in Figures I	Ching Tak Wing C J Lam	204
8	5 Nov	12:00 n.n. – 5:00 p.m. 12:00 n.n. – 4:00 p.m. / 4:30 p.m.*	Iranian Geometry Olympiad	T W Leung	105
9	6 Nov	2:00 p.m. – 5:00 p.m.	Inequalities and Convexity	Ching Tak Wing	204
10	13 Nov	2:00 p.m. – 5:00 p.m.	Counting	T W Leung	
11	20 Nov	2:00 p.m. – 5:00 p.m.	Algebraic Number Theory I	LongTin Chan	
12	27 Nov	2:00 p.m. – 5:00 p.m.	Algebraic Number Theory II	LongTin Chan	
13	4 Dec	2:00 p.m. – 5:00 p.m.	CHKMO	T W Leung	105
14	11 Dec	2:00 p.m. – 5:00 p.m.	Analytic Number Theory I	Daniel Sheremata C J Lam	204
15	18 Dec	2:00 p.m. – 5:00 p.m.	Analytic Number Theory II	Daniel Sheremata Ching Tak Wing	
Make-up	22 Dec	2:00 p.m. – 5:00 p.m.	Geometry in Figures II	T W Leung	204

Remarks: 奧林匹克數學深造課程: 國際數學奧林匹克訓練 2021-22 (第二期) 進階班 (E3IMO005C)

- Students **MUST ATTEND** the tests held on **23 Oct, 4 Dec 2021**. No make-up test will be arranged.
- Students are encouraged to participate in the Iranian Geometry Olympiad held on **5 Nov 2021**.

***The end time of Iranian Geometry Olympiad held on 5 Nov 2021 is different according to students' class level. For S1-S2 students, ends at 4:00 p.m.; For S4-S6 students, ends at 4:30 p.m.**

Enquiries

For enquiries, please contact us on 3940 0101.