



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	14:00 – 17:00	Cyclotomic Polynomials	T W Leung	204
2	25 Sep	14:00 – 17:00	Probabilistic Methods	Omega Tong	
3	2 Oct	14:00 – 17:00	Extremal Combinatorics	Omega Tong	
Postponed	9 Oct	14:00 – 17:00	Geometry in Figures I	C J Lam	
5	16 Oct	14:00 – 17:00	Functional Equations Geometry in Figures II	Ching Tak Wing C J Lam	
6	23 Oct	14:00 – 17:00	Oct Test	T W Leung	105
7	30 Oct	14:00 – 17:00	Geometry in Figures I Functional Equations	C J Lam Ching Tak Wing	204
8	5 Nov	12:00 - 17:00	Iranian Geometry Olympiad	T W Leung	105
9	6 Nov	14:00 – 17:00	Inequalities and Convexity	Ching Tak Wing	204
10	13 Nov	14:00 – 17:00	Counting	T W Leung	
11	20 Nov	14:00 – 17:00	Algebraic Number Theory I	LongTin Chan	
12	27 Nov	14:00 – 17:00	Algebraic Number Theory II	LongTin Chan	
13	4 Dec	14:00 – 17:00	CHKMO	T W Leung	
14	11 Dec	14:00 – 17:00	Analytic Number Theory I	Daniel Sheremata	204
15	18 Dec	14:00 – 17:00	Analytic Number Theory II	Daniel Sheremata	
Make-up	22 Dec	14:00 – 17:00	Geometry in Figures II	C J Lam	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**.

Enquiries

For enquiries, please contact us on 3940 0101.