



Introduction to Olympiad Mathematics 2020 (Phase I) (MATS1151)

Introduction

- An introductory level comprehensive mathematics programme which covers a wide range of topics
- Broaden students' mathematical knowledge and strengthen their problem-solving skills
- Students can learn more about the scope of International Mathematical Olympiad Training
- Consists of 2 phases

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

Programme Type / Level

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

Instructor(s)

Dr Ching Tak Wing and other trainers

Pre-requisites

Students should know the basic knowledge of the following:

Quadratic Equations and Functions, Binomial Theorem, Mathematical Induction, Remainder Theorem and Factor Theorem, Arithmetic and Geometric Sequences, Circles and Trigonometry

Target Participants



- S1 – S6 HKAGE student members
- Class size: 30

All applicants **MUST** submit the "Screening Form" **no later than 4 Mar 2020 (Wed) at 12 noon**

Except for those who have

1. completed any 2 out of 5 courses in Maths Ignition series
- OR**
2. attended the Aptitude Test held on 18 May, 10 Aug or 23 Nov 2019.

Remarks: Not for student members who have completed any phase of "International Mathematics Olympiad Training" or "Introduction to Olympiad Mathematics" before

Medium of Instruction



Cantonese with English handouts

Certificate



E-Certificate will be awarded to participants who have:

- ❖ Attended **at least 7 sessions** AND
- ❖ Had Satisfactory performance in all assessments

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.

Aptitude Test



Students who wish to apply for this programme must take a general aptitude test on **22 Feb 2020 (2:00 p.m. – 4:00 p.m.)**.

This general aptitude test consists of 100 multiple choice questions which covers a wide range of topics in mathematics. The purpose of the test is to figure out the applicant's knowledge in different fields of mathematics in order to choose the most suitable students for different programmes. Neither under-qualified nor over-qualified students will be admitted.

The next aptitude test is tentatively scheduled in **May 2020**. The result of an aptitude test will be valid for 1 year. If a student takes the test more than once, the latest result will prevail. The following table lists the programmes for which the results of this general aptitude test will apply:

Programme Date	Code	Programme Name	Aptitude test valid			
			18 May 2019	10 Aug 2019	23 Nov 2019	22 Feb 2020
Mar 2020	MATS1121	CGMO Training 2020 (Phase I)	√	√	√	√
Mar 2020	MATS1151	Introduction to Olympiad Mathematics 2020 (Phase I)	√	√	√	√
Jul 2020	MATS1111	Maths Ignition - Combinatorics		√	√	√
Aug 2020	MATS1112	Maths Ignition - Geometry		√	√	√
Aug 2020	MATS2330	Trigonometry		√	√	√
Sep 2020	MATS1113	Maths Ignition - Number Theory			√	√
Nov 2020	MATS1114	Maths Ignition - Algebra			√	√
Feb 2021	MATS1115	Maths Ignition - Coordinate Geometry				√

Remarks:

1. All aptitude tests will only be arranged on the designated dates. No make-up test will be arranged.
2. No Calculator is allowed.
3. Please bring along with your Identification Card, e.g. HKID, student ID.
4. Please arrive at the venue 15 minutes prior to the Aptitude Test begins.

If students who have selected to join the aptitude test are absent without any reasons and prior notification provided, it will result in a lower priority in joining the aptitude test next time when they apply.

Application

10 Feb 2020

Application Result 28 Feb 2020

Deadline

12:00 n.n.

Release Date 6 Mar 2020

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

Schedule



Session	Date	Time	Venue
Aptitude- Test [Cancelled]	22 Feb 2020	2:00 p.m.— 4:00 p.m.	Computer Room 4/F HKPC
Submission Deadline of “Screening Form”	4 Mar	12:00 n.n.	---
1	7 Mar [Cancelled]		Room 124 HKPC
2	14 Mar [Cancelled]		TBC
3	21 Mar [Cancelled]		Room 124 HKPC
4	28 Mar [Cancelled]		TBC
5	18 Apr [Cancelled]	2:00 p.m.— 5:30 p.m.	Room 303 HKAGE
6	25 Apr [Cancelled]		
7	2 May [Cancelled]		Room 303 HKAGE
8	9 May [Cancelled]		
9	16 May [Cancelled]		Room 105 HKAGE

Remarks:

- 1. “Screening Form” will be sent to students concerned through email duly. Please submit the completed Form no later than 4 Mar 2020 (Wed) at 12 noon. Late submission will not be considered.**
2. For any assessment to be held in the programme, no make-up will be arranged.

Sample Examples
for the Programme

1. Do there exist a multiple of 2017 of the form $111\dots111$?
2. If $a+b+c=10$, what is the greatest possible value of ab^2c^3 ?

Enquiries



For enquiries, please contact us at 3940 0101 after language selection, press “1”.