MATHS IGNITION-GEOMETRY (E1IMO002C)

Introduction	Maths Ignition is an introductory programme. It is designed as a series of courses on different topics and is developed as a bridging programme to the 'IMO Training' programme. 'Maths Ignition- Geometry' is the second course of the series. It aims to broaden students' knowledge in Geometry on the basis of junior secondary mathematics curriculum through exploration and investigation approach. Students who have completed 2 out of 5 courses in Maths Ignition series might be considered for direct admission to the 'Introduction to Olympiad Mathematics 2022 (Phase I) ' (E1IMO008C), an intermediate-level programme offered by IMO Hong Kong Committee. This programme is co-organized with International Mathematical Olympiad Hong Kong Committee (IMOHKC).
Programme Type / Level	Introductory Course in Mathematical Olympiad ([Token-required](#))
Instructor(s)	Dr Ching Tak Wing
Pre-requisites	Students should have the basic knowledge in: 1. congruence and similarity, 2. properties of triangles and different types of quadrilaterals, 3. Pythagoras' Theorem.
Target Participants	➢ S1 – S3 HKAGE student members ➢ Class size: 30 ➢ All applicants **MUST** attend the **Aptitude Test** held in HKAGE on **15 May 2021** except for those who have attended the Aptitude Test held on 21 Nov 2020 or 20 Feb 2021**.** *** Not for students who have enrolled in any phase of** **1. CGMO Training or** **2. Introduction to Olympiad Mathematics or** **3. International Mathematics Olympiad (IMO) Training before.** Remarks: • Due to the limited seats in computer rooms, students who have attended the Aptitude Test on 20 Feb 2021 would not be allowed to take the test on 15 May 2021. Their results on 20 Feb 2021 will be used for this programme. • Students will be selected randomly in attending the Aptitude Test if the application is over-subscribed. Only selected students could join the Aptitude Test held on 15 May 2021. • A notification email will be sent on **5 May 2021** for the application result of the Aptitude Test. • All unselected students will be regarded as their application of this programme unsuccessful. This programme is same as "Introductory Course in Mathematical Olympiad: Maths Ignition- Geometry (MATS1112)" in 19/20 school year.
Medium of Instruction	Cantonese with English handouts
Certificate	**E-Certificate** will be awarded to participants who have: ❖ Attended **at least 3 sessions AND** ❖ Satisfactory performance in the end-of-course test.

	Intended Learning Outcomes	Upon completion of the programme, participants should be able to:

Intended Learning Outcomes

Upon completion of the programme, participants should be able to:
1. broaden their mathematical knowledge in the topic of Geometry on the basis of junior secondary mathematics curriculum;
2. strengthen their 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 **15 May 2021 (1:45 p.m. – 3:45 p.m. or 4:00 p.m. – 6:00 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 scheduled on **21 Aug 2021**. 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		
			21 Nov 2020	20 Feb 2021	15 May 2021
Jul 2021	E1IMO001C	Maths Ignition – Combinatorics	√	√	√
Aug 2021	E1IMO002C	Maths Ignition - Geometry	√	√	√
Aug 2021	E3MAT001C	Polynomials	√	√	√
Sep 2021	E1IMO003C	Maths Ignition - Number Theory	√	√	√
Nov 2021	E1IMO004C	Maths Ignition - Algebra	√	√	√
Feb 2022	E1IMO005C	Maths Ignition - Coordinate Geometry		√	√
Mar 2022	E1IMO007C	CGMO Training 2022 (Phase I)			√
Mar 2022	E1IMO008C	Introduction to Olympiad Mathematics 2022 (Phase I)			√

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 Deadline

3 May 2021 ,12:00 n.n.

Application Result Release Date

28 May 2021

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

Schedule

Session	Date	Time	Venue
Aptitude Test	**15 May 2021**	**1:45 p.m. – 3:45 p.m.** **or** **4:00 p.m. – 6:00 p.m.**	*** Welkin Systems Limited (Mongkok)**
1	9 Aug 2021	2:00 p.m. – 5:00 p.m.	HKAGE ~~Room 204~~ **Room 203**
2	12 Aug		
3	14 Aug		
4	16 Aug		

*Address: 7/F, Righteous Centre, 585 Nathan Road, Mongkok, Kowloon (Opposite to Sino Centre)

Remarks:

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

Sample Notes

1. Explain why SSA cannot be used to prove congruent triangles. Are there special cases in which SSA can guarantee congruence?

2. Work out different proofs to Pythagoras' Theorem and its converse. Is it logically correct to prove the converse of Pythagoras' Theorem using Pythagoras' Theorem?

Enquiries

For enquiries, please contact Academic Programme Development Division on 3940 0101 after language selection, press "1".