



MATHS IGNITION – COORDINATE GEOMETRY (MATS1115)

Introduction

Maths Ignition is an introductory programme. It is designed as a series of courses of different topics and is developed as a bridging programme to the 'IMO Training' programmes. Maths Ignition – Coordinate Geometry is the fifth course in the series. It aims to broaden students' knowledge in coordinate geometry on the basis of junior secondary mathematics curriculum through exploration and investigation approach. Students who have completed 2 out of 5 courses in the Maths Ignition series might be considered for direct admission to the "Introduction to Olympiad Mathematics 2019 (Phase I)" (MATS1151), an intermediate-level programme offered in Spring 2019 by IMOHKC.

Programme Type / Level

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

Instructor(s)

Dr. Law Ka Ho
Co-organized with International Mathematical Olympiad Hong Kong Committee (IMOHKC)

Pre-requisites

Students should know:

1. Cartesian coordinate systems
2. Distance and slope between two points
3. Basic ideas on equations of straight lines

Target Participants



- S1 – S3 HKAGE student members
- Class size: 30

All applicants **MUST** attend the **Aptitude Test** held in HKAGE on **17 Nov 2018** except for those who have attended the Aptitude Test held on 3 Feb 2018, 30 Jun 2018 or 25 Aug 2018.

- * Not for students who have enrolled in**
- 1. CGMO Training (Phase I) MATS1121 or**
 - 2. Introduction to Olympiad Mathematics (Phase I) MATS1151 or**
 - 3. Any phase of International Mathematics Olympiad (IMO) Training before**

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:

1. Broaden their mathematical knowledge in the topic of Coordinate 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 **17 Nov 2018 (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 scheduled on **16 Feb 2019**. The result of an aptitude test will be valid for one 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			
			3 Feb 2018	30 Jun 2018	25 Aug 2018	17 Nov 2018
Feb 2019	MATS1115	Maths Ignition - Coordinate Geometry	√	√	√	√
Mar 2019	MATS1121	CGMO Training 2019 (Phase I)		√	√	√
Mar 2019	MATS1151	Introduction to Olympiad Mathematics 2019 (Phase I)		√	√	√
Jul 2019	MATS1111	Maths Ignition - Combinatorics			√	√
Aug 2019	MATS1112	Maths Ignition - Geometry			√	√
Sep 2019	MATS1113	Maths Ignition - Number Theory				√
Nov 2019	MATS1114	Maths Ignition - Algebra				√

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

Application Deadline **12 Nov 2018**

Application Result Release Date **27 Nov 2018**

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

Schedule



Session	Date	Time	Venue (HKAGE)
Aptitude Test	17 Nov 2018	2:00 p.m. – 4:00 p.m.	Room 105
1	23 Feb 2019	2:00 p.m. – 5:00 p.m.	Room 303
2	2 Mar		Room 105
3	9 Mar		
4	16 Mar		

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

Sample Examples for the Programme

1. What is the distance between the straight lines $3x+4y=5$ and $3x+4y=6$?
2. What is the radius of the circle $x^2+y^2-4x+6y-8=0$?

Enquiries



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

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