香 港 資 優 教 育 學 苑
The Hong Kong Academy for Gifted Education

MATHS IGNITION – NUMBER THEORY (MATS1113)

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' programme. Maths Ignition – Number Theory is the third course of the series in 2016/17. It aims to broaden students' knowledge in number theory on the basis of junior secondary mathematics curriculum through exploration and investigation approach. Students who completed 2 out of 5 courses in Math Ignition series (MI) might be considered for direct admission to Introduction to Olympiad Mathematics (ITOM), an intermediate-level programme offered in Spring 2017 by IMO Hong Kong Committee.
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. Prime factorisation of positive integers 2. Basic properties of and tests for the divisibility of integers
Target Participants	➢ S1 – S3 HKAGE **Maths Domain** student members ➢ Class size: 50 *** Not for students who have enrolled in "CGMO Training (Phase I)" MATS1121 or "Introduction to Olympiad Mathematics (Phase I)" MATS1151 before**
Medium of Instruction	Cantonese (Supplemented by English) with English handouts
Certificate	**Certificate** will be awarded to participants who have: ❖ Attending **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 number theory 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
Screening	Please answer the screening question in the online application form. *The screening question is designed to help the applicant understands the course level and the course content. The question must be answered by the student applicant and it can only be attempted once. The answer cannot be changed once the application is submitted. Selection is based on students' performance in answering the question. Only students who can demonstrate **motivation and problem-solving skills** in the screening question can be enrolled in the programme.

Application Deadline **22 Aug 2016** **Application Result Release Date** **26 Aug 2016**

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

Schedule

Session	Date	Time	Venue (HKAGE)
1	3 Sep	2:00 p.m. – 5:00 p.m.	Room 403
2	10 Sep		
3	17 Sep		
4	24 Sep		Room 105

Sample Examples for the Programme

1. What is the sum of all factors of 899899?
2. Find all positive integers x and y such that $xy = 4x + 7y$.

Enquiries

For enquiries, please contact us at 3940 0191 or 3940 0102.

MATHEMATICS 數學