



# Secret Codes –

## How to make them and how to break them (MATT1710)

### Introduction

Cryptography (密碼學) is about the story of code making as well as the story of code breaking. Codes have been silently integrated into everyone's daily life. Credit card numbers and Hong Kong Identity card number are two well-known examples. Encryption of information means that except for specific recipients, no other people can recognize the relevant information. Today, all communication software and e-commerce are using a lot of encryption and decryption technologies.

The talk aims to provide an introduction to cryptographic techniques. The main objective is for students to know basic algorithms for some elementary ciphers as well as their applications to fundamental security protocols. Modern cryptography algorithms utilize prime numbers and modular arithmetic extensively; indeed, which are actually a field that draws heavily upon Mathematics.

### Programme Type

Mathematics Talk ([Non Token-required](#))

### Speaker

Mr. Li Kwok Kwan (Former Vice-Principal of TWGHs Sun Hoi Directors' College, Senior Secondary School Mathematics Teacher)

### Target Participants



- P4 – P6 HKAGE student members
- Class size: **160**
- \* *First-come, first-served*

### Language



Cantonese

### Application Deadline

~~6 Aug, 2018~~  
**31 Aug, 2018**

### Schedule



|       |  |
|-------|--|
| Date  | 15 Sep 2018 (Saturday)   |
| Time  | 11:00 a.m.–12:30p.m.<br>(Please arrive at 10:45 a.m. for registration)           |
| Venue | <b>Room 105</b> <del>Room 303</del> , The Hong Kong Academy for Gifted Education |

### Enquiries



For enquiries, please contact us at 3940 0101.