

# HKU Summer Institute 2018

## High School Programmes

Course Details											
Course Code	MARTHA 2018										
Course Title	MARTHA 數藝同行										
Credit Bearing Programme	N/A										
Course Description	MARTHA, or “Math – Art – Abreast”, means “Mathematics and Art <i>do something</i> Abreast”. This program is for senior secondary school students to learn how mathematics can be used in creative way to produce art and magic. By means of a wide variety of hands-on activities and in-class performance, students will learn the underlying mathematical theory to create their own beautiful art images and design their own magical show. Software such as <i>GeoGebra</i> will be used for the part on artistic design and as a means to facilitate the understanding of mathematical concepts.										
Course Outline	<p>It is a 3-day program consists of two 3-hour workshops per day. In every workshop, relevant mathematical knowledge (and coding techniques if applicable) would be introduced. Candidates (individual or grouped) would apply what they have learnt and make their own designs.</p> <p>Candidates may need to bring their laptops along to some classes.</p>										
Learning Outcomes	<p>On successful completion of this course, students should be able to:</p> <table border="1"> <thead> <tr> <th colspan="2">Course Learning Outcomes (CLO)</th> </tr> </thead> <tbody> <tr> <td>CLO 1</td> <td>explain some magic tricks using mathematical arguments</td> </tr> <tr> <td>CLO 2</td> <td>recognize the mathematical elements in some artistic designs</td> </tr> <tr> <td>CLO 3</td> <td>make use of software (e.g., GeoGebra, Scilab) for a variety of purposes</td> </tr> <tr> <td>CLO 4</td> <td>design their own artistic work and/or perform a magic show based on their mathematical knowledge learnt in the course</td> </tr> </tbody> </table>	Course Learning Outcomes (CLO)		CLO 1	explain some magic tricks using mathematical arguments	CLO 2	recognize the mathematical elements in some artistic designs	CLO 3	make use of software (e.g., GeoGebra, Scilab) for a variety of purposes	CLO 4	design their own artistic work and/or perform a magic show based on their mathematical knowledge learnt in the course
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Assessments	In-class activities and individual/group presentations/performance										
Language of Instruction	English										

Class Schedule	
Course Period	July 16 - 20, 2018
Class Day & Time	Monday, Wednesday & Friday 09:30 - 12:30 & 14:30 - 17:30
Venue	The University of Hong Kong

Application	
Pre-requisite	Form 4 or above, or Equivalent.
Remarks	<p>Students without Permanent HK Identity Cards may require visas to study in HKU. For student visa, please visit <a href="#">Here</a>.</p> <p>HKU accommodation is also available, with priority given to students not residing in Hong Kong. For details, please visit <a href="#">Here</a>.</p>
Online Application	Please visit the <a href="#">webpage of "MATHA 數藝同行"</a> for <b>Online Application</b> .
Programme Fee	HK\$3,600
Early Bird Offer	Apply before March 9, 2018: 5% Discount on course fees
Deadline for Application	<ul style="list-style-type: none"> <li>▪ Non-local Applicants: April 20, 2018</li> <li>▪ Local Applicants: May 31, 2018</li> </ul>

Enquiries
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