

TRIGONOMETRY & GEOMETRY (MATP1321)

Introduction

Do you know what the circumference of the Earth is? In fact, we can use trigonometry to calculate the circumference of the Earth. This course will investigate the proof of trigonometric identities, and introduce the importance of triangles to architecture as well as real-life application examples of trigonometry.

Programme Type / Level

Geometry and Topology Course (Level 1) ([Token-required](#))

Instructor(s)

Mr. Po Ching Fung
(Mathematics Teacher of HKICC Lee Shau Kee School of Creativity)

Pre-requisite

No special prerequisites are needed.

Target Participants



- P4 to P6 HKAGE student members
- Class size: 30

Medium of Instruction



Cantonese with Chinese handouts

Certificate



E-Certificate will be awarded to participants who have:

- ❖ Attended **AT LEAST 3** sessions AND
- ❖ Completed all the assignments with satisfactory performance

Intended Learning Outcomes



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

1. discover the properties of triangles and polygons and use trigonometric concept to find out their side lengths and angles;
2. prove Pythagoras's Theorem in different ways and apply the theorem;
3. apply trigonometric ratio to find out side lengths and angles of triangles;
4. apply Sine formula, Cosine formula and Heron's formula to find out side lengths, angles and areas of triangles;
5. solve 3D trigonometric problems;
6. construct a strong and beautiful building by using concept of geometry and trigonometry.

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 knowledge of geometry in the screening question can be enrolled in the programme.

Application Deadline

29 Apr, 2019 12:00 n.n

Application Result Release Date

10 May, 2019

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

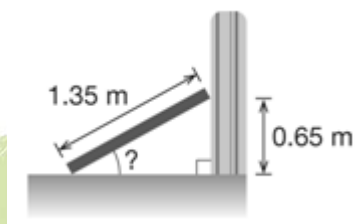
Schedule



Session	Date	Time	Venue (HKAGE)
1	15 Jun	2:00 p.m. – 5:00 p.m.	Room 303
2	22 Jun		
3	29 Jun		
4	13 Jul		

Sample Example for the Programme

一長 1.35 m 的梯子斜靠在牆邊。若梯子的頂部與地面的距離為 0.65 m，求梯子與地面所成的角，準確至三位有效數字。



Enquiries



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

MATHEMATICS

數學