








Plane Geometry (MATS2310)

Introduction	<p>Geometric figures always appear around us such as parallel and perpendicular lines on the walls of buildings, circular wheels of vehicles. In this course, properties of plane figures including triangles, rectangles, parallelograms, etc will be revised. Also, basic elements like chords, arc angles in a circle will be introduced and their geometric relations will be explored.</p> <p>This is the third programme in the Subject Core Series which is comprised of four level 2 programmes. They are namely</p> <ol style="list-style-type: none">1. Equations and Identities (MATS2220)2. Handling Sequences and Series (MATS2410)3. Plane Geometry (MATS2310)4. Quadratic Functions and Standard Conics (MATS2610) <p>MATS2220 and MATS2410 will be held in Jun and Aug 2019 respectively while MATS2610 is scheduled to be held in Dec 2019. For details, please refer to the programme flyer to be posted in due course.</p>
Programme Type / Level	Geometry and Topology Course (Level 2) (Token-required)
Instructor(s)	Mr Tse Siu On
Pre-requisites	<p>Students should have:</p> <ol style="list-style-type: none">1. Be able to perform basic algebraic manipulations such as addition and multiplication of polynomials, simplification of rational expressions, etc.;2. Have basic knowledge on some simple geometric elements such as lines, angles, triangles and polygons;3. Know some basic properties related to geometric figures such as angles at a point, angle sum of triangle, Pythagoras' Theorem, surds etc.
Target Participants	 <ul style="list-style-type: none">➤ S1 – S3 HKAGE student members➤ Class size: 50
Medium of Instruction	 Cantonese with English handouts
Certificate	 <p>E-Certificate will be awarded to participants who have:</p> <ul style="list-style-type: none">❖ Attended at least 3 sessions AND❖ Completed all assignments with satisfactory performance in the course tests
Intended Learning Outcomes	 <p>Upon completion of the programme, participants should be able to:</p> <ol style="list-style-type: none">1. Understand some geometric properties of plane figures including circles;2. Perform geometric proofs and give deductive reasons;3. Apply geometric theorems to solve related problems.
Screening	 <p>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 the basic knowledge of Geometry in the screening question can be enrolled in the programme.</p>

Application
Deadline

6 May 2019 12:00 n.n

Application Result
Release Date

17 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 Jul	2:00 p.m. – 5:00 p.m.	Room 105
2	17 Jul		
3	22 Jul		
4	24 Jul		

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

Sample Examples for the Programme

Eg. 2 In the figure, EAB, EDC, FAD and FBC are straight lines
(a) Prove that $\angle ABC = 32^\circ + x$ (b) Hence, find the value of x .

(a) $\angle FAB = x$ (*ext. \angle , cyclic quad.*)

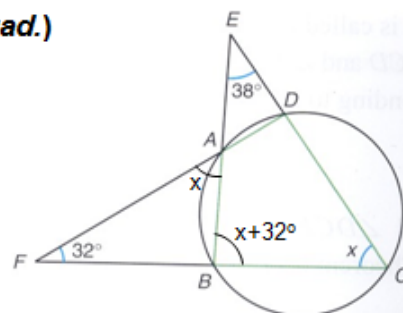
$$\begin{aligned}\angle ABC &= \angle FAB + 32^\circ \\ &= x + 32^\circ \quad (\text{ext. } \angle \text{ of } \Delta)\end{aligned}$$

(b) In ΔBCE

$$(x + 32^\circ) + x + 38^\circ = 180^\circ$$

$$2x + 70^\circ = 180^\circ$$

$$x = 55^\circ$$



Enquiries

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