Plane Geometry (MATS2310)

Introduction	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 revisited. Also, basic elements like chords, arc angles in a circle will be introduced and their geometric relations will be explored. This is the third programme in the *Subject Core Series* which is comprised of four level 2 programmes. They are namely 1. Equations and Identities (MATS2220) 2. Handling Sequences and Series (MATS2410) 3. Plane Geometry (MATS2310) 4. Quadratic Functions and Standard Conics (MATS2610)
Programme Type / Level	Geometry and Topology Course (Level 2) ([Token-required](#))
Instructor(s)	Mr Tse Siu On
Pre-requisites	Students should have: 1. the ability to perform basic algebraic manipulations such as addition and multiplication of polynomials, simplification of rational expressions, etc.; 2. basic knowledge on some simple geometric elements such as lines, angles, triangles and polygons; 3. knowledge about some basic properties related to geometric figures such as angles at a point, angle sum of triangle, Pythagoras' Theorem, surds etc.
Target Participants	➢ S1 – S3 HKAGE student members ➢ Class size: 30
Medium of Instruction	Cantonese with English handouts
Certificate	**E-Certificate** will be awarded to participants who have: ❖ Attended **at least 3 sessions AND** ❖ Completed all assignments with **satisfactory performance** in the course tests
Intended Learning Outcomes	Upon completion of the programme, participants should be able to: 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	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.
Application Deadline	**18 May 2020 12:00 n.n**
Application Result Release Date	**29 May 2020**

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

Schedule	Session	Date	Time	Venue (HKAGE)
	1	12 Aug		
	2	14 Aug	2:00 p.m. – 5:00 p.m.	Online Teaching
	3	17 Aug		
	4	19 Aug		

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 ABC = 32° +x (b)   Hence, find the value of x.

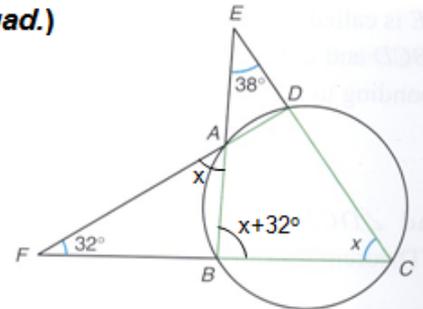(a) $\angle FAB = x$ **(ext. $\angle$, cyclic quad.)**

$\angle ABC = \angle FAB + 32°$

$= x + 32°$ **(ext. $\angle$ of Δ)**

(b)   In Δ BCE

$(x+32°)+x+38° = 180°$

$2x + 70° = 180°$

$x = 55°$

Enquiries

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