

# MATHEMATICS EXTENDED PART (M1, M2)



### APPROVAL OF UNIVERSITY

- Up to now, the extended part of mathematics (M1,M2) are approved by CUHK, HKUST and some faculties of HKU as valid elective subjects.
- <u>http://www.als.hku.hk/admission/local/one-stop-shop/entrance-req/uni-entrance-req/</u>
- <u>http://www.oafa.cuhk.edu.hk/adm/jupas/hkdse/admis</u> <u>sion-requirements/general</u>
- <u>http://join.ust.hk/local/jupas/apply\_jupas\_entry\_genera</u>
  <u>l.html</u>



### CLASSES STRUCTURE

There are currently four core groups; two groups of

Core+M1 and two groups of Core+M2. There are 23

(no more than 25) students in each group.



### TEACHING CONTENT OF M1

In summary, M1 is studying Calculus and Statistics.

The exact topics include:

- (1) Binomial Theorem
- (2) Exponential and Logarithmic Function
- (3) Differentiation and its Application
- (4) Integration and its Application
- (5) Approximation method to Definite Integrals
- (6) Conditional Probability
- (7) Probability Distributions
- (8) Binomial, Geometric, Poisson and Normal Distribution
- (9) Sample Statistic
- (10) Confidence Interval



#### TEACHING CONTENT OF M2

In summary, M2 is studying Algebra and Calculus.

The exact topics include:

- (1) Mathematical Induction
- (2) Binomial Theorem
- (3) Trigonometric Functions
- (4) Limit
- (5) Differentiation and its application
- (6) Integration and its application
- (7) Matrix and Determinants
- (8) Systems of Linear Equations
- (9) Vectors



## ENTRY REQUIREMENT

- To take M1 in F4, the requirement is ranking within 100 in F3 mathematics.
- To take M2 in F4, the requirement is ranking within 55 in F3 mathematics.
- F4 students who want to take M1 or M2 in F5, the requirements are:
  - (1) ranking in the top 33% of F4 mathematics ; and
  - (2) passing in the given qualifying test.(arranged in mid-August)