

MASTER OF ARTS IN MATHEMATICS MATHEMATICS AND PEDAGOGY

數學及教學文學碩士

One-year Full-time 一年全日制

PROGRAMME CODE: A1M085 課程編號: A1M085



EdUHK Excels in 2024 QS World University Rankings; Ranked 5th in Asia & 20th in the World in Education

> 香港教育大學於2024 QS 世界大學學科 排名 (教育領域) 全球二十、亞洲第五



PROGRAMME AIMS 課程目標

This programme aims to:

- broaden students' knowledge in Mathematics;
- help students realise how to teach Mathematics in schools from an advanced mathematical standpoint;
- expose students to different classroom environments and innovative pedagogical practices in Mathematics;
- cultivate synergy between subject knowledge and pedagogy in Mathematics; and
- foster students' critical thinking to enable them to become reflective practitioners.

本課程旨在加深及強化學員的數學知識,幫助他們從高等數學角度認識數學的教與學。同時讓學員接觸不同的 課堂環境和創新的數學教學方法,培養他們整合數學學科知識和教學法的能力,提升他們的批判性思維,使其 成為懂得自我反思的教育工作者。

ENTRANCE REQUIREMENTS 入學要求

- A recognized Bachelor's degree, preferably in subject areas other than Mathematics* 申請人須持有由認可大學頒授的本科學士學位 (非主修數學為佳)*
- Obtained in the HKALE Grade E or above in Mathematics or in HKDSE Level 4 or above in Mathematics (Compulsory Part), or an equivalent qualification in Mathematics* 具備香港高級程度會考數學科考獲 E 級以上成績或香港中學文憑試中數學 (必修部分) 考獲 4 級或以上成 績或同等學歷
- Applicant whose Bachelor's degree is obtained from a non-English speaking institution should normally fulfil one of the following minimum English proficiency requirements: 申請人如非在英語授課的院校取得學士學位,其英語水平須符合以下其中一項要求:
 - a. IELTS 6.0** 雅思水平達 6.0 或以上**; or
 - b. Grade C or above in GCSE/GCE OL English; or a TOEFL score of 80 (internet-based test)** GCSE/GCE OL 英語 C 級或以上;或托福 TOEFL 分數 80 (網絡考試)**; or
 - c. Band 6 in the Chinese Mainland's College English Test (CET) (a total score of 430 or above and the test result should be valid within two years); 中國內地的全國大學英語六級考試 成績不少於 430 分 (成績有效期為兩年); or
 - d. Other equivalent qualifications. 其他同等學歷。
 - * Applicant who had studied some Mathematics (or Mathematics related) courses in the undergraduates or former Colleges of Education may also be considered.
 - * 申請人如在修讀學士學位或前師範學院課程期間,曾修讀數學或數學相關科目,其申請亦會獲考慮。
 - ** The result of IELTS/TOEFL provided should be within two years and should be taken in test centres.
 - ** 所提供的雅思/託福成績應在兩年有效期內,且應是在考試中心參加考試取得的成績。

PROGRAMME CURRICULUM 課程大綱

The programme comprises 24 credit points (cps). Each course is worth 3 cps. Students normally take one year (Full-time) to complete the whole programme. 本課程共有24 個學分,每科目3學分。學員可在一年內修畢整個課程。

MATHEMATICAL STUDIES 數學科目

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CORE COURSES 必修科目

- Algebra and Number Theory 代數與數論
- Foundations of Geometry 基礎幾何學
- Probability and Statistics 概率與統計

ELECTIVE COURSES 選修科目

- Calculus and Mathematical Modelling 微積分與數學建模#
- Combinatorics and Graph Theory 組合學與圖論#

PEDAGOGY IN MATHEMATICS 數學教學法科目



CORE COURSES 必修科目

- Instructional Design in Mathematics 數學教學設計
- Technology for Mathematics Teaching: An Inquiry Approach 運用科技於數學教學:以探究取向爲本
- History and Pedagogy of Mathematics 數學史的教與學

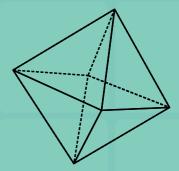
ELECTIVE COURSES 選修科目

- Mathematical Thinking and Assessment 數學思維與評估 @
- Data Mining in STEM Education STEM教育中的數據挖掘 @
- Artificial Intelligence in Education 教育中的人工智能 @

Remarks: Choose one elective course with # and one elective course with @ 同學需在以上 # 及 @ 中選擇各一門選修科目

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ADMISSION ENQUIRIES 入學查詢

€ (852) 2948 6886 admission@eduhk.hk

PROGRAMME INFORMATION &

APPLICATION 課程資訊與申請

GENERAL ENQUIRIES 一般查詢

€ (852) 2948 7824
≥ mamp@eduhk.hk



Please refer to the following website for more information: 更多資訊,請參閱以下網站: <u>https://www.eduhk.hk/mit/en/mamp</u>

Disclaimer: Every effort has been made to ensure the accuracy of the information contained in this leaflet. Changes to any aspects of the programmes may be made from time to time as due to change of circumstances and the University reserves the right to revise any information contained in this leaflet as it deems fit without prior notice. The University accepts no liability for any loss or damage arising from any use or misuse of or reliance on any information contained in this leaflet.

Any aspect of the courses and course offerings (including, without limitation, the contents of the course and the manner in which the course is taught) may be subject to change at any time at the sole discretion of the University if necessary. Without limiting the generality of the University's discretion to revise the courses and course offerings, it is envisaged that changes may be required due to factors including staffing, enrolment levels, logistical arrangements, curriculum changes, and other factors caused by change of circumstances. Tuition fees, once paid, are non-refundable.

EdUHK, has not collaborated with any agency in Mainland China or Hong Kong on admission, and does not encourage students to entrust their applications to any third-party agents and we always contact applicants directly on updates regarding the applications. You must complete and submit your own application via the EdUHK online admissions system and provide your own personal and contact details. Please refer to the official EdUHK channels, such as programme websites and the admissions system, for the required information to complete your application.