入學資格

申請人於認可大學之榮譽學位課程畢業,主修數學或相 關學科(例如:物理學、工程學、經濟學),而其榮譽 等級通常須為乙等或以上。

申請人需附上公開試和大學成績單副本,以顯示曾修讀 的數學科或其他與數學相關的科目(例如:物理學、工 程學、經濟學) 作為參考,將有助申請的處理。

有關申請詳情及所需申請文件,請瀏覽課程網址: https://www.fed.cuhk.edu.hk/higherdegree/mme/zh/

Admission requirements

Applicants should hold a Bachelor's degree in mathematics or a related area (e.g., physics, engineering, economics), preferably with second class honours level or above from a recognised

Applicants should submit copies of records of your mathematics courses or mathematics-related courses (e.g., physics, engineering, economics) in public examinations and during your undergraduate study for reference.

For application details and required supporting documents, please visit the programme's website:

https://www.fed.cuhk.edu.hk/higherdegree/mme/application/

其他有用資料

修業年限:兼讀制;常規期限2年,最長期限4年

費:港幣123,000元(分四期繳交)

開課日期:2024年9月

上課時間:每學年分上、下學期。上學期由9月開始至12月;

下學期由1月開始至4月。一般上課時間為週一至週五

晚間及週六上午。

指定研究院修課課程獎學金計劃:

_scheme.html

Other useful information

Period of study: Part-time programme; 2 years (maximum 4 years)

Tuition fee: HK\$123,000 (by 4 installments) Commencement of classes: September 2024

Class schedule: There are two terms per academic year.

Term 1 is from September to December, and Term 2 from January to April. Classes are usually offered

on weekday evenings and Saturday mornings.

https://www.ugc.edu.hk/eng/ugc/activity/targeted_postgraduate _scheme.html

申請及查詢

課程網頁:https://www.fed.cuhk.edu.hk/higherdegree/mme/zh/

網上申請: https://www.gs.cuhk.edu.hk

查詢電話:3943 6203 聯絡電郵:maed@cuhk.edu.hk 截止申請日期:2024年2月29日

Application procedures and enquiries

Programme website: https://www.fed.cuhk.edu.hk/higherdegree/mme/

Online application: https://www.gs.cuhk.edu.hk

Telephone: 3943 6203

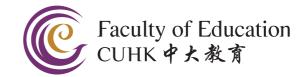
Email: maed@cuhk.edu.hk

Application deadline: 29 February 2024























數學教育

理學碩士學位課程

MASTER OF SCIENCE DEGREE PROGRAMME IN

MATHEMATICS EDUCATION









課程目的及對象

本課程為中文大學教育學院與數學系合辦的兩年制兼讀課程,屬首個由此兩個教學單位共同籌辦的項目,是本課程獨有的特色。課程對象為現職或有志成為本港中、小學數學教師的人士,旨在提升學員的學科及教學知識之餘,亦能啟動學員在數學及教育專業的發展。

Programme aims and targets

This programme is a joint venture pioneered by the Faculty of Education in association with the Department of Mathematics. The two-year part-time programme targets potential and practising mathematics teachers in local primary and secondary schools who would like to upgrade their subject and pedagogical knowledge through further studies. It is particularly designed to meet the needs of those with an interest to further develop in both the fields of mathematics and the teaching profession.

課程開設之科目例子

(a) 數學教育範疇

- 課程變革中之數學教學
- 教育改革中之數學課程與評核
- 數學教學的實踐研究
- 研習與研究報告:數學教育
- 數學教育獨立研讀

(b) 數學範疇

- 組合數學導引#
- 教師數學增益#
- 高等數學基礎
- 高等幾何
- 微分方程與線性代數[^]
- 有限數學與數學規劃@

備註:

- # 推薦給沒有微積分知識背景的學生
- ^ 適合具備單變量微積分和線性代數基礎知識的學生
- @適合具備線性代數基礎知識的學生

(c) 教育範疇

- 課程:觀點與設計
- 課程評鑑:理論與實踐
- 教學:取向、策略與應用
- 課程改革與實施
- 數碼科技在學與教上的應用
- STEAM 教育與研究專題
- 學習科學及其在教學上的啟示

(數學系尚會提供其他科目供數學根底較深的學員修讀。)

Examples of courses

(a) Mathematics Education Component

- Teaching and Learning Mathematics in the Changing Curriculum
- Mathematics Curriculum and Assessment Under Educational Reform
- Researching Action in Mathematics Teaching
- Project and Research Report: Mathematics Education
- . Independent Study in Mathematics Education

(b) Mathematics Component

- Introduction to Combinatorics#
- Mathematics Enhancement for Teachers#
- Foundation of Advanced Mathematics
- Advanced Geometry
- Differential Equation and Linear Algebra[^]
- Finite Mathematics and Mathematical Programming@

Remarks:

- # Recommended for students without a calculus background
- Suitable for students with basic knowledge in one variable calculus and linear algebra
- @Suitable for students with basic knowledge in linear algebra

(c) Education Component

- Curriculum: Perspectives and Design
- Curriculum Evaluation: Theory and Practice
- Teaching: Orientation, Strategy and Application
- Curriculum Change and Implementation
- Leveraging Digital Technologies in Learning and Teaching
- Selected Topics in STEAM Education and Research
 Learning Sciences and Instructional Implications

修讀辦法

學員須按照課程要求完成24學分,方可畢業。

- a. 數學教育範疇 (9學分)
- b. 數學範疇 (9學分)
- c. 教育範疇 (6學分<mark>)</mark>

Study scheme

Students are required to complete a total of 24 units for graduation:

- a. Mathematics Education Component (9 units)
- b. Mathematics Component (9 units)
- c. Education Component (6 units)

畢業生分享 Graduates' sharing

Huey LEI

2013 graduate, current Assistant Professor at Caritas Institute of Higher Education

The two-year programme of Master of Science in Mathematics Education offered by the Faculty of Education, The Chinese University of Hong Kong was enriching and challenging. As a student, the programme offered a wide range of courses covering the main areas of mathematics knowledge, pedagogical content knowledge and general education issues which enhanced mathematics teachers' professional practices. I not only benefited from the expertise through theories and practices, but also developed a network connecting passionate educators in mathematics education in Hong Kong.

As a teacher, the countless lectures in the evenings took away my limited time after school work. It was challenging for me to make balance between the study and the work. When approaching the due dates for submissions of assignments, I was often confused about distinguishing between my students' works and my coursework on a messy table. Although there were difficult moments, I have gained something more than I expected in this unforgettable study journey in CUHK.

黃靜

2017年畢業,現任中學數學科老師

我在香港中文大學取得學位及完成教育文憑後,一直於中學任教數學科。八年前,我希望自己能在數學教育方面中,有再進一步的突破,一直在尋找適合自己的碩士課程,通過比較不同課程間的特點,發現香港中文大學的數學教育理學碩士課程與別的大學有所不同,會與數學科一起合辦,當中包含數學、數學教育及教育三大範疇,令同學能得到更全面的教育。因此,我選擇了香港中文大學的數學教育理學碩士課程作為我繼續進修的途徑。

轉眼兩年過去,當中的收獲比我想像中豐富,課程的內容及形式多元化,有機會一試反轉教室的滋味,有不同科技程式的應用,令你可以體會最新教學模式的感受。課堂上亦會有不同的嘉賓到場分享教育心得及其他國家的教育情況,再結合教育的理論,帶領你對教學的反思。在這些課程活動裏,通過與不同同學的討論及交流,你可以認識到一班跟你志同道合的朋友,在未來的道路上互相扶持。這些寶貴的經歷及體會,相信會令同學們於教學路上有所得著。

Eugene SZE

2017 graduate, current Mathematics teacher at a secondary school

I have been on the Masters of Mathematics Education programme from 2015 to 2017. I have been, and still am, teaching at a secondary school as a mathematics teacher. Although the programme has not directly impacted my career, it has opened my mind to the more theoretical side of education. It has gotten me to think about applying different teaching styles and techniques after having read research on them in the course.

The programme has been a great challenge for me. Two night's commitment per week is no easy task, especially after an exhausting day at work. Luckily all instructors in the course were very understanding. The most challenging aspect of the programme was time management; the assignments and assessments were often within the same time span as school term assessments.

I was attracted to the course due to its nature, with components in mathematics as well as components in education. The mathematics component has certainly developed my knowledge in teaching pre-university level classes, as I found that I have not understood some concepts as well as I thought. It is strange sitting in a mathematics classroom as a student again after years of being on the other side of the room. The feeling is strongest before written exams, having the same anxiety I know my students have before sitting any exams. Overall, the programme has been an enjoyable journey and one that I would recommend to any colleagues looking for their next academic adventure.

徐斈炘

2022年畢業,現任中學數學科老師

自從於2013年大學畢業後,我曾任教初中科學科及高中物理科。 最近幾年兼教數學,發現科學跟數學雖然有相通之處,但當中的 學科教學知識 (pedagogical content knowledge) 仍有許多細節 有所不同,深感有自己在數學教育方面有很多進步的空間。

在疫情爆發初期,教學模式的急劇轉變逼使自己對教學有更多反 思。為了可以成為稱職乃至優秀的數學教師,因此決定要去進 修,增強自己數學教育能力,留意到香港中文大學有一個數學教 育理學碩士課程,其中包含數學及教育的內容能讓老師在數學能 力及教育能力雙方面都有所提升,特意在疫情之初就決定報讀。

兩年過去,當初報讀時沒有想過去到今天修畢碩士,疫情尚未完結,幸好碩士課程的課堂能夠以遙距方式進行,使大家在疫情嚴峻中亦可學習進修。在上網課期間,老師亦可以學生的角度,反思自己日常工作上網課的課堂設計及課堂活動,對平日的教學工作實在有很大裨益。

值得一提,在修讀碩士這兩年間,會有很多課堂討論、分享及研習的機會,從中可以認識到一班經歷相近、能在教育及進修路途上砥礪前行的同工,實在相當實貴。