數學教育理學碩十學位課程

Master of Science (M.Sc.) Degree Programme in Mathematics Education

課程總監 Programme Directors: 劉永發教授 Prof. LAU Wing Fat Wilfred

陳國威教授 Prof. CHAN Kwok Wai

數學教育理學碩士學位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,屬首個由數學教育學者和數學科研學者共同籌辦的項目。創辦至今,這個仍然是本課程獨有的特色。本課程充分利用到校園內兩個教學單位協作的優點,課程對象為現職或有志成為本港中、小學數學教師的人士。本課程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。

本課程由數學、教育及數學教育三個部份組成。數學方面‧學員須於數學系開設的碩士課程中選讀三科‧以確保學員學科知識的能力在大學本科程度之上。同時‧學員亦須增進課程研究及數學教育的專業知識。至於數學教育的學科‧將會集中在全球性教育改革下的學與教‧以及課程與評估方面。學員可選擇修讀「行動研究」作為課程的總結‧以引發教學專業化的知識。

This programme is a joint venture pioneered by mathematics educators and research mathematicians. It is a two-year course offered by the Faculty of Education in association with the Department of Mathematics. The programme takes full advantage of collaboration between two academic units on the same campus, and targets potential and practising mathematics teachers in Hong Kong primary and secondary schools. Its aim is to upgrade programme participants' subject content knowledge and pedagogical content knowledge. It is particularly designed to meet the needs of those with an interest in both mathematics and the teaching profession who wish to pursue further studies.

The programme comprises mathematics, education and mathematics education components. In the mathematics component, participants are required to take three Master-level courses offered by the Mathematics Department to ensure mathematics knowledge and competency that exceed the undergraduate level. Participants are equipped with professional knowledge of curriculum studies and mathematics education. Courses on mathematics education focus on mathematics teaching, learning, curricula and assessment in the context of the educational reforms taking place worldwide. Participants have the option to conclude their studies by conducting action research, thereby generating knowledge for the professionalisation of teaching.

I. 修讀辦法 Study Scheme

(1) 修課要求

學員須按照課程要求完成24學分,方可畢業。

適用於 2020-21 年度及以後入學學生

(i) 數學範疇*

9 學分

從下列科目選修3科:

第一組 – MMAT5010, 5020, 5210, 5220, 5230, 5240, 5250, 5510, 5520, 5530, 5540, 5610, 5620

第二組 — MATH5011, 5012, 5031, 5032, 5051, 5052, 5070, 6011, 6012, 6021, 6022, 6031, 6032, 6041, 6042, 6051, 6052, 6061, 6062, 6071, 6072, 6081, 6082, 6211, 6212, 6221, 6222, 6231, 6232, 6241, 6242

(ii) 教育範疇~

6學分

從下列科目修讀 2 科: PEDU6051, 6052, 6053, 6054, 6125, 6126, 6513, 6003, 6004, 6401-6406

(iii) 數學教育範疇

9 學分

MAED6161, 6162, 6163, 6164^, 6165

(PEDU6404 及 PEDU6405 皆有先修科目, 學生請參閱*學院手冊 之學科概要*。)

總計: 24 學分

- * 學員如欲修讀 MATH 第二組科目或 MMAT 第一組科目(科目不列在時間表內).必須事前取得數學系核准。
- ~ 學生最多可選擇兩科 1.5 學分科目。
- ^ 修讀 MAED6164 的學員如曾在本大學修讀數學理學士或教育文憑課程 · 可申 請彈性修讀三個修課範疇之學分 · 詳情請向教育學部查詢 。

適用於 2019-20 年度入學學生

(i) 數學範疇*

9 學分

從下列科目選修3科:

第一組 – MMAT5010, 5020, 5210, 5220, 5230, 5240, 5250, 5510, 5520, 5530, 5540, 5610, 5620

第二組 – MATH5011, 5012, 5031, 5032, 5051, 5052, 5070, 6011, 6012, 6021, 6022, 6031, 6032, 6041, 6042, 6051, 6052, 6061, 6062, 6071, 6072, 6081, 6082, 6211, 6212, 6221, 6222, 6231, 6232, 6241, 6242

(ii) 教育範疇

6學分

從下列科目修讀 2 科: PEDU6051, 6052, 6053, 6054, 6125, 6126, 6513

(iii) 數學教育範疇

9 學分

第一組^ 從下列科目修讀 6-9 學分:MAED6161, 6162, 6163, 6164, 6165

第二組 — 從下列科目修讀 0-3 學分: PEDU6003, 6004, 6401-6406

(PEDU6404 及 PEDU6405 皆有先修科目, 學生請參閱*學院手冊 之學科概要。*)

總計: 24 學分

- * 學員如欲修讀 MATH 第二組科目或 MMAT 第一組科目(科目不列在時間表內).必須事前取得數學系核准。
- ^ 修讀 MAED6164 的學員如曾在本大學修讀數學理學士或教育文憑課程 · 可申 請彈性修讀三個修課範疇之學分 · 詳情請向教育學部查詢 。

(2) 其他要求

- (a) 學員的累積平均積點必須不少於 2.0 · 方可畢業。
- (b) 學員每個學期必須達到研究院的評審要求。根據學則 13.0 中"成績低劣及退學",研究生於上一學期的累積平均績點少於 2.0,該生次學期將被列為試讀生。詳情請參閱研究院網頁:http://www.gs.cuhk.edu.hk/。

(3) 備註

學生可向教育學部及研究院院長申請豁免部份學分·並以不超逾9學分為限·條件如下:

- (a) 曾修讀之科目的程度須相等於本大學研究院課程之程度·而且與該生在本院所 修之課程科目相同或有密切關係:及
- (b) 曾修讀之科目須為該生在入學日期前七年內所修讀。

(1) Coursework Requirement

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

Applicable to students admitted in 2020-21 and thereafter

(i)	Mathematics Component*	9 units
	3 courses from any of the followings:	
	Group 1 –MMAT5010, 5020, 5210, 5220, 5230, 5240, 5250, 5510,	
	5520, 5530, 5540, 5610, 5620	
	<i>Group 2 – MATH5011, 5012, 5031, 5032, 5051, 5052, 5070, 6011,</i>	
	6012, 6021, 6022, 6031, 6032, 6041, 6042, 6051, 6052, 6061, 6062,	
	6071, 6072, 6081, 6082, 6211, 6212, 6221, 6222, 6231, 6232, 6241,	
	6242	
(ii)	Education Component [~]	6 units
	2 courses from: PEDU6051, 6052, 6053, 6054, 6125, 6126, 6513,	
	6003, 6004, 6401-6406	
(iii)	Mathematics Education Component	9 units
	MAED6161, 6162, 6163, 6164^, 6165	
	(There are pre-requisites for PEDU6404 & PEDU6405, please refer	
	to Faculty Handbook - Course Descriptions for details.)	
	Total:	24 units

- * Students intending to take MATH Group 2 courses and MMAT Group 1 courses which are not included in the timetable of the programme must obtain prior approval from the Department of Mathematics.
- Students can take a maximum of two 1.5-unit courses.
- ^ Students who are admitted to MAED6164 and were enrolled in BSc in Mathematics or PGDE programmes in CUHK may apply for flexibility in course selection among the three coursework components. Please check with the Division of Education for details.

Applicable to students admitted in 2019-20

(i)	Mathematics Component*	9 units
	3 courses from any of the followings:	
	Group 1 –MMAT5010, 5020, 5210, 5220, 5230, 5240, 5250, 5510,	
	5520, 5530, 5540, 5610, 5620	
	<i>Group 2 – MATH5011, 5012, 5031, 5032, 5051, 5052, 5070, 6011,</i>	
	6012, 6021, 6022, 6031, 6032, 6041, 6042, 6051, 6052, 6061, 6062,	
	6071, 6072, 6081, 6082, 6211, 6212, 6221, 6222, 6231, 6232, 6241,	
	6242	
(ii)	Education Component	6 units
	2 courses from: PEDU6051, 6052, 6053, 6054, 6125, 6126, 6513	
iii)	Mathematics Education Component	9 units

Group 1^ - 6-9 units from: MAED6161, 6162, 6163, 6164, 6165 Group 2 - 0-3 units from: PEDU6003, 6004, 6401-6406

(There are pre-requisites for PEDU6404 & PEDU6405, please refer to *Faculty Handbook – Course Descriptions* for details.)

Total: 24 units

* Students intending to take MATH Group 2 courses and MMAT Group 1 courses which are not included in the timetable of the programme must obtain prior approval from the Department of Mathematics.

^ Students who are admitted to MAED6164 and were enrolled in BSc in Mathematics or PGDE programmes in CUHK may apply for flexibility in course selection among the three coursework components. Please check with the Division of Education for details.

(2) Other Requirements

- (a) A student must achieve a cumulative grade point average (GPA) of at least 2.0 in order to fulfill the graduation requirement.
- (b) Students must fulfill the Term Assessment Requirement of the Graduate School. A student who obtains a cumulative grade point average (GPA) below 2.0 in the preceding term will be put on academic probation. For details, please refer to Section 13.0 "Unsatisfactory Performance and Discontinuation of Studies" of the General Regulations Governing Postgraduate Studies which can be accessed from the Graduate School Homepage: http://www.gs.cuhk.edu.hk/.

(3) Remarks

Students who have fulfilled the following conditions may apply for exemption of certain courses of up to a total of 9 units, subject to the approval of the Graduate Division of Education and the Dean of the Graduate School:

- (a) courses completed should be equivalent to the postgraduate level of this University and correspond to the courses offered in this programme; and
- (b) courses completed should be taken within seven years from date of admission.