國立臺灣師範大學數學系碩士班修業規定

Academic Regulations for Master Program Department of Mathematics, NTNU

103年10月2日103學年度第1次系務會議修正通過

Approved in the 1st Department Affairs Council meeting on October 2, 2014

104年1月15日教務處備查

Reported to Office of Academic Affairs on January 15, 2015

104年10月19日104學年度第1次系務會議修正通過

Approved in the 1st Department Affairs Council meeting on October 19, 2015

105年1月5日教務處備查

Reported to Office of Academic Affairs on January 5, 2016

108年6月20日107學年度第4次系務會議修正通過

Approved in the 4th Department Affairs Council meeting on June 20, 2019

108年7月11日教務處備查

Reported to Office of Academic Affairs on July 11, 2019

109年3月16日理學院108學年度第2次院課程委員會會議修正通過

Approved in the 2nd Curriculum Planning Committee of College of Science meeting on March 19, 2020

109年4月22日108學年度第2次教務會議修正通過

Approved in the 2nd Office of Academic Affairs meeting on April 22, 2020

110 年 1 月 20 日 109 學年度第 2 次系務會議修正通過

Approved in the 2nd Department Affairs Council meeting on January 20, 2021

110 年 4 月 28 日 109 學年度第 2 次教務會議修正通過

Approved in the 2nd Office of Academic Affairs meeting on April 28, 2021

111 年 6 月 10 日 110 學年度第 5 次系務會議修正通過

Approved in the 5th Department Affairs Council meeting on June 10, 2021

111 年 7 月 1 日教務處備查

Reported to Office of Academic Affairs on July 1, 2022

111 年 10 月 4 日 111 學年度第 1 次系務會議追認通過

Approved in the 1st Department Affairs Council meeting on October 4, 2022

壹、 本要點依據「學位授予暨研究生學位考試辦法」訂定之。

Article I This regulation is established in accordance with the "NTNU Degree Conferral and Graduate Degree Exam Regulations".

貳、 本系碩士班授予之學位名稱為理學碩士 (Master of Science, M.S.)。

Article II Degree title is conferred as Master of Science, M.S.

參、 修課規定:

Article III Course Requirements:

一、數學教育組:修畢本系碩士班課程27學分且至少應修畢分析、代數、

幾何、應用數學、統計、數學教育等六領域中之二領域,每領域至少 6學分。

Math. Education Section: Earn 27 credits from Master courses. At least 6 credits must be earned from each of two areas chosen among: Analysis, Algebra, Geometry, Applied Mathematics, Statistics, and Math. Education.

- 二、數學組、統計與計算科學組:修畢本系碩士班課程二十七學分。
 Mathematics Section and Statistics & Computational Science(C.S.) Section:
 Earn 27 credits from Master courses.
- 三、碩士班修業科目表如附表。 Refer to the table of required subjects.
- 四、修習並通過學校規定之必修學術倫理課程。
 Complete and pass the compulsory Academic Research Ethics Course within the University.

肆、碩士學位考試:

Article IV Master degree examination:

- 一、碩士研究生符合下列各項規定者得申請碩士學位考試: Master students who meet all of the following requirements may apply degree examination:
 - (一) 碩士班修業滿一年者或逕行修讀博士學位回讀碩士班者。
 Studied in a master's program for at least 1 semester; or is a direct admissions PhD program student who has returned to a master's level program.
 - (二) 完成第參條之修課規定。 Meet requirements in Article III.
 - (三) 已完成碩士論文初稿者。
 Complete a first draft of thesis.
 - (四) 於本系擔任教學助理並獲得兩次資歷證明。
 Serve as teaching assistant (TA) in Math. department and acquire 2 certificates.
- 二、符合前項申請資格者,得於每年四月二十日或十一月二十日以前向本 系申請碩士學位考試。

Those who meet the requirements mentioned above submit application documents for applying Master degree examination by 20th April or Nov.

三、碩士學位考試委員,應對修讀碩士學位學生之研究領域有專門研究, 並具有下列資格之一:

Members of the Examination Committee for a master's student shall

specialize in the student's field of study and shall meet at least one of the following qualifications:

- (一) 現任或曾任教授、副教授、助理教授。
 Presently or previously a professor, associate professor, or assistant professor.
- (二) 中央研究院院士、現任或曾任中央研究院研究員、副研究員、助研究員。

A research fellow, or is presently or previously a researcher, associate researcher, or assistant researcher of Academia Sinica.

- (三) 獲有博士學位,且在學術上著有成就。
 Holds a PhD degree and has outstanding academic achievements.
- (四) 研究領域屬於稀少性、特殊性學科或屬專業實務,且在學術或專業上著有成就。

Has been researching in a rare, specific, or practical field and has outstanding academic or professional achievements.

四、前款第(三)目及第(四)目資格之認定基準,由指導教授提出書面資料後,由本系系主任核定之。

Determination of Qualification Criteria, in accordance with clause (Ξ) & (Ξ) , is approved by the Chair based on the profile documents submitted by Thesis Advisor.

- 伍、本規定未盡事宜,悉依相關法令辦理,並自111學年度起入學新生適用。
- Article V If this regulation is anywhere incomplete, students should consult with the related rules set by the University and MoE. The regulation is applicable to the graduate students who enrolled in or after the academic year of 2022.
- 陸、本規定涉及學位授予等畢業條件之規定,經系務會議及學院相關會議通過,送教務會議審查;其餘各項規定經系務會議通過後,送教務處備查, 修正時亦同。
- Article VI This regulation will be enforced after approval by the Department Affair & Curriculum Planning Committee of College of Science meetings, and being reviewed at the Academic Affairs meetings. Any revision must follow the same procedure.

英文版僅供參考,若有歧義,以中文版為準。

These regulations were translated from the original Chinese. In the event of any discrepancies between the two versions, the Chinese always takes precedence.

附表:國立臺灣師範大學數學系碩士班修業科目表

Annexed table:

Subjects of Master students at the Department of Mathematics

壹、 修習總學分數 Graduation Credits

組別 Section	系必修學分 Required credits	系選修學分 Selective credits	畢業最低總學分 Minimum graduation credits
數學組	15 學分	12 學分	27 學分
Math.	15 credits	12 credits	27 credits
數學教育組	7學分	20 學分	27 學分
Math. Edu.	7 credits	20 credits	27 credits
統計與計算科學組	3學分	24 學分	27 學分
Statistics and C.S.	3 credits	24 credits	27 credits

貳、 系必修課程 Required Courses

一、共同必修課程,應修3學分:

For all Master students, 3 credits of required courses should be completed.

組別 Section	科目名稱 Course Name	學分 Credits
數學組 Math. 數學教育組 Math. Edu. 統計與計算科學組 Statistics & C.S	數學研究趨勢 Trend of Mathematics Research	1 學分 1 credits (得重複修習)

註:數學研究趨勢,應修3學期,各1學分。

Remark: Master students should take the course "Trend of Mathematics Research" as one of the required courses. The course should be completed in 3 semesters and is counted as 1 credit for each semester.

二、分組必修課程 Math. and Math. Edu. Required Courses:

組別 Section	科目名稱 Course Name	學分 Credits
	實變分析 Real Analysis、	
	近世代數 Modern algebra、	
數學組	複變分析 Complex Analysis、	12 學分
Math.	偏微分方程導論 PDE、	12 credits
	黎曼幾何 Riemannian Geometry、	
	組合學 Combinatorics	
數學教育組	數學教育研究專題(一)	2學分

Math. Edu.	Topics in Mathematics Education Research (I)	2 credits
	數學教育研究專題(二)	2 學分
	Topics in Mathematics Education Research (II)	2 credits

(一)數學組:至少修滿 12 學分,其中必須修畢實變分析(一)、(二) 6學分,或近世代數(一)、(二)6學分。

Math.: at least 12 credits. students need to take the course Real Analysis (I) (II) or Modern algebra (I) (II)

(二) 數學教育組:應修 4 學分。

Math. Edu.: at least 4 credits should be completed.

(三) 統計與計算科學組:無。

Statistics & C.S.: No.

參、 系選修課程 Selective Courses

一、本系碩士班課程分為分析、代數、幾何、應用數學、統計、數學教育等 六大領域。

Master courses are form six divisions: Analysis, Algebra, Geometry, Applied mathematics, Statistics, and Math. education.

- 二、各組別修習選修課程之規定 For each section:
 - (一) 數學組:依本系每學期開設之選修科目修畢至少 12 學分。 Math.: at least 12 credits should be completed.
 - (二) 數學教育組:依本系每學期開設之選修科目修畢六領域中之二領域,每領域至少6學分,但不含同領域兩科(一)之課程。
 Math. Edu.: at least 6 credits should be completed among 6 divisions.
 Two courses cataloged as (I) of one division are not allowed to take.
 - (三)統計與計算科學組:依本系每學期開設之選修科目修畢至少24 學分。

Statistics & C.S.: at least 24 credits should be completed.