

# 國立成功大學數據科學研究所碩士班學位修讀辦法

## Academic Regulations for the Master's Degree Program of the Institute of Data Science, NCKU

106.12.21 系務會議通過

Approved by the Department-Institute Affairs Council on December 21, 2017

109.6.18 系務會議通過

Approved by the Department-Institute Affairs Council on June 18, 2020

110.1.7 系務會議修正通過

Revised by the Department-Institute Affairs Council on January 7, 2021

111.1.6 系務會議修正通過

Revised by the Department-Institute Affairs Council on January 6, 2022

### 第一章 總則

#### Chapter One General Principles

第一條 為明確規範數據科學研究所碩士班學生之學位修讀，依據國立成功大學學則、研究生章程，制訂「國立成功大學數據科學研究所碩士班學位修讀辦法」（以下簡稱本辦法）。

Article 1 The Academic Regulations for the Master's Degree Program of the Institute of Data Science, NCKU (hereafter the Regulations) are established by the Institute of Data Science (hereafter the Institute), National Cheng Kung University (NCKU) to regulate the graduation requirements for its master's degree program in accordance with NCKU Academic Regulations and NCKU Graduate Program Regulations.

### 第二章 入學

#### Chapter Two Matriculation

第二條 進入本所碩士班就讀學生，應經研究所入學考試或甄試合格。

Article 2 The Institute admits students into its master's program for each academic year through the NCKU-designated master's program entrance examinations or the recommended selection examination of the Institute.

第三條 凡國內公立或已立案之私立大學或獨立學院畢業生（不含公費生及有實習規定者）其在校學業成績名次（系排名）列於該校系應屆畢業班年級全部人數前百分之三十五（含）者，得於規定時間申請參加甄試進入本所碩士班就讀。甄試項目分資料審查（50%）、面試（50%）兩部分，審查成績通過者，再通知面試。

Article 3 Applicants who are graduates of domestic government-run or government-registered

universities or colleges (excluding government-funded students and those with internship requirements) and who are ranked by academic performance among the top 35% of the graduating class in the school are eligible to apply for the recommended selection examination within the designated period for admission to the master's program of the Institute. The selection test is administered in two stages: document review (50%) and interview (50%). Those who pass the review will be notified of the interview.

第四條 凡國內公立或已立案之私立大學，或經教育部認可之外國大學畢業，得有學士學位，或合於同等學力規定者，得參加本校碩士班入學考，進入本所碩士班就讀。碩士班入學考考試科目為：統計學(含迴歸分析)及計算機概論(含資料結構)。

Article 4 Those who are graduates of domestic government-run or government-registered universities/colleges, who are bachelors of overseas universities/colleges accredited by the Ministry of Education, or who are qualified candidates with an equivalent educational level according to the relevant education regulations, will be granted admission into the master's program of the Institute after they pass the NCKU-designated master's program entrance examinations. The test subjects of the entrance examination are Statistics (including regression analysis) and Introduction to Computers (including data structures).

### 第三章 修業年限、學分及選課

#### Chapter Three Study Duration, Credit Requirements and Course Enrollment

第五條 碩士班修業年限至少一年，至多四年。

Article 5 Master's students of the Institute (hereafter master's students) shall complete the graduation requirements for the degree within the regular study duration of four years (a minimum of one year and a maximum of four years).

第六條 碩士班研究生除專題討論及論文外，至少需修滿 30 學分，其中學生選修外系所課程上限定為 5 門。延修生每學期皆應選修專題討論。  
前項外系所課程係指非統計系暨數據科學研究所碩、博班課程。且除本所表列之課程(如附件一)外，由該生之指導教授(或所長)建議學生選修。

Article 6 In addition to the credits for the Institute-designated specific-topic seminar course and the thesis, master's students are required to complete a minimum of 30 course credits, with a maximum of elective credits in five courses offered by other programs, for graduation. Deferred students shall enroll in the Institute-designated specific-topic seminar course every semester during the extended duration of study.

The courses offered by other programs, specified in the preceding paragraph, refer to none of the courses in the curriculum of the Department of Statistics and the Institute of Data Science. Students may enroll in courses offered by other programs according to the Institute-recommended course list (Attachment I) or under the instruction of the advisor or the Institute director.

第七條 碩士班研究生每學期選修講義課，以不超過 12 學分為原則；其成績特優或其他特殊原因，得經所長之同意，增加選修科目至 15 學分。

Article 7 In principle, master's students are allowed to enroll in elective lecture-courses with a maximum of 12 credits each semester. With outstanding academic performance, or under special circumstances, approved by the director, they are allowed to enroll in elective courses with a maximum of 15 credits.

第八條 必修科目：專題討論(每學期必修)及論文。

Article 8 Master's students must complete two required courses: The Institute-designated specific-topic seminar course (enrolled every semester) and thesis.

第九條 必選科目：統計方法、資料科學、最佳化方法、機器學習、資料分析實務，合計 15 學分。

Article 9 Master's students are required to complete five elective courses with a total of 15 credits, including Statistical Methods, Data Science, Optimization Methods, Machine Learning, and Big Data Analytics, Practice and Applications.

#### 第四章 論文指導

### Chapter Four Thesis Advising

第十條 本所研究生最遲應於碩一下學期六月底前確定論文指導教授，並將同意指導確認單（如附件二）繳交給助教辦理。

Article 10 Master's students shall select their thesis advisor by the end of June in the spring semester and submit a completed Consent Form for Thesis Advising for the Master's Program (Attachment II) to the responsible teaching assistant for further administration.

第十一條 本所研究生選擇指導教授，應以統計學系暨數據科學研究所專、兼任教師為原則；其中兼任教師以在統計學系暨數據科學研究所碩、博士班有授課者為限。擬選擇前項規定以外之非本系所教師為指導教授者，須有本系所專任教師一人以上共同指導。每位教師指導碩士班研究生同一年級(含統計學系暨數據科學研究所)以不超過 3 人為原則，三年內無研究成果之教師，每年原則上只能指導一位碩士班研究生，例外時，則簽請所長處理之。如有共同指導教授，則 2 人共同指導各佔 1/2，3 人共同指導各佔 1/3，餘者類推之。

Article 11 In principle, master's students should select a thesis advisor from the faculty of the Department of Statistics and the Institute of Data Science (hereafter the Department-Institute), including adjunct instructors who are assigned to teach master's and doctoral classes of the Department-Institute. Those who intend to choose an advisor from outside the Department-Institute must be co-supervised by one or more full-time faculty members of the Department-Institute. Basically each faculty member of the Department-Institute is allowed to advise a maximum of three students in the master's

class of the same year (including the Department of Statistics and the Institute of Data Science). A faculty member who has failed to achieve research results within the last three years is allowed to advise one master's student each year. Assignment of an advisor under exceptional circumstances shall be approved by the Institute director. In case of co-advising, the advisee quota for each co-advisor will be calculated proportionally.

第十二條 碩士班研究生於選定論文指導教授後，以不變更為原則。若其因特殊原因需變更者，依「國立成功大學統計學系暨數據科學研究所研究生申請更換指導教授原則」(另訂)辦理，填寫「國立成功大學統計學系暨數據科學研究所碩士班更換論文指導教授申請表」(如附件三)。新選定之指導教授，指導時間至少六個月後方可提出學位考試之申請。前項指導教授之變更，以一次為限。碩士班研究生抗拒指導有重大具體事實者，其指導教授得徵求所長同意，停止指導。被停止指導之學生，應另行選定新的指導教授。新任指導教授之指導時間至少六個月後方可提出學位考試之申請。

Article 12 In principle, master's students shall not change the thesis advisor of their choice. However, should need arise under special circumstances, a student may apply for change with a completed Application Form for Advisor Assignment Change Under the Department of Statistics and the Institute of Data Science, NCKU (Attachment III) in accordance with Principles for Change of Thesis Advisor Under the Department of Statistics and the Institute of Data Science, NCKU (established in a separate text). A master's student is allowed only one application for advisor change. Those who complete their application for a change of advisor shall not apply for their degree examination until after a minimum of six months following the advisor change application.

An advisor whose advisee resists guidance with significant specific facts may seek the consent of the Chair-Director to terminate the advising relationship. Students whose advisor assignment is suspended should select a new advisor. Meanwhile, they shall not apply for their degree examination until after a minimum of six months from the date of the new assignment.

## 第五章 畢業

### Chapter Five Graduation

第十三條 碩士班研究生應在規定修業期限修滿總畢業學分數之應修課程，並完成碩士論文，得經指導教授之同意，於規定時限前提出學位考試。延修生之學位考試，得於每學期提出。

Article 13 Master's students should complete the minimum credit requirements for graduation and a master's thesis within the regular study period. Upon approval by the advisor, a student may submit an application for a degree examination by the designated deadline. Deferred students may submit an application for a degree examination every semester during the extended study duration.

第十四條 為維護學術倫理及預杜學位論文有抄襲之情事，學生申請學位考試時應先提出線上論文比對系統之比對結果報告一份，經指導教授簽名同意，方可提出學位考試申請。

Article 14 To maintain academic ethics and prevent plagiarism in theses, students should submit an originality report from the online plagiarism detection system, signed for approval by the advisor, before submission of an application for the degree examination.

第十五條 碩士班學位考試須依統計學系暨數據科學研究所研究生畢業論文審查委員聘任程序辦法組成學位考試委員會，並辦理學位考試。

Article 15 The Institute shall form a committee to administer the master's degree examination in accordance with the Regulations for Appointment of Thesis/Dissertation Review Committee Members Under the Department of Statistics and the Institute of Data Science, National Cheng Kung University.

第十六條 論文須於預定之學位考試日期前兩週提交學位考試委員審查。

Article 16 The thesis must be submitted to members of the degree examination committee for review two weeks before the scheduled examination date.

第十七條 碩士班研究生應具備下列英語能力之一方得畢業：(自 111 學年度起入學新生適用) 於畢業前必須修習並通過一門全英文教學的課程或通過以下任一項之英文檢定：

1. GEPT 全民英語能力分級檢定中高級複試以上；
2. TOEFL iBT 托福 iBT 72 分以上。
3. IELTS 雅思 國際英語測試 5.5 級以上。
4. New TOEIC 新多益測驗聽讀 785 分以上及說寫 310 分以上。
5. 或其他 B2 同等級之英語能力檢定證明。

其中全英文教學的課程包含於 34 學分之內，英文檢定可追溯至入學前 2 年內。

Article 17 Master's students are required to complete the requirement for English proficiency before graduation (applicable to students admitted in/after the 2022-23 academic year). Students should complete an English-taught course or receive one of the following certificates for English proficiency:

1. Second stage of High-Intermediate level or above on GEPT.
2. A minimum score of 72 on the TOEFL iBT test.
3. A minimum IELTS score of 5.5.
4. A minimum score of 785 in listening and reading and a minimum score of 310 in speaking and writing on the New TOEIC test
5. Other certificates for English proficiency equivalent to Level B2 on the Common European Framework of Reference (CEFR).

The credits of an English-taught course can be included in the minimum requirement of 34 credits for graduation, while a certificate for English proficiency from the aforementioned tests dated within 2 years before matriculation is also valid.

## 第六章 附則

### Chapter Six Supplementary Provisions

第十八條 碩士班入學考試成績特優，或成績特優學生甄試進入本所碩士班就讀者，得給予獎學金。其相關辦法另訂之。

Article 18 Master's students admitted with higher test scores through the NCKU master's program entrance examination, or the recommended selection examination of the Institute will be granted scholarships in accordance with the Institute regulations for student scholarships (established in a separate text).

第十九條 碩士班研究生領有獎學金者，不得在校內、外兼職。但參與一項本校內之研究計畫而為兼任助理或協同研究人員，其津貼未違反領取獎學金之限制及其他規定者，不在此限。

Article 19 Master's students who receive scholarships are not allowed to work part-time within and outside of NCKU. However, this rule does not apply to those participating as a part-time assistant or co-researcher in an NCKU research project whose allowance does not violate the restrictions or related requirements imposed on scholarship recipients.

第二十條 碩士班一年級學習成績優良，且具研究潛力，得經本系所專任助理教授以上之教師至少二人推薦，申請逕行攻讀統計學系博士學位，其實施辦法另訂之。

Article 20 Master's students who are outstanding in academic performance and research potential in the first year of the program may apply for direct admission to the doctoral program of the Department of Statistics under recommendation of at least two full-time faculty members in the position of assistant professor or above in the Department. The regulations for direct admission to the Department doctoral program will be established in a separate text.

第二十一條 本辦法未定事項，悉依學校相關規定及統計學系暨數據科學研究所其他規章處理。

Article 21 Matters that are not specified in these Regulations shall be administered in accordance with related regulations established by NCKU and the Department of Statistics and the Institute of Data Science.

第二十二條 本辦法經系(所)務會議通過後公告並實施，修正時亦同。

Article 22 These Regulations shall be approved by the Department-Institute Affairs Council before taking effect. Amendments shall be processed accordingly.

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



附件一

Attachment I

數據科學研究所建議外所課程：

A list of recommended courses, offered by other institutes, for master's students of the Institute of Data Science:

課程名稱 Course Title	開課學期 Semester	開課系所 Department/Institute
工程計算與程式設計 ENGINEERING COMPUTING AND PROGRAMMING	上 Fall	工科所 Engineering Science
高等人工智慧特論 ADVANCED ARTIFICIAL INTELLIGENCE	上 Fall	資訊所 Computer Science and Information Engineering
資料庫管理系統 DATA BASE MANAGEMENT SYSTEM	上 Fall	資訊所 Computer Science and Information Engineering
資料庫系統與實務 DATABASE MANAGEMENT SYSTEMS AND PRACTICE	上 Fall	製造所 Manufacturing Information and Systems
多核 CPU 和 GPU 計算 INTRODUCTION TO MULTI-CORE CPU AND GPU COMPUTATION	上 Fall	機械所 Mechanical Engineering
機器學習與生物資訊學 MACHINE LEARNING AND BIOINFORMATICS	上 Fall	電機所 Electrical Engineering
資料程式設計 DATA PROGRAMMING	上 Fall	物治所 Physical Therapy
高階競技程式設計 ADVANCED COMPETITIVE PROGRAMMING	下 Spring	資訊所 Computer Science and Information Engineering
圖訊識別 SPECIAL TOPICS ON PATTERN RECOGNITION	下 Spring	工科所 Engineering Science
深度學習 DEEP LEARNING	下 Spring	工科所 Engineering Science
資料庫系統 DATA-BASE SYSTEM	下 Spring	工科所 Engineering Science
高效能計算 HIGH PERFORMANCE SCIENTIFIC COMPUTING	下 Spring	應數所 Applied Mathematics
科學計算 SCIENTIFIC COMPUTING	下 Spring	應數所 Applied Mathematics

附件二

Attachment II

國立成功大學統計學系暨數據科學研究所碩士班

同意指導確認單

Consent Form for Thesis Advising for the Master's Program

Under the Department of Statistics and the Institute of Data Science, NCKU

學生姓名／學號：\_\_\_\_\_

Name of Student/Student No.: \_\_\_\_\_

指導教授（親簽）：\_\_\_\_\_

Signature of Advisor: \_\_\_\_\_

共同指導教授 1(親簽)：\_\_\_\_\_

Signature of First Co-Advisor: \_\_\_\_\_

共同指導教授 2(親簽)：\_\_\_\_\_

Signature of Second Co-Advisor: \_\_\_\_\_

日期：\_\_\_\_年\_\_\_\_月\_\_\_\_日

Date: \_\_\_\_ (yyyy) \_\_\_\_ (mm) \_\_\_\_ (dd)

主任核章：\_\_\_\_\_

Signature of Director: \_\_\_\_\_

承辦人：\_\_\_\_\_

Responsible Staffer: \_\_\_\_\_

附件三

Attachment III

國立成功大學統計學系暨數據科學研究所碩士班  
更換論文指導教授申請表

Application Form for Change of Advisor Assignment for the Master's Program  
Under the Department of Statistics and the Institute of Data Science, NCKU

學生姓名／學號： \_\_\_\_\_  
Name of Student/Student No.: \_\_\_\_\_

原選定指導教授（親簽）： \_\_\_\_\_  
Signature of Formerly Assigned Advisor: \_\_\_\_\_

擬更換指導教授（親簽）： \_\_\_\_\_  
Signature of Newly Assigned Advisor: \_\_\_\_\_

上述變更，經雙方指導教授同意，敬請同意變更。  
I hereby apply for approval from the Department-Institute for the change of advisor assignment with a completed application form approved by former and new advisors.

日期： \_\_\_\_年 \_\_\_\_月 \_\_\_\_日  
Date: \_\_\_\_\_(yyyy)\_\_\_\_\_(mm)\_\_\_\_\_(dd)

主任核章： \_\_\_\_\_  
Signature of Director: \_\_\_\_\_

承辦人： \_\_\_\_\_  
Responsible Staffer: \_\_\_\_\_