

國立成功大學統計學系博士班學位修讀辦法

Academic Regulations for the Ph.D. Program of the Department of Statistics National Cheng Kung University

87.6.18 系務會議通過

Approved by the Department Affairs Council on June 18, 1998

111.1.6 系務會議修正通過

Amended by the Department Affair Council on January 6, 2022

第一章 總則

Chapter One: General Principles

第一條 第一條為明確規範本系博士班學生之學位修讀，依據國立成功大學學則、研究生章程、碩、博士班研究生招生辦法及博士學位候選人資格考試實施要點，訂定「國立成功大學統計學系博士班學位修讀辦法」(以下簡稱本辦法)

Article 1 The Academic Regulations for the Ph.D. Program of the Department of Statistics, National Cheng Kung University (hereafter, the Regulations) are established by the Department of Statistics (hereafter, the Department) to regulate the academic requirements for its doctoral program in accordance with NCKU Academic Regulations, NCKU Graduate Program Regulations, NCKU Regulations for Graduate Program Admissions, and NCKU Directions for the Administration of the Ph.D. Qualifying Examination.

第二章 入學

Chapter Two: Admissions

第二條 本系應成立博士班研究生入學招生小組，負責筆試、審查及口試之命題及評分事宜。小組由系主任遴選本系專任助理教授以上教師至少五人組成之，並由系主任擔任召集人。

Article 2 The Department shall form an admission committee for the recruitment of doctoral students to administer examination affairs regarding written tests, reviews, and interviews. The committee is composed of at least five full-time faculty members appointed from assistant professors or above by the Department chair, who serves as the convener.

第三條 入學成績評定方式：

- 一、審查：佔總成績 50%。(含求學計畫書、具體研究成果及二封以上之推薦函)
- 二、面試：佔總成績 50%。

Article 3 Grading criteria for admission examinations:

1. Review: 50% of the final grade (study plan, concrete research achievements, and a minimum of two reference letters).
2. Interview: 50% of the final grade

第三章 修業年限、學分、選課

Chapter Three Study Duration, Credit Requirement, and Course Enrollment

第四條 博士班研究生修業期限以二至七年為限。在職生得延長一年為限。其餘按本校研究生章程相關規定辦理。

Article 4 Ph.D. students shall complete the graduation requirements for the degree within the regular study duration of seven years (a minimum of two years and a maximum of seven years). In-service Ph.D. students are allowed to extend their study for a maximum of one year from the regular seven-year duration. Other matters regarding study duration shall be administered in accordance with NCKU Graduate Program Regulations.

第五條 博士班畢業學分為 34 學分，除必修之專討 4 學分外，選修至少修滿 30 學分。上述學分不含統計專題研究 6 學分及論文 12 學分。選修學分至多 15 學分得選修本校其他所之重點課程，但修課前需經指導教授或系主任同意。其餘按本校研究生章程相關規定辦理。

Article 5 Ph.D. Students are required to complete a minimum of 34 course credits for graduation, including 4 credits from department-required specific-topic seminar courses and a minimum of 30 credits from elective courses. The minimum credit requirements for graduation excludes the 6 credits designed for specific-topic seminar courses in statistics and the 12 credits designed for the dissertation. With the prior consent of the dissertation advisor or the Department chair, Ph.D. students are allowed to complete a maximum of 15 credits on major courses offered by other programs at NCKU, which can count into the minimum credit requirements for graduation. Other matters regarding credit requirements shall be administered in accordance with NCKU Graduate Program Regulations.

第六條 博士班研究生在修業期間每學期均應選修「專題討論」課程。

Article 6 Ph.D. students shall enroll in the department-designated Specific-Topic Seminar Course every semester during years of study.

第四章 資格檢定考試

Chapter 4 Ph.D. Qualifying Examination

第七條 資格考核採筆試與審查兩種形式。博士生原則上均採筆試資格考，除有下列情形者，可申請選擇審查資格考：

- 一、入學前之學術背景為非統計/數學相關專業。
- 二、外籍生。
- 三、其他。

申請選擇審查資格考者，應於入學後 1 學年內完成申請(申請表見附表)。

Article 7 The Ph.D. qualifying examination shall be conducted in the forms of written tests and document reviews. In general, all doctoral students should take the written tests for the Ph.D. qualifying examination, except those who may apply for document reviews under the following circumstances:

1. Students admitted into the program with a non-statistics or non-mathematics educational background.
2. International students.
3. Others.

Those who apply for document reviews for the Ph.D. qualifying examination shall submit and complete the application within the first academic year after matriculation (please refer to the attached application form).

第八條 筆試資格考相關規定：

- 一、需修習並通過「高等統計推論(一)(二)」及「高等機率論」。
- 二、入學後 4 年內(不含休學年限)需通過紙筆考試，考試科目為「高等統計推論」與「線性模型」二科。第一次參加資格考需 2 科全考，在職生可分次考試，不通過之科目得重考一次(重考申

請單見附表)。

- 三、筆試資格考應設筆試資格考委員會，置委員 2 至 4 人，由系主任聘請本系助理教授以上專任教師擔任，由系主任擔任召集人。委員會負責命題、考試與評分等業務，並開會決定及格認定標準。
- 四、評分方式：各科評分等第分為通過與不通過。筆試通過評分係根據考試科目之分數決定。資格考第二次筆試不通過，成績在通過邊緣之科目，由筆試資格考委員會決定口試方式及時間。若口試後成績仍在通過邊緣且情況特殊者，由筆試資格考委員會決定檢定方式。申請參加資格考試，但又放棄者視為參加考試次數乙次。若有不可抗拒之因素者，由筆試資格考委員會認定。其餘按本校博士學位候選人資格考試實施要點辦理之。
- 五、入學後 4 年內(不含休學年限)完成上述規定，才視為通過資格考並可提出博士候選人資格審查(博士候選人資格審查結果通知單如附表)，在職生得延長 1 年，其餘按本校博士學位候選人資格考試實施要點辦理。

Article 8 Written tests for the Ph.D. qualifying examination

1. Students must complete the courses of Advanced Statistics Inference (1)(2) and Advanced Probability Theory before they apply for written tests for the Ph.D. qualifying examination.
2. Students must complete the written tests within 4 years after matriculation (excluding the period of study suspension). The designated test subjects are Advanced Statistics Inference and Linear Model. A student shall take the tests of the two subjects as a first-time applicant for the Ph.D. qualifying examination, and an in-service student can take the written tests scheduled for several times. Those who fail a subject test may retake the test (please refer to the attached application from).
3. The Department shall form a written-test Ph.D. qualifying examination committee with 2 to 4 full-time faculty members appointed from assistant professors or above by the Department chair, who serves as the convener. The major responsibilities of the committee are to develop the question paper, administer the tests, grade the tests, and establish the passing standards.

4. Grading system: Each subject test is graded on a pass/fail basis. A grade of pass shall be based on the score of each subject test. If a student fails a written subject test for a second time with a close-to-passing score, the committee will schedule an oral test on the subject. Should the student receive a close-to-passing score for the oral test under special circumstances, the committee will determine to administer a certification scheme. A student who cancels the written tests for the Ph.D. qualifying exam upon completion of an application will be counted as one fail in the examination. In case of irresistible conditions, the committee will determine whether it should be calculated in the allowed number of applications. Other matters in this regard shall be administered in accordance with NCKU Directions for the Administration of the Ph.D. Qualifying Examination.
5. Students shall complete the requirements specified in the preceding four subparagraphs within 4 years after matriculation (excluding the period of study suspension) before they are considered to have passed the Ph.D. qualifying examination and entitled to submit a doctoral candidate qualification review for approval (a notice of the doctoral candidate qualification review result is attached). In-service students may complete the requirements for the Ph.D. qualifying examination within five years after matriculation. Other matters in this regard shall be administered in accordance with NCKU Directions for the Administration of the Ph.D. Qualifying Examination.

第九條

審查資格考相關規定：

- 一、博士生在確認選擇審查資格考形式後，須同時選定論文指導教授。
- 二、需修習並通過「數理統計(一)(二)」及「統計方法」。
- 三、入學後3年內(不含休學年限)必須提出研究計畫口試並組成資格考審查委員會。委員會委員組成五人以上，系主任為召集人，除指導教授為當然委員外，須另含統計系或數據所內教師至少二名。口試內容為學生提出之計畫書內容，計畫書主題可不必與其博士論文相同，唯計畫書內容須經指導教授同意後才送出至系辦。計畫書格式可參考科技部研究計畫書之架構。除此之外亦需對於數理統計相關內容進行適當口試。不通過者得

於次年重新參加考試。

- 四、入學後 4 年內(不含休學年限)完成上述規定，才視為通過資格考並可提出博士候選人資格審查(博士候選人資格審查結果通知單如附表)，在職生得延長 1 年，其餘按本校博士學位候選人資格考試實施要點辦理。

Article 9 Document reviews for the Ph.D. qualifying examination

1. Ph.D. students who apply for document reviews for the Ph.D. qualifying examination must select a dissertation advisor upon confirmation of the application.
2. Students must complete the courses of Mathematical Statistics (1)(2) and Statistical Methods before they apply for document reviews for the Ph.D. qualifying examination.
3. Within 3 years after matriculation (excluding the period of study suspension), students must apply for an oral examination of their research proposal while the Department must form a qualification review committee. The committee consists of more than five members, including the Department chair as the convener, the dissertation advisor as an ex officio member, and at least two professors from the Department of Statistics or the Institute of Data Science. The oral examination is based on the content of the proposal submitted by the student. The subject of the proposal does not have to be the same as that of the doctoral dissertation, but the proposal must be approved by the advisor before submission to the Department office. Applicants may refer to the structure of the research projects designated by the Ministry of Science and Technology for the format of the proposal. Meanwhile, the applicant shall be evaluated on mathematical statistics-related content in the oral examination. Those who fail the oral examination may retake the exam the following year.
4. Students shall complete the requirements specified in the preceding three subparagraphs within 4 years after matriculation (excluding the period of study suspension) before they are considered to have passed the Ph.D. qualifying examination and entitled to submit a doctoral candidate qualification review for approval (please refer to an attached notice of the doctoral candidate qualification review result). In-service students may

complete the requirements for the Ph.D. qualifying examination within five years after matriculation. Other matters in this regard shall be administered in accordance with NCKU Directions for the Administration of the Ph.D. Qualifying Examination.

第十條 筆試資格考應於每學年第一學期開學前一週完成並公告結果。欲參加資格考者，應於考試的前一學期結束前二週向系上提出申請。

Article 10 The written tests for the Ph.D. qualifying examination shall be completed with results announced one week before the first semester of each school year. Students should submit an application to the Department two weeks before the end of the second semester of each academic year.

第五章 指導教授與論文指導委員會

Chapter Five Dissertation Advisor and Advisory Committee

第十一條 選擇筆試資格考者，在通過資格考後二個月內須選定指導教授；選擇審查資格考者，須於入學後 1 年內選定論文指導教授。(申請書如附表)，並由指導教授負責協調在論文研究計畫考試前組成論文指導委員會。

Article 11 Students who take the written tests for the Ph.D. qualifying examination must select a dissertation advisor within two months after completion of the Ph.D. qualifying examination; those who choose document reviews for the Ph.D. qualifying examination must select a dissertation advisor within one year after matriculation (please refer to the attached application form). The advisor is responsible for the formation of the dissertation advisory committee before an oral examination on the doctoral dissertation research proposal is scheduled.

第十二條 指導教授必須為本系專任教師，或兼任副教授以上之教師。本校外系教師僅可擔任共同指導教授。

Article 12 The advisor must be a full-time faculty member of the Department, or an adjunct associate professor or above. Professors from other departments at NCKU can only serve as co-advisors.

第十三條 指導教授及共同指導教授需由研究成果優良教師擔任（過去三年中，至少有一篇論文於統計相關 SCI 期刊上發表，每年由學術委員會提供以上資訊）。

Article 13 An advisor or co-advisor must be a professor with excellent research credentials (at least one paper published in a statistics-related SCI journal

in the past three years, according to the annual information released by the academic committee of the Department).

第十四條 博士論文研究計畫(proposal)口試由指導教授決定是否舉行。

Article 14 The advisor shall decide whether to conduct an oral examination on the doctoral dissertation research proposal.

第十五條 博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研究生申請更換指導教授原則」(另訂)辦理，並需填寫「國立成功大學統計系博士班更換論文指導教授申請書」(見附表)。博士班研究生抗拒指導有重大具體事實者，其指導教授得徵求系主任同意，停止指導。被停止指導之學生，應另行選定新的指導教授。

Article 15 In principle, Ph.D. students shall not change the dissertation advisor of their choice. However, should need arises under special circumstances, a student may apply for change with a completed NCKU Department of Statistics Application Form for Change of Dissertation Advisor (please refer to an attached application form) in accordance with NCKU Department of Statistics Principles for Change of Thesis/Dissertation Advisor Application (established in a separate text). An advisor whose advisee resists guidance with significant specific facts may seek the consent of the Department chair to terminate the advising relationship. Students whose guidance has been suspended shall select a new advisor.

第十六條 論文指導委員會須聘請 5 至 9 人，本系教師需佔二分之一以上，校(院)外委員須佔三分之一以上，並由指導教授擔任主席。

Article 16 The Dissertation Advisory Committee shall consist of 5 to 9 members, including more than half of them appointed from the Department and more than one third of them appointed from outside NCKU. The advisor shall serve as the chair of the committee.

第六章 論文準則

Chapter Six Dissertation

第十七條 博士班學生在通過資格考後仍須註冊為正式生二年，至少修習與論文相關之統計專題研究二學期，並從事博士論文研究工作。

Article 17 After passing the Ph.D. qualifying examination, Ph.D. students must register and enroll as regular students for two years to complete seminar courses in dissertation-related statistical research for at least two

semesters while engaging in doctoral dissertation research.

第十八條 研究過程應能提供學生有價值的教育經驗，特別是創造力之培養、獨立研究及獨立學習之訓練、研究方法之熟習及學者風範之塑造。

Article 18 The research process is intended to provide students with valuable educational experience, especially the cultivation of creativity, the training of independent research and learning, the familiarization of research methods, and the shaping of scholarly style.

第十九條 研究結果須具有原創性。因此，論文應能實質性地增加研究領域之基本知識或對已知事實提出創新或理想之解釋。本此理念，論文若僅將已知之原理、技術和模式應用於和前人稍微不同之狀況，雖經發表，仍應屬不理想。

Article 19 Research results must be original. Accordingly, a dissertation should substantially increase the basic knowledge of the field of study or provide innovative or ideal interpretations of known facts. Based on this concept, if a dissertation only applies the known principles, technologies and models to situations slightly different from those of the predecessors, it should be considered to be unsatisfactory even if it is published.

第二十條 研究題目與內容必須是統計領域中原創性之問題。

Article 20 Research topic and content of a dissertation must be original in the field of statistics.

第二十一條 論文中應嚴謹且明確地顯示該生對所探討問題的相關理論及方法之了解，以及對其相關應用領域之精通。

Article 21 A dissertation should rigorously and clearly demonstrate the student's understanding of the relevant theories and methods applied to the research issues, as well as his/her proficiency in related application fields.

第二十二條 博士論文之水準應顯著超出碩士論文。因此，研究應從學生主修領域深入進行，其內容並應實質展現對研究領域之精通。

Article 22 A doctoral dissertation should be distinguished by a higher standard of academic research from a master's thesis. Therefore, students should engage an in-depth research in their major field with a dissertation content that substantially demonstrates their proficiency in the research field.

第二十三條 論文應將研究結果詳實列出，且應遵守學校對論文格式之規定。

Article 23 A dissertation should present the research results in detail in accordance with the format of paper writing designated by NCKU.

第七章 畢業

Chapter Seven Graduation

第二十四條 凡合於本校研究生章程第十四條及本辦法者准予提出學位考試申請。學位資格審查應備資料及申請表請參考附表。

Article 24 Students who meet the requirements specified in Article 14 of NCKU Graduation Program Regulations and these Regulations are allowed to apply for degree examination. Please refer to the application forms required for degree examination and qualification review (please refer to an attached application form).

第二十五條 博士生申請學位考試前需有發表(含已接受)於 SCI 或 Scopus (有同儕審查)論文點數至少一點，其點數計算方式為：

一、期刊論文之點數為 1.0。

二、研討會論文(proceeding)之點數為 0.5。

上述論文發表必須以學生為第一作者或通訊作者。同一篇論文若學生作者多於一人時，只可作為其中一人之畢業論文（發表之論文指進入本所博士班後所發表者）。

Article 25 Ph.D. students shall receive a minimum of one point for papers published (or accepted) in SCI or Scopus (with a peer review system) before applying for the degree examination. The points awarded for paper publication are calculated as follows:

1. 1.0 for papers published in journals.
2. 0.5 for papers published in conference proceedings.

The aforementioned papers must be published with the student as the first author or corresponding author. A paper authored by more than one student can only be used as the dissertation for graduation by one student (papers defined herein refer to those published by students after matriculation into the doctoral program of the Department).

第二十六條 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 26 To maintain academic ethics and prevent plagiarism in dissertations, 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.

第二十七條 博士生須具備下列英語能力之一方得畢業：(自 111 學年度起入學新生開始實施)

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、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 27 Ph.D. Students are required to complete the requirement for English proficiency before graduation (applicable to students admitted in/after the 2021-2022 academic year).

They should complete an English-taught course or receive one of the following certificates for English proficiency:

1. A certificate 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.

第二十八條 本所博士班之學位考試應組成博士學位考試委員會辦理。委員會之組成及委員資格須依照國立成功大學研究生學位考試細則第四條之規定，並由論文指導委員會之委員擔任為原則。

Article 28 A committee shall be formed to administer the doctoral degree examination of the Department in accordance with Article 4 of NCKU Enforcement Rules for Doctoral and Master's Degree Examinations. In principle, members of the Dissertation Advisory Committee shall sit on the Doctoral Degree Examination Committee.

第二十九條 博士學位考試委員會不得由指導教授擔任主席。

Article 29 The Doctoral Degree Examination Committee shall not be chaired by the advisor of the candidate.

第三十條 博士學位考試委員會之委員本系教師需佔二分之一以上。

Article 30 The Doctoral Degree Examination Committee shall be formed with more than half of the members appointed from the Department.

第八章 附則

Chapter Eight Supplementary Provisions

第三十一條 本辦法經系務會議通過後實行，修正時亦同。

Article 31 These Regulations shall be approved by the Department Affairs Council before taking effect. Amendments shall be processed accordingly.

第三十二條 本修訂辦法自 111 學年度起入學之新生適用。

Article 32 These Regulations shall be applicable to students admitted into the program in and after 2022.

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