

國立交通大學生物資訊及系統生物研究所博士班研究生入學與修讀辦法

Regulations for the Enrollment and Completion of the PhD Program of the Institute of Bioinformatics and Systems Biology at National Chiao Tung University

92年4月1日系務會議制訂 94年3月22日系所務會議修訂 95年5月9日系所務會議修訂
96年4月03日系所務會議修訂 96年8月22日所務會議修訂 97年4月15日所務會議修訂
98年4月14日系所務會議修訂 99年4月13日所務會議修訂 100年3月1日所務會議修訂
101年3月29日所務會議修訂 103年4月15日所務會議修訂 107年3月26日所務會議修訂
107年4月2日所務會議修訂 107年4月12日院課程委員會會議修訂

Stipulated in the Meeting of Department Affairs on Apr. 1, 2003

Amended in the Meeting of Department and Institutes Affairs on Mar. 22, 2005

Amended in the Meeting of Department and Institutes Affairs on May. 9, 2006

Amended in the Meeting of Department and Institutes Affairs on Apr. 3, 2007

Amended in the Meeting of Institutes Affairs on Aug. 22, 2007

Amended in the Meeting of Institutes Affairs on Apr. 15, 2008

Amended in the Meeting of Department and Institutes Affairs on Apr. 14, 2009

Amended in the Meeting of Institutes Affairs on Apr. 13, 2010

Amended in the Meeting of Institutes Affairs on Mar. 1, 2011

Amended in the Meeting of Institutes Affairs on Mar. 29, 2012

Amended in the Meeting of Institutes Affairs on Apr. 15, 2014

Amended in the Meeting of Institutes Affairs on Mar. 26, 2018

Amended in the Meeting of Institutes Affairs on Apr. 2, 2018

Reviewed by the Curriculum Committee of the College on Apr. 12, 2018

一、 入學方式：依本校博士班研究生招生辦法辦理。

Article 1 Admission: All matters regarding admission shall be in accordance with the Regulations for the Admission to PhD Programs at National Chiao Tung University (hereafter referred to as NCTU or the University).

1. 招生考試：依本校博士班研究生招生辦法辦理。

1.1 Admission examination: All matters regarding admission examinations shall be in accordance with the Regulations for the Admission to PhD Programs at NCTU.

2. 逕讀博士學位：依本校學生逕修讀博士學位作業規定辦理。

1.2 Direct admission to the PhD program: All matters regarding direct admission to the PhD program shall be in accordance with the Regulations for the Operations of Direct Admission to the PhD Programs at NCTU.

二、 選指導教授準則：

Article 2 Principles on thesis advisor selection:

1. 每位教師收取最多人數，每年由系所務聯席會議訂定。
 - 2.1 Every academic year, the joint Meeting of Department and Institutes Affairs of the Department of Biological Science and Technology (hereafter referred to as the Department), the Institute of Bioinformatics and Systems Biology (hereafter referred to as the IBSB) and the Institute of Molecular Medicine and Biological Engineering (hereafter referred to as the IMB) determines the maximum number of students supervised by each faculty member.
2. 入學後第一學年結束前必須選定指導教授（須具本院專任助理教授以上之資格）。逾期未選定指導教授者由所長暫代之。
 - 2.2 The selection of a thesis advisor (who must be a faculty member of the College and whose academic rank has to be assistant professor or higher) shall be completed before the end of the students' first academic year after enrollment. The Director of the IBSB will temporarily serve as the deputy advisor for those students who are overdue for choosing thesis advisors.
3. 研究生或指導教授任何一方，因故欲取消關係，施行細則如下，並追溯適用本所在學學生：
 - 2.3 If a PhD student or a thesis advisor intends to terminate the advisory relationship for any reason, the termination should follow the enforcement rules as below. The enforcement rules shall apply to all enrolled graduate students of the IBSB.
 - (1) 研究生於就讀期間，如擬更換論文指導教授，應以書面文件向本系所務聯席會議提出，並於通知原指導教授後生效，無須經原指導教授同意。
 - 2.3.(1) If a PhD student decides to change his or her thesis advisor during the period of his or her study, he or she should apply in written documents to the Joint Meeting of Institute Affairs of the IBSB. His or her decision becomes effective after the IBSB notifies this original thesis advisor. Consent of this original thesis advisor is not required.
 - (2) 指導教授欲終止指導關係，應以書面文件向本系所務聯席會議提出申請，審查結果由本系所務聯席會議通知研究生。終止指導關係後，本所得協助研究生另覓指導教授。
 - 2.3.(2) If a thesis advisor decides to terminate the advisor-student relationship with any of his or her advisees, he or she should apply in written documents to the Joint Meeting of Institute Affairs of the IBSB. The advisee should be informed of the review decisions by the Joint Meeting of Institute Affairs of the IBSB. After the termination of the advisor-student relationship, the IBSB may provide assistance to the PhD student to select a new advisor.
 - (3) 研究生依本準則申請更換指導教授時，在原指導教授提供原始構想、概念或受指導下所獲得之研究成果，皆不可公開發表或作為學位論文。但經原指導教授書面同意者不在此限。
 - 2.3.(3) When a PhD student changes his or her thesis advisor in accordance with the aforementioned Guidelines (section 2.3), he or she shall not publish the research results based on the original ideas, original concepts, and advisory guidance provided

by the original advisor in question, neither shall the student use those research results for his or her own dissertation. However, student who obtains the written consent of the original advisor may be exempted from the prohibition.

(4) 未盡事宜，悉依國立交通大學論文指導教授與研究生互動準則辦理之。

2.3.(4) Implementation details not specified herein must all be subject to the “Guidelines for the Interaction Between Thesis Advisors and Graduate Students of NCTU.”

三、 修業年限：一般生為二至七年；在職生為二至八年。

Article 3 The duration of study: Two to seven years for full-time PhD students, and two to eight years for part-time PhD students.

四、 博士班必修課程：

Article 4 Required courses for the PhD program:

1. 專題演講（需修滿 4 學分）
2. 博士班書報討論（需修滿 2 學分）
3. 論文研究（需修滿 2 學分）
4. 生物序列分析與高通量技術、結構生物資訊、生物機器學習、統計熱力學(四門選二門)
 - 4.1 Departmental Seminar (4 credits required)
 - 4.2 Special Topics Seminar (2 credits required)
 - 4.3 Thesis in the Biological Science and Technology (2 credits required)
 - 4.4 Sequencing Technology and High-throughput Data Analysis; Structural Bioinformatics; Machine Learning in Computational Biology; Statistical Thermodynamics (choose two courses out of the four).

五、 課程、學分：

Article 5 Requirements for the curriculum and credits:

1. 在規定修業年限內需修滿 15 學分（不含論文研究及專題演講），其中本院課程不得少於 9 學分（即本院以外各系所學分不得多於 6 學分）；逕行修讀博士學位者至少應修滿 30 學分（含碩士班所修課程學分，不含碩博班論文研究及專題演講），其中本院課程不得少於 24 學分。大學直升博士學位者，應至少修滿 30 學分，其中本院課程不得少於 24 學分（不含論文研究及專題演講）。
- 5.1 A PhD student shall acquire 15 credits, not including Thesis in the Biological Science and Technology and Departmental Seminar, within the duration of study. These 15 credits shall contain at least 9 credits from the courses of the College of Biological Science and Technology at NCTU (the number of credits acquired from the departments or institutes that are not in the College of Biological Science and Technology at NCTU shall not exceed 6). PhD students who are enrolled through direct admission to the PhD program shall acquire at least 30 credits (which may include the credits earned from Master’s program, but the Thesis in the Biological Science and Technology and Departmental Seminar from Master’s and PhD programs are not included)

within the duration of study. These 30 credits must contain at least 24 credits from the courses offered by the College of Biological Science and Technology at the NCTU. Undergraduate students who are enrolled through direct admission to the PhD program shall acquire at least 30 credits within the duration of study. These 30 credits must contain at least 24 credits from the courses offered by the College of Biological Science and Technology at the NCTU (Thesis in the Biological Science and Technology and Departmental Seminar are not included).

六、抵免學分：

Article 6 Credit exemption:

1. 抵免學分依本校學生抵免學分辦法辦理，由課程委員會審定之，至多可抵免 6 學分。
- 6.1 Credit exemption should be processed according to the Regulations of Credit Exemptions of NCTU. Credit exemptions are reviewed and approved by the joint Curriculum Committee of the Department and Institutes and the Curriculum Committee of the College. At most six credits can be exempted.
2. 未盡事宜，悉依相關規定辦理。
- 6.3 Implementation details not specified herein must all be subject to related laws and regulations.

七、 博士候選人資格考核：分審查及口試

Article 7 PhD candidacy qualifying examination: review and oral defense

1. 審查：

7.1 Review:

- (1) 候選人當於考試前修滿 9 學分（含）以上之課程，其績必需在 70 分以上。
- 7.1.(1) A PhD student must have completed at least 9 credits and have scored 70 or above on all of the courses containing these 9 credits before his or her PhD candidacy qualifying examination.
- (2) 必需已通過二學期博士班書報討論。
- 7.1.(2) The PhD student must have passed Seminar for PhD Students for two semesters before his or her PhD candidacy qualifying examination.
- (3) 繳交博士論文研究計畫及初步成果之書面報告，或加上其他成為候選人值得參考之書面資料。
- 7.1.(3) The PhD student shall submit, in printed form, a research proposal for his or her PhD dissertation and a report on his or her preliminary research results. Other documents or materials that can support the candidacy of the PhD student may also be submitted.

2. 口試：

7.2 Oral defense:

- (1) 時間：一般生於第三年內完成，在職生於第五年內完成。

7.2.(1) Deadline for the oral defense: Full-time PhD students shall complete their oral defense in their third year; part-time PhD students shall complete theirs in their fifth year.

(2) 提出研究計畫及初步成果及其他書面資料

(A) 時間：考前兩週。

(B) 內容：目的、簡介、方法、成果及其他預期成果。

7.2.(2) The PhD student shall submit his or her research proposal, preliminary research results, and other supporting materials in printed form.

7.2.(2).(A) Deadline for the submission of documents: two weeks before the oral defense.

7.2.(2).(B) Content of the documents: purposes, an introduction, methods, preliminary results, and anticipated results.

(3) 先由候選人口頭報告，再由博士資格考審查委員會審查其論文研究成果是否符合博士候選人資格。

7.2.(3) The PhD student makes an oral presentation first. After the presentation, members on the Review Committee for the PhD Candidacy Qualifying Examination review the research results in the student's dissertation proposal and decide whether he or she qualifies as a PhD candidate.

(4) 與研究論文相關之課程基本內容，得於口試中提出。

7.2.(4) Basic content related to the research in the dissertation can be brought up in the oral Defense.

(5) 資格考核通過者需呈報課程委員會，未能通過者，得於一年內再補考一次。

7.2.(5) Those who pass the PhD candidacy qualifying examination shall notify the Curriculum Committee; those who fail the qualifying examination are allowed to retake the examination once within one year.

八、博士班一般生研究生在入學後四年內（休學不計入年限），未能通過博士候選人資格考核者，應予退學；在職生入學後六年內（休學不計入年限），未能通過博士候選人資格考核者，應予退學。

Article 8 Any full-time PhD student who fails to pass the PhD candidacy qualifying examination in four years after enrollment (the period of an approved temporary suspension is not included in the duration of study) shall be dis-enrolled. Any part-time PhD student who fails to pass the PhD candidacy qualifying examination in six years after enrollment (the period of an approved temporary suspension is not included in the duration of study) shall be dis-enrolled.

九、 博士候選人欲申請博士學位考試前須通過第一外國語文。下列辦法得任選一種：

Article 9 Before a PhD candidate intends to apply for a doctoral degree examination, he or she shall meet the requirement of the first foreign language competence. One of the options below must be chosen:

1. 通過系所認可相關單位舉辦之英文能力測試，包括口試及筆試，並獲頒發英文能力證明。

9.1 Passing the tests of English competence, including oral and written tests held by the

organizations recognized by the Department and the IBSB, and being awarded a certificate of English competence.

2. 修習科技英文或論文寫作或讀、寫類之英文課程達 2 學分，且成績均達 70 分以上。

9.2 Taking courses as Scientific English Writing, English Thesis Writing, or English courses regarding reading or writing for at least two credits, and reaching a score of at least 70 for any of the courses containing the two credits.

3. 托福成績達以下之一：紙筆測驗 550 分、電腦化測驗(CBT)達 213 分、網路化測驗(iBT)達 79 分。

9.3 The TOEFL score reaching one of the following: 550 for TOEFL ITP; 213 for TOEFL CBT; 79 for TOEFL iBT.

4. 多益測驗(TOEIC)成績達 750。

9.4 The TOEIC score reaching 750.

十、博士學位考試：

Article 10 Doctoral degree examination:

1. 申請人發表期刊論文需有二篇以上已被接受於有評審制度之國際性學術期刊，並應註明本所為其所屬單位，而且論文總點數需達點數 2.5 以上且至少其中有一篇論文為第一作者，其本院之指導教授為該篇共同作者。(點數依本系所期刊記點方式認定之)

10.1 PhD candidates applying for the doctoral degree examination shall have at least two papers accepted by international academic journals with peer-review systems, and these papers should indicate that the author is affiliated with the IBSB. A PhD candidate's total impact factor accumulated from these publications should exceed 2.5. The PhD candidate shall be the first author of at least one of those papers, and the candidate's advisor from the College shall be the co-author of any of those papers (the recognition of the total impact factor accumulated from publications of journal papers shall follow the impact factor recognition method of the IBSB).

2. 博士候選人申請博士學位考試時須將學位考試申請表、學位論文摘要、歷年成績單、資格考核通過日期、已發表期刊論文及第一外國語文能力證明，送交系所辦公室查驗，經所長簽核同意後始得進行博士學位考試。

10.2 When a PhD candidate applies for a doctoral degree examination, he or she shall submit his or her application form of a dissertation doctoral degree examination, abstract of the dissertation, all transcripts in school, date of passing the PhD candidacy qualifying examination, published journal papers, and certificate of competence in the first foreign language to the joint office of the Department and the IBSB for review. The PhD candidate shall proceed with the doctoral degree examination upon approval by the director of the IBSB.

3. 博士論文考試成績以論文內容及口試(及其他方式之考試)成績綜合評定，以出席

委員無記名評定分數平均決定之，評定以一次為限，以 70 分為及格。但有三分之一（含）以上委員評定不及格者，即以不及格論。不及格者，在修業年限未屆滿前，得於次學期或次學年申請重考，重考以一次為限，仍不及格者，應予退學。

10.3 The score of the doctoral degree examination is determined based on the content of the dissertation and the oral defense (and tests administered by other means, if applicable). The score is given anonymously by the Doctoral Degree Examination Committee members present and is averaged. The examination is graded only once. A minimal of 70 points is considered a pass. If at least one third of the committee members give a failing grade, then the PhD candidate fails the doctoral degree examination. Those who fail their doctoral degree examination can apply for a retake of the exam in the next semester or the next academic year within the duration of study. The examination can be retaken for only once, and if the PhD candidate fails again, he or she shall be dis-enrolled.

4. 逕行修讀博士學位研究生修業期滿，通過資格考核但未通過博士學位考試，其博士學位論文經博士學位考試委員會決定合於碩士學位標準者，得授予碩士學位。

10.4 If any graduate student who is enrolled through direct admission to the PhD program passes the PhD candidacy qualifying examination but fails the doctoral degree examination and his or her duration of study is coming to the end, a master's degree may be conferred on him or her if his or her doctoral dissertation is reviewed and considered by the PhD Examination Committee as meeting the criteria of a master's degree.

十一、本辦法未盡事宜，悉依國立交通大學碩士學位及博士學位授予作業規章及有關教育法令辦理之。

Article 11 Implementation details not specified herein must all be subject to the Regulations for Master and Doctoral Degrees Conferment of NCTU and other education-related laws and regulations.

十二、本辦法經系所務聯席會議通過後，經學院課程委員會及校課程委員會審查，再送教務會議核備後實施，修訂時亦同。

Article 12 The Regulations were approved by the Joint Meeting of Department and Institute Affairs of the Department and the IBSB, reviewed by the Curriculum Committee of the College and the Curriculum Committee of the University, and implemented after the Regulations were submitted to the Meeting of Academic Affairs of the University. The same procedure applies to any amendment of the Regulations.

十三、本修業規定翻譯為英文版本，在文義上如有爭議，以中文版本為準。

Article 13 The Chinese version of this document shall prevail in case of any discrepancy or inconsistency between Chinese version and its English translation.