## 國立交通大學分子醫學與生物工程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 Molecular Medicine and Bioengineering at National Chiao Tung University

98年4月14日系所務會議制訂 98年11月2日所務會議修訂 99年3月1日所務會議修訂 100年3月1日所務會議修訂 102年9月10日所務會議修訂第2條第3項及第9條 104年10月15日所務會議修訂第7條第1項第3款未通過 105年12月2日所務會議修訂106年1月10日院務會議全文核備 106年3月20日所務會議修訂第五條第2款106年4月12日院務會議全文核備 107年3月27日所務會議修訂全文 107年4月12院課程會審查 107年10月29院課程會審議

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

Amended in the Meeting of Institute Affairs on Nov. 2, 2009

Amended in the Meeting of Institute Affairs on Mar. 1, 2010

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

Art. 2.3 and Art. 9 amended in the Meeting of Institute Affairs on Sep. 10, 2013

Amendment of Art. 7.1.(3) not passed in the Meeting of Institute affairs on Oct. 15, 2015

Amended in the Meeting of Institute Affairs on Dec. 12, 2016 and submitted to the Meeting of College Affairs for reference on Jan. 10, 2016

Art. 5.2 amended in the Meeting of Institute Affairs on Mar. 20, 2017, and the full text submitted to the Meeting of College Affairs for reference on Apr. 12, 2017

Art. 2 and Art. 6 amended and Art. 13 added in the Meeting of Institute Affairs on Mar. XX, 2018

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

Reviewed by the Curriculum Committee of the College on Oct.. 29, 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。

- 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。
- 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,每學年由系所務聯席會議訂定。
- 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(須具本系所專任助理教授 以上之資格)。博士生通過博士候選人資格考核後,組成論文研究指導 委員會(委員由五位(含)以上學者專家組成,學者專家之資歷依本 校碩士學位及博士學位授予作業規章認定)。在所外進行論文研究者, 所外共同指導教授為當然委員。委員為無給職。論文研究指導委員會 之職責為:
- 2. The selection of a thesis advisor (who must be a faculty member of the Department, the IBSB, and the IMB 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. After passing the PhD candidacy qualifying examination, a student's Dissertation Advisory Committee will be assembled consisting at least five experts in the relevant fields (whose qualification should be in accordance with Regulations for Master and Doctoral Degrees Conferment of National Chiao Tung University). For a PhD student who conducts thesis research outside the IMB, his or her non-IMB coadvisor is an ex officio member on the Dissertation Advisory Committee. Members of a Dissertation Advisory Committees are non-paid positions. The

responsibilities of the Dissertation Advisory Committee include the following:

- (1) 協助選定論文題目,輔導課業及研究。
- To Assist a PhD student in choosing research topic for his or her dissertation, and to provide guidance to the PhD student on his or her study and research.
- (2) 每學年得召開一次會議,聽取論文研究進度,審定是否能於修業 年限內獲得博士學位。審核通過之研究進度報告送課程委員會核 備。
  - (2) To convene one meeting every academic year to be briefed

by the PhD student on the progress of his or her dissertational research.
The committee shall review and determine whether the PhD student could obtain his or her PhD degree within the duration of study. The report on PhD student's research progress that is approved by the Dissertation Advisory Committee shall be submitted to the Curriculum Committee for reference.

- (3) 審定博士候選人之研究成果是否已達可撰寫論文初稿之水準。
- (3) To Review and determine whether the PhD candidate's research results are sufficient for the drafting of his or her dissertation.
- 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:
- 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 IMB.

(1) 研究生於就讀期間,如擬終止論文指導關係或更換論文指導教授,應以書面文件向本系所務聯席會議提出<u>申請</u>,並於通知原指導教授 及完成各項交接事務後生效,無須經原指導教授同意。

 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 IMB. His or her decision becomes effective after the IMB notifies the thesis advisor. Consent of the 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) If a thesis advisor decides to terminate the advisor-advisee 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 IMB. The advisee should be informed of the review decisions by the Joint Meeting of Institute Affairs of the IMB. After the termination of the advisor-advisee relationship, the IMB may provide assistance to the PhD student to select a new advisor.
- (3)研究生依本準則申請終止論文指導關係或更換論文指導教授時,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。
- (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。
- (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:一般生為二至七學年;在職生為二至八學年。

Article 3 The duration of study: Two to seven academic years for full-time PhD students, and two to eight academic 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 4 學分)
4.高等分子醫學
5.高等生物工程
1. Departmental Seminar (4 credits required)
2. Special Topics Seminar (2 credits required)
3. Thesis in the Biological Science and Technology (4 credits required)
4. Advanced Molecular Medicine

5. Advanced Bioengineering

五、課程、學分要求:

Article 5 Requirements for the curriculum and credits:

 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在規定修業年限內至少應修滿 30 學分(含專題演講與碩士班所修課程學分,但不含碩班論文研究),其中本院課程不得 少於 24 學分(不含論文研究及專題演講)。

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 Departmental Seminar and the credits earned from the Master's program, but the Thesis in the Biological Science and Technology from the Master's program is 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 NCTU (Thesis in the Biological Science and Technology at NCTU (Thesis in the Biological Science and Technology at NCTU 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辨法辦理,由課程委員會審定之。

- 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.
- 2. 可抵免學分之課程與總數,由課程委員會審定之。
- 2. The courses and credits that may be exempted, as well as the total of the credits that could be exempted, should be reviewed and approved by the Curriculum Committee.
- 3. 未盡事宜,悉依相關規定辦理。
- 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

博士資格考審查委員會應於博士班第二學年結束前組成,博士資格考審查委員 會由五位(含)以上學者專家組成,指導教授得選擇擔任審查委員,學者專家之 資歷依本校碩士學位及博士學位授予作業規章認定。(本條文朔及既往,適用分 醫所在學學生)。

The review committee for the PhD candidacy qualifying examination shall be formed before the end of the PhD student's second academic year after enrollment. The review committee for the PhD candidacy qualifying examination shall be consisted of at least five faculty and/or experts, and the advisor of the PhD student may choose to be a member on the review committee. The criteria of appointments of the scholars and experts shall follow the Regulations for Master and PhD Degrees Conferment of NCTU. This article is retrospective and applies to all enrolled students studying in the IMB.

- 1. 審查:
- 7.1 Review:
  - (1) 博士研究生當於考試前修滿9學分(含)以上之課程,其每科成 績必須在70分以上。
  - 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) 必須已通過二學期博士班書報討論。
  - (2) The PhD student must have passed Special Topics Seminar for two

semesters before his or her PhD candidacy qualifying examination.

- (3) 經指導教授同意後,繳交特定研究課程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。
- (3) The PhD student, after obtaining his or her advisor's approval, 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:一般生於第三學年內完成,在職生於第五學年內完成。
    - (1) Deadline for the oral defense: Full-time PhD students shall complete their oral defense in their third academic year; part-time PhD students shall complete theirs in their fifth academic year.
  - (2)經指導教授同意後,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。
    - (2) The PhD student, after obtaining his or her advisor's approval, shall submit his or her research proposal, preliminary research results, and other supporting materials in printed form.
      - (A) Deadline for the submission of documents: two weeks before the oral defense.
      - (B) Content of the documents: purposes, an introduction, methods, preliminary results, and anticipated results.
  - (3) 先由博士研究生口頭報告,再由博士資格考審查委員審查 其論文研究之初步結果、成果,並依所提研究計畫審定其論文研 究是否可於修業年限內完成。
  - (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 preliminary results in his or her dissertation proposal. After reviewing the student's research proposal, the committee evaluates whether the student's dissertation research could be completed within the duration of study.

- (4) 與研究論文相關之課程基本內容,學生得於口試中提出。
- (4) Basic content related to the research in the dissertation can be brought up by the PhD student in the oral defense.
- (5) 資格考核通過者需呈報課程委員會<u>核備</u>;其資格考未能通過者, 得於年限內再補考一次。
- (5) Those who pass the PhD candidacy qualifying examination shall notify the Curriculum Committee <u>for reference</u>; those who fail the qualifying examination are allowed to retake once <u>within their duration of study.</u>
- 八、博士班一般生研究生在入學後三學年內(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;在職生入學後五學年內(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 three academic 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 five academic 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

- Article 9 Before a PhD candidate intends to apply for a doctoral degree examination, he or she shall pass the following:
  - 1. 第一外國語文。下列辦法得任選一種:
  - 1 First foreign language. One of the options below must be chosen:
    - 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。
    - Passing the tests of English competence, including oral and written tests held by the organizations recognized by the Department and the IMB, 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。

- (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 higher than 70 for each of the courses.
- (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。
- (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 分。
- (4) The TOEIC score reaching 750.

十、博士學位考試:

Article 10 Doctoral degree examination:

- 1. 博士班研究生經其論文研究指導委員一致同意後,得開始撰寫論文。
- A PhD student shall begin to write his or her dissertation upon unanimous consent of all the members on his or her Dissertation Advisory Committee.
- 論文至少含有二篇已被接受於有評審制度之國際性學術期刊(SCI、 SSCI、EI 或經論文研究指導委員會與所課程委員會同意核定),並應 註明本所為其所屬單位,而且論文 SCI總影響因子,總和需達4.0以 上且至少其中一篇論文為第一作者,其本院之指導教授為該篇共同作 者。
- 2. PhD candidates applying for the doctoral degree examination shall have at least two papers accepted by international academic journals with peer-review systems (including SCI, SSCI, EI, or any journal acknowledged by a Dissertation Advisory Committee and the Curriculum Committee of the College), and these papers should indicate that the author is affiliated with the IMB. A PhD candidate's total impact factor accumulated from SCI journal publications should exceed 4.0. The PhD candidate shall be the first author of at least one of those SCI papers, and the candidate's advisor from the College shall be the co-author of any of those SCI papers.

- 博士候選人申請博士學位考試時須將其學位考試申請表、論文摘要、 歷年成績單、資格考核通過日期、已發表之論文及第一外國語文能力 證明,送交系所辦公室查驗,經所長主管簽核同意後始得提出博士學 位考試申請。
- 3. 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 papers, and certificate of competence in the first foreign language to the joint office of the Department and the IMB for review. The PhD candidate shall apply for the doctoral degree examination upon approval by the director of the IMB.
- 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。
- 4. The score of the doctoral degree examination is determined based on the content of 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 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 disenrolled.
- 2. 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。
- 5. 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、本辦法經系所務聯席會議通過後,經所屬學院課程委員會及校級課程委員會審查,再送教務會議核備後實施。修正時亦同。
- Article 11 The Regulations were approved by the Joint Meeting of Department and Institute Affairs of the Department and the IMB, 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.
- 十二、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 12 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.