

國立中央大學

跨領域神經科學國際研究生博士學位學程修業辦法

(中央研究院與中央大學認知神經科學研究所合作)

111.2.15 認知神經科學研究所課程委員會通訊會議通過

111.02.23 生醫理工學院課程委員會會議通過

第一條、學程課程規劃 (Curriculum/Course)

一、畢業學分

- (一) 持碩士學位入學者，至少應修畢 18 學分 (博士論文 12 學分另計)。
- (二) 持學士學位入學者，應修畢 34 學分 (博士論文 12 學分另計)，且須於入學一年後提出逕攻讀博學位申請。

二、課程

本學程學生經授課教師同意得選擇研修合作學校開設之神經科學類課程作為選修課程。

(一) 必修科目

1. 基礎神經科學入門課程(3 學分，上學期)
2. 實驗室輪習(一學期 2 學分)——至少須實習 2 個實驗室，中研院及中央大學各一。
3. 跨領域神經科學講座 (一學期 1 學分，共 2 學期)。

(二) 必選科目

1. 神經科學專題討論(一學期 1 學分，共四學期)

(三) 選修科目

1. 國際研究生學程初級中文課(Elementary Chinese Class): 0 學分(非中文語系國家學生須修讀)。
2. 除本學程開設課程外，亦得修習其他相關系所開設之相關課程(須經指導教授同意)。
3. 非英文授課之課程上限學分 3 學分(學士入學者上限 10 學分)。

第二條、指導老師選擇 (Thesis Advisor)

每位學生須由兩位論文指導老師(中央大學及中研院各一)共同指導。助理教授以上之本學程成員且符合國立中央大學碩博士生論文指導老師資格者，皆可擔任論文指導老師。

學生於完成實驗室輪習後，須於入學第一年結束時確認指導老師。學生未確認指導老師前，由學生事務委員會輔導之，但須於一年半內確定指導老師。指導

老師授選擇及更換辦法依「本學程研究生選擇指導老師細則」辦理。

第三條、 博士候選人資格考試 (Qualify examination)

一、 申請資格

(一) 已修畢該學年規定之必修課程

1. 基礎神經科學入門課程(共 3 學分)
2. 專題討論(共 2 學分)
3. 實驗室輪習(共 2 學分)
4. Interdisciplinary Neuroscience Lecture (共 2 學分)

(二) 已選定指導教授並依照指導教授之研究方向。

二、 申請時間

(一) 學生須於博士班第一學年之 6 月 1 日前提出資格考申請，7 月 31 日前繳交論文研究計畫書(Thesis proposal)，並於 9 月 30 日前完成資格考試。

(二) 博士生如有下列因素，可再提出資格考考試申請：

1. 未能於第一學年通過資格考試者。
2. 尚未選定指導教授。
3. 第一學年之必修課程未完成。

(三) 再次申請資格考考試者，須於博士班第二學年之 10 月 1 日前提出申請，12 月 1 日前繳交論文研究計畫書(Thesis proposal)，並於次年 1 月 31 日前完成資格考試。

(四) 博士生如未能於第二學年 1 月 31 日前通過博士候選人資格考試，將取消其修業資格。

第四條、 論文進度報告 (Thesis Progress Report)

一、 通過博士資格考之博士候選人，須每年提出進度報告經論文輔導委員會通過。

二、 論文輔導委員會由三位以上校內外委員組成，委員會之召開及成員更改由指導教授推薦經教務委員會核可。

第五條、 學位考試 (Degree examination)

一、 學位考試資格審查

(一) 博士候選人須提出學位考試資格審查，並包含下列資料以供書面審查：申請書一份、指導教授推薦函共兩封、繳交完整論文初稿、其他相關學術成果。

- (二) 博士候選人須於書面審查資料提出後進行口頭報告。
- (三) 博士候選人須獲得 80%(含)以上的學位考試資格審查委員(不含指導教授，由中央大學及中央研究院各設召集人一人，由六至十人組成)同意通過，方可依規定向所內及校方申請學位考。
- (四) 學位考試資格審查未通過者，可申請重考以一次為限。重考仍未通過者，將取消其修業資格。

二、學位考申請

(一) 學位考申請規定

1. 博士候選人通過本學程學位考資格審查考試，可提出學位考申請。申請時應填申請書並檢附歷年成績單、論文、資格考核合格證明書、學位考資格審查合格證明書。經指導教授、學程負責人同意後，依本校「博士班、碩士班研究生學位考試細則」提出申請，檢附申請書、指導教授推薦證明函、學位考試委員名冊。
2. 論文須依學校規定並以英文撰寫，須於學位考試前經指導教授同意後送交學位考試委員。

(二) 學位考之口試委員

學位考試委員經指導老師推薦，由五～九位與候選人研究領域相關之成員組成，其中至少五分之一須來自於本學程外之成員。學位考之主持人由委員會成員內選出且指導教授不得擔任主持人。委員資格依本校「博士班、碩士班研究生學位考試細則」辦理。

(三) 學位考試

1. 學位考試成績以平均 70 分為及格，100 分為滿分。考試成績由全體出席考試委員所評分數平均計算之。若有三分之一(含)以上考試委員評定不滿 70 分，以不及格論。
2. 學位考試通過後，學生須依委員會建議修改論文，如無法修改，須提出說明並獲得同意。修改後之論文須經學位考委員會同意。
3. 學位考試成績不及格者，應於其修業年限屆滿前完成重考。重考以一次為限，重考成績仍不及格者，應令退學。

第六條、本辦法如有未盡事宜，依教育部及本校有關規定辦理。

第七條、本辦法經所務會議與院務會議通過，送教務會議核備後實施，修正時亦同。

參考資料：中央研究院 跨領域神經科學國際博士學位學程
修業規定

International Ph.D. Program in Interdisciplinary Neuroscience

Rules and Regulations

I. Curriculum/Course

(A) Satisfactory completion of required courses and credit hours.

At least 18 credits in formal courses including required courses and elective courses are required for students entering with a M.S. degree. Note that an additional 12 credits in formal courses is required for students who enter the program with a B.S. degree (total in 30 credits). Students holding only a B.S. degree require evaluation by the admission committee to advance into the Ph.D. program at the end of their first year of study.

(B) Courses

Students are allowed to take courses related to neuroscience as elective courses, offered in affiliated university with prior notice to the TIGP-INS office.

(1) Required Courses

Introduction to Neuroscience

(3 credits, offered every Fall)

Neuroscience Seminar 1 & Neuroscience Seminar 2

(1 credit per semester, for a total of 4 credits within the first two years)

Laboratory Rotations : One rotation should be in Academia Sinica and the other in the enrolled university.

(2 credits, at least 2 rotations in the first year):

Interdisciplinary Neuroscience Lecture

(1 credit per semester, for a total of 2 credits in the first year)

(2) Required Select Courses

(3) Elective Courses

Neuroscience thesis writing and presentation (2 credit)

Introduction of Research Techniques in Neuroscience (2 credits, every two

years)

Neural Development and Disease (3 credits, every two years)

Electrophysiology Technique (3 credits, summer)

Neuroimaging Technique (3 credits, every two years)

Clinical Perspectives of Neurological Disorders (2 credits, every two years)

Elementary Chinese Course

(0 credit; international students from non-Chinese countries are required by the TIGP program to take one-year course of Mandarin Chinese)

*Students with bachelor degree should take no more than 10 credits for courses that are not offered in English. For students holding master degree, 3 credits are the maximum.

II Thesis Advisor

Students are required to select 2 thesis advisors, one from NCU and the other from Academia Sinica. Thesis advisors can be selected from the faculty list of this program and meet the qualifications under “Guidelines for qualifications thesis advisors for doctoral and master's students at enrolled university”. Students are required to have completed at least 2 laboratory rotations for 2 months each (8 weeks in summer vacation or during semesters). Students should choose their thesis advisors before the beginning of the fall semester in their second year. Students can seek for Student Affairs Committee's advice before choosing thesis advisors.

III. Qualify examination

A. Requirements

Completion of all required courses, including Introduction to Neuroscience (3 credits), Neuroscience Seminar (2 credits), Laboratory Rotations (2 credits), and Interdisciplinary Neuroscience Lecture (2 credits) in first year.

Completion of Thesis Advisor Record.

B. Timing

(1) Students should submit the qualifying examination application with an abstract of their doctoral research project by 5:00 PM on June 1 of the first Ph.D. year.

- (2) Upon approval of the abstract, three hard copies and an electronic copy (pdf format) with turn-it-in report of the FULL thesis proposal for the Qualifying Examination Committee should be submitted to the TIGP-INS Office by July 31. Please note that there will be NO EXCEPTIONS to this deadline.
- (3) The oral presentation will take place by September 30. This will consist of 40 – 45 minutes of oral presentation by the student, followed by questions from the members of the Qualifying Examination Committee. Exam date will be arranged and announced by INS office.
- (4) Applicants may apply for re-examination due to the following reasons:
 - (a) Failure to pass the required courses in the first year
 - (b) Thesis advisors have not been chosen in the first year
 - (c) Failure to successfully complete the qualifying examination on the first try
- (5) Applicants may apply for the late examination with the consent form from thesis advisors. For late examination, the student must apply by November 1 of the second Ph.D. year, submit a thesis proposal by December 31, and finish the oral defense by the end of January.
- (6) If the student is not offered re-examination, or if the student's performance is judged unsatisfactory on the re-examination, he/she should withdraw from the TIGP-INS program.

IV. Thesis Progress Report

- (1) After successful completion of the qualifying examination, Ph.D. candidates should meet with their Thesis Advisory Committee to assess their thesis progress during September to December, every year. The "Progress Report Record form" should be returned to office by December 31 every year.
- (2) Thesis Advisory Committee consists of at least three committee members (including the thesis Advisors). Appointments and changes of the committee members are determined by the student and his/her thesis advisors.

V. Degree examination

Application

- (1) Submit the Application: Ph.D. candidates who pass the degree review examination must submit formal application for the degree examination. Please contact with TIGP-INS office to check the application timelines and the process of your enrolled university. Application form must be submitted to the university prior to exam date, and must be approved for the exam to be official.

- (2) Arrange the exam: Student must plan the exam date and the list of the Degree Examination Committee. The Committee must consist of five to nine members recommended by the thesis advisor. Qualifications for the members of the committee will be determined as per University regulations.
- (3) Complete the application: After the application is submitted, student need to send transcripts, thesis abstract, and proof of successful completion of the Qualifying Examination (from TIGP-INS office), and recommendation letter from the thesis advisors to TIGP-INS office. These documents will be sent out with your application form to the Office of Academic Affairs of the University.
- (4) The detailed application process and requirement will be determined by the regulation of universities. If your application to graduate is not approved, then you must re-apply for the next semester.

Degree Examination

- (1) After the application is approved, the examination must be held before the end of the semester.
- (2) Thesis draft should be written in English and follow the requirement format the University. Thesis must be submitted to the Degree Examination Committee after being approved by the thesis advisor prior to the Degree Examination.
- (3) The final examination score is the average of individual score given by the attending committee members, and a score of 70 out of 100 is considered “pass”. The detailed rules will be determined as per university regulations.
- (4) Candidates who fail the thesis exam can apply for a re-examination (must be within the study time of PhD). Re-examination is limited to one opportunity only. Students who fail the re-examination will withdraw from the program.