

# 國立中山大學工學院通訊工程研究所

## 碩士班研究生學位考試相關規定

112 學年度起入學新生適用

91.11.29 本所 91 學年度第 3 次所務會議通過  
92.01.07 工學院 91 學年度第 1 次院務會議修正通過  
97.05.20 本所 96 學年度第 7 次所務會議修正通過  
97.06.10 工學院 96 學年度第 3 次院務會議修正通過  
100.02.25 本所 99 學年度第 5 次聯合系所務會議修正通過  
100.03.09 工學院 99 學年度第 3 次院務會議修正通過  
100.6.17 本所 99 學年度第 9 次聯合系所務會議修正通過  
100.06.23 工學院 99 學年度第 5 次院務會議修正通過  
101.11.05 本所 101 學年度第 2 次系所學術審議委員會會議修正通過  
102.01.04 本所 101 學年度第 5 次聯合系所務會議修正通過  
102.03.05 工學院 101 學年度第 2 次院務會議修正通過  
107.12.07 本所 107 學年度第 2 次聯合系所務會議修正通過  
108.03.28 工學院 107 學年度第 3 次院務會議修正通過  
108.11.29 本所 108 學年度第 4 次聯合系所務會議修正通過  
109.05.25 工學院 108 學年度第 3 次院務會議修正通過  
110.04.30 本所 109 學年度第 9 次聯合系所務會議修正通過  
110.07.19 工學院 109 學年度第 2 次院務會議修正通過

一、依據教育部頒「學位授予法」、本校「學則」及「研究生學位考試施行細則」訂定之。

二、在學期間相關事項：

(一) 修業年限：依教育部規定一至四年(不含保留入學及休學期間)。

(二) 學分制度及修課要求：

1. 學生選課均須經指導教授認可。
2. 碩士班學生入學後於修業期限內，須修畢本所規定之最低畢業學分數，其中選修專題課程至多 6 學分，可計入最低畢業學分數內。最低畢業學分數中，至少需有兩門基礎科學核心課程（可跨組選修，各組基礎科學核心課程一覽表如附件一）。
3. 碩士班研究生因符合校內規定經推薦出國交換、研習課程或修讀雙聯學位，且出國期間達六週者，得免修習出國當學期規定應修之「書報討論」課程學分，並得溯及既往。

(三) 指導教授選派：

依電機工程學系暨通訊工程研究所「教師招收碩士班研究生暨碩士班研究生選擇與更換指導教授辦法」規定辦理。

三、碩士學位考試：

學期之定義：上學期自每年八月一日至次年一月三十一日、下學期自每年二月一日至七月三十一日。

- (一) 研究生論文製作完成後，由指導教授推薦，於學校規定期限內提出申請，始得舉行學位考試。
- (二) 學位論文需經原創性系統比對，學位考試一星期前將論文初稿及原創性比對結果送學位考試委員。
- (三) 學位考試成績不及格而其修業年限尚未屆滿者，得於次學期或次學年舉行重

考，重考以一次為限，經重考一次仍不及格者，依本校學則相關規定應令退學。

#### 四、畢業：

- (一) 學生在繳交論文終稿時要有原創性系統比對之分數證明。
- (二) 論文原創性以中山大學當年度之論文原創性比對系統為主。論文原創性比對系統排除引言、參考文獻、目錄、附件等，指標分數以不超過 12% 為原則，超過者須經指導教授簽名確認未有抄襲疑慮，始得通過。
- (三) 研究生辦理畢業離校時，需繳交論文之「原創性比對結果報告」及「研究生學位論文符合學術倫理規範聲明書」，並由指導教授親簽，經所上審核後，始得離校。

符合上述之各項規定者，得提出畢業之申請。

五、本規定經系所學程聯合系所務會議、院務會議通過，簽請校長核定後施行，修正時亦同。

附件一

## 通訊所各組核心課程一覽表

| 組別  | 核心課程 1 | 核心課程 2 | 核心課程 3   |
|-----|--------|--------|----------|
| 系統組 | 隨機過程   | 數位信號處理 | 數位通訊     |
| 電波組 | 電磁理論   | 平面天線設計 | 射頻通訊電路設計 |

\*自 97 學年度入學之新生，最低畢業學分數中，至少需有兩門基礎核心課程（可跨組選修）。

National Sun Yat-sen University  
College of Engineering  
Institute of Communications Engineering

Regulations on Candidacy and Degree Examination for **Students** in  
the Ph.D. Program

Applicable to students enrolled from the 112 academic year onwards.

Approved by the 7th Departmental Meeting on May 20, 2008 (the 96 academic year).  
Amended and approved by the 3rd College Meeting on June 10, 2008 (the 96 academic year).  
Amended and approved by the 4th Joint Departmental Meeting on November 14, 2008 (the 97 academic year).  
Amended and approved by the 2nd College Meeting on March 3, 2009 (the 97 academic year).  
Amended and approved by the 8th Joint Departmental Meeting on May 28, 2010 (the 98 academic year).  
Amended and approved by the 5th College Meeting on June 28, 2010 (the 98 academic year).  
Amended and approved by the 3rd College Meeting on March 9, 2011 (the 99 academic year).  
Amended and approved by the 9th Joint Departmental Meeting on June 17, 2011 (the 99 academic year).  
Amended and approved by the 5th College Meeting on June 23, 2011 (the 99 academic year).  
Amended and approved by the 5th Joint Departmental Meeting on December 30, 2011 (the 100 academic year).  
Amended and approved by the 3rd College Meeting on March 7, 2012 (the 100 academic year).  
Amended and approved by the 8th Joint Departmental Meeting on April 19, 2013 (the 101 academic year).  
Amended and approved by the 3rd College Meeting on May 29, 2013 (the 101 academic year).  
Amended and approved by the 2nd Joint Departmental Meeting on December 7, 2018 (the 107 academic year).  
Amended and approved by the 3rd College Meeting on March 28, 2019 (the 107 academic year).  
Amended and approved by the 2nd Joint Departmental Meeting on March 5, 2020 (the 107 academic year).  
Amended and approved by the 3rd College Meeting on May 25, 2020 (the 108 academic year).  
Amended and approved by the 9th Joint Departmental Meeting on April 30, 2021 (the 109 academic year).  
Amended and approved by the 10th Joint Departmental Meeting on May 28, 2021 (the 109 academic year).  
Amended and approved by the 2nd College Meeting on July 19, 2021 (the 109 academic year).

Article 1 The Regulations of Master's Degree Examination for Graduate Students of Master's Program, National Sun Yat-sen University (NSYSU) (hereinafter the Regulations) is formulated in accordance with *the Degree Conferral Act* of the Ministry of Education, *the Academic Regulations*, *the Enforcement Rules for Master's Degree Examination*, *Implementation Guidelines for the Qualifying Examination of Ph. D. Candidates*, and *Guidelines for Direct Admission into Ph.D. Program* of NSYSU (hereinafter the University).

Article 2 Other regulations during the studies:

1. Study period limit: The study period shall be within two to seven years, excluding retaining enrollment and suspension periods.
2. Credit system and course prerequisite:  
Advisor approval of taking courses is needed. Graduate students must complete the minimum required credits of the program before submitting a thesis proposal for review. Up to six credits of elective research courses can be counted towards the minimum graduation credits. Master's degree students enrolled in the department for one year or more apply to directly those who attempt to pursue a doctoral degree must have a minimum of forty-two credits of completed coursework (with a maximum of twenty-one credits of master's coursework, excluding Seminar Rules course).
3. Appointed by advisors:  
In the first academic year, students must select a full-time faculty of the department as their thesis advisor. If for any reason students need to change their selected advisor, they must obtain written consent from the original advisor and the new advisor before the change can be made. However, the new advisor must still be a

full-time faculty member of the department. If the advisor resigns or retires, the change must be handled through a co-advisorship.

4. English Proficiency Test for Graduation Threshold:

To enhance the English proficiency of students in the doctoral program of the department, the doctoral students enrolled after the 97 academic year are required to obtain any of the following English language proficiency certificates before applying for the doctoral thesis examination:

I. TOEIC (Test of English for International Communication) score 700 (or above) or any other language proficiency test that is equivalent to the aforementioned examination and has been recognized by the Ministry of Education. Students shall submit a copy of the certificate with a credible source which will be authenticated by the chair of the department.

II. In the doctoral program, students shall take at least three credits of English intermediate or advanced courses offered by the Department of Foreign Languages and Literature or three credits of the English Technical Writing course offered by any department in the College of Engineering. The grade for these courses must be seventy or above.

5. Foreign exchange:

Domestic students in the doctoral program of the department shall study abroad for exchange before graduation. The conditions are as follows: one of which shall be completed by the application for the degree examination.

(I) Students study in an exchange program or participate in an international research program for at least three months.

(II) Students complete a dual degree from a foreign university that the University has a partnership with.

(III) If there are other conditions that prevent students from studying abroad for a long period of time (such as being employed, being pregnant, or raising children), they must participate in international conferences abroad and present their research orally at least three times.

6. Other conditions:

If a doctoral student needs a co-advisor who doesn't work for the department, they must obtain the consent of their advisor and submit an application to the department before the thesis proposal is reviewed. The application will be reviewed and approved by the joint departmental meeting.

Article 3 Qualification examination for a doctoral degree:

1. Definition of semester: The fall semester begins on August 1 of each year and ends on January 31 of the following year. The spring semester begins on February 1 of each year and ends on July 31.

(I) Qualification Examination: Within four academic terms after admission

(excluding suspension), students must complete one of the following qualification examinations. Those who fail the examination may be withdrawn.

(II) Qualification Examination:

Examination subjects:

- A. Semiconductor Physics and Devices
- B. Control Systems
- C. Discrete Mathematics
- D. Electrical Engineering
- E. Electromagnetic Wave
- F. Digital Logic
- G. Fundamentals of Signals & Systems
- H. Communication Theory
- I. Random process
- J. Digital signal processing

The aforementioned subjects are included in the qualification examination for Group Jia (甲) to Group Geng (庚). Besides the required subjects in each Group, students need to choose two of the ten subjects listed above as elective subjects. The qualification examination will only be conducted once in a written format at the end of each semester. The exam date will be announced during the midterm exam. Students can take each subject up to twice, and they can change the subject they choose to take when they retake the exam.

2. Prerequisite: To be eligible to take the qualifying examination, students must complete two courses from their own group and one course from a different group's core curriculum, including the BS/MS Program of the Department of Electrical Engineering. The passing score standard for this examination is as follows: The grades of the three elective courses must be ranked in the top 30% of the class grades of the core courses in the same group or an A- (or above) and ranked in the top 50% of the class grades of the core courses in the other group or a B+ (or above).

If students fail to pass any subject of their group in the qualification examination, the graduation thesis points shall be increased by 50%. If students fail to pass any subject of the other group in the qualification examination, the graduation thesis publication points shall be increased by 25%. The above-mentioned increase in points is not limited to journal articles.

3. Review of proposal:

- (I) Doctoral students are required to pass the qualification assessment and obtain the approval of their advisor. They also need to submit their thesis proposal for review within five years of their admission (excluding suspension). The review will be conducted through an oral examination. If the review is passed, the student will be

granted the status of a doctoral candidate. If students fail to submit their thesis proposal for review by the deadline, they will be required to withdraw from the program, according to Article 3 of *the Implementation Guidelines for the Qualification Assessment of Doctoral Degree Candidates* of the University.

- (II) The Thesis Proposal Review Committee consists of three to six members, who are assistant professors or above from within or outside the department. The Committee is appointed by the department chair, after being nominated by the advisor.
- (III) Those who fail the thesis proposal review must revise the proposal and obtain the approval of their advisor before resubmitting it for review. If the proposal is not approved again, the student will be required to withdraw from the program, according to the Regulations of academic regulations of the University.
- (IV) If a doctoral student has passed the thesis proposal review and obtained the status of a doctoral candidate before changing advisors, they must re-pass the thesis proposal review after changing advisors.

1. Regulations regarding publications of thesis:

(1) Regulations regarding publications of thesis are as follows:

i. Requirements of graduation points:

During the study of the doctoral program, the students are required to have a minimum of 20 publication points.

b. Ranking papers and calculating publication points:

① Publication as an IEEE paper: 15 points for a long thesis; 10 points for a short thesis.

b. If the paper is not published as an IEEE paper, the thesis will be divided into three categories based on the JCR Impact Factor of the SCIE journal in which they were published:

A-level: Journals ranked in the top half of the JCR Impact Factor, each paper will be calculated as 10 points.

B-level: Journals ranked in the top three-quarters but not in the top half, each paper will be calculated as 7.5 points.

C-level: Journals ranked below the top three-quarters, each paper will be calculated as 5 points.

c. Other journals and international conference papers will be calculated as 5 points per thesis, and the publication points will be calculated for up to 1 thesis.

(3) The above are the graduation thesis publication point calculation regulations for students of the Systems Group. Points for students of the Electromagnetic Waves Group shall be calculated in accordance with *the Rules of Calculating*

*Publication Points for Doctoral Degree in EM Wave Group.*

2. Research results published before entering the doctoral program, or research results published in the doctoral program that are not related to the specialty, are not included in the calculation.
  3. The following regulations shall apply when calculating the points for the works published by the graduate student:
    - (1) When the student's affiliation is stated in the thesis, the department shall be the only affiliated unit. If the student has other affiliated units, the thesis will not be counted towards their graduation thesis publication points.
    - (2) If the first affiliated unit of a work published by a graduate student is not the department, the thesis will not be counted toward their graduation thesis publication points.
    - (3) Each work can only be used as a reference for the application of one graduate student, and the student's ranking must be the first one listed among all student authors, and the ranking of their advisor shall be the first one listed among all non-student authors in the work.
  4. If a graduate student changes advisor, then their thesis published with the original advisor shall not be included in the graduation thesis publication points unless the original advisor gives written consent to be included. If there are any disagreements, the department chair will coordinate or convene an academic review committee to discuss and determine the matter.
  5. Jointly appointed and retired professors may follow the above regulations. The order of listing for retired professors and co-advisors in the thesis should be negotiated by the parties involved based on the actual guidance circumstances.
  6. The above regulations are the minimum graduation threshold of the Ph.D. program.
2. Ph.D Degree Examination:
- (1) After a graduate student has passed the doctoral qualification exam and meets the relevant regulations for thesis publication, they must obtain the consent of their advisor and apply by the degree examination application deadline to participate in the doctoral candidate degree examination.
  - (2) The commissioner of the doctoral degree examination is nominated by the advisor in accordance with *the Implementation Bylaws for Ph. D. and Master's Degree Examination of the University*. After the approval of the department chair, the list of the members shall be submitted to the president for approval and appointment.
  - (3) The thesis must be compared with the originality comparison system. The draft of the thesis and the comparison results shall be sent to the degree examination committee one week before the degree examination.
  - (4) If a student fails the degree examination and has not yet completed the required

period of study, they may retake the examination in the next semester or year. Retaking the examination is limited to one time. If the student fails the examination again after the first retake, they will be suspended from the University in accordance with the relevant regulations.

Article 4 Graduation:

1. Graduate students must provide proof of the originality system comparison score when submitting their final thesis.
2. The standard of the originality comparison system is subject to the one used in the University. Originality comparison systems for theses exclude the introduction, references, table of contents, and appendices. The indicator score should be no more than 12% as a principle. Those who exceed the score must have their thesis signed by their advisor to confirm that there is no plagiarism concern before it can be passed.
3. Graduate students must submit the originality comparison report and the Declaration of Compliance with Academic Ethics for Graduate Thesis to the faculty for approval before they can graduate. The thesis must be signed by the student's advisor and reviewed by the department.

Those who meet all the above requirements may apply for graduation.

Article 5 This regulation shall be implemented after it is passed by the joint departmental and college meetings and approved by the president. The same applies to amendments.