國立中山大學工學院通訊工程研究所博士班研究生資格考核及學位考試相關規定

112 學年度起入學新生適用

97.05.20 本所 96 學年度第7次所務會議通過 97.06.10 工學院 96 學年度第 3 次院務會議修正通過 97.11.14 本所 97 學年度第 4 次聯合系所務會議修正通過 98.03.03 工學院 97 學年度第 2 次院務會議修正通過 99.05.28 本所 98 學年度第 8 次聯合系所務會議修正通過 99.06.28 工學院 98 學年度第 5 次院務會議修正通過 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 100.12.30 本所 100 學年度第 5 次聯合系所務會議修正通過 101.03.07 工學院 100 學年度第 3 次院務會議修正通過 102.04.19 本所 101 學年度第 8 次聯合系所務會議修正通過 102.05.29 工學院 101 學年度第 3 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 109.03.05 本所 107 學年度第 2 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 110.05.28 本所 109 學年度第 10 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」、「研究生學位考試施行細則」、「博士 學位候選人資格考核實施要點」及「本校學生逕修讀博士學位作業規定」訂定之。

二、在學期間相關事項:

- (一) 修業年限:依教育部規定二至七年(不含保留入學及休學期間)。
- (二) 學分制度及修課要求:

學生選課均須經指導教授認可。並在提出論文計畫書審查前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六學分,可計入最低畢業學分數內。本所修業一年以上碩士班在學研究生,申請逕修讀博士學位者,其最低畢業學分數為42學分(碩士班所修課程上限為21學分,以上均不含書報討論)。

(三) 指導教授選派:

研究生在第一學年內須選定本所專任教師為論文指導教授。倘因故須更改已選定之指導教授,必須獲得原指導教授及新指導教授之書面同意後,始得更改,惟仍須以本所專任教師擔任。若指導教授離職或退休,則須以共同指導方式處理。

(四) 英文畢業門檻:

為加強本所博士班學生語文能力,自 97 學年度起入學之本所博士班研究生在申請博士論文考試之前,必須取得下列任一種之英語能力證明:

1. 多益測驗 (TOEIC) 700 分 (含) 以上,或經由其他語言測驗機構及教育部

頒訂之同等於前述檢核考試之測驗標準者,請檢附具公信力之證明文件, 並授權由所長認定。

2. 博士班修業期間,修習本校外文系開設之英文中高級課程至少3學分(含), 或本院各系所開設之科技英文寫作課程乙門3學分,上述所修課程之成績 需70分以上。

(五) 國外交流:

本所博士班之本國籍學生,畢業前需赴國外進行交流,條件包括以下各點,擇 一完成,方得提出學位考試。

- 1. 申請出國交換、參與國外研修課程或計畫 3 個月(含)以上。
- 2. 取得本校合作之境外大學雙聯學位。
- 3. 若有其他因素無法長期出國交流者(如具在職身分、懷孕、育嬰等), 需以口 頭報告方式, 出境參加國際研討會 3 次(含)以上。

(六) 其他:

博士班研究生若有需要由所外老師共同指導時,需指導教授同意後,於論文計畫書提審前向所上提出申請,由系所學程聯合系所務會議審理通過。

三、博士候選人資格考核:

- 1. 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) 資格考核:入學後四學期內(不含休學期間)需擇一完成下列之資格考核,未 通過者,得令退學。
 - 1. 資格考試:

考試科目:

- (1) 半導體物理與元件
- (2) 控制系統
- (3) 離散數學
- (4) 電力工程
- (5) 電磁波
- (6) 數位邏輯
- (7) 訊號與系統
- (8) 通訊理論
- (9) 隨機過程
- (10)數位信號處理

以上1至7考科為電機系甲組至庚組考試科目。本所學生應於上列十門考 試科目選考二科,但本組科目為必選。考試以筆試方式進行,於每學期末 舉行一次(考試日期於期中考時公告)。每科至多可考二次,重考時得變更 選考科目。

2. 修課:本考核以修習兩門本組及一門外組碩博士班之核心課程(含本所及 電機系)。本考核通過成績標準:選修之三門科目成績應達本組核心課程該 班成績排序 30%或 A-(含)以上、外組核心課程該班成績排序 50%或 B+(含)以上。

資格考核若本組科目未通過,則須增加畢業論文點數百分之五十。外組科目未通過,則須增加畢業論文點數百分之二十五,上述增加點數,不以期刊論文為限。

(二) 論文計畫書提審:

- 1. 研究生須於資格考核通過及指導教授同意後,並須於入學五年內(不含休學期間)提出論文計畫書審查,審查以口試行之,通過後取得博士候選人資格。研究生若未能在期限內提出論文計畫書審查,依本校博士學位候選人資格考核實施要點第三條規定,應令退學。
- 論文計畫審查委員三至六人,由所內或所外助理教授以上人員組成,經由指 導教授提名,所長同意後聘請之。
- 3. 未通過論文計畫審查者,經修正並獲指導教授同意後,必須重新提出並接受審查,再未通過則依本校學則規定,應令退學。
- 若研究生於更換指導教授前,已通過論文計畫書提審取得博士候選人資格, 則需於更換指導教授後,重新通過博士論文研究計畫書審查。

(三) 博士論文發表相關規定:

- 1. 論文發表之相關規定如下:
 - (1) 畢業計點要求: 博士班修業期間,最低畢業點數20點。
 - (2) 論文分級計點:
 - a. 若為IEEE期刊論文:長篇論文每篇計15點,短篇論文每篇計10點。
 - b. 若非為IEEE期刊論文:各論文依其所發表之SCIE期刊在JCR Impact Factor之排名,分成 A、B、C三級,A級:期刊排名前二分之一(含),每篇論文計10點,B級:期刊排名前四分之三(含),未達二分之一,每篇計7.5點,C級:期刊排名未達前四分之三,每篇計5點。
 - c. 其他期刊與國際會議論文每篇5點,畢業點數計入至多1篇。
 - (3) 以上為系統領域學生畢業計點規定,電波領域學生則需依電機系「電波 組博士班畢業論文計點法」規定計算。
- 2. 就讀博士班以前發表之研究成果,或在博士班內發表與專長不相關之研究成 果均不列入計算。
- 3. 研究生發表之著作,於計點時須符合下述規定:
 - (1) 於註明該研究生所屬單位時,本所應為唯一之掛名單位,若該研究生同時掛有其他單位名稱,則該篇論文不計入其畢業論文點數。
 - (2) 研究生發表之著作,若該著作本所不是第一掛名單位,則該篇論文不計 入其畢業論文點數。
 - (3) 每篇著作僅能供作一位研究生之申請參考,且該研究生排名必須為所有 學生作者中掛名的第一位,同時其指導教授之排名亦必須為該著作中所 有非學生作者的第一位。
- 4. 若研究生有更換指導教授,則其與原指導教授發表之論文原則上不得算入畢

業點數,除非經原指導教授書面同意方可納入畢業點數。若有其他爭議, 由所長協調或召開學術審議委員會討論認定。

- 合聘及退休教授得遵照上述規定辦理,退休教授及共同指導教授論文掛名順序,請依實際指導情形自行協商。
- 6. 以上標準僅為所上最低畢業門檻。

(四)博士學位考試:

- 1. 研究生於通過博士候選人資格考核,並符合論文發表相關規定後,須 經指導教授同意,並於學校學位考試申請期限內提出申請,始得參加博士 候選人學位考試。
- 博士候選人學位考試委員人選,由指導教授依本校「研究生學位考試施行細則」規定提名,經所長同意後陳請校長核定聘任之。
- 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。
- 4. 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,依本校學則規定應今退學。

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。

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

Related Regulations of Master's Degree Examination for Graduate

Students of Master's Program

Applicable to students enrolled from the 112 academic year onwards.

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Approved by the 3rd Departmental Meeting on November 29, 2002 (the 91 academic year).
                      Amended and approved by the 1st College Meeting on January 7, 2003 (the 91 academic year).
                  Amended and 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 5th Joint Departmental Meeting on February 25, 2011 (the 99 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 2nd Departmental Academic Affairs Council Meeting on November 5, 2012 (the 101
                                                                                                    academic year).
Amended and approved by the 5th Joint Departmental Meeting on January 4, 2013 (the 101 academic year).
                     Amended and approved by the 2nd College Meeting on March 5, 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 4th Joint Departmental Meeting on November 29, 2019 (the 108 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 2nd College Meeting on July 19, 2021 (the 109 academic year).
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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 and the Academic Regulations and the Enforcement Rules for Master Degree Examination of NSYSU (hereinafter the University).

Article 2 Other regulations during the studies:

- 1. Study period limit: The study period shall not exceed four years, excluding retaining enrollment and suspension periods.
- 2. Credit system and course prerequisite:
 - (1) Advisor approval of taking courses is needed.
 - (2) Graduate students must complete the minimum required credits of the program within the stipulated period of study. Up to six credits of elective research courses can be counted towards the minimum graduation credits. At least two science core courses are required in the minimum graduation credits (courses can be cross-group selected, and a list of science core courses for each group is attached as Appendix I).
 - (3) Master's students who are recommended by the University to study abroad, attend a study program, or pursue a dual degree, and whose study abroad period is at least six weeks, may be exempted from the required credits for the Seminar Rules course during the semester of study abroad. This exemption is also applicable to previous semesters.

3. Appointed by advisors:

Refer to the Department of Electrical Engineering Institute of Communications Engineering Regulations of Advisors Selection and Variation for Graduate Students of Master's Program.

Article 3 Master's Degree Examination:

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.

- 1. After the thesis is completed and submitted, the advisor is required to approve it within the deadline set by the University, and the degree examination can be held.
- 2. 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.
- 3. 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 of the University's academic 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.

Appendix I

List of Core Curriculum for Groups in the Institute of Communications Engineering

Groups	Core	Core	Core curriculum
	curriculum 1	curriculum 2	3

System Group	Random	Digital signal	Digital
	process	processing	Communication
Electromagnetic	Electromagnetic	Planar Antenna	RF Communication
Waves Group	theory	Design	Circuit Design

^{*}For new students who enrolled in the 97 academic year, at least two core courses are required in the minimum graduation credits (courses can be cross-group selected).