國立交通大學資訊科學與工程研究所碩士班修業要點
National Chiao Tung University (NCTU)

Master's Degree Regulations for the Institute of Computer Science and Engineering

一、 國立交通大學資訊科學與工程研究所（以下簡稱本所）為規範碩士班研究生修業事項，依據本校碩士學位及博士學位授予作業規章以及相關規定，特訂定本修業要點。

The Institute of Computer Science and Engineering at National Chiao Tung University(NCTU) sets the following program regulations for master's students in compliance with the NCTU Regulations for Master's and Doctoral Degrees Conferment and relevant guidelines.

二、 入學資格：

Admission requirements:

1. 公立或立案之私立大學或獨立學院或經教育部認可之外國大學各學系畢業具有學士學位 應屆畢業或具有同等學歷之資格，經本校碩士班研究生入學考試通過者，得進入本所修讀碩士學位。

Applicants who are graduating students or who hold a bachelor's degree or equivalent from public universities, registered private universities, independent academies, or foreign academic institutions recognized by the Ministry of Education (MOE) of the Republic of China are eligible to take the NCTU Graduate Student Entrance Exam to enroll in the graduate programs of the Institute.

2. 符合教育部訂定之「外國學生來華留學辦法」及「國立交通大學接受外國學生申請入學修讀學位暨選讀學分辦法」修讀碩士學位者，得進入本所修讀碩士學位。International

applicants who comply with the Regulations Governing Study by Foreign Students in the Republic of China as promulgated by the MOE and the NCTU Regulations for Admission of International Students to Degree and Non-degree Programs may enroll in the graduate programs of the Institute.

3. 新生因重病或接獲兵役單位征集令，不能按時入學者經檢具有關證明於註冊前申述理由，向本校申請保留入學資格並獲准者，得延後進入本所修讀碩士學位。

   Newly admitted students to the graduate programs of the Institute who are unable to enroll in the designated semester due to serious illness or military service obligations may apply for delayed enrollment by presenting relevant documentation before the registration deadline. The application is subject to the university's approval.

三、 <u>修業年限</u>：一般生為一至四年，在職生為二至五年。至本所修讀碩士班雙聯學位生至少需於本所修業二學期。

   <u>Period of study</u>: One to four years for full-time students; two to five years for part-time students. Dual-degree graduate students of the Institute must complete at least 2 semesters in the Institute.

四、 <u>修課規定</u>：

   <u>Program requirements</u>:

   1. 新生入學時必須繳交大學部成績單，由本所規定之委員會審查該生之演算法概論、作業系統概論、計算機組織等三科是否修過大學部水準之課程。若有不足者，必須於畢業前完成補修通過大學部課程或選修通過研究所相關課程；未完成者不能畢業。

      Prior to enrollment, a fresh graduate student must submit his undergraduate transcripts to a designated committee for examination. The committee will check if the student's grades on 'Algorithms', 'Operating Systems', and 'Computer Organization' meet the Institute's requirements for undergraduate students. Students who cannot meet the requirements must fulfill the requirements by taking and passing either the undergraduate courses offered by the Department of Computer Science (hereinafter referred to as the Department) at NCTU or the related courses offered by the institute. If such requirements are not met, the student shall not graduate.

   2. 必須選修通過「作業系統」、「計算機架構」、「演算法」、「正規語言與計算理論」四科中至少兩科。入學前修習過前述本所開設課程且成績達七十五分以上，經所長核准後可免修。

      Students must pass a minimum of two courses out of the following four elective courses: 'Operating Systems', 'Computer Architecture', 'Algorithms', and 'Formal Languages and Theory of Computation'. Students who have completed the aforementioned courses offered by the Institute prior to enrollment and achieved a score of 75 and above for the courses may waive the courses with the approval of the Director of the Institute.

   3. 每學期須選修「個別研究」課程，由碩士論文指導教授評分，以評定學生之研究水準，畢業前該課程至少須有二學期成績為通過。

      Students must take 'Independent Study' every semester and be graded by the thesis advisor in order to evaluate the research ability. At least two semesters should be passed prior to

graduation.

4. 畢業前須修讀通過一學期『論文研討』課程。

Students must pass one Seminar course before graduation.

5. 畢業前須通過一門本院研究所開授或認可之英文授課專業課程。（註：研討類型之課程除外。）

Students must pass at least 1 professional course taught in English given or approved by Institutes of the Computer Science College (hereinafter referred to as the College) at NCTU (Note: Except seminar courses.)

6. 碩士生應於提出碩士學位論文計畫書之前通過本院大學部程式檢定考試 (已於大學部期間通過本院大學部程式檢定考試者，視為通過)。

Master's students must pass the Basic Programming Examination given by the Department before the thesis proposal is submitted. (Students who have passed the Basic Programming Examination given by the Department during undergraduate years can waive the requirement.)

7. 除『個別研究』及『論文研討』課程之外，至少須修滿廿四學分，其中至少十八學分須修讀本院所開設之課程，另六學分如選擇非本學院課程，須於選課截止前填寫『碩

士生修習非本學院課程申請書』，經指導教授同意並經所長認可後方得計入畢業學分，逾期一概不受理。

In addition to the courses of 'Individual Study' and Seminars, students must complete 24 credits, of which at least 18 must come from courses offered within the College. For the remaining credits, at most 6, students can take courses offered by the other colleges at NCTU or at other institutions. In this case, students must complete the "Application Form for Master's Students to Take Courses in Other Institutes" before the deadline of course enrollment, and the application must be approved by the thesis advisor and then by the Director of the Institute, for the credits to be accepted as part of the graduation credits.

8. 未於修業期限內通過學位考試或未能完成應修課程者，應令退學。

Students who do not pass the degree qualifying examination or fulfill the credit requirements within the study period shall be dismissed from the program.

9 丁組學生入學後之前二學期必須選修『系統與網路管理實習(一)、(二)』，畢業前須通過此兩課程。

Students in Program D must take 'Computer and Network System Administration Lab (I) and (II)' in the first two semesters and pass both courses prior to graduation.

10 戊組學生入學後之前二學期必須選修『校務系統開發與管理實習(一)、(二)』，畢業前須通過此兩課程。

Students in Programme E must take 'velopment and Managemen Development and Management Practice (I) and (II)' in the first 2 semesters and pass both courses prior to graduation.

五、 學分抵免:
Credit exemption:

1. 本所碩士班研究生於入學前五年內所選修之學分得申請抵免，於入學後第一學期選課加退選截止日之一週前提出。

   Master's students of the Institute may apply for credit exemption for credits that are obtained within five years 1 week before the deadline of online courses add and drop in the first semester after enrolling in the current program.

2. 碩士生修業期間修習非本院課程之學分抵免申請，應於取得學分後次學期選課加退選截止日之一週前提出。

   Master's students must submit the application for credit exemption one week before the course add/drop deadline in the semester following the completion of the said credits for master's students.

3.

   學分抵免申請須經本所所長同意，方得抵免。因故逾期申請者，則另需經本所規定之會議同意。

   Credit exemption must be approved by the Director of the Institute. Late application are subject to review by relevant committee of the Institute.

4. 本所相關會議依下列方式審核學分抵免申請:

   The Institute shall review the applications in accordance with the following guidelines:

   (1) 不列為大學畢業學分之本所、網路工程研究所、及多媒體工程研究所課程成績達七十五分(含)以上，且未超過抵免學分上限者，可以申請抵免。

   Exemption application shall be approved for courses taken in the Institute, the Institute of Network Engineering and the Institute of Multimedia Engineering with a score of 75 and above if the courses do not count toward the graduation credit requirement for the bachelor's degree nor exceed the maximum number of credit exemption.

   (2) 選修本校其他學院研究所以及外校研究所課程達七十五分以上，且不列為大學畢業學分者，得申請抵免。

   Application for exemption may be considered for graduate courses taken in other graduate institutes at NCTU or other universities with a score of 75 and above if the courses do not count toward the graduation credit requirement for the bachelor's degree.

   (3) 選修國外研究所課程達相當等級以上，且不列為大學畢業學分者，得申請抵免。

   Application for exemption may be considered for graduate courses taken in foreign

academic institutions if the courses do not count toward the graduation credit requirement for the bachelor's degree.

(4) 申請抵免學分以二十四學分為限，其中本院以外之其他研究所選修學分以六學分為限。

The maximum number of exemption credits is 24, of which up to 6 may come from graduate courses taken in other colleges.

(5) 申請抵免學分時須繳交下列各項資料：申請表一份（附表一）；不列為大學畢業學分證明一份申請入學前選修學分抵免者需準備；成績單一份；其他有利審查之資料，如課號、任課老師、課程內容教材綱要等（如為本所課程則不需要）。

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Required documents for credit exemption: An application form (Appendix 1); a statement specifying that the credits have not counted toward the graduation credit requirement for the bachelor's degree. Students who apply before enrolling in the programme should prepare: a transcript, other supporting documents (not required if applying for credit exemption at this Institute), such as the course number, name of instructor, textbooks and syllabus (not needed if the courses are offered by the Institute).

5. 至本所修讀碩士班雙聯學位，應滿足碩士學位授予之學分數；其中至少三分之一須於本校修習並經本所承認，於簽約學校修習之學分得經抵免程序取得承認。

Dual-degree graduate students of the Institute must complete credits for graduate degree. At least 1/3 of the credits must be taken in the NCTU and approved by the Institute. Credits taken from the sister school may be approved through the credit exemption procedure.

六、論文指導：

Thesis advisor:

1. 碩士生應於入學後三十日內提出『論文指導教授同意書』（附表二），由本所規定之委員會審核同意。

Master's students must submit the Thesis Advisor Consent Form (Appendix 2) within 30 days of enrollment for the review and approval of the relevant committee of the Institute.

2. 碩士生應於入學後第二學期註冊時，提出『碩士論文研究方向申請書』（附表三）。

When registering in the second semester of study, master's students should submit the Application for Master's Thesis Research Direction (Appendix 3).

3. 碩士論文及個別研究指導教授以本所專任助理教授含以上教師擔任為原則，特殊狀況須經書面（附表四）向本所提出申請並獲同意。

The advisor for a student taking the course of thesis or individual study must be a full-time faculty member of the Institute who is an assistant professor or above; any exception must be made in writing application (see Appendix 4) to the Institute for review and approval.

4. 若獲同意選定外系教師擔任指導教授，則必須有本所專任助理教授(含)以上教師共同指導。

If the advisor is not a faculty member of the Institute, the student shall be jointly supervised by an assistant professor or above from the Institute.

5. 如欲變更論文指導教授，應填具申請書（附表五）說明理由，經由原、新指導教授同意，並經系務委員會審查通過。若原指導教授因故不予同意，則由系務委員會召集人召集會議審查議決之。

To change the thesis advisor, students must complete the relevant application form (Appendix 5). The application must be approved by both the original advisor and the prospective advisor before being reviewed by the affairs committee of the Department. If consent is not given by the original advisor for any reason, the convener of the affairs committee should conduct a meeting to form a resolution.

6.

戊組之碩士生必須有資訊技術服務中心助理教授以上教師共同指導，其論文方向須以校務系統開發與管理為主。

Master's students in Programme E must have a co-advisor from assistant professors or above of Information Technology Service Centre. The thesis research approach should be related with academic system development and management.

6. 戊組錄取生入學後須先尋找及獲得本系意願指導戊組學生的老師同意指導後，才可由老師尋找資訊技術服務中心（校計中）符合指導資格且有意願共同指導該生之老師且向本系系務委員會提出共同指導該生之申請。會議通過共同指導申請案後該生在本系與資訊技術服務中心（校計中）
之間之共同指導方為本系所承認。

7. 戊組錄取生入學後須先尋找及獲得本系意願指導戊組學生的老師同意指導後，才可由老師尋找資訊技術服務中心（校計中）符合指導資格且有意願共同指導該生之老師且向本系系務委員會提出共同指導該生之申請。會議通過共同指導申請案後該生在本系與資訊技術服務中心（校計中）之間之共同指導方為本系所承認。

Students in Programme E should look for and be approved by the advisor in the Institute. The advisor would seek for the qualified co-advisor from ITSC. Students then submit the application for co-advising to the Department Affairs Committee and be approved.

七、論文計畫書：

Thesis Proposal:

1. 碩士生應於擬畢業口試日六個月前，提出『碩士論文計畫書』（附表六）。

Master's students must submit a Thesis Proposal (Appendix 6) six months prior to the date of the oral defense.

2. 指導教授變更時，須重新提出碩士論文計畫書。

Where there is a change in the advisor, the student must re-submit the Thesis Proposal.

八、碩士學位論文口試：

Oral defense for the master's degree:

1. 須在舉行口試六週前提交『碩士論文題目及碩士口試時間調查表』（附表七）。口試日期二週前須繳交碩士論文初稿，始得進行口試。

   The Thesis Title and Time of Oral Defense (Appendix 7) must be submitted six weeks prior to the oral defense. The draft of the thesis must be submitted two weeks prior to the oral defense.

2. 碩士學位論文（含摘要）以中文撰寫為原則，並須符合「國立交通大學學位論文格式規範」。學位考試通過後一個月內應將論文摘要及全文電子檔上網建檔(依照「國立交通大學圖書館學位論文摘要及全文電子檔建檔規範」辦理)，並繳交論文四冊(一冊本系收藏，一冊本校圖書館陳列，二冊由教務處彙轉教育部指定之庋藏單位收藏)。

   The thesis (and the abstract) should be primarily written in Chinese and comply with the NCTU Thesis and Dissertation Formats. Students should post an electronic version of the abstract and thesis on the university website within one month after passing the oral defense. (See the NCTU Library Abstract, Thesis and Dissertation Electronization Specification for details); students must also submit four copies of the thesis (one for the record of the Department, one for display in the library and two to be submitted to the Office of Academic Affairs for transmission to appropriate archival units as specified by the MOE).

3. 碩士學位考試委員會置委員三至五人（其中系外委員至少乙位），由本所就校內外學者專家中對研究生所提論文有專門研究，並具備下列資格之一者，向校長推薦，由校長遴聘組成之。

   The President of NCTU will select three to five members to form a committee for the master's degree oral defense from amidst the scholars and experts recommended by the Institute (at least one member should be from other department). The committee members, whether from NCTU or an external organization must specialize in the area of research or study of the candidate and fulfill at least one of the following requirements.

   (1) 曾任教授、副教授或助理教授者。

   has hold the position of a professor, an associate professor, or an assistant professor.

   (2) 擔任中央研究院院士或曾任中央研究院研究員、副研究員或助研究員者。

   is an Academician or has been a researcher, an associate researcher, or an assistant researcher at Academia Sinica.

   (3) 獲有博士學位，在學術上著有成就者。

   holds a doctoral degree and has outstanding academic achievements.

   (4) 屬於稀少性或特殊性研究領域，在學術上或專業上著有成就者。

   has outstanding academic or professional achievements in certain rare or specific fields of research.

   前款第(3)點及第(4)點之提聘資格認定標準，由本所規定之委員會訂定之。

   The criteria for the qualifications of the persons mentioned in Items (3) and (4) will be determined by a relevant committee of the Institute.

   碩士班研究生之配偶或三親等內之血親、姻親，不得擔任其碩士學位考試委員。

The spouse, blood relations and in-laws of the candidate within the third degree may not serve on the oral defense committee.

4. 學位考試以口試行之，並依下列規定辦理：

The thesis defense should be made orally according to the following rules:

(1) 口試以公開舉行為原則，須於事前公佈口試時間、地點及論文題目。

All oral defenses must be conducted openly. The time and place of the oral defense and the title of the thesis must be announced in advance.

(2) 學位考試委員應親自出席學位口試，不得委託他人代理。碩士學位考試委員會至少應有委員三人出席，始得舉行。

All members of the oral defense committee must attend the oral defense in person; proxies are not permitted. An oral defense for the master's degree should only take place when attended by at least three committee members.

(3) 學位考試委員會，由本所指定委員一人為召集人，指導教授不得兼任召集人。

Institute will appoint a committee member as the convener of the oral defense committee. The adviser of the candidate may not serve as the convener.

(4) 學位考試成績，以七十分為及格，一百分為滿分，評定以一次為限，並以出席委員評定分數平均決定之。但碩士學位考試有二分之一以上出席委員評定不及格者，以不及格論，不予平均。

The passing grade and full marks of the oral defense are 70 and 100, respectively. There should be one single evaluation based on the average of the scores given by the members present. Nonetheless, when the scores given by half or more of the members present are below the passing grade, the master's candidate is deemed failed, and no average score shall be calculated

(5) 論文有抄襲或舞弊情事，經學位考試委員會審查確定者，以不及格論，並送本校學生獎懲委員會議處。

The candidate is deemed failed when plagiarism or cheating is discovered in the thesis and subsequently verified to be true by the oral defense committee. The incident shall also be reported to the Student Disciplinary Committee for deliberation.

5. 學位考試不通過，得於次學期或次學年申請重考，重考以一次為限，重考不及格者，即令退學。

Candidates who fail the oral defense may apply to retake the oral defense once in the following semester or the following academic year. Candidates who fail a second time will be dismissed from the program.

九、 本校對已授予之碩士學位，如發現論文有抄襲或舞弊情事，經調查屬實者，則撤銷其學位，並追繳已發之學位證書。

In the event that plagiarism or cheating is discovered in the thesis and subsequently verified to be true, NCTU will revoke the degree conferred and request the student to return the certificate issued.

十、 <u>修訂及實施</u>:
<u>Revision and implementation:</u>

1. 本修業要點修訂時由資訊工程學系系務會議通過，經學院課程委員會及校課程委員會審查通過，再送教務會議核備後施行之，修正時亦同。
Revisions of the program regulations are passed at the CS Department Affairs Meeting, reviewed by the course committees at the College and the University levels, and submitted for approval at an Academic Affairs Meeting.

2. 其他未盡之事宜，悉依學校規定。
Matters not mentioned herein shall be governed by relevant NCTU regulations.

本法規有中英文兩個版本，在有疑義的情況下以中文版為準。

The Regulations were drawn up in Chinese and translated into English. In the event of any discrepancy between the two versions, the original Chinese version shall prevail.