國立陽明交通大學產學創新研究學院前瞻半導體研究所博士班修業規章

Regulations for the Doctoral Program in the Institute of Pioneer Semiconductor Innovation, Industry Academia Innovation School, National Yang Ming Chiao Tung University

本規章適用於 115 學年度入學學生

These regulations apply to students admitted in the 2026-2027 academic year.

110 年 12 月 13 日產學創新研究學院前瞻半導體研究所 110 學年度第 1 次研究所教師會議制訂
110 年 12 月 14 日產學創新研究學院 110 學年度第 2 次管理委員會審議通過
110 年 12 月 16 日 110 學年度第 2 次教務會議審議通過
110 月 12 月 20 日產學創新研究學院 110 學年度第 3 次監督委員會備查
111 年 4 月 19 日產學創新研究學院前瞻半導體研究所 110 學年度第 6 次研究所教師會議修訂通過
111 年 5 月 11 日產學創新研究學院 110 學年度第 5 次管理委員會審議通過
111 年 6 月 16 日 110 學年度第 4 次教務會議審議通過
111 年 08 月 08 日產學創新研究學院 111 學年度第 1 次監督委員會備查
112 年 03 月 21 日產學創新研究學院前瞻半導體研究所 111 學年度第 6 次研究所教師會議修訂通過
112 年 05 月 05 日產學創新研究學院 111 學年度第 6 次管理委員會審議通過
112 年 05 月 16 日 111 學年度第 3 次校課程委員會審議通過
112 年 09 月 14 日 112 學年度第 1 次監督委員會備查
113 年 03 月 27 日產學創新研究學院前瞻半導體研究所 112 學年度第 8 次研究所教師會議修訂通過
113 年 04 月 23 日產學創新研究學院 112 學年度第 2 次院課程委員會審議通過
113 年 05 月 20 日 112 學年度第 3 次校課程委員會審議通過
113 年 07 月 22 日產學創新研究學院 112 學年度第 5 次管理委員會審議通過
113 年 07 月 29 日 112 學年度第 4 次監督委員會備查
114 年 03 月 21 日產學創新研究學院前瞻半導體研究所 113 學年度第 7 次所課程委員會議修訂通過
114 年 03 月 28 日產學創新研究學院前瞻半導體研究所 113 學年度第 8 次所教師會議修訂通過
114 年 04 月 15 日產學創新研究學院 113 學年度第 3 次院課程委員會審議通過
114 年 05 月 12 日 113 學年度第 3 次校課程委員會審議通過
114.05.12 校課程委員會通過 114 年 05 月 28 日產學創新研究學院 113 學年度第 4 次管理委員會審議通過
114 年 12 月 03 日產學創新研究學院 114 學年度第 1 次監督委員會議備查
115 年 03 月 10 日產學創新研究學院前瞻半導體研究所 114 學年度第 3 次所課程委員會議修訂通過
115 年 03 月 23 日產學創新研究學院前瞻半導體研究所 114 學年度第 6 次所教師會議修訂通過
115 年 04 月 20 日產學創新研究學院 114 學年度第 2 次院課程委員會審議通過
115 年 05 月 14 日 114 學年度第 4 次校課程委員會審議通過
115 年 07 月 23 日產學創新研究學院 114 學年度第 3 次管理委員會審議通過

第一條 入學資格

Article 1 Admission Requirements

一、國內經教育部立案之公私立大學校院或符合教育部採認規定之外國大學校院畢業，獲得碩士學位，或具有報考博士班之同等學力資格，經本校博士班甄試及入學考試合格錄取者，得進入本所修讀博士學位。

Applicants who have obtained a master's degree from a domestic university accredited by the Ministry of Education (MOE), or from a foreign institution recognized by the MOE, or who possess MOE-recognized equivalent qualifications for doctoral admission, and who pass the University's doctoral screening and entrance examination, may be admitted to the PhD Program of the Institute.

二、本校及台灣聯合大學系統學士班應屆畢業生或碩士生，且符合本校「國立陽明交通大學逕修讀博士學位作業規定」之資格者，經本院博士班逕博甄試合格錄取者，自下一學期起，得進入本所修讀博士學位。

Current bachelor's or master's students of NYCU or of the University System of Taiwan who meet the requirements stipulated in the NYCU Regulations for Direct

Pursuit of a PhD Degree may apply for direct admission. Those who pass the Institute's review shall be admitted to the PhD Program beginning the following semester.

三、本校研究所博士生修業滿一學期以上，經原系所同意後，經本所所長召集相關領域專任教師進行專案討論，決定是否准予轉入或附加條件轉入，再經本院博士班轉入甄試合格錄取者，得進入本所修讀博士學位。

NYCU doctoral students who have completed at least one semester of study may apply for transfer to the Institute with the consent of their original department/institute. The Institute Director shall convene full-time faculty members in the relevant field(s) to conduct a review. Applicants who pass the transfer admission review shall be admitted to the PhD Program.

四、其他入學資格將依國家重點領域產學合作及人才培育創新條例、大學法、主管機關及本校相關規定辦理。

Other categories of admission shall be governed by the Act for National Key Fields Industry–Academia Cooperation and Talent Cultivation, the University Act, relevant MOE regulations, and applicable NYCU rules.

第二條 修業年限

Article 2 Duration of Study

一、博士班研究生(以下簡稱博士生)之修業期限 2 年至 7 年為限，若轉為在職生得延長修業年限 2 年。

The permitted period of study for PhD students is between two and seven academic years. The maximum study period for part-time students may be extended by up to two additional years.

二、逕行修讀博士班學位研究生(以下簡稱逕博生)之修業年限，自修讀博士學位起悉照博士班之規定。

For students admitted through the direct-PhD track, the study duration shall be governed by the same regulations as applicable to all PhD students, beginning from the semester in which they commence doctoral studies.

第三條 課程學分規定

Article 3 Course and Credit Requirements

一、本所博士班研究生於畢業前至少須修滿專業課程 18 學分；逕博生至少需修滿專業課程 24 學分(含逕博前修讀之研究所學分)。

博士班研究生專業課程需含本所核心課程至少 6 學分，及本所專業選修課程至少 6 學分；逕博生專業課程需含本所核心課程至少 6 學分，及本所專業選修課程至少 12 學分。

修業期間，論文研討應加總通過 2 學期，並完成博士論文。論文研討與學位論文研究不計入專業課程學分。論文研討課程可用本學院產學研究課程(業師課程或企業實習)申請免修，同意免修之產學研究課程不得計入應修學分數 18 學分(逕博生為 24 學分)。

PhD students must complete at least 18 credits of technical courses approved by the Institute.

Direct-PhD students must complete at least 24 credits, including graduate-level credits earned prior to direct admission.

- PhD students must complete a minimum of 6 credits of IPSI core courses and 6 credits of IPSI technical electives.
- Direct-PhD students must complete a minimum of 6 credits of IPSI core courses and 12 credits of IPSI technical electives.

Students must also complete and pass two semesters of seminar courses and the doctoral dissertation. Seminar credits and dissertation research credits do not count toward the required technical course credits.

Seminar requirements may be waived through IAIS industry–academia research courses (including industry-taught courses or approved corporate internship courses). Courses approved as seminar substitutes may not be counted toward the required 18 or 24 credits.

二、博士生畢業前須修習並通過本校語言/寫作中心開設之研究生英文課程兩門或(本校)博士班英語能力考核。英文修習可使用第三方公正機構之英文檢定成績來抵免，抵免標準由本所另訂定之。

Prior to graduation, students must either:

(1) complete and pass two graduate-level English courses offered by the University's Language/Writing Center, or

(2) pass the University's doctoral English proficiency assessment.

Students may apply for exemption using recognized English proficiency test results. Exemption criteria shall be prescribed separately by the Institute.

三、學術研究倫理教育課程採網路教學方式實施，為必修教育課程，但不計入專業課程學分。

(一)、學生於修業期間 (建議入學後第一學期內)，至「臺灣學術倫理教育資源中心」平台修習本課程，並應通過課程總測驗成績達及格標準。

(二)、總測驗成績未達及格標準之學生，不得申請學位考試。

Academic Research Ethics education is mandatory, online-delivered, and does not count toward course credit requirements.

- Students shall complete the course—preferably within the first semester—through the "Center for Taiwan Academic Research Ethics Education" platform and must pass the final assessment.
- Students who fail to pass the assessment may not apply for the degree examination.

第四條 學分抵免

Article 4 Credit Transfer

一、重考、重新申請入學或依照法令規定先修讀學分後考取修讀學分之研究生申請抵免，抵免學分數以應修畢業學分數 1/2 為限(論文研討不得抵免)。一貫修讀碩博士班之研究生的可抵免學分數不受此限制。

Students who are readmitted, re-enroll, or take courses prior to admission under applicable regulations may apply for credit transfer. The maximum number of transferable credits shall not exceed one-half of the graduation credit requirement. Seminar courses may not be transferred. This restriction does not apply to students admitted through integrated bachelor–master or bachelor–PhD programs.

二、研究生入學前所修之與本所相關領域課程學分，且不計入其前一級學位畢業學分，須於入學後第一學期開學後一週內向本所提出申請抵免，申請時請繳交各科成績單及課程內容說明。

Credits earned prior to admission that pertain to fields relevant to the Institute and were not counted toward a previous degree may be transferred. Applications must be submitted within one week after the beginning of the first semester of enrollment, accompanied by transcripts and course syllabi.

三、申請抵免科目限五年內(含)所修且成績達 70 分(等第制 B-)以上。

Only courses completed within the past five years with a minimum grade of 70 (or B– under letter grading) are eligible for transfer.

四、在碩士班已修畢之課程，如於修讀博士班期間重覆選修將不得計算在畢業學分內。

Courses completed during a master's program may not be counted toward PhD graduation credits if retaken during doctoral study.

第五條 論文指導規定

Article 5 Dissertation Supervision

一、博士生於入學後四週內須選定指導教授，由指導教授負責其學業與研究之指導。論文指導教授應由本所助理教授或以上職級之專任（或合聘）教師擔任。因研究合作需要，得邀請校內外產業界或學術界專家擔任共同指導教授。共同指導教授之資格，須符合教育部學位授予法所規定之博士學位考試委員資格。若擬聘之專家未擔任助理教授或以上職級之專任教職，其資格應提交予研究所教師會議進行審核。

本校教師與研究生具有配偶、三親等內之血親或姻親，或曾有上述關係者，不得擔任其論文指導教授。

Doctoral students must select a supervisor within four weeks of enrollment. The supervisor will be responsible for guiding their studies and research. Doctoral students must select a supervisor within four weeks of enrollment. The supervisor will be responsible for guiding their studies and research. The advisor must be a full-time (or jointly appointed) IPSI faculty member at the rank of assistant professor or above. Based on research collaboration needs, industry or academic experts from within or outside the university may be invited to serve as co-advisors. Co-advisors must meet the qualifications for doctoral degree examination committee members as stipulated by the Ministry of Education's Degree Conferral Act. If a proposed co-advisor does not hold a full-time faculty position at or above the rank of assistant professor, their credentials must be submitted to the Institute Faculty Meeting for qualification review.

Faculty members who are the spouse, former spouse, or a relative within the third degree of kinship (by blood or marriage) of the student may not serve as advisor.

二、本所博士生欲選外系所或外校老師為共同指導教授時，須經指導教授與所長同意。

Students wishing to appoint a co-advisor from another department or institution must obtain approval from both the advisor and the Institute Director.

三、博士生無法覓得指導教授或指導教授因生病、辭職、出國或其他因素無法再繼續指導時，本所將提供必要之協助。

If a student is unable to secure an advisor, or if the advisor becomes unable to continue supervision due to illness, resignation, overseas assignment, or other reasons, the Institute shall assist the student in finding a new advisor.

四、博士生如擬終止論文指導關係或更換指導教授，應以書面通知本所及原指導教授及完成各項交接事務且完成簽署新指導教授協議書流程後生效。

Students intending to terminate or change their advisor must notify the Institute and the. original advisor in writing. The change becomes effective only after completion of all required handover procedures and submission of a signed new-advisor agreement.

五、指導教授欲終止指導關係，應以書面文件向本所提出申請，審查結果由本所通知博士生。終止指導關係後，本所得協助博士生另覓指導教授。

Advisors intending to terminate supervision must submit a written request to the Institute. The Institute shall notify the student and assist in securing a new advisor as necessary.

六、簽訂更換指導教授協議書之日期至口試日期計算須相隔一年以上，若有未符合規定欲申請畢業者，須經所長邀請相關領域專任教師開會審議核可。

At least one year must elapse between the signing of a new-advisor agreement and the oral defense. Students who do not meet this requirement must obtain approval through a review meeting convened by the Institute Director with full-time faculty members in the relevant field(s).

七、博士生由原指導教授提供原始構想或概念及受指導下所獲得之研究成果，須經原指導教授同意，始得公開發表或作為學位論文使用。

Research outcomes derived from the original concepts or ideas provided by a former advisor. and obtained under the former advisor's supervision may be published or used in the dissertation only with the former advisor's consent.

八、論文指導依本校論文指導教授與研究生互動準則辦理。

Dissertation supervision shall be conducted in accordance with the University's *Guidelines for Interaction between Thesis Advisors and Graduate Students.*

第六條 博士學位候選人資格考核規定

Article 6 Qualification Examination for Doctoral Candidacy

一、博士生於入學後2年內應選修本所規定之以修課抵免資格考課程2門，且該2門課程之修課成績均達 A(百分制八十五分)(含)以上，完成資格考核。未於規定期限內完成者，應予退學。

Students must complete two qualifying courses designated by the Institute within two years of enrollment, earning a grade of A (85/100) or above in each. Failure to meet this requirement shall result in dismissal.

二、由本校其他研究所轉入之博士生，經其指導教授同意，其原系所通過之資格考試科目得以抵免。轉所博士生尚未參加原系所資格考試，但已修過指導教授選定之 2 門資格考核科目，並符合修課成績達 A(百分制八十五分) (含)以上者，可抵免該課程之資格考核。

Transfer students may, with advisor approval, have previously passed qualifying subjects or previously completed qualifying courses (grade A or above) counted toward the Institute's candidacy requirements.

三、逕博生經其指導教授同意，已修過指導教授選定之資格考核科目，並符合修課成績達 A(百分制八十五分)(含)以上者，可抵免該課程之資格考核。

Direct-PhD students may receive qualification exemption if, with advisor approval, they have completed the designated qualifying courses with grades of A (85/100) or above.

第七條 學位考試規定

Article 7 Degree Examination

一、學位考試規定依本校研究生學位授予作業規章之規定，但所內另行規定者，則依本所之規定。

The degree examination shall be governed by the NYCU Regulations Governing the Conferment of Graduate Degrees. Where the Institute stipulates additional rules, such rules shall prevail.

二、申請博士學位考試資格：

(一)、通過本所博士學位所須之修課規定與學分。

(二)、通過博士學位候選人資格考核。

(三)、博士論文審查合格。

學生之博士論文著作及研究成果必須經過本所所長邀請相關領域專任教師審查同意，且至少需有二篇期刊論文為 SCI 國際期刊所接受，始可進行口試。惟 IEDM、VLSI、ISSCC、DAC、ICCAD 之頂尖國際會議論文可視同 SCI 期刊之發表，至多以一篇為計。

上述之論文必須為該學生與指導教授共同發表，並註明本所為第一論文發表單位，且該學生必須為指導教授除外之第一作者。

Students applying for the doctoral degree examination must satisfy the following:
(1) Completion of all required courses and credits.
(2) Successful completion of the candidacy qualification assessment.
(3) Passing of the dissertation review.

The dissertation and research results shall be reviewed and approved by full-time faculty members in the relevant field(s) invited by the Institute Director.

Students must have **at least two papers accepted by SCI-indexed journals** prior to the oral defense.

One paper accepted by a top-tier conference—IEDM, VLSI, ISSCC, DAC, or ICCAD—may be counted as equivalent to one SCI-indexed journal paper.

All publications must be co-authored with the advisor, list the Institute as the first affiliation, and indicate the student as first author (excluding the advisor).

三、舉行學位考試之博士生應先完成「論文原創性比對」，且相似度低於 20%(含)，若相似度超過 20%，應檢附說明，並由指導教授簽名同意，方可申請學位考試。

Students shall complete the University's originality-check procedure prior to applying for the degree examination. A similarity index of 20% or below is required. Scores above 20% require a written explanation and advisor approval.

四、博士學位論文(含摘要)以中文或英文撰寫為原則，並須符合本校學位論文格式規範。學位考試通過後應將論文摘要及全文電子檔上網建檔，並繳交論文二冊(一冊本校圖書館陳列，一冊由國家圖書館收藏)。

The dissertation (including abstract) must be written in Chinese or English and must comply with the University's thesis formatting guidelines. After passing the examination, students shall upload electronic versions and submit two hard copies—one to the University Library and one to the National Central Library.

五、本所博士班研究生通過博士學位考試，並符合博士生修業規定且完成論文者，由本所報請學校授予博士學位。學位考試成績不及格，其修業年限尚未屆滿者，得於次學期或次學年重考，重考以一次為限；重考成績仍不及格者，應令退學。

Students who fail the degree examination may retake it once, provided they remain within the permitted study duration. Failure of the retake shall result in dismissal.

六、已申請學位考試之研究生，若因故無法於該學期內完成學位考試，本所將於次學期第一個工作日將未舉行考試之名單提交註冊組。

Students who apply for the degree examination but fail to complete it within the semester shall be reported to the Registration Division on the first working day of the following semester.

七、博士生提出之學位論文有違反學術倫理情事時，根據本校相關規定辦理。

Any dissertation found to involve academic misconduct shall be handled in accordance with University regulations.

第八條 博士學位考試委員資格規定

Article 8 Qualifications for Dissertation Examination Committee Members

博士生之博士學位考試委員會置委員五至九人，由本所就校內外學者專家中對博士生所提論文之研究領域有專門研究，並具備下列資格之一者，經指導教授與所長同意後，向校長推薦，由校長遴聘組成之，校內外委員均各須佔三分之一(含)以上。

一、現任或曾任教授、副教授者。

二、擔任中央研究院院士、現任或曾任中央研究院研究員、副研究員。

三、獲有博士學位，在學術上著有成就者，或在專業實務或技能上著有成就者。

四、研究領域屬於稀少性、特殊性學科或屬專業實務，且在學術上或專業上著有成就者。

前項第三款、第四款資格之認定基準，由本所訂定之。

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

The Doctoral Dissertation Examination Committee shall consist of five to nine members. Members shall be selected from scholars or experts with specialized expertise in the dissertation field and must meet at least one of the following qualifications:

(1) Current or former professor or associate professor.
(2) Academician of Academia Sinica, or current/former research fellow or associate research fellow of Academia Sinica.
(3) Holder of a doctoral degree with demonstrated academic distinction, or recognized professional/technical achievements.
(4) Specialist in rare or highly specialized disciplines with distinguished academic or professional accomplishments.

At least one-third of committee members shall be external to NYCU, and at least one-third shall be internal.

Criteria for determining qualifications under Items (3) and (4) shall be established by the Institute.

The spouse, former spouse, or a relative within the third degree of kinship (by blood or marriage) of the PhD student may not serve as a committee member.

第九條 畢業與離校

Article 9 Graduation and Departure Procedures

一、學位考試通過後，研究生應於考試當學期繳交「學位考試成績資料表」至註冊組，第一學期需於 1 月 31 日前繳交；第二學期需於 7 月 31 日前繳交。

Students who pass the degree examination shall submit the Doctoral Degree Examination Result Form to the Registration Division within the same semester:

- By January 31 for the first semester;
- By July 31 for the second semester.

二、學位論文紙本之繳交期限為舉行學位考試日的次學期開學前最後一個工作日，逾期未交論文紙本且未達修業年限者，次學期仍應註冊。

Hard copies of the dissertation must be submitted by the last working day before the start of the following semester. Students who miss the deadline and remain within the permitted study duration must register for the next semester.

三、修業年限屆滿者，未於年限屆滿當學期繳交學位考試成績資料表或未於次學期開學前最後一個工作日前繳交紙本論文，應予退學。

Students who reach the end of their maximum study duration and fail to submit either the result form or the dissertation hard copies by the deadline shall be dismissed.

第十條 本規章未盡事宜，依本校及本所相關規定辦理。

Article 10 Supplementary Provisions

Any matters not covered in these Regulations shall be handled in accordance with relevant University and Institute rules.

第十一條 本規章初次由研究所教師會議訂定，修正時由所級課程委員會修訂，經研究所教師會議、院級課程委員會及校級課程委員會審議，管理委員會審議通過後施行，報監督委員會備查。

Article 11 Amendments

These Regulations were initially approved by the Institute Faculty Meeting. Amendments shall be drafted by the Institute Curriculum Committee and, following review by the

Institute Faculty Meeting, the College Curriculum Committee, and the University Curriculum Committee, shall take effect upon approval by the Management Committee and be submitted to the Supervisory Committee for record.

These Regulations are adopted in Chinese, which shall prevail in case of any discrepancy between the English translation and the Chinese original.