

跨院國際博士班學位學程智慧製造與數位決策組修業規定

109 年 3 月 9 日 108 學年度第四次執行委員會會議通過

110 年 5 月 6 日 109 學年度第 6 次執行委員會修訂通過

一、適用對象：

110 學年度起入學之跨院國際博士學位學程智慧製造與數位決策組適用。

二、修業規定：

(一) 修業年限：二年至七年。

(二) 學生應修滿 22 學分，包括：

- 1 經指導教授同意修讀至少 18 學分之課程。
- 2 指導教授所屬系所或跨院國際博士學位學程開設之書報討論必修 4 學分。
- 3 論文研究學分另計。
- 4 除上述書報討論之必修 4 學分以外，逕行修讀博士學位者，需至少修滿經指導教授同意之課程 30 學分。

(三) 畢業門檻：

1. 完成修課規定、資格考試及通過畢業論文口試與規定。
2. 論文發表：一篇 SCI 或 SSCI 論文，並且為主要作者。
3. 資格審查：在論文發表之外，指導教授亦將以研究內容之品質、對該領域/或產業之影響力與實用性作為學生畢業與否之評核標準，避免僅以論文篇數作為畢業與否之單一規定。
4. 資格考試：學生需於修業第三學年內，完成資格考試。資格考試分兩階段進行：
(a)學程初審：考生於資格考口試四週前繳交論文計畫書至學程辦公室，由學程主任召集本校專任教師擔任審查小組，小組成員至少三名。審查方式得以書面或口試方式進行，通過後始得辦理資格考口試。
(b)資格考試：採公開口試方式進行，考試委員會由 4 至 5 人經指導教授建議，學程主任聘請組成。其中指導教授為當然委員兼考試委員會召集人。口試內容及論文計畫書內容，以論文研究方向為主。口試不及格者，需於次學期結束前再次申請辦理。重考以一次為限，不及格者應即退學。
5. 論文指導
入學後一個學期必需選定指導教授，向學程辦公室登記，繳交指導教授同意書。第二學期開始，選課須由指導教授簽名，學程主任不得代為簽名。指導教授應為本智慧製造與數位決策組之專任教師。因研究需要，得設共同指導教授一名，其職級應至少相當於助理教授，於入學後第二學期起提出申請，經指導教授與學程主任同意後始得擔任共同指導教授。
6. 畢業論文及口試
A. 本學程學生欲申請博士論文口試，應滿足下列規定：

- i. 通過博士班研究生資格考試至少六個月以上。
- ii. 滿足論文發表規定。
- iii. 繳交論文初稿至學程辦公室。
- iv. 外語能力認定合格，限五年內之成績，多益(750)、托福(iBT 80 或 CBT 170)、雅思(6.5)、全民英語能力分級檢定測驗「中高級」初複試皆通過或其他經學程辦公室認可之英文能力證明。
- B. 畢業論文口試之申請，應於口試前六週提出。
- C. 申請論文口試時應提出之申請文件如下所列：
 - i. 經指導教授與申請人簽名之論文口試申請表。
 - ii. 博士班成績單。
 - iii. 博士論文初稿。
 - iv. 刊登於學術期刊之論文抽印本或論文被學術期刊接受之證明文件與論文稿。
 - v. 博士班研究生論文口試考試委員推薦書。
 - vi. 論文相似度比對報告。
- D. 論文口試前須進行學程初審程序，由學程主任召集本校專任教師擔任審查小組，小組成員至少三位。審查方式以口試方式進行，通過後始得辦理論文口試。
- E. 論文口試由考試委員會主持，採公開方式進行。考試委員會之成員由指導教授推薦組成。
- F. 學位考試委員資格：
 - i. 助理教授及助理研究員職級以上者。
 - ii. 取得博士學位 3 年(含)以上之專家學者。
- G. 口試不及格者，得於次學期或次學年重考，重考以一次為限，不及格者應即退學。
- H. 各階段考試結果均應向學程辦公室及學程主任報備。
- I. 博士學位論文口試按照本校「博士學位考試細則」之規定辦理。

四、學位授予：

於修業年限內完成學程修業規定，授予指導教授所屬之學院博士學位。本學程研究生得申請修讀合作學校的雙聯學位，修業依兩校 MOU 規定辦理。

五、學雜費及獎助學金

(一) 學雜費收費基準：本地生及外國學生採一致收費標準，皆依本校博士班外國學生（理工領域）收費標準收取學雜費基數；另依每學期所修學分數收取學分費，每學分新臺幣 5,000 元。

(二) 獎助學金：校方將視經費狀況酌予核發獎助學金。

六、其他

(一) 博士生修業年限為二至七年，在職生得延長修業年限二年。

(二) 其他未訂事項，悉依國立清華大學教務章則規定辦理。本辦法經本學程執行委員會議通過後實施，修改時亦同。

Information and Degree Requirements for IPhD -Smart Manufacturing & Digital Decision-Section Students

Confirmed and Approved by IPhD council on March 9th, 2020
Confirmed and Approved by IPhD council on May 6th, 2021

1. Eligibility : Applicable to IPhD -Smart Manufacturing & Digital Decision General Section Students enrolling after the academic year of 2021.
2. Degree Regulations for IPhD students
 - (1) Period of Study : 2 to 7 years.
 - (2) Degree Requirements: Students must complete a minimum of 22 credits of approved courses, including
 - i. 18 credits of postgraduate courses approved by advisor, and
 - ii. compulsory four credits of seminars offered by the IPhD Program or Advisor's department.
 - iii. Registered dissertation credits are extra and not included in the minimum 22 credits.
 - iv. In addition to above 4 credits of seminars, graduates and bachelors who advance to the Program must complete at least 30 credits, approved by advisors.
3. Graduation Requirements:
 - (1) Completion of degree requirements, Ph.D. qualifying exam, oral defense, and dissertation.
 - (2) Publications: a minimum of one original thesis written in the first-person perspective under the name of his/her Institute published in academic journals such as SCI or SSCI.
 - (3) Qualification Assessment: Advisor will also assess the quality, impact and academic/industry contribution of student's research works as one of the graduation requirements.
 - (4) Qualifying Examinations: students must pass the qualifying examinations before the end of 3 years into Ph. D. study. The qualifying exam will be implemented in a two-stage process.
 - (a) Preliminary review: Prior to the exam, the student must submit a written form of "proposal" to IPhD office no later than 4 weeks before the oral exam. The dean of IPhD and 2 NTHU full-time professors serve as the committee to review the qualifying proposal. There should be at least 3 committee members in the committee.

The preliminary review can be held in written or oral. Student may take the qualifying oral exam after passing the preliminary review.

(b) Qualifying exam should be held by the committee and is open to public. 4 to 5 commissioners shall be nominated by advisor and approved by the Program Director; the advisor will be one of the commissioners and the convener. The contents of oral exam and proposal should be consistent with the candidate's ongoing dissertation research. Fail to pass the oral exam should re-take the oral exam by the end of the next semester. Re-take oral exam is limited to one time. Failure for the second time should be dismissed from the program and the university.

(5) Thesis Advisor

Students shall select a thesis advisor, and submit "Advisor Confirm Form" to Program Office within the first semester after enrollment. After second semester begins, students' course registration must be approved by their advisor instead of the program director. Advisor of IPhD program must be the full-time teacher of Smart Manufacturing & Digital Decision Section. For research needs, students are entitled to apply for one co-advisor, whose job grade must be at least equivalent to assistant professor. The application shall be submitted within the second semester after enrollment, and be approved by the advisor and the program director.

(6) Thesis and Oral Defense Examination:

A. For applying for the oral defense, students should complete the following requirements:

- i. Pass the qualifying examination for at least 6 months.
- ii. Achieve the publication requirements
- iii. Submit the completed thesis draft to the IPhD office.
- iv. Foreign language proficiency certificate valid for 5 years, including, TOEIC 750, TOEFL iBT 80/ CBT170, IELTS 6.5, High-Intermediate GEPT (passed both 1st and 2nd stages) or other equivalent test score approved by IPhD Office

B. Application for oral defense examination should be set forth to Program Office 6 weeks before the examination is held.

C. The following supplemental documents, along with the oral defense application form, must be submitted to the Program Office:

- i. Thesis Defense Application Form signed by the applicant and his/her advisor
- ii. Official Transcript of the Ph.D. Study
- iii. Thesis Draft

- a hardcopy of published thesis or a photocopy of the thesis acceptance certificate with the full-text thesis
 - iv. Oral Examination Committee's Recommendation for Doctoral Students
 - v. Report of Turnitin
 - D. Preliminary review should be held prior to the oral examination. The dean of IPhD and 2 full-time professors serve as the review team. The team should be consisted of at least 3 professors. Review should be held orally. Dissertation qualifying exam should be taken after passing the oral examination.
 - E. Oral Examination is hold publicly by the Committee. The list of Committee members is recommended and formed by the advisor.
 - F. Qualification for the Committee members:
 - i. Assistant professor, assistant researcher or a member with higher rank.
 - ii. Experts or scholars received her/his doctorate for at least three years
 - G. Each Ph.D. candidate who fails the oral defense examination may retake the examinations during the next semester or next academic year. Failing the second attempt shall be expelled from the Program.
 - H. The results for qualifying examinations and oral defense examination should be reported to the IPhD Program Office.
 - I. Doctoral thesis oral defense should be in accordance with Doctoral Degree Examination Regulations of National Tsing Hua University.
4. Doctor of Philosophy (Ph.D. degree): The Ph.D. degree is administered by the college which the student's advisor is affiliated with. Each IPhD student must fulfill all the degree requirements and regulations to receive the degree. Students of IPhD -Smart Manufacturing & Digital Decision are eligible to apply for Dual-degree Program. The related rules and regulations will be based on the MOU of the both schools.
5. Tuition fees and scholarship:
- (1) Tuition fees: the amount of the tuition fees is the same for both domestic and international students. Please see the Tuition Information page of Office of Academic Affairs for full details on tuition calculations and payments. Meanwhile, students have to pay for thesis course credits, 5,000 NT dollars each, every semester

accordingly.

- (2) Scholarships: subject to the University funding

6. Notes

- (1) The period of full-time Ph.D. study is 2 to 7 years. Students studying part time have a maximum of two additional years.
- (2) Matters not covered in the current document shall be handled in accordance with the “Academic Regulations” of National Tsing Hua University. Formulation and amendment of the requirements shall be implemented after being approved by the Program Affairs Meeting; the same procedure applies to all amendments.