Regulation of Course Requirements for Master and PhD Students in the Taiwan International Graduate Program of Academia Sinica and Department of Physics, National Central University

Passed in the Department Meeting on Nov. 14, 2006
Passed in the Department Meeting on Nov. 04, 2008
Reported to the Academic Affairs Meeting on Jan. 07, 2009
Reported to the Academic Affairs Meeting on June. 17, 2009
Passed in the Department Meeting on Dec. 01, 2009
Reported to the Academic Affairs Meeting on Jan. 16, 2010
Revised and Passed in the Academic Affairs Meeting of Physics Dept. on Oct. 11, 2011
Reported to the Academic Affairs Meeting on Jan. 11, 2012
Revised and Passed in the Academic Affairs Meeting of Physics Dept. on April. 10, 2012
Reported to the Academic Affairs Meeting on June. 20, 2012
Revised and Passed in the Academic Affairs Meeting of Physics Dept. on Sep. 25, 2013
Reported to the Academic Affairs Meeting on Oct. 16, 2013
Revised and Passed in the Academic Affairs Meeting of Physics Dept. on Dec. 16, 2014
Reported to the Academic Affairs Meeting on Jan. 14, 2015
Revised and Passed in the Academic Affairs Meeting of Physics Dept. on May. 31, 2016
Passed in the Faculty Meeting of College of Science on Jun. 1, 2016
Reported to the Academic Affairs Meeting on Jun. 15, 2016
Revised and Passed in the Academic Affairs Meeting of Physics Dept. on Nov.29, 2016
Passed in the Faculty Meeting of College of Science on Feb. 21, 2017
Reported to the Academic Affairs Meeting on March.15, 2017
Revised and Passed in the Academic Affairs Meeting of Physics Dept. on Sep.25, 2018
Reported to the Academic Affairs Meeting on Oct.09, 2018
Revised and Passed in the Academic Affairs Meeting of Physics Dept. on Sep.24, 2019
Reported to the Academic Affairs Meeting on Oct.09, 2019
Revised and Passed in the Curriculum Committee Meeting of Physics Dept. on June 29, 2021
Revised and Passed in the Academic Affairs Meeting of Physics Dept. on July 08, 2021
Reported to the Academic Affairs Meeting on Jan 12, 2022

1 This Bylaw is established in accordance with the “Examination Rules of Degree for Master and Ph.D. Candidates, NCU”.

2 Regulation of Course Requirements

2.1 In the Molecular Science and Technology program, the minimal course credits for master, PhD, and pre-PhD students are 24, 18, and 34, respectively, before the degree conferral. For international students of MST program enrolled in 2012 and after 2012, the credits earned for Chinese courses (Elementary Chinese I and Elementary Chinese II) are not counted as part of the minimal course credits (this applies to master, PhD, and pre-PhD students).

2.2 A master student has to pass at least six credits of optional courses with course numbers bearing the PH5, PH6, PH7, PH8 and PHT prefix, and also need to pass the following obligatory courses: Seminar Presentation on Topics about Molecular Science and Technology I, II, III, Colloquium I, Colloquium II. Students who fail to fulfill this requirement will not be awarded the degree.

2.3 A master student of MST program enrolled in 2016 and after 2016 has to take Special Studies on Topics about Molecular Science and Technology I, II (course number PHT, two semesters, 0 credits) in his/ her first year of studies and eventually obtain passing grades. This is not included the credits in Regulation 2.2. Students who fail to fulfill this requirement will not be awarded the degree.

2.4 A PhD student has to pass the six credits obligatory courses Seminar Presentation on

Topics about Molecular Science and Technology I, II, III (with course numbers bearing the PHT prefix), and pass at least 18 credits of optional courses with course numbers bearing the PH5, PH6, PH7, PH8, and PHT prefix. Credits earned for Chinese course (Elementary Chinese I, Elementary Chinese II opened for international students) are not counted as part of these 18 credits. Students who fail to fulfill this requirement will not be awarded the degree.

2.5 A PhD student of MST program enrolled in 2016 and after 2016 has to take Special Studies on Topics about Molecular Science and Technology I, II (course number PHT, two semesters, 0 credits) in his/ her first year of studies and eventually obtain passing grades. This is not included the credits in Regulation 2.4. Students who fail to fulfill this requirement will not be awarded the degree.

3 Candidates must satisfy the following requirements:

3.1 The student has to finish the following courses:

3.1.1 Required courses:

Seminar Presentation on Topics about Molecular Science and Technology I, II, III (PHT course) 6 credits.
Special Studies on Topics about Molecular Science and Technology I, II (PHT course only for PhD/ master students enrolled in 2016 and after 2016) 0 credits.
Elementary Chinese I, II (PHT course, only for international students. Students can only waive this course if they can pass the Chinese language examination which is held by TIGP of Academia Sinica.) 0 credits.

3.1.2 18 credits of optional courses recognized by the department in addition to those designated in condition 3.1.1.

3.2 Specify a thesis advisor

Students must select a professor satisfying the Qualification of PhD/ Master Thesis Advisor and Degree Examination Committee Member of the Physics Department as their thesis advisor. If the student wants to select a thesis advisor from another department, he/ she has to select one from the Department of Physics as the co-advisor and apply in writing to the Department. Within three weeks, the Department Head will convene in accord with the research field of the student an examining committee of three to five people to determine the issue.

3.3 Pass the qualifying examination

3.3.1 The qualifying examination is held in an oral form. The student taking the exam has to give an oral presentation on current research results and proposed research projects during his/ her PhD study.

3.3.2 Students can apply for the PhD qualifying examination in each semester, and complete the qualifying examination within the semester.

3.3.3 The qualifying examination committee consists of three members, including the

dissertation advisor, a member invited by the dissertation advisor (whose qualification is the same as in the PhD defense), and a member chosen by the dissertation advisor from a list of faculties recommended by the Taiwan International Graduate Program (hereinafter as TIGP) Examination Committee. The committee member recommended by the Department will be the chair of the examination committee. For the student who selects a thesis advisor from another department, his/her co-advisor is the invited member.

3.3.4 The result of the qualifying examination will be decided by majority voting of the examination committee. A report enclosing suggestions from the examination committee will be filed with the TIGP and the Department.

3.3.5 PhD students must pass the qualifying examination within two years after enrollment (except for the period of leave). Students who have full-time jobs or are pregnant can extend for one year.

3.3.6 Students who cannot pass the qualifying examination within the above-mentioned period will be terminated from the program. Those who enter the PhD Program without a master degree may return to the Master Program upon the approval of the Department Faculty Meeting. (For students of MST program enrolled after 2015)

3.4 Publications

Before applying for the PhD defense, the student (1) must have at least two papers accepted by or published in SCI、SCIE journals, in one of which the student has to be the first author and in the other the student has to be the first author among graduate student authors (if more than one), or (2) has one paper accepted by or published in an SCI、SCIE journal, another paper submitted to an SCI、SCIE journal, in the reviewing process and reaching the standard of an SCI、SCIE paper by the defense committee, where the two papers have to satisfy the first author requirements defined in (1). (Other types of journal need to be deliberated and confirmed by the Curriculum Committee.)

3.5 The student has finished the preliminary version of his/her doctoral thesis.

After satisfying Articles 3.1, 3.2, 3.3, 3.4, and 3.5 above, the doctoral candidate can apply for an oral thesis defense. The defense has to be announced and open to people in the Department.

4 If this bylaw is anywhere incomplete, students should consult with the related rules set by the University and the Ministry of Education.

5 This bylaw will be enforced after approval by the Department faculty meeting and being recorded at the Office of Academic Affairs. PhD students who enter the program before the approval of this bylaw may opt to use it.

國立中央大學
物理學系與中央研究院合作辦理國際研究生學程修業辦法

95.11.14 系務會議通過
97.11.04 系務會議通過
98.01.07 教務會議核備
98.06.17 教務會議核備
98.12.01 系務會議通過
99.01.06 教務會議核備
100.10.11 系務會議通過
101.01.11 教務會議核備
101.4.10 系務會議通過
101.06.20 教務會議核備
102.09.25 系務會議通過
102.10.16 教務會議核備
103.12.16 系務會議通過
104.01.14 教務會議通過
105.05.31 系務會議通過
105.06.01 理學院院務會議通過
105.06.15 教務會議核備
105.11.29 系務會議通過
106.02.21 理學院院務會議通過
106.03.15 教務會議核備
107.09.25 系務會議通過
107.10.09 教務會議核備
108.09.24 系務會議通過
108.10.09 教務會議核備
110.06.29 物理系課程委員會議修正通過
110.07.08 物理系系務會議通過
111.01.12 教務會議核備

第一條　本辦法依照本校「博士班、碩士班研究生學位考試細則」第二條規定訂定之。

第二條　本系修課規定如下

一、 參與中央研究院國際研究生分子科學與技術學程之碩士班學生最低畢業學分 24 學分，博士班學生最低畢業學分 18 學分。逕修讀博士班學生最低畢業學分 34 學分。[101 學年度起入學之外籍生，中文課(初級中文 I, 初級中文 II)學分數不計算入最低畢業學分內]

二、 碩士班應通過課號 PH5、PH6、PH7、PH8、PHT 開頭之非專題課程至少 6 學分。並應通過必修課程『分子科學與技術書報討論暨演練（I、II、III）』、『專題演講 I』、『專題演講 II』。修課未達此要求者不得畢業。

三、 105 學年度起入學國際研究生分子科學與技術學程之碩士班學生入學後第一年應修兩學期 0 學分之必修課『分子科學與技術專題研究』I、II (課號 PHT)。修課未通過者不得畢業。

四、 博士班學生應通過課號 PHT 開頭之分子科學與技術書報討論暨演練（I、II、III）6 學分，其餘 PH5、PH6、PH7、PH8、PHT 開頭之非專題課程至少應通過 18 學分，18 學分不包含外籍生所修之中文課(初級中文 I, 初級中文 II)。修課未通過者不得畢業。

五、 105 學年度起入學國際研究生分子科學與技術學程之博士班學生入學後第一年應修兩學期 0 學分之必修課『分子科學與技術專題研究』I、II (課號 PHT)。修課未通過者不得畢業。

第三條　本系博士學位候選人之資格須符合下列一至五款條件

一、修畢下列課程

（一） 必修課程

1. 課號 PHT 開頭之分子科學與技術書報討論暨演練（I、II、III）　6 學分
2. 課號 PHT 開頭之分子科學與技術專題研究(I、II)　0 學分 **（適用於 105 學年度起入學學生）**
3. 課號 PHT 開頭之初級中文(I、II) (僅外籍生需要，如通過中央研究院國際研究生院學程所辦理之中文測驗者可免修)　0 學分

（二）除第(一)項必修課程外，其餘本系認可的非專題課程 18 學分。

二、選定指導教授

須選定符合本系博碩士論文指導教授暨學位考試委員提聘資格認定標準。如欲選擇系外指導教授，須有一名系內共同指導教授，並向系提出書面申請；系主任於接獲申請書三週內就其相關研究領域組成三至五人審查小組，審查議決之。

三、通過資格考試

（一）資格考試以口試行之，參加口試的學生針對博士班期間的研究成果與未來的研究計畫作一口頭報告。

（二）學生可於每學期向系上提出口試申請，並於該學期內完成口試。

（三）口試委員會成員三名，包含指導教授、指導教授邀請委員（其資格與博士學位口試之資格相同）、以及國際研究生學程考試委員會建議名單上之一名委員(由指導教授決定)；口試由考試委員會建議名單上之委員召集。選擇國際研究生院外指導教授者，其共同指導教授須為上述之邀請委員。

（四）口試結果由口試委員會多數決決定，並提出書面報告，陳述委員會建議，由國際研究生院及物理系存檔備查。

（五）資格考以二次為限，必須在博士班入學二年內通過（休學期間不計入），在職生、懷孕生產者得延長一年。

（六）未於期限內通過資格考者，應予退學。逕修讀博士班者，經系務會議同意，可轉回碩士班就讀。（適用於 104 學年度起入學新生）

四、發表研究成果

申請學位口試前(1)須有兩篇論文在 SCI、SCIE 期刊上被接受或發表；其中一篇須為第一作者，另外一篇須為研究生中(若由二人以上研究生合著)之第一作者或(2)須有一篇論文在 SCI、SCIE 期刊上被接受或發表；另一篇已投稿 SCI、SCIE 期刊仍在審查中，並經口試委員認可已達 SCI、SCIE 論文之水準，此二篇論文並符合(1)項第一作者之規定。(其他種類期刊須經本系課程委員會審議認可。)

五、完成博士論文初稿

符合上述一至五款條件，得申請學位口試，口試演講須公告且公開給系上成員參與。

第四條　本辦法如有未盡事宜，依教育部及本校有關規定辦理。

第五條　本辦法經系務會議通過，並報教務會議核備後實施，修正時亦同。此辦法實施前已入學學生可選擇本辦法。