

General Requirement for NTHU Engineering-oriented Doctoral Students in Nano Science and Technology Program, TIGP, Academia Sinica

*The rules are approved by the Departmental Affairs Meeting on **October 29, 2014**
103 年 10 月 29 日系務會議修訂*

	Doctor Program
Minimum Credits	<ol style="list-style-type: none"> 1. For students enrolled with a master degree, a minimum of 18 credits. (graduate level, course number 5000 above, excluding Seminar), in addition to seminar. 2. For students enrolled with a bachelor degree, a minimum of 30 credits. (5000 level or above, excluding Seminar), in addition to seminar. Credit Exemption: <ol style="list-style-type: none"> 1. A maximum of 6 credits taken in the master program. 2. For students who pursue their second Ph.D. graduate study, a maximum of 12 credits can be exempted (refer to “Credit Exemption Regulations of National Tsing Hua University”). 3. The application for credit exemption should be completed all at once during the first semester of the academic year upon registration.
Grade Requirements	Grades below 70, on basis of 100, will not be accepted toward degree requirements. From 2010 academic year, the passing grade is B-.
Required Courses	<ol style="list-style-type: none"> 1. Introduction to Nanotechnology and Advanced Nanotechnology (3 credits each) 2. Four semesters of Seminar (1 credit each) during the first two years. From the third year, the students may take more semesters as required by the advisor. 3. Colloquium (0 credit) before passing the Doctoral Dissertation Preliminary Examination. Students should retake Colloquium for the semester(s) in which they did not pass it. 4. Four semesters of Thesis (0 credit).
Other Regulations	※ Examinations / Time Constraints <ol style="list-style-type: none"> 1. The PhD Qualification Exam should be taken and passed before the end of second year of Ph.D. graduate study. 2. After passing his/her PhD Qualification Exam, the student should take and pass the Doctoral Dissertation Preliminary Examination before the end of third year of Ph.D. graduate study. 3. Thesis defense should be taken and passed before the end of seventh year of Ph.D. graduate study. 4. Students enrolled with a bachelor degree should apply for advancing to doctoral degree program at the end of their first year of study. After approval, follow the regulations listed above.

For details on PhD Qualification Exam and Doctoral Dissertation Preliminary Examination, please read the two rules on the next pages.

※ Other Assessments / Time Constraints

1. Courses and Research Plan Application Form:

Students must submit the doctoral plan when registering in the first semester of second year of Ph.D. graduate study.

In the plan, students have to list courses (to be taken or already taken) to formulate their Major and 2nd Major of PhD study. The titles of Major and 2nd Major can be found in the “Table of Major and 2nd Major” and the listed courses should follow the suggestion of courses given in the Table.

If there is any change in the courses or majors, students have to submit the application form “Change of Courses and Research Plan” to the Program Committee for re-evaluation.

- (1) Major: at least 12 credits (graduate-level courses, course number 5000 above, either already taken or intend to take).
- (2) 2nd Major: at least 9 credits (graduate-level courses, course number 5000 above, either already taken or intend to take).
- (3) Students can list at most two graduate level courses, which do not appear in the “Suggestion of Courses” but are related to their thesis research and major, approved by their thesis advisor. This rule applies to either the major or the second major field of the student.
- (4) In the plan, students also need to provide thesis title (tentative) and propose five persons to be the committee members in Doctoral Dissertation Preliminary Examination. At least two of them are from outside NTHU.

2. Proof of English proficiency:

Passing either test is required for all students.

- (1) GEPT: passing the first stage of High-intermediate level
- (2) TOEFL: iBT-75
- (3) TOEIC: 700
- (4) Other equivalent English proficiency test. The test must involve, at least, listening and reading subtests. Please provide a creditable comparison chart for the equivalency.

3. Publication:

Student must publish at least two research papers* listed as the principal author (i.e. the first author) in the international recognized journals (papers

accepted for publication are considered as published. A proof is needed). One of the papers has to be published in SCI journals. **Published papers should use a full and official affiliation of the department and university (in Chinese: 國立清華大學工程與系統科學系; in English: Department of Engineering and System Science, National Tsing Hua University).**

* The papers should be the work completed in the Ph.D. graduate study. Papers publishing the work done in the master graduate study are not accepted.

4. Requirement to become a Ph.D. Candidate:

Students have

- (1) Fulfilled all courses and credits requirement for the Ph.D. graduate study
- (2) Passed the Ph.D. Qualification Exam
- (3) Satisfied the English proficiency

5. Students can submit the application for the Ph.D. degree exam (the final oral defense) six months after becoming a Ph.D. Candidate. Under a special circumstance, the exam could be held earlier by submitting the application, together with an explanation, to the Program Committee.

6. Requirements to hold the Ph.D. degree exam

- (1) Having enrolled in the Ph.D. program for at least 2 years (at least 3 years for students pursuing Ph.D. without Master degree)
- (2) Having become a Ph.D. Candidate
- (3) Possessing the abilities of innovation and independent research, as well as having contributions to their professional field
- (4) Being recommended by the advisor, and approved by the Program Committee and the Chairperson of Department.

7. A one-year Mandarin course is also required for foreign students.

Note: The original rules (國立清華大學工程與系統科學系博士班修課、外語能力及論文發表要求相關規定) are written in Chinese. Should any discrepancy exists between the English translation and the original Chinese version, the Chinese version shall prevail.