

Notes for Admitted Graduate Students for Master and PhD Programs

Department of Chemical Engineering
National Taiwan University of Science and Technology

1. Course requirement:

- (1) Master students are required to take and pass at least two of the following four core courses: Transport Phenomena (I), Transport Phenomena (II), Advanced Chemical Engineering Advanced Thermodynamics, and Advanced Chemical Engineering Kinetics.
- (2) The **dual-degree** students are required to take and pass at least 8 credits of graduate level courses, including reading seminar (I)(II) and seminars (zero credit) for 2 semesters.
- (3) Since the academic year of 1999, ChE Department provides PhD program in two categories: Category A for the students whose major is Chemical Engineering and Category B for Chemistry or Applied Chemistry major. Please refer to “**Regulations of PhD Program (Attachment I)**” for the PhD course requirements.
- (4) The reading seminar (I) (II) course is open only to dual-degree students.
- (5) Please refer to “**the NEW requirements for the course works for Ph.D. students (Attachment II)**”.
- (6) Since the academic year of 2016, the new master and doctoral international students of NTUST should complete the course of “The regulation of Academic Research Ethics course” (zero credit) before the end of the first semester. Graduate students can apply the examination of degree only after they pass the course. The course information will be announced on the website of the Center for General Education.
(<http://cla.ntust.edu.tw/files/11-1101-5969.php?Lang=zh-tw>)

2. Advisor:

Graduate students may choose their advisors before the enrollment with mutual consent between professor and student. A signed Advisor Consent Form should be submitted to the Department office.

3. PhD qualification:

- (1) The requirement of qualification is that PhD student must take at least **2 core courses in two years**, and with performance ranking in the **upper 60%**.
- (2) Any PhD student who fails to meet the above stated requirement, then before the end of the second academic year, his/her thesis advisor may organize a committee to decide if the student is qualified to continue his/her PhD program.
- (3) Master students are encouraged to transfer to PhD program if they could meet the same requirements of the qualification.
- (4) The record for a Master student who is admitted to PhD program will be valid within five years after their application/transfer to PhD program if they meet the above mentioned requirements for qualification

4. Graduation:

- (1) Students should complete their MS study within 1 to 4 years and PhD study within 2 to 7 years.
- (2) Master degree is awarded when the following requirements are met:
 - a. Accumulate **24 credits** of graduate level courses, including five courses of our department. (at least 15 credits) **Two core courses and seminars (zero credit) for 2 semesters** should be included in their graduate academic records.
 - b. Pass the thesis defense.
- (3) PhD degree is awarded when the following requirements are met:
 - a. Accumulate **18 credits** of graduate level courses after MS degree. **Two core courses and seminars (zero credit) for 4 semesters** should be included in his/her graduate (MS or PhD) academic records.
 - b. Pass the requirements of qualification and be approved after the qualification review.
Pass the thesis defense.

5. Part-time jobs:

Graduate students are not allowed to take part-time jobs without permission

Regulations of PhD Program (Attachment I)

Department of Chemical Engineering,
National Taiwan University of Science and Technology

The PhD program of Department of Chemical Engineering admits Chemical Engineering or Chemistry related major students. The Chemical Engineering major students are classified as *Category A* and Chemistry related major as *Category B*.

1. Course requirement:

- (1) PhD students have to accumulate 18 credits beyond the credits taken in MS program (24 credits for the students with MS degree and 18 credits for the students bypassing MS degree) to fulfill the minimum requirement.
- (2) At least two core courses should be included in their graduate (MS or PhD) academic records. The core courses for *Category A* students are Transport Phenomena (I), Transport Phenomena (II), Advanced Chemical Engineering Thermodynamics, and Advanced Chemical Engineering Kinetics. Those for *Category B* students are Advanced Organic Chemistry, Advanced Analytical Chemistry, and Advanced Physical Chemistry.

2. PhD qualification:

- (1) The requirement of qualification is that PhD student must take in two years, and with performance ranking in the upper 60%.
- (2) Any PhD student who fails to meet the above stated requirement, then before the end of the second academic year, his/her thesis advisor may organize a committee to decide if the student is qualified to continue his/her PhD program.

3. Seminar

PhD students are required to take and pass 4 semesters of seminar courses (zero credit) before graduation.

4. PhD Dissertation:

Dissertation is required to earn PhD degree.

5. Degree Conferral:

PhD degree will be granted to the students who fulfill all the requirements as mentioned above. The students should complete their PhD study within 2 to 7 years.

The requirements for the course works for **Ph.D. students**

Department of Chemical Engineering, Taiwan Tech (**Attachment II**)

1. For Ph.D. students, in order to fulfill the credits required for Ph.D., the undertaken courses must be evaluated and recommended by the student's advisor on the basis of appropriateness of the course material. If the student has not yet decided the advisor, she/he could obtain the approval from the Graduate advisor for the first semester, which is applicable only for the first semester.
2. In such cases, the student's degree clock starts with the first of these courses approved for inclusion in a **plan of work (POW)**. The advisor is responsible for organizing an advisory committee to approve the POW. Any change of the POW should be approved by the advisory committee.
3. The aforementioned advisory committee should be composed by at least three experts from the related research field. The Professors from the Department of Chemical Engineering (Taiwan Tech) should be considered with priority as the committee members. The advisory committee plays the role for research and course consultation.
4. At least 2 courses should be designated as core courses in the POW, and the Ph.D. students should **pass the courses and acquire the grade at the top 60 %** to be considered **as the candidate of Ph.D. degree**.
5. At least one of the core courses for POW should be selected from: (i) **Advanced Transport Phenomena (I)**; (ii) **Advanced Transport Phenomena (II)**; (iii) **Advanced Thermodynamics**; (iv) **Advanced Kinetic Engineering**; (v) **Advanced Organic Chemistry**; (vi) **Advanced Inorganic Chemistry**; (vii) **Advanced Physical Chemistry or Advanced Analytical Chemistry**. Any modification on the selection of the core course should be agreed by the advisory committee.

Regulations of Seminar Courses for Graduate Students of the Department of Chemical Engineering, National Taiwan University of Science and Technology

Enacted 214th Meeting of Department Affairs, 1999/Jan/06

Requirements in taking seminar courses for graduate students in Master's or PhD program in this department are as follows:

1. Graduate students in Master and PhD programs in this department, both full-time and part-time, are required to take and pass 2 semesters and 4 semesters seminar courses before graduation, respectively.
2. Considering that the duration for Master's students is 1 to 4 years, and for PhD students is 2 to 7 years, PhD students who have met all the other requirements for graduation before the end of the third enrolled year, and have taken and passed seminar course in every enrolled semester are not subject to Regulation 1 listed above and may graduate from school.
3. Graduate students who have been directly admitted to PhD program from Master's program are required to take seminar courses following the regulations listed below:
 - (1) Graduate students who seek to be directly admitted to PhD program must take and pass seminar courses for one semester during the first year of study. Then the students can apply for PhD direct admission.
 - (2) PhD students who are admitted directly after having completed more than 1 year of study in the graduate school must take another 4 semesters of seminar courses before graduation.
 - (3) PhD students who have met all the other requirements for graduation before the end of the third enrolled year in PhD program, and have taken and passed seminar courses in every enrolled semester in PhD program are not subject to Regulation(2) listed above and may graduate from school.
4. The regulations listed above have been enacted by the Meeting of Department Affairs and should be amended following the same procedure.

Plan of work (POW) form

Student in Ph.D. Program
Department of Chemical Engineering, Taiwan Tech

Name: _____

Student ID: _____

Advisor: _____

Research field: _____

Enrolled year: _____, Semester: <input type="checkbox"/> 1; <input type="checkbox"/> 2 Designated core courses						
Year	Semester	Lecture name	Lecture provided by Department/University	Credit	Waived credit	Note

Elective courses						
Year	Semester	Lecture name	Lecture provided by Department/University	Credit	Waived credit	Note
Total credits:						_____

Committee member : _____ (Signature)

Committee member : _____ (Signature)

Advisor : _____ (Signature)

Date: _____ (year) _____ (month) _____ (day)

※ All students enrolled in Ph.D. program need to turn in this form to the Department (Ms. Yo) within 3 weeks of the start of the term, after obtaining the signatures from the advisor and committee members.