

TIGP - CBMB

Graduation Requirement – NTHU Department of Chemistry

Effective and applicable for all NTHU CHEM students starting their program in and after 115 academic year

(Standard Students: enrolled with a master's degree; Fast-track Students: enrolled with a bachelor's degree)

Established by Management Committee on 2026 May
Amended by Academic Affairs Committee on 2026 August

I. University: National Tsing Hua University

II. Department: Department of Chemistry

III. Duration of Study: 3-7 academic years

IV. Minimum Credits for Graduation

A. Standard students: 18 credits

B. Fast-track students: 30 credits

C. The credits requirement excludes Mandarin course/Chinese class, ethics course, or Dissertation/Thesis credits.

V. Mandatory Courses

A. Standard students are required to pass the following mandatory courses with 8 credits.

1. PhD Study & Career Development (TIGP715700): required for 1 semester (1 credit)
2. Research Training (TIGP716000): Students are required to take this course from the 3rd semester of the PhD study until graduation; however, 0 credit will be counted toward graduation. Note that students are exempt from this requirement during the semester of graduation. (0 credit)
3. Seminar (TIGP718100): required for 2 semesters (1 credit*2 semesters)
4. Colloquium (CHEM570000): required for 4 semesters (0 credit*4 semesters)
5. Ethics Course: required to take and pass before the end of the 1st academic year. Students should pass both the ethics courses organized by NTHU and TIGP.
6. Mandarin Course/Chinese Class: required for international students or students whose first language is not Mandarin for 2 semesters. (0 credit)
7. Thesis: required to take at the semester for taking the final defense/dissertation defense.
8. Teaching Practice (CHEM600000/CHEM620000): required for 1 semester (1 credit)
9. Seminar I&II (CHEM650000, CHEM651000): required to take at the 1st academic year. (2 credits*2 semesters).

B. Fast-track students are required to pass the following mandatory courses with 10 credits.

1. PhD Study & Career Development: required for 1 semester (1 credit)
2. Research Training (TIGP715700): Students are required to take this course from the 1st semester after joining the program until graduation, except the 1st academic year when turning to PhD students. 0 credit will be counted toward graduation. Note that students are exempt from this requirement during the semester of

graduation. (0 credit)

3. Seminar (TIGP718100): required for 4 semesters (1 credit*4 semesters)

4. Colloquium (CHEM570000): required for 4 semesters (0 credit*4 semesters)

Fast-track students should take the courses from the 1st academic year when turning to PhD students.

5. Ethics Course: required to take and pass before the end of the 1st academic year. Students should pass both the ethics courses organized by NTHU and TIGP.

6. Mandarin Course/Chinese Class: required for international students or students whose first language is not Mandarin for 2 semesters. (0 credit)

7. Thesis: required to take at the semester for taking the final defense/dissertation defense.

8. Teaching Practice (CHEM600000/CHEM620000): required for 1 semester (1 credit)

9. Seminar I&II (CHEM650000, CHEM651000): required to take at the 1st academic year when turning to PhD students. (2 credits*2 semesters).

VI. Specialized (Elective) Courses

- A. Standard students must complete at least 10 credits of specialized courses from the CBMB-approved list. With the supervisor's approval, up to 3 credits may be completed through other courses.
- B. Fast-track students must complete a minimum of 30 total credits for graduation (including all mandatory and elective specialized courses), with at least 14 credits taken from the CBMB-approved specialized course list.
- C. All courses should be relevant to CBMB field and taught in English. CBMB office has the authority to decide whether a course can be counted towards specialized course credits based on the program policy.

VII. Qualifying Exam

- A. Students are eligible to apply for the qualifying exam (candidacy examination) after completing at least 9 credits of graduate-level courses and fulfilling their respective division-specific requirements. The examination must be conducted no later than the end of the 5th semester of enrollment (excluding periods of leave of absence).
- B. Students can choose any of the following schemes to pass the qualifying exam according to their research field: organic chemistry, inorganic chemistry, physical chemistry, analytical chemistry, biochemistry, materials chemistry division.
- C. Refer to the regulation on the NTHU CHEM website for details: <https://chem-en.site.nthu.edu.tw/p/406-1293-312520,r2603.php>

VIII. Annual Progress Report Requirement

- A. Students are required to hold an annual dissertation advisory committee meeting starting in the 3rd year of the program. The committee shall consist of at least three members, including the supervisor(s).
- B. This report and any additional reports required by the advisor(s) should be sent to the CBMB office by 31st May every year until graduation. The student is responsible for submitting this form or an explanation from the advisor by the deadline. All students are required to submit a self-evaluation form.

- C. Students do not need to submit an annual progress report during the year they hold a pre-oral exam or the final defense, but the exemption is required.

IX. Paper Requirement

Students must publish SCI paper(s) as a first or second author; their supervisor should be one of the corresponding authors. First author papers earn points equivalent to the impact factor; second author, 60% of the impact factor. Students must earn 3.0 points to graduate. The student should at least list his/her registered department and TIGP-CBMB as part of the affiliation in the publication(s).

X. English Requirement

- A. Students must provide one of the following test results or take recommended English courses (3 credits) to fulfill the English requirement.

1. TOEFL: ILP – 550, CBT – 213, iBT – 79
2. IELTS: 6.0.
3. TOEIC: Listening and Reading Test – 750
4. Cambridge Assessment English – B2 First
5. FLPT: Listening, Usage and Voc. & Read – 210 (each item 70)
6. GEPT: high-intermediate level.
7. The selected English training courses (3 credits) include: (a) Technical and Scientific English Writing, (b)Public Speaking and Presentation, (c)Academic Research Writing, (d) Academic English Reading & Discussion, (e) Academic Listening and Speaking, (f) Academic Listening and Presenting, (g) any course at similar level as those shown in (a) to (f).

XI. Safety Training

All students should attend safety training courses in accordance with the requirements set by their labs. Any lab safety training proof should be kept by the students as reference.

XII. Pre-Oral Exam

- A. Students should submit an application to the program office at least two weeks before the pre-oral exam. After approval, students should submit a dissertation proposal and invite the dissertation committee for a pre-oral exam. The committee indicates approval of the dissertation proposal by providing signatures on the approval form. After completing the pre-oral, students should submit the pre-oral exam form, Checklist for Course and Credit, Committee members' approval form to the CBMB office.
- B. The dissertation committee should include the supervisor(s).
- C. Checklist for Course and Credit, Committee members' approval forms are available on the NTHU-CHEM website.

XIII. Final Defense/Dissertation Defense

- A. Students can take the final defense/dissertation defense 1 year after passing the pre-oral exam. On applying for the oral exam, students should submit:

1. CBMB Graduation Application Form
2. Official Chinese Academic Transcript
3. Publication(s) Proof
4. English Proficiency Certificate
5. NTHU Application Form for Doctoral Degree Exam via NTHU Academic Information Systems.
6. NTHU Dissertation Advisor Approval Form Generated via NTHU Academic Information Systems.
7. Statement and Reports for The Thesis Similarity:
8. Statement of Thesis Similarity Form
9. Turnitin Reports of Introduction, Experimental Results, And Discussions

PhD students should submit a statement of thesis similarity for the thesis committee before the oral exam.

The statement must include the introduction, results and discussion sections of the thesis separately. In principle, the similarity index of his/her thesis similarity report should be below 35%.

- B. Students should also complete the authorization and set the publication date in the “NTHU Dissertations & Thesis Respository” at <https://etd.lib.nthu.edu.tw/>.

Reference: <https://chem-en.site.nthu.edu.tw/p/406-1293-92523,r2603.php>

- C. The venue of the Final Defense/Dissertation Defence should be in NTHU-CHEM. Students should contact the NTHU-CHEM office to make a reservation for the venue after receiving the approval of the application.
- D. The exam committee should consist of 5-9 professors (assistant professor and above, including dissertation advisor and co-advisor from student’s registered university). The committee members will nominate the committee chair (cannot be the dissertation advisor). The committee will grade the candidates based on the dissertation content and oral exam performance. The minimum passing grade out of 100 is 70. However, the student does not pass if more than 1/3 (≥ 2 persons) of the examiners give a score lower than 70. Students will have one chance to retake the exam, which must be completed before the end of 7th academic year.

XIV. Any matters not covered in these regulations shall be handled in accordance with the academic regulations of the university.