

NTUST Departments /Graduate Institutes of Chemical Engineering Regulations and Requirements for Awarding a Master Degree

1. Master's students are expected to complete their studies in one to four years.
2. Master's students must complete 24 credits of coursework (excluding the thesis).

Other requirements for graduation are as follows:

(1) Language Courses:

- If admitted before Fall 2020, all doctoral students (with the exception of international students) must take 4 credits of English Language courses offered by the language center or the Department of Applied Language (course code: FE, FL). Students, who have passed the Intermediate level of the GEPT, may apply to their department/graduate institute for a special exemption.
- If admitted after Fall 2020, all doctoral students (including international students) must take 4 credits of English Language courses offered by the language center or the Department of Applied Language (course code: FE, FL) (not count as part of degree credits). Students, who passed the Intermediate level of the GEPT after enrollment, may apply to their department/graduate institute for a special exemption.
- Credits earn from language courses cannot use to fulfill the required graduation degree.

(2) Academic Research Ethics Course: Master's students admitted from the 2016 academic year onwards shall take a course in Academic Research Ethics by the end of their first year of studies. The completion of such a course is required to apply for the Master's Degree Thesis Defense Examination.

(3) Required subject-specific courses: (set by each advisor, or, in the case of no advisor, set by the graduate academic counselor)

- Complete 2 seminars
- Complete 24 credits 【15 credits (5 courses including 2 core courses) must belong to graduate courses offered by the department of Chemical Engineering】. Exceptions to this rule will be reviewed by the committee on a case-by-case basis (passed at the 360th department affairs meeting on 2015.01.14).
- Complete two core courses
 - Students specializing in **Group A (Chemical Engineering)** must pass two of the following courses: **transport phenomena I, transport phenomena II, advanced thermodynamics, advanced chemical kinetics**. Students who have passed two of the aforementioned courses during their undergraduate or graduate studies can are eligible for having this

requirement waived.

- Students specializing in **Group B (Cross-Field, not specializing A and C)** must pass two of the following courses: **Chemical Engineering Principles I, Chemical Engineering Principles II, advanced thermodynamics, advanced chemical kinetics**. Students who have passed two of the aforementioned courses during their undergraduate or graduate studies can request a waiver.
- Students specializing in **Group C (Applied Chemistry)** must pass two of the following courses: **advanced organic chemistry, advanced physical chemistry, advanced analytical chemistry, advanced inorganic chemistry**. Students who have passed two of the aforementioned courses during their undergraduate or graduate studies can request a waiver.

(4) Application for course credit waiver:

1. Courses to be waived shall be approved by the thesis advisor.
2. Students who are eligible for course credit waiver include those who have completed any course on a graduate level with a grade of at least 82 or A⁻ prior to matriculation.
3. The planning committee shall serve as the review committee for course credit waiver.
4. Any matters that are not regulated shall be administered according to NTUST's "Course Credit Waiver Regulations."

3. Thesis-related regulations:

- (1) Students must confirm with their advisors if the subject of their planned thesis matches the department's field of expertise at an initial stage of the thesis-writing process. **If admitted after Fall 2023, student's thesis/dissertation topic and research objectives must be reviewed by at least 3 committees (must qualified as assistant professor or above/including advisor), and students must submit "Department of Chemical Engineering (Taiwan Tech) Opinion Sheet for Degree Thesis Professional Field Recognition" to the department office within 14 days before the add/drop deadline in the semester of their oral defense.**
- (2) From the academic year of 2022, the similarity report of the thesis shall be completed and submitted to the thesis advisor and the oral exam committee prior to the date of the oral defense. The standard of similarity score is 20% and shall not exceed 30%. The report must be attached to the final draft of the thesis. **If the similarity report is above 30% and actually causing from self-citation, students must give the proof of authorization from the publisher and mention it in the acknowledgments of thesis/dissertation. The special cases could be reviewed by**

the committee from the department.

- (3) The thesis defense conducted via video conferencing shall be provided with an access link and announced on the department's website. The defense shall be recorded during the whole presentation of the student (the committee members shall show their faces). However, the advisor has right to decide whether to record for the further defense and discussion sections. A non-disclosure agreement shall be signed if necessary.
4. Master's students must select their thesis advisor before the first semester begins and submit the "Thesis Advisor Consent Form" to the department/graduate institute office (students in Group C must select the advisor from the institute of Chemistry at Academia Sinica). Interactions between thesis advisors and their Master's students shall follow the "NTUST Guidelines for the Interaction between Thesis Advisors and Graduate Students."
 5. Master's students who a) have fulfilled the requirements of the department, and b) completed the first draft of their thesis, within the designated time period, may apply for the Master's Degree Thesis Defense Examination. The Master's Degree Thesis Defense Examination must be taken in accordance with the "National Taiwan University of Science and Technology Master's Degree Thesis Defense Examination Regulations."
 6. Full time graduate students who need a part-time job need to submit an application to be approved by both the student's thesis advisor and the Chairman of the department of Chemical Engineering. However, this requires that he/she gives up their scholarship and assistantship and extend a year of their studies.
 7. Matters not covered by the Master's Program Regulations shall be handled in accordance with the University's General Academic Regulations and relevant laws and regulations.
 8. The aforementioned regulations shall go into effect in Fall 2020 after being approved by the Department/Graduate Institute Affairs Meeting, as will any amendments.