

National Taiwan University of Science and Technology (NTUST)
Department of Industrial Management Regulations for
Ph.D. Program

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I. General Regulations

- (1) It is expected that students will complete their program in two to seven years; the time limit does not include period for retention of admission status, retention of student status, and break from studies.
- (2) Regular Ph.D. degree students should complete 30 units; “Seminar on Industrial Management (1) and (2)” (no credits) are required courses, which should be completed before passing qualifying examination. Starting from 2016 Fall semester, all students are required to take Academic Research Ethics with 0 credit during the first year of study program. Starting from fall 2019, Students have yet to complete the courses which are equivalent to Production Management, Operations Management and Production and Operations Management are required to complete Production Management System before graduation (determined by 393rd Departmental Affairs Meeting). Before the end of the first semester of the first year, students should submit the Ph.D. student study plan to the department office.
- (3) Ph.D. students must take four of the nine following courses: Production Management System, Mathematical Planning, Applied Probability Model, Psychological Foundations in Human Factor Engineering, Physiological Foundations in Human Factor Engineering, Experimental Design, Project Management, Supply Chain Management, and Concepts and Methods in Quality Control. For students admitted during school years 2008 and 2009, Manufacturing Information Processing as well as Information Technology and Management are also required subjects.
- (4) In accordance with the motion passed during the 154th Academic Affairs Meeting, all students admitted starting from 2010 Fall semester (except for

international students) are required to take 4 credits of English courses at NTUST. However, students who have passed the equivalent of Stage 2 Intermediary Level of the GEPT may apply for exemption. (According to the 171st Academic Affairs Meeting: Overseas Chinese students, students from Hong Kong and Macao and students from Mainland China are not in the category of international students.)

- (5) Ph.D. students who have already obtained master degrees with credits obtained within five years during their time in the master degree program, but not included in the minimum credit requirements may apply for credit transfer. Approval will be upon the department's discretion and may not exceed one-half of the minimum credit requirements for graduation. However, this limitation will not apply if said credits were obtained from this university. For dual or joint majors, credit transfers may not exceed two-thirds of the minimum credit requirements for graduation. Students who have already obtained a master degree and have taken some Ph.D. classes may apply for credit transfer. Approval for credit transfer will be upon the department's discretion and may not exceed one-half of the minimum credit requirements for graduation. The credits of EMBA courses cannot be transferred to Master courses due to the contents of both programs are different (determined by 393rd Departmental Affairs Meeting).

II. Selection of Dissertation Adviser:

- (1) The department chair is the academic advisor of all Ph.D. students. The Ph.D. student has to select a thesis advisor within one month after the start of the first semester. The academic advisor can be selected from IM department faculties, or co-advised by an IM department faculty and a faculty from either the other department in NTUST or adjunct faculty of IM department. The thesis consent form must be stamped by the IM office, signed by the thesis advisor, and submitted to the IM office.
- (2) Change of Adviser:
 1. If a Ph.D. student wants to change his/her thesis advisor, he/she must submit a completed application form to the IM department office after the request is approved by the current advisor (or department chairman) and the new advisor.
 2. If the thesis advisor wants to terminate the instruction to a certain student, the advisor should inform the department office as soon as possible. So that the department office can advise the student to find a new advisor, and then he/she follows the same application procedure.

III. Ph.D. Qualifying Examination Regulations

Ph.D. students have to submit a completed Study Plan (Appendix 1) before the end of the first semester in the Ph.D. program. A student who fails to submit the Study Plan by the deadline cannot take the Ph.D. qualifying examination.

1. A Ph.D. student must apply for qualifying examination waiver with a journal paper within 3 years after admission. A Ph.D. student should apply to waive qualifying examination with the Application Form for Ph.D. Qualifying Examination (Appendix 5) to the department office, and the detailed regulations are different according to the admission year:

- (1) Students admitted in and before 2016 fall semester:

The Ph.D. student must satisfy one of the following conditions, and be recommended by the student's dissertation advisor (recommendation letter required). Upon approval, a score of 80 will be recorded as the student's qualifying examination score.

- A. The student has at least one paper accepted or given a chance to revise by an SCI or SSCI journal.
- B. The student has submitted a paper to an SCI or SSCI journal, which has been approved by the Ph.D. Qualifying Examination Committee. The student who intends to fulfill qualifying examination requirements by submitting paper to journals must provide relevant documents such as the submitted journal paper and a progress report for her/his Ph.D. dissertation. Those documents will be reviewed by three full-time faculty members (the advisor might be one of the three) as a committee selected by the Ph.D. Qualifying Examination Committee members. The committee members will evaluate the student's research capability to decide if the student can continue the Ph.D. program. The committee members will vote for a pass or fail anonymously. The examination is passed if greater than or equal to 2/3 of the

committee members vote to pass it. Only Ph.D. students in their sixth semester are eligible for applying to waive the qualifying examination by submitting journal, and students can only apply once.

(2) Students admitted in and after 2017 spring semester:

The student has at least one paper accepted or given a chance to revise by an SCI or SSCI journal, and be recommended by the student's dissertation advisor (recommendation letter required). Upon approval, a score of 80 will be recorded as the student's qualifying examination score. In case of "revised", the student must provide related proof documents to the Degree Review Committee for review. If the submitted paper has undergone substantive review by the journal, and with complete comments, the journal advised the author to resubmit after revising, the paper can be regarded as "revised."

2. The affiliation of the first author must be National Taiwan University of Science and Technology. The paper must be accepted or published after the student has enrolled in the Ph.D. program of the IM department (i.e. after August 1st for fall enrollment; after February 1st for spring enrollment). Further, the paper must satisfy the following conditions:
 - (1) The student can be the sole author of the paper.
 - (2) If the paper is coauthored and the student is the second author, the first author must be her/his dissertation advisor, who must be a full time faculty member of the IM department.
 - (3) If the paper is coauthored and the student is the first author, there is no restriction on the affiliation of the second author.
3. The Ph.D. program student must submit his/her application one week before the end of temporary leave of absence (according to the school academic calendar) in the applicant's sixth semester (2nd semester of the 3rd year) in Ph.D. program.

IV. Regulations for Publishing Ph.D. Graduation Dissertation

- (1) A Ph.D. student has to publish at least two papers from her/his thesis in an

international journal which is either indexed in SCI or SSCI. The paper must be published after the student enrolled in the Ph.D. program. The first and the second authors must be the student and her/his thesis advisor (including retired faculty members), in any order. The paper must be different from the one used for the student's Ph.D. qualifying examination.

- (2) A Ph.D. student has to present a paper in an international conference in person before graduation. Important international conferences held in a domestic location need to be approved by the department's Degree Evaluation Committee before students submit their papers.

V. Oral Defense of Dissertation:

- (1) After the dissertation has been published in or accepted by SCI or SSCI journals (please attach original letter of acceptance; adviser's signature is required for emails), Ph.D. students may start applying for oral defense.
- (2) Dissertation oral defense time: Apply based on the schedule announced by the department.
- (3) Students who do not obtain a passing score on the qualifying exam and have not yet reached the limit of the study time period, may retake the exam once the following semester or school year. Students who fail the retake exam will be asked to leave the program.

VI. Others

The regulations will be implemented after approval during the department affairs meeting, as shall all future revisions.