### National Chiao-Tung University Graduate Institute of Management of Technology

#### **Policies and Procedures of Master's Program**

Approved May 12, 1999, by the Institute Affairs Meeting Revised March 21, 2000, by the Institute Affairs Meeting Revised June 21, 2001, by the Institute Affairs Meeting Revised May 28, 2003, by the Institute Affairs Meeting Revised March 22, 2005, by the Institute Affairs Meeting Revised May 26, 2005, by the Institute Affairs Meeting Revised June 7, 2006, by the Institute Affairs Meeting Revised April 13, 2007, by the Institute Affairs Meeting Revised March 31, 2008, by the Institute Affairs Meeting Revised March 19, 2009, by the Institute Affairs Meeting Revised May 14, 2009, by the Institute Affairs Meeting Revised March 29, 2010 by the Institute Affairs Meeting Revised March 27, 2014 by the Institute Affairs Meeting Revised March 11, 2016 by the Institute Affairs Meeting Revised Feb. 18, 2017 by the Institute Affairs Meeting Revised March 21, 2018 by the Institute Affairs Meeting

# 【Admission】

I. Applicants who have obtained a bachelor degree or its equivalent from a public or private university, an individual college, or an accredited foreign institution recognized by the Ministry of Education (MOE) and also passed the entrance exam of the master's program of the Graduate Institute of Management of Technology (IMOT, hereafter the Institute) of National Chiao Tung University (NCTU) can be admitted to the master's degree program of the Institute.

Fresh college graduates who retain outstanding academic records and pass the screening process hold by NCTU Recruiting Committee can be admitted to the master's degree program of the Institute.

Students who meet the requirements of the "MOE Regulations Regarding International Students Undertaking Studies in Taiwan" and the "Admission Policy for Foreign Students to Study Degree Programs or Credit Programs at NCTU" are eligible to apply for the master's program of the Institute if the applicants' GMAT score above 550 and also TOEFL score above 237 for people from non-English speaking countries.

# 【Academic Requirements】

- II. Full-time master's students are required to complete the degree within four years while part-time students can complete with one additional year, i.e. within five years. Students who wish to graduate before completing two years of study should get an approval from the Institute Affairs Meeting and the Office of Academic Affairs of NCTU.
- III. There are four prerequisite courses for all master's students of the Institute, including Statistics, Economics, Business Management/Management, and Accounting, which credits won't be counted towards graduation. New students can apply to waive the prerequisite

courses taken previously right after entering the program.

IV. To be eligible for graduation, all master's students are required to complete at least 39 credits of coursework (prerequisite courses excluded), including the following:

Required courses: 15 credits (including 3 credits of MBA Thesis) Required elective course(s): 3 credits Seminar on Management of Technology: 3 credits (international students may take other courses (3 credits) instead) Elective courses:18 credits Six of these credits can be obtained by taking courses in other NCTU departments/institutes or accredited foreign institutions

International students who take the courses not offered by IMOT should get approval from the Institute Affairs Meeting in advance.

- V. Master's students are required to take Seminar on Management of Technology every semester during their study. Each seminar course will be counted as one credit in the first three semesters and none credit afterwards. If students fail seminar course(s), they may make up by taking one three-credit course offered by IMOT.
- VI. Required Courses and Required Electives of IMOT are as follows:
  - 1. Required courses (15 credits):
    - a. International Marketing
    - b. Business Policy and Strategic Management
    - c. Financial Strategies and Management
    - d. Industry Analysis and Innovation
    - e. MBA Thesis
  - 2. Required elective courses (3 credits):

One quantitative methodology related course is required. Such courses include Research Methods in MOT, Multivariate Statistics, Regression Analysis, Time Series, Operations Research, Scientific Computing, Quantitative Methods for Business Decision, Multiple Criteria Decision Making, Business Survey and Research, Applied Econometrics, Big Data Analytics.

VII. A course advisor will be assigned to each new master's student to help on course selections.

### 【Application for a Thesis Advisor】

VIII. 1. A master's student should make the choice of a thesis advisor by the third week (included) of the second semester of the study and submit the Application Form of Advisor Assignment (Form C01) to get the approval from the Institute Affairs Meeting. Part-time students may postpone the deadline and select their thesis advisors within the first two years of study, though the same method for calculating the number of students advised by each professor will apply and based on the academic year (shown on their student ID numbers) they are admitted.

Before selecting a thesis advisor, a student should get the course advisor's approval to take courses; but s/he should have the thesis advisor's approval to take courses if a thesis advisor is chosen.

- 2. If a student seek to change advisor for some reason, he / she should submit the application form to the Institute, and will be effective after notifying the original advisor, without the agreement of the original advisor. If the advisor wishes to terminate the guiding relationship, student shall submit application to the Institute and the results of the review shall be notified to graduate students by the Institute. After terminating the guiding relationship, Institute will assist the graduate student in finding another advisor. A student is also allowed to choose faculty of other NCTU department/institute or university to work with an IMOT full-time faculty and serve as the student's co-advisor.
- 3. An IMOT faculty member can advise four new master's students admitted each academic year and it must have the approval from the Institute Affairs Meeting to have the fifth one. The student who is co-advised by two IMOT faculty members is counted as 0.5 student to each advisor whereas who is advised by one IMOT faculty member and one from other department is counted as one student. (Applicable to the students admitted in and after the academic year 2004-2005)

#### 4. <u>The Article VIII section 2 and 3 applicable to doctoral students who are still enrolled in</u> <u>the Institute</u>

- IX. Principally a student should choose a full-time IMOT faculty member as his/her thesis advisor, though a faculty member with assistant professorship or above from other department or university can be invited and co-advise the student with the other IMOT full-time faculty.
- X. The Thesis Advising Committee
  - 1. A student's thesis advisor is regarded as an essential member of the Thesis Advising Committee and should serve as the director of the committee.
  - 2. A thesis advisor should recommend two to three professors, associate professors, assistant professors, or academic scholars in related fields to form the committee.

# (Thesis)

- In line with NCTU "Master's and Doctoral Degree Awarding Regulations," a Master's Degree Examination Committee is composed of three to five members, all of whom are experts on the student's research areas and recommended by the Institute to NCTU President, who then invites and appoints the members for this function. All committee members should also meet one of the following criteria:
  - a. Being a Professor now or before
  - b. An Academician or being a Researcher or an Associate Researcher of Academia Sinica now or before
  - c. A Ph.D. with significant academic achievements or an Assistant Professor, who
    - (a) has published at least two academic papers on the ISI (SCI, SSCI), EI, or TSSCI journals during the past five years; or

- (b) has a Ph.D. degree and at least three year of work experience in industry.
- d. An expert with excellent academic or professional achievements in a rare or specialized field and who
  - (a) has published at least two academic papers on the ISI (SCI, SSCI), EI, or TSSCI journals during the past five years; or
  - (b) has worked as a high-level manager for a government facility, a non-profit organization, or one of the top 1000 enterprises in Taiwan for at least 20 years.

The number of the experts described above cannot be more than one quarter of all committee members.

The qualification of Items c and d listed above will be determined by the Institute Affairs Meeting.

#### [The Oral Defense for a Thesis Proposal]

XII. The Progress and the Assessment of a Thesis Proposal:

1. Students who expect to graduate in July of their second academic year should make their choices on thesis advisors by the third week (included) of the second semester of their study and submit the Application Form of Advisor Assignment (Form C01) to get the approval from the Institute Affairs Meeting.

Students must submit thesis proposals for assessment. There are three schedules set by the IMOT annually for the oral defense of thesis proposals.

A student must submit the Application Form for an Oral Proposal Defense (Form C02) to the Institute one week prior to the defense, which schedule will then be announced to all in IMOT.

If a student's advisor believes there is a significant change on the original thesis topic, the student should complete and submit the Application Form for Changing the Thesis Title and Committee (Form C10) and re-take the oral defense for the new thesis proposal.

If a student encounters a severe illness, a serious car accident, or other unexpected disasters prior to the oral defense for a thesis proposal, s/he may re-schedule the defense upon approval by the Institute Affairs Meeting. Students who fail twice the defense of a proposal will be dismissed from NCTU.

The Format and Procedures of the Oral Defense for a Thesis Proposal

- 1. A master's student presents his/her thesis proposal and provides the following:
  - a. the copies of the PowerPoint file of the presentation
  - b. one copy of the thesis proposal to each committee member
  - c. a proposal with the first three chapters of the thesis included
- 2. The oral defense, including questioning and answering, will be open to all IMOT members.
- 3. The examination committee of the oral defense for a thesis proposal is composed of the student's advisor and two to three professors, associate professors, assistant professors, or experts.
- 4. The examination committee of the oral defense for a thesis proposal will evaluate the student's proposal as "pass" or "fail" and state the result on the form C03.

The content of a thesis proposal should make clear the following:

- a. Define the research topic(s)
- b. State research objective(s)
- c. Give literature reviews
- d. Explain research methodologies and procedures
- e. Present expected results
- f. Provide research timetable
- g. List references

[The Oral Defense for a Thesis]

XIII. The Progress and the Assessment of a Thesis:

Upon approval by the thesis advisor, a master's student may submit the Application Form for the Oral Defense for a Thesis (Form C04) after passing his/her thesis proposal.

A student must submit the Application Form for the Oral Defense for a Thesis as well as the thesis to the Institute one week prior to the defense, which schedule will then be announced to public.

The Format and Procedures of the Oral Defense for a Thesis:

- 1. A master's student presents the research processes and the results of his/her thesis.
- 2. The oral defense, including questioning and answering, will be open to all IMOT members.
- 3. The passing score will be 70 or above on the average of all scores given by the Thesis Advising Committee and recorded on the Forms C05.

- 4. The convener of the committee should collect the grading sheets (Form C05) from all attending committees and state the average score on the form of the Result of the Oral Defense for a Thesis (Form C06).
- XIV. Oral examination will be the primary format of the master's degree examination and the following rules should be enforced:
  - The Examination Committee should be present in person and the examination can be held only if there are at least three committee members present, including at least two IMOT faculty members.
  - 2. NCTU President should appoint one of the committee members except the thesis advisor as the convener of the committee.
  - 3. The passing grade for the degree examination is 70 or above (with 100 as the perfect score). The exam will be graded only once and the final grade will be the average from all attending members of the committee. If more than a half of the present committees come to a decision to fail the examinee, then the student fails it.
  - 4. If any cheating or plagiarism is found in the thesis and confirmed by the Examination Committee, then the student fails the exam.
- XV. MBA thesis (including abstracts) should be written principally in Chinese and must be prepared by following the regulations of NCTU Degree Thesis and Dissertation Format. The electronic thesis, including the abstract, should upload to internet in accordance with polices of the Filing System of Electronic Thesis and Dissertations in NCTU Library within one month upon passing the degree examination. In addition, four hard copies of the thesis should be submitted – one for the thesis advisor, one for the IMOT, one for the NCTU Library, and one for the Office of Academic Affairs to send to other organizations specified by MOT.
- XVI. If cheating or plagiarism is found in the theses of those who had already obtained a master's degree and confirmed by the investigation, the degree will be rescinded and the diploma will have to be returned.
- XVII. Items not stated herein are subject to the NCTU Master's and Ph.D. Degree Awarding Regulations.
- XVIII. These aforementioned policies and procedures have been approved by the Institute Affairs Meeting, confirmed by the Curriculum Committees of the College of Management and NCTU, and validated by the Academic Affairs Meeting of the university. The same procedure will be applied for future revision.
- The content of this document originated in Chinese. If there are differences between the Chinese version and its English translation, the Chinese content is always the most accurate.