# **NCTU** – Institute of Electrical Control Engineering

Academic Regulations for Master of Science Degree

## **Admission Criteria**

- 1. According to Article 5 of the "Regulations Regarding International Students Undertaking Studies in Taiwan" published by the Ministry of Education and the "Foreign Student Admission Procedure" of National Chiao Tung University (NCTU), only the students, who are not citizens of the Republic of China and do not possess the legal status of overseas Chinese, are eligible to apply as international students.
- 2. International students who have earned or will earn a bachelor's degree at accredited universities in Taiwan or other countries are eligible to be considered for admission to the Master Programs offered by the Electrical and Computer Engineering (ECE) and the Computer Science (CS) Colleges at NCTU.
- 3. A newly admitted graduate student may defer his/her enrollment for one semester with the permission of the director of the institute. The student must submit a request for deferred enrollment along with documents explaining the reasons for the deferral before he/she registers at NCTU. The request will only be approved if it is justified with compelling reasons.

# **Term of Study**

- 1. The term of study for master degree is one to four years.
- 2. A student may apply for leaves of absence from his/her enrollment institute. The leaves must be approved by the thesis advisor of the student and the director of the institute. The leaves may last one or more semester(s) or academic year(s). The total duration of leaves is normally limited to four semesters or two academic years. Extended leaves of absence that last more than two academic years will be approved only if the student suffers from a serious chronic illness, and the diagnosis is certified by a public hospital. The application of extended leaves of absence must be approved by the Office of Academic Affairs.

### **Course Work and Credits**

- 1. Every master degree student must complete at least twenty-four (24) credit hours of graduate-level courses before graduation (not include Seminar course and Academic Dissertation Research).

  The curriculum should consist of the following categories.
  - (A) Major Group Core Courses [6 credits]
    - Group A Linear System Theory, Digital Signal Processing, Optimization Theory, Stochastic Processes, Nonlinear System Theory, Detection and Estimaiton, Image Processing.
    - Group B VLSI System Design and Applications, Analog IC Design, Power Electronics.
    - Group C Fuzzy Systems, Digital Signal Processing, Embedded Operating Systems.
  - (B) Elective courses [15 credits]

All graduate level courses offered by the department, and at least 3 credits of other groups' core courses should be taken.

- (C) Graduate Seminar Course [Mandatory]

  Every master degree student should take the thesis seminar (1 credit) and Academic Dissertation

  Research (1 credit) each semester for the first two school years.
- Master's degree of group A and C students should take the independent directory
  reading each semester for the first two school years.

  Master's degree of group B students should take the System-on-Chip Design Seminar each semester
  for the first two school years.
- 4. Transfer of Credits
  - At most 15 credit hours completed at other institutes at NCTU, and a maximum of 9 transferred credit hours for the subjects obtained outside NCTU may be counted toward the fulfillment of the course requirements of the program. Each of those transferred subjects should be scored over 85.
- 5. A student who fails to complete the course requirements and/or pass the master degree examination within his/her term of study will be dismissed from the institute. His/her enrollment at NCTU will also be terminated.

#### **Thesis**

- 1. A student must select a thesis advisor and submit the Thesis Advisor Agreement Form within the first two weeks after his/her enrollment into NCTU. Student may select his/her thesis advisor among the full-time faculty members of this institute. Student who wants to receive joint supervision from faculty members of other institutes must obtain the permission from his/her thesis advisor and the approval of the academic committee of the institute.
- 2. For changing thesis advisor, a student must obtain permissions from the original advisor, the new advisor and then be approved by this institute.

#### Graduation

- 1. Master's students who have satisfied the following criteria may take the Master Degree Examination.
  - (A) Those who have completed the required coursework and the required credit hours within the limit of their study terms.
  - (B) Those who have passed the required examinations in accordance with the master program.
  - (C) Those who have submitted their master theses in English.
    - Students who met the requirements stated above and passed the master degree examination administered by the examination committee will be awarded the master's degree.
- Under normal conditions, students should take their master degree examination after completing all the required coursework. In some cases, with the recommendation of thesis advisor, a student may

take the master degree examination before completing his/her courses. The degree will be awarded upon the successful completion of all the courses and the earning of sufficient credit hours. The master degree examination will be deemed invalid if the student fails to satisfy the requirements before the end of the semester.

- 4. The Master Degree Examination is usually conducted in the form of an oral examination. An additional written examination may be held if necessary. The examination should be conducted according to the following rules.
  - (A) The oral examination should be held in public with its time, place and thesis topic of the candidate to be announced in advance.
  - (B) Members of the degree examination committee should attend the examination in person. No substitution or proxy arrangement is permitted. The examination can only be held with at least three committee members in attendance.
  - (C) A chair person (other than the thesis advisor of the student) will be elected among the members of the examination committee.
  - (D) The student is deemed passing the examination if he/she obtains an average score of seventy (70) or above out of one hundred (100). Nevertheless, when the majority of the committee members issue failing scores (lower than 70), a decision of failure will be made without calculating the average score.
  - (E) The student is deemed failing the examination if plagiarism or fraudulence is found and confirmed by the examination committee.
  - (F) A student who has failed his/her master degree examination may take the examination one more time in the following semester or academic year. A candidate who fails the examination for a second time will be dismissed from his/her enrolled program.
  - (G) If a member of the examination committee is physically absent from the examination, he/she is regarded to waive his/her right to serve in the examination committee. He/ she may not ask for a make-up examination nor sign on the Thesis Approval Form.
  - (H) Conformed to the policies of the national library, students should submit an electronic copy and three printed copies of their thesis one to his/her enrolled institute, one to the school library and one for the Ministry of Education for archiving within one month after they passed their master degree examination.

## **Prologue**

 The rules and regulations stated in this document shall be administered after they are approved by Committee of Institute Affairs, and the University Academic Office. Any revision to this guideline must follow the same procedures.

- 2. Any regulation not mentioned above should be processed according to the related rules of NCTU.
- 3. If any discrepancy exists between the English texts and the Chinese texts of the academic regulations, the Chinese texts prevail.