

Regulations and Procedures for MA Program in the Institute of Electronics Engineering, National Tsing Hua University

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I. Admission

1. Applicants must have a Bachelor degree or equivalent from a domestic university or college or from a foreign institute recognized by the Ministry of Education. Applicants who pass the Entrance Examination are qualified to enter the institute to pursue a Master degree.
2. Recent undergraduate students from a domestic university are qualified to enter the institute to pursue a Master degree if they pass the Screening Review of Recommendation.

II. Years of Study

All MA students are required to complete their studies within a minimum period of 1 year and a maximum period of 4 years. Part-time graduate students could extend the maximum period for one more year.

III. Required Courses and Credits

1. Students must earn at least 24 credits of courses approved by the institute, in addition to the seminar (2 credits for 2 semesters) and the thesis (ENE6900, 0 credit).
2. “Academic Research Ethics Education Courses”, which possesses 0 credit and is conducted via cyber, is required to complete before the end of the first academic year. Please refer to the “Academic Research Ethics Education Curriculum Implementation Highlights” for details.

IV. Required Elective Courses

- (1) All core courses are categorized into 3 groups (as Courses Group Table). Each master student must take at least 3 required courses (as listed below), across at least two course groups. Additionally, students must choose and complete at least two or more professional courses offered by the institute under the ENE course

code.

Required courses in each group :

- I. Physics and Optoelectronics : ENE5110 Solid State Physics I, ENE5125 (formerly ENE6130) Semiconductor Physics, ENE5130 Quantum Mechanics, PHYS5410 Quantum Mechanics (I).
- II. Devices and Process : ENE5330 Semiconductor Devices for Integrated Circuits, ENE5310 Silicon Processing Technology for Microelectronics.
- III. Circuit Design : ENE5210/EE5230 Analog Circuit Design, ENE5220 Digital Integrated Circuits, EE5250 VLSI Design.

(2) If students already took some of the listed required courses in either the Institute, other institutes, or other universities, the courses can be waived with the approval of the Director of the Institute. For current institute students, if who wish to apply for exemption from required elective courses based on graduate courses taken at other institutes during academic program, students must seek approval through the application process before enrolling in the course.

(3) If applying for and getting approval in advance, students are allowed to take the undergraduate (junior and senior) courses, but only 6 credits among them can be included as part of the credits for graduation. If students would like to take the graduate courses outside the EECS College and would like to include these credits as part of the credits for graduation, getting approval in advance is required.

V. Thesis Advisor

- 1. Each student should find a thesis advisor by the end of the first year of study. The thesis advisor supervises the student's study and research.
- 2. The thesis advisor must be a full-time faculty of the Institute of Electronics Engineering, either a professor, an associate professor, or an assistant professor. Students who wish to change a thesis advisor should raise the application to the Institute in advance.

VI. Oral Defense

- 1. Students who fulfill the requirements from Sections II to V can apply for an oral examination in defense of the thesis.
- 2. More detailed regulation can be found in "National Tsing Hua University's Master's Degree Examination Measures."

VII. These regulations are activated by the Institutional Affair Meeting, so are the revisions of regulations.

(These regulations are adopted in Chinese, which shall prevail in case of any discrepancy between the English translation and the Chinese original.)