

## **Academic Regulations for Doctoral Degree Students**

Translation updated on August 9<sup>th</sup>, 2024

### **Credits and Curriculum:**

1. Doctoral students are required to obtain at least 21 credits during their doctoral programs before graduation, including 3 credits from taking the required 'Seminar' course for three semesters as well as the required online 'Academic Ethics' course which carries no credit.
2. Doctoral students can take courses from the department of Materials Science and Engineering (MSE) or other related departments, but 'Ph. D. Special Topics', 'Ph. D. Thesis', courses on foreign languages, and other courses unrelated to MSE are excluded as graduation credits.
3. Doctoral students who had opted for Direct-Entry Doctoral Degrees midway through their Master's studies are required to obtain at least 30 credits before graduation, including credits obtained during their Master's studies.
4. Doctoral students who fail any MSE course are only allowed to retake the course once.
5. Starting from August 2018, doctoral students are required to complete before graduation at least three semesters of the 'Ph. D. Special Topics' course, whose credits do not count toward graduation credits.
6. The taking of any course by doctoral students should be approved by their thesis advisors. Apart from the courses offered by the MSE department, doctoral students are allowed to take up to 3 courses offered by other departments with the approval of their dissertation advisors. To take courses offered by other departments, doctoral students are required to submit application forms signed by their advisors alongside the syllabus of the courses to the Department Curriculum Committee for future reference.
7. Any course-related disputes from doctoral students should be submitted with the approval of their dissertation advisors to the Department Curriculum Committee for consideration.

### **Credits Transfer:**

8. For doctoral students who had graduated from the Master's program of NTU MSE, the courses that they had taken during their Master's studies do not count towards graduation credits if they retake such courses.
9. Doctoral students who had taken undergraduate- and/or graduate-level courses offered by the MSE department are allowed to transfer up to 9 credits from such courses.
10. Doctoral students who had taken graduate-level courses offered by other departments are allowed to transfer credits of up to two of such courses with the approval of both their advisors and the Department Curriculum Committee.

### **Qualification Examination measures for Doctoral Degree Students:**

1. Doctoral students are required to pass the qualification examination within two years of study, i.e. before the start of the third year of the doctoral program. Failure to meet such a requirement will result in termination of the program. Each student is allowed a maximum of two attempts at the qualification examination.
2. The qualification examination is held twice a year, once during the winter vacation and once during the summer vacation. Doctoral students must take the qualification examination for the first time before the start of the second year of their program. Failure to comply counts as a failed attempt at the qualification exam.
3. For local doctoral students, there are two subjects in the qualification examination: Core and Specialty. Students have to obtain grade "B" or above in 3 courses (9 credits) from the corresponding group of designated subjects, offered by the NTU MSE department, for exemption of each subject. The list of courses in each course group can be found at <http://www.mse.ntu.edu.tw/images/documents/forms-download/%E8%B3%87%E6%A0%BC%E8%80%83%E5%AF%A6%E6%96%BD%E8%BE%A6%E6%B3%95-112.10.23.doc>

4. International doctoral students have the option to follow the same above rules for exemption of the qualification examination. If an international doctoral student cannot obtain enough credits from each course group due to the lack of English-taught courses, another option for exemption of the qualification examination is to pass 6 MSE related courses (18 credits) offered by the NTU system with grade "B" or above. At the start of each semester, such a student is required to submit a list of courses to be taken that semester, with the approval and signature of his/her dissertation advisor(s), to the Department Curriculum Committee.

### **Thesis Publications:**

Doctoral students must publish articles in academic journals and fulfill one of the following requirements before applying for a dissertation defense:

- (1) Publish 1 outstanding paper as the first student author in an SCI international journal ranked among the top 15% of its field.
- (2) Publish 2 excellent papers in SCI international journals ranked among the top 50% of their fields, and at least in 1 paper as the first student author.
- (3) Publish 3 papers in SCI international journals, and as the first student author in at least 1 paper.

### **PhD Dissertation Defense:**

1. Doctoral students become PhD candidates 6 months after passing the research proposal defense while having passed the qualification examination and completed all credit requirements; in this case, such students are allowed to apply for a dissertation defense.
2. When applying for the doctoral dissertation defense, PhD candidates are required to submit an application signed by their dissertation advisors alongside their preliminary doctoral dissertation proposal and paper publications to the Department Curriculum Committee.

Any other disputes will be referred to the Department Curriculum Committee and settled within the Department faculty meeting.