

Academic Regulations for Doctoral Degree Students

Credits and Curriculum:

A doctoral student is required to obtain at least 21 credits during his/her doctoral program towards graduation, including 3 credits from taking the required 'Seminar' course for three semesters and in addition to the required online 'Academic Ethics' course which carries no credit.

A doctoral student can take courses from 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.

The taking of any course by a doctoral student should be approved by his/her thesis advisor(s). Besides the courses offered by the MSE department, a doctoral student is allowed to take up to 3 courses offered by other departments with the approval of his/her thesis advisor(s). To take courses offered by other departments, a doctoral student is required to submit application forms signed by his/her advisor(s) with the syllabus of the courses to the Department Curriculum Committee for records.

Starting from August 2018, a doctoral student is required to complete at least three semesters of the 'Ph. D. Special Topics' course before graduation, whose credits do not count toward graduation credits.

The doctoral students who have opted for Direct Pursuit of PhD Degree midway through their Master's studies are required to obtain at least 30 credits towards graduation, including credits obtained during their Master's studies.

Doctoral students who fail any MSE course are only allowed to retake it once.

Any course-related dispute from a doctoral student should be submitted with the approval of his/her thesis advisor(s) to the Department Curriculum Committee for consideration.

Credits Transfer:

For the doctoral students who graduated from the Master's program of NTU MSE, the courses that they have taken during their Master's studies do not count towards graduation if they retake those courses.

For the doctoral students who have taken undergraduate- and/or graduate-level courses offered by the MSE department, they are allowed to transfer up to 9 credits from those courses.

For the doctoral students who have taken graduate-level courses offered by other departments, they are allowed to transfer the credits of up to two of those courses with the approvals of both their advisors and the Department Curriculum Committee.

Exemption from Qualifying Examination for Doctoral Degree Students:

Every international doctoral student must pass the qualifying exam within two academic years after enrolment. International doctoral students are required to take 6 courses (18 credits), each graded at least "B" for exemption from qualifying exam.

Courses listed below from the NTU System are offered for international doctoral students.

Courses for international doctoral students (offered in English):

1. National Taiwan University:

Department of Materials Science and Engineering:

Mechanical Behavior of Materials, Materials Microstructures & Defects, Contemporary Solid State materials in a Nutshell, Polymer Physics I: in Solid State, X-ray Diffraction, Polymer Syntheses, Introduction of Electrochemistry, Magnetic Materials, Nanomaterials, Tissue Engineering, Energy Materials

Department of Mechanical Engineering:

Advanced Practice of Semiconductor Equipment

Department of Civil Engineering:

Method of Finite Elements

Department of Chemical Engineering:

Topics on Particulate Technology, Special Topic on Organic Materials Synthesis and Applications, Applied Polymer Chemistry

Institute of Applied Mechanics:

Special Topics on Electronic Materials

2. National Taiwan University of Science and Technology:

Physical Properties of Polymers, Vacuum and Thin Film Technology, Special Topics on Polymer Organic Chemistry

3. National Taiwan Normal University:

Technology and Electronics for Next-Transistor, Optical Properties of Solids

For local doctoral students, only courses from MSE-NTU department in Master's or doctoral program can be exempted from qualifying exam. As local doctoral students, international doctoral students can also take 6 courses (18 credits) including 3 from the fundamental course group and 3 from the professional course group, each graded at least "B" for exemption from qualifying exam.

Please notice that each Academic Division within MSE-NTU has different courses in its fundamental and professional course groups and a large number of courses are offered in Mandarin only. Please contact the Department Office for the list of fundamental and professional courses offered within each Academic Division.

Thesis Publications:

Doctoral students must publish their articles to the international journals and fulfill one of the following requirements before the Doctoral Thesis Oral Examination:

(1) Publish 1 outstanding paper as the first student author in a 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 at least in 1 paper as the first student author.

PhD Oral Examination:

PhD students who pass the Qualifying Examination, complete all credit points and pass the research proposal defense after 6 months become PhD candidates.

PhD candidates are admitted to apply for the Doctoral Thesis Oral Examination with the preliminary doctoral thesis proposal and thesis publications.

Any other dispute will be referred to the Department Curriculum Committee, and settled by the Department faculty meeting.