

Explanations on Degree Requirements for Ph.D. in Mechanical Engineering, Opto-Mechatronics Engineering, and Energy Engineering

Department of Mechanical Engineering, National Central University

(For Reference Only. For legal matters, consult the Chinese version)

- I. The following rules are provided in accordance with the *National Central University Rules Governing the Qualifying Exam and Thesis Defense for Master's and Doctoral Degree* enforcement rules as well as the *National Central University Study Regulations*, article 3, and its enforcement rules.
- II. Ph.D. students must have an advisor, complete the required course works and pass the qualifying examination to become a doctoral candidate. After passing the qualification and Degree Examination, students are eligible to apply for graduation.
- III. The Dissertation Advisor:
 - A. Students must select a dissertation advisor from Department of Mechanical Engineering before the 31th of October on their enrollment year, or the committee will assign an advisor for them.
 - B. If a student needs to have a co-advisor(s) from other departments, the co-advisor(s) needs to be approved by the Committee of Graduate Student Affairs.
 - C. Any changes or addendum of advisors must also be approved by the Committee of Graduate Student Affairs.
 - D. When dismiss/dropout condition is met, any changes or addendum of advisors is not allowed.
- IV. Duration for Study:

Students must complete their study within two to seven academic years.
- V. Course Requirements:
 - A. A minimum of 18 graduate credits is required, including 9 credits, at least, imposed by the thesis advisors. Students may take related courses from other departments or other universities according to their research interests. Courses taken from other universities must not exceed 6 credits in total and must be approved by both the student's advisor and the Committee of Graduate Student Affairs if these courses are used to meet the minimum course requirements.
 - B. Students must pass "LN4901 technical writing in English" course and the Graduate Seminal course for four semesters.
 - C. Credits obtained from out of campus cannot exceed one third of the minimum credits requirement stipulated in this department.
 - D. Those who participate in the Industry and Academia Course for Elite Doctoral Degree must also meet the regulations stipulated by "National Central University/Ministry of Education for Industry and Academia project".
- VI. Qualifying Examination:
 - A. All Ph.D. students are required to take a qualifying examination, which can only be taken twice. Those who do not pass should be expelled.
 - B. Students should take the qualifying examination after completing 12 graduate credits of course work, including 9 credits, at least, imposed by the thesis advisors. Students must pass the qualifying examination within **four** semesters after enrollment (excluding the period of leave). For those conditionally passed students, 2 more semesters can be extended.
 - C. If a student changes his/her advisor on the second year after enrollment, the **4** semesters limitation can be extended to **6** semesters.
 - D. On changing or adding a co-advisor, students must retake the qualifying examination. If the changes or addendums are before taking the qualifying examination, one additional year is extended for passing the qualifying examination.

VII. Degree Examination :

A. Publication requirements :

1. Students are required to publish at least two professional academic journal papers (with SCI(E) or SSCI impact factor greater than 0.2 within 5 years).
 2. Either students or his/her dissertation advisor(s) must be the first author of the forgoing co-authored, published papers affiliated with the Department of Mechanical Engineering /Institute of Opto-Mechatronics Engineering/ Institute of Energy Engineering. At least one of the publications has to be first authored by the student.
 3. If the aforementioned papers are in the form of short communication, it shall be approved in advance by the Committee of Graduate Student Affairs.
 4. Participating in the Industry and Academia Course, those who have one invention patent with NCU as a patentee are eligible for claiming one SCI paper after approval of the Graduate Committee.
- B. Students should give a public presentation in English before applying for a doctoral thesis defense. Eligible candidates must submit the thesis defense application form and relevant materials 15 days before the date of their thesis defense.
- C. Formation of the Doctoral Thesis Defense Committee should follow the *National Central University Rules Governing the Master's and Doctoral Degree Qualifying Exam and Thesis Defense*.

VIII. Matters not covered by these rules shall be referred to the Chinese version of “*Regulations and Degree Requirements for Ph.D. in Mechanical Engineering, Opto-Mechatronics Engineering, and Energy Engineering Department of Mechanical Engineering, National Central University*”.