

Regulations for Doctoral Degree of Graduate Institute of Industrial Economics National Central University

Resolved at the Institute Affairs Meeting on October 6, 1994
Amended and resolved at the Academic Affairs Meeting of the Institute on December 19 1995
Amended and resolved at the Academic Affairs Meeting of the Institute on January 16 1996
Amended and resolved at the Academic Affairs Meeting of the Institute on November 11 1996
Amended and resolved at the Academic Affairs Meeting of the Institute on October 3 2000
Amended and resolved at the Academic Affairs Meeting of the Institute on September 10 2002
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Amended and resolved at the Academic Affairs Meeting of the Institute on February 25 2014
Verified at the Academic Affairs Meeting on June 11, 2014
Amended and resolved at the Academic Affairs Meeting of the Institute on November 9 2021
Resolved at the College curriculum committee on December 7, 2021
Verified at the Academic Affairs Meeting on January 12, 2022

Article 1 The Regulations are formulated according to Academic Regulations, National Central University Regulations on the Degree Examinations for Postgraduate Students and National Central University Course Credit Waiver Guidelines.

Article 2 The Doctoral degree study is limited to 2-7 years.

Article 3 Those who have studied for one year in the master's class and whose grades in the two semesters are within the top one-third of the class, or who are judged to have excellent grades by the Institute under other special circumstances, may study for a doctoral degree after application review and approval; The length of study is calculated from the time of transfer to the doctoral program.

Article 4 For those who study directly for a doctoral degree, if their dissertation examination does not meet the requirements for a doctoral degree but meets the requirements for a master's degree, they may be awarded a master's degree by resolution of the Doctoral Degree Examination Committee. Doctoral graduate students should complete 18 credits; graduate students studying for a doctoral degree should complete 30 credits, but the above credits do not include graduation dissertation.

Article 5 Graduation Requirements of Economic Class:

- (a) The minimum number of credits required for graduation is 18. Required subjects and elective subjects are listed in the attached table; Those who have completed the required subjects of our institute may apply for exemption.
- (b) Grade 3 and 4 Ph.D. students must prepare a presentation for dissertation every academic year.
- (c) The class period for Seminar on Industrial Economics is from Grade 2-4.

- (d) Students entering after the 98th academic year should take a 3 credits course related to Macroeconomics in the master's or doctoral degree of the Institute of Economics.

Article 6 Graduation Requirements of Law Class:

- (a) The minimum number of credits required for graduation is 21. Required subjects and elective subjects are listed in the attached table.
- (b) 12 credits of required subjects shall be taken.
- (c) At least 9 credits of required elective subjects shall be taken.

Article 7 The doctoral qualification examination shall be in accordance with the following provisions:

- (a) The qualification examination is held once every semester. If the result does not meet the passing standard, you can apply for re-examination within the qualification examination period. The re-examination is limited to one time. If you fail to pass the exam twice, or if you fail to pass the exam within the qualifying exam period, you will be dropped from school. The qualification examination only announces the examination scope before the examination, and the examination time is four hours per subject.
- (b) Except for legitimate reasons and with the approval of the Institute Affairs Meeting, graduate students should complete the qualifying examinations for each subject within the above time limit.
- (c) If you have taken Correlated Curriculum to doctoral and master's degree at this institute or other schools as an expertise subject, you should follow the National Central University Course Credit Waiver Guidelines.

Article 8 Graduation Requirements of Economic Class:

- (a) Subject examinations: Two basic subject qualification examinations should be completed within one and a half years after registration. Among them, “Advanced Industrial Economics” is a compulsory examination. In addition, students can choose any one from “Advanced Microeconomics” and “Advanced Quantitative methods” to take the exam. In addition to passing one subject, graduate students should take the exam for both subjects at the same time; executive students should complete the two basic subject qualification examinations within three years of enrollment, and only take the exam for one subject at a time. However, those who apply for a one-year deferment of completing the second basic subject examination must meet the following two conditions before being allowed to defer one year of completing the second basic subject examination.
 - (1) Before the end of the second-year semester of the doctoral program, students should take the courses of Industrial Economics I, II and Microeconomics I of the grade 1 master's degree and pass the subject examinations for the above courses.
 - (2) The grant period for doctoral program fellowship is from Grade 2-5.
- (b) Participation in academic seminars: Graduate students should participate in publishing an academic paper at domestic and foreign academic seminars within three years after passing the subject examination specified in the above paragraph; domestic academic seminars are limited to those held by the Institute, the Institute of Economics of Academia Sinica or

Taiwan Economic Association; other domestic and foreign seminars should be submitted to the Institute Affairs Meeting for approval. Relevant information for participating in the seminar should be submitted to the institute for retention.

- (c) Publication of journal papers: Graduate students should publish at least one academic paper in a domestic and foreign journal recognized by the Institute before taking the oral examination for their doctoral dissertation. For details on the recognition of academic journals and the calculation method of the number of papers, please refer to the attached table of Journal Levels Standards for Doctoral Degrees of the Institute of Industrial Economics.
- (d) Academic expertise subject requirements: In addition to the required subjects, graduate students should take three main expertise subjects and two minor expertise subjects; expertise subjects can be taken as inter-school electives, but the school, subject name, and professors must be informed in advance and submit the required materials to our institute for approval; for minor expertise subjects, you only need to take elective courses offered by our institute, and are not limited to the same field. The division of expertise subjects is as shown in the attached table.

Article 9 Graduation Requirements of Law Class:

- (a) Students can only be qualified as doctoral candidates if they complete the following requirements within three years:
 - (1) The subject of the written examination will be chosen from Industrial Economics or Advanced Industrial Economics, and the written examination is limited to two times.
 - (2) One article should be published in an academic journal.
- (b) Doctoral candidates who meet the following requirements may apply for a doctoral thesis oral examination:
 - (1) Participate in academic paper seminars and publish a paper. Before participating in domestic and foreign academic seminars, you should apply to our institute in advance and obtain accreditation.
 - (2) One more article in an academic journal should be published.
- (c) The academic journals in which the above-mentioned papers are published should be at least TSSCI (first and second level only), SSCI or other journals recognized by the conference (an application must be made in advance and approved before submission).

Article 10 The regulations for dissertation examination shall be in accordance with the following provisions:

- (a) Doctoral graduate students should select a faculty advisor before the end of June of the second semester of Grade 2, and register with the office of the institute with the consent of the faculty advisor. If you want to change your faculty advisor, you must obtain the consent of the Director before changing your faculty advisor, but you must report to the original faculty advisor.
- (b) Doctoral graduate students should register their dissertation topic at the office of the institute in accordance with the academic calendar and fill in a degree examination application form, a list of degree candidates, transcripts from previous years and a recommendation letter from

their faculty advisor.

- (c) Dissertation examination should be completed within the deadline specified in the academic calendar. If graduate students who have applied for the dissertation examination are unable to complete the examination within the semester for any reason, they should report to the school to cancel the application for the examination within the cancellation period specified by the Institute; if the application has not been canceled and the examination has not been held, will be considered as a failure.
- (d) Before the formal dissertation oral examination, doctoral candidates should have a public “topic proposal” arranged by the Institute on the key points of their dissertation, moderated by the faculty advisor.
- (e) The number of examination committee members for the dissertation examination shall be 5-9, of which more than one-third shall be from outside the school. The examination committee members shall recommend one person from each other to serve as the moderator of the dissertation examination. However, the faculty advisor is not allowed to serve as the moderator.
- (f) In the absence of the dissertation examination committee member, it is not allowed to be represented by others. At least 5 committee members are present, of which more than one-third are from outside the school. Otherwise, the examination will not be held; those who have already taken the examination will not have their examination results recognized.
- (g) The dissertation examination score is based on 100 points as a full score and 70 points as a passing score. It is determined by the average score of the anonymous evaluation by the members present. If the doctoral dissertation examination is assessed as failing by more than one-third of the committee members, it will be considered as failing, and the assessment will be limited to one time. Those who fail the dissertation examination and whose years of study have not yet expired may retake the examination in the next semester or academic year, and the retake is limited to one time.
- (h) Doctoral candidates should contact their faculty advisor during the dissertation examination period to decide the time for the oral examination, and register at the office two weeks before the examination.
- (i) The procedure for leaving school is part of the dissertation examination. If a graduate student cannot complete the procedure within the prescribed time limit, he will be deemed to have not graduated.
- (j) Before the doctoral dissertation examination, a copy of the dissertation proposal should be submitted and reviewed and approved by the doctoral dissertation oral examination committee. Dissertation proposal oral examination and dissertation degree oral examination cannot be held in the same semester.
- (k) During the period of study, the doctoral dissertation of the graduate students should be presented at least once in the “Seminar on Industrial Economics” of the Institute.

Article 11 To determine the qualifications of doctoral candidates, students in the doctoral program of our institute who have completed subject examinations and completed main and minor expertise subjects will be qualified as doctoral candidates.

Article 12 Matters not provided for under the Regulations shall be governed by relevant requirements of the Ministry of Education and this University.

Article 13 The Regulations shall be deliberated and adopted by the Institute Affairs Meeting and shall be implemented following verification with the Academic Affairs Meeting, and this shall apply to amendments thereto.

Attached Table

1. Table of required subjects for Doctoral Degree of **Economic Class** of the Institute of Industrial Economics, National Central University:

(1) Graduation Credits: 30 credits. It does not include the need to take 3 additional elective courses for the main expertise and 2 courses for the minor expertise.

(2) Required subjects: 16 credits. The subjects are as follows:

| Courses | Class Period | Credits |
|-------------------------------------|--------------------------------------|-----------|
| Advanced Industrial Economics I, II | First and Second Semester of Grade 1 | 3 of each |
| Advanced Microeconomics I | Second Semester of Grade 1 | 3 |
| Advanced Quantitative Methods | First Semester of Grade 1 | 3 |

(3) Required elective subjects: 6 credits. The subjects are as follows:

| Courses | Class Period | Credits |
|--|----------------------------|-----------|
| Seminar on Industrial Economics I, II, III, IV | Each Semester of Grade 1-4 | 1 of each |
| Advanced Seminar on Industrial Economics I, II | Each Semester of Grade 1-4 | 1 of each |

2. Table of required subjects for Doctoral Degree of **Law Class** of the Institute of Industrial Economics, National Central University:

(1) Graduation Credits: 21 credits. It does not include the need to take 3 additional elective courses for the main expertise and 2 courses for the minor expertise.

(2) Required subjects: 12 credits. The subjects are as follows:

| Courses | Class Period | Credits |
|---|----------------------------|-----------|
| Industrial Economics I, II or Advanced Industrial Economics I, II | Each Semester of Grade 1-4 | 3 of each |
| Seminar on Industrial Economics I, II, III, IV | Each Semester of Grade 1-4 | 1 of each |
| Advanced Seminar on Industrial I, II | Each Semester of Grade 1-4 | 1 of each |

(3) Elective subjects: 12 credits. Students are expected to take three elective courses, at least two of which are law courses.

3. Table of Expertise subjects for Doctoral Degree of **Economic Class** of the Institute of Industrial Economics, National Central University:

| Expertise Subject Group | Course selection regulations |
|-------------------------------|------------------------------|
| A. Theoretical Economic Group | |

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|---|---|---------------------------|
| a. Mathematical Economics | Dynamic Economics I, II, Game Theory I, II 、 Microeconomics II 、 Macroeconomics | Choose any three subjects |
| b. Economics of Regulation and Economic Analysis of Law | Economic Analysis of Law 、 Regulatory Economics I, II 、 Fair-Trade Law I, II, III 、 Telecommunication and Information Law 、 Technology Law and Policy 、 Laws of Intellectual Property I, II 、 Antitrust Economics 、 Topics in Antitrust Economics 、 Bankruptcy 、 Private Workouts and Corporate Reorganization Law 、 Securities Regulation 、 Cyberlaw | Choose any three subjects |
| B. Applied Economics Group | | |
| a. Applied Microeconomics | Technological Progress and Industrial Development I, II 、 Environmental Economics 、 Topics in Environmental Economics 、 Health Economics I, II 、 Quantitative Methods II 、 Applied Econometrics 、 Topics on Labor Market and Industrial Development I, II, III 、 Computable General Equilibrium Analysis II 、 Economic of Innovation 、 Science and Technology in Economic Growth I, II 、 Advanced Macroeconomics 、 Seminar on Environmental Economics | Choose any three subjects |
| b. Economic Development | Economic Development and Industrial Change I, II 、 Economic Development 、 Economics History 、 Topics on Economics History 、 Taiwan's Postwar Economic 、 High-Tech Industry Organization I, II 、 Cross Strait H-Tech Industrial Analysis | Choose any three subjects |