

Regulations on Qualifying Examination of Ph. D. Candidates and Degree Examination for Ph. D Students

Department of Applied Mathematics, National Sun Yat-sen University

Applicable to students admitted in and after Fall, 2019

Article 1

The following regulations are in accordance with the Law of Academic Degree Conferment and its enforcement rules promulgated by MOE and NSYSU Academic Regulations, Implementation bylaws for Ph. D. and Master Degree Examination and related ordinances.

Article 2 Ordinances during study

2. 1 The period of study is 2 to 7 years based on the regulations of MOE (admission retention and deferment years are excluded).

2. 2 Credits and Course Requirement

2. 2. 1 Ph. D. students must complete at least 24 credits. Students who enroll in a Ph. D. program directly from a Master program must complete at least 30 credits and a maximum of 6 credits from the Master program may be transferred. Students who enroll in a Ph. D. program directly from an undergraduate program shall obtain at least 42 credits. Credits from seminar courses may not be transferred. Credits must be transferred within the first academic year of the Ph.D. program.

2. 2. 2 At least $\frac{2}{3}$ credits shall be obtained under courses conducted by the Department of Applied Mathematics.

2. 2. 3 Students must take Seminar courses for Ph. D. program in two different semesters. Credits from the seminar courses are NOT included in the credits required.

2. 2. 4 According to the NSYSU Guidelines for Course on Academic Ethics, students must complete the academic ethics course in the first academic year, or they are not allowed to apply for the Degree Examination.

2. 3 Designation of Academic Advisor

2. 3. 1 Students must find their own academic advisors and file their choices with the department within 6 months after passing the Qualifying Examination of Ph. D. Candidates. The choice of academic advisors shall be conducted in accordance with the NSYSU Guidelines for Selection of

Advisors.

2. 3. 2 Consent from the department Teaching Committee is required when academic advisors are not full-time faculty of the department.

2. 3. 3 Students may request change of advisor after getting written approval from their current advisors.

2. 4 Other ordinance

If a co-advisor from another department is needed, a student shall first obtain consent from his/her advisor and then file an application with the Department of Applied Mathematics to be reviewed by the department Teaching Committee. **Article 3 Qualifying Examination of Ph. D. Candidates**

3. 1 Students who have found academic advisors and fulfilled the course requirement in Article 2. 2 may attend the Qualifying Examination.

3. 2 The Qualifying Examination of Ph. D. Candidates is a written test and is held in February and September each year. Each student must pass all examinations in the subjects listed below before the end of the 7th semester. Students may take the examination in each subject twice at the most. Students who fail the qualifying examination will be asked to withdraw the Ph.D. program unless they have exceptional reasons that are approved by the Teaching Committee. Exam Subjects:

Group A: (Choose any two out of the 5 subjects below)

(1) Statistics (including statistical inference) 、 (2) Probability (including stochastic process) 、 (3) Statistical Methods (including regression analysis, experimental design and multivariate analysis) 、 (4) Financial Econometrics (including financial time series, financial engineering, and investment) 、 (5) Statistical and Machine Learning Methods

Group B: (Choose two out of the 3 subjects listed below with at least one from the first two subjects)

(1) Numerical Differential Equations 、 (2) Numerical Linear Algebra 、 (3) Matrix theory

Group C: (Choose any two out of the 6 subjects below)

(1) Real Analysis 、 (2) Functional Analysis 、 (3) Mathematical Programming 、 (4) Differential Equations 、 (5) Discrete Mathematics 、 (6) Algebra

Students may apply for taking exams that are not in their groups after obtaining consent from their academic advisors. However, each student may take only one exam of any outside group. 3. 3 Application for Ph. D. Candidates

A students may submit the Certification of Passing the Qualifying Examination of Ph. D. Candidates to the Department after fulfilling the course requirement, passing the qualifying examination and the English proficiency test for Ph. D students as required by the department and

selecting his/her own academic advisor. Once the application is reviewed and approved by the Teaching Committee, the student becomes a Ph.D. candidate.

Article 4 Ph. D. Degree Examination

4. 1 Dissertation Publishing:

Ph. D. students must present their research with NSYSU as an affiliation in either an international conference or a nation-wide domestic conference and have at least one academic article with NSYSU as an affiliation published (or accepted) on a journal with peer-review before taking the degree examination.

4. 2 Ph. D Degree Examination

4. 2. 1 Recommended by advisor, students can attend the Ph. D. Degree Examination after passing the Qualifying Examination for Ph. D. Candidates and fulfilling the publication requirement in Article 4. 1.

4. 2. 2 The Committee members of the Ph. D Degree Examination are proposed by the student's academic advisor in accordance with the NSYSU Implementation bylaws for Ph.D. and Master Degree Examinations and invited with consent of the department chair and the university president.

4. 2. 3 Within their period of study, students can take the degree examination for a second time. However, students who fail the second exam will be asked to withdraw the Ph.D. program based on the NSYSU regulations.

Article 5 Graduation

Students may submit application of graduation after fulfilling the requirements above.

Article 6 The bylaw are implemented after approval of the meetings of the Department of Applied Mathematics and the College of Science and obtaining signature of President. Any modification on the bylaw will go through the same procedure.

In case of discrepancy between the Chinese version of terms & rules and its English translation, the Chinese version shall prevail.

Regulations on Examination of English Proficiency for Ph. D. Students
Department of Applied Mathematics, National Sun Yat-sen University

Article 1 The bylaw is applicable to Ph. D. students admitted in and after the fall semester of 2014.

Article 2 Students shall submit the test result from any English Proficiency test listed below before the Ph. D Degree Examination.

2. 1 General English Proficiency Test (GEPT) Intermediate Level or above
2. 2 TOEFL ITP, 500 or above
2. 3 TOEFL-CBT, 173 or above
2. 4 TOEFL-iBT, 61 or above
2. 5 IELTS. 5.0 or above
2. 6 TOEIC, 650 or above
2. 7 BESTEP, Listening and Reading: 85 or above, and Speaking and Writing: 260 or above
2. 8 any High Level English course conducted by NSYSU, C-/60 or above

Article 3 Students who gained their Bachelor's degree (or a higher degree) in English speaking countries are eligible for exemption.

Article 4 The bylaw are implemented after approval of the meeting of the Department of Applied Mathematics. Any modification on the bylaw will go through the same procedure.

In case of discrepancy between the Chinese version of terms & rules and its English translation, the Chinese version shall prevail.