

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

## **The Department of Applied Mathematics, National Sun Yat-sen University**

Applicable to newly admitted students after Fall, 2019

### **Article 1**

The following regulations in accordance with 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 24 credits. Students who enroll Ph. D. program directly from Master program must complete 30 credits and maximum of 6 credits from Master program can be substituted. Students who enroll Ph. D. program directly from undergraduate program shall obtain 42 credits. Seminar courses can not be substituted. The application of the substitution for credits shall be submitted within the first academic year.

2. 2. 2 At least  $\frac{2}{3}$  credits shall be taken under courses conducted by the Department.

2. 2. 3 Students must take Seminar course for Ph. D. program in two different semesters. Seminar courses are NOT including in required credits.

2. 2. 4 According to NSYSU Guidelines for Course on Academic Ethics, Students who accomplish academic ethics course in the first academic year can take Master Degree Examination.

#### 2. 3 Designation of Academic Advisor

2. 3. 1 Students shall submit the application of the designation of academic advisor to the Department within 6 months after passing Qualifying Examination of Ph. D. Candidates. The premise is in accordance with NSYSU Guidelines for Selection of Advisors.

2. 3. 2 The consent from the Committee is necessary when academic advisors are not full-time instructors of the Department.

2. 3. 3 Students can request change of advisor after getting approval from original advisors.

#### 2. 4 Other ordinance

Confirmed and consented by the advisor, students can invite other faculty from other departments or research centers as co-advisor if needed. The application shall be submitted to the Department and approved by the Committee.

### **Article 3 Qualifying Examination of Ph. D. Candidates**

3. 1 Students who designate an academic advisor and fulfill the course requirement in Article 2. 2 can attend Qualifying Examination.

3. 2 Qualifying Examination of Ph. D. Candidates will be a written test and will be taken in February and September each year. Each student must pass all required subjects listed below before the end of the 7<sup>th</sup> semester. Students can re-take each subject only once. Students who cannot pass qualifying exams will be suspended. However, certain conditions for each student could be considered by the Committee.

#### Required Subjects:

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

(1) Statistics 、(2) Probability 、(3) Statistical Methods 、(4) Financial Econometrics 、(5) Statistical and Machine Learning Methods

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

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

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

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

Students can choose ONE subject at most from other groups upon approval from the academic advisor if needed.

### 3. 3 Application for Ph. D. Candidates

Students can submit Certification of Passing the Qualifying Examination of Ph. D. Candidates to the Department after fulfilling criteria of course requirement, qualifying examination and English proficiency of Ph. D students.

## **Article 4 Ph. D. Degree Examination**

### 4. 1 Dissertation Publishing:

Ph. D. students must present their research result in either international conferences or domestic conferences and have at least one academic article published (or accepted) by journals with academic evaluation system under the name of NSYSU.

### 4. 2 Ph. D Degree Examination

4. 2. 1 Confirmed by advisor, students can attend Ph. D. Degree Exam after passing the Qualifying Examination for Ph. D. Candidates and fulfill criteria in Article 4. 1.

4. 2. 2 The Committee members of Ph. D Degree Examination shall be designated in accordance with NSYSU Implementation bylaws for Ph.D. and Master Degree Examination and consented by Department president and Principal of NSYSU.

4. 2. 3 Within their period of study, students can re-retake the degree exam once. However, Students who fail the retake exam will be suspended based on NSYSU regulations.

## **Article 5 Graduation**

With the fulfillment of premise regulations, students can submit application of graduation.

**Article 6 The bylaw will be implemented after approval of the meeting of the Department of Applied Mathematics, College of Science and signed by the Principal. The same for modification.**

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

