

Ph.D. Candidate Qualification Examination Requirements for the Ph.D. Program of the Department of Applied Mathematics at Chung Yuan Christian University

Amended by the 95-1-2 Department Affairs Meeting on November 24, 2006

Amended by the 97-2-1 Department Affairs Meeting on March 13, 2009

Amended by the 99-1-3 Department Affairs Meeting on January 19, 2011

Amended by the 101-1-1 Department Affairs Meeting on September 21, 2012

Amended by the 102-1-2 Department Affairs Meeting on November 15, 2013

Amended by the 102-2-3 Department Affairs Meeting on May 30, 2014

Amended by the 102-2-4 Department Affairs Meeting on July 2, 2014

Amended by the 106-1-2 Department Affairs Meeting on November 15, 2017

Amended by the 107-1-1 Department Affairs Meeting on October 24, 2018

- I. The Ph.D. Candidate Qualification Examination Requirements for the Ph.D. Program of the Department of Applied Mathematics at Chung Yuan Christian University (hereafter referred to as “The Regulations” was established in accordance with Article 7 of the Implementation Guidelines for Qualification Exams for PhD Degree Candidates at Chung Yuan Christian University.
- II. Students in the Ph.D. program of this Department must complete the qualification exam to be recognized as Ph.D. degree candidates by this Department (Graduate Institute). The qualification exam is announced once per semester. Applications are accepted within the announced period.
- III. Students in the Ph.D. program shall complete the qualification exam within **four** years of enrollment or direct entry to the Ph.D. program (not including sabbaticals).
- IV. The qualification exam for Ph.D. students can take the form of a written exam or a published paper.
 - (I) For written exams. they must pass one subject exam from the Ph.D. program (the subject is to be designated by the student’s advisor. If there is no advisor, then this is to be designated by the head of the department). The exam is to run for three hours and the passing score is 70.
 - (II) Paper publication
 - Paper eligibility: Only papers submitted after enrollment in the Ph.D. program may be counted.
 - The student must have one paper accepted for publication at a symposium or academic journal. The paper must be submitted to the Department Office with the following information attachment.
 - (1) The full text of the paper presented at a symposium or published by the symposium (electronic or hard copy).
 - (2) For academic magazines, the cover page of the magazine, the acceptance letter, full text of the paper, and so on.
 - The details of the paper must have been reviewed and approved by the convener of the academic team.
- V. Ph.D. Program Exam Subject
 - (I) The exam subjects for students enrolled between 2005 ~ 2010 are as follows:
General Algebra, General Analysis, Discrete Mathematics and Combinatorics Theory, Probability Theory, Mathematical Statistics, Differential Equations (including Ordinary Differential Equations and Partial Differential Equations), Regression and Analysis of Variance.
 - (II) The exam subjects for students enrolled from 2011 and after are as follows:

General Algebra, General Analysis, Graph Theory and Combinatorics Theory, Probability Theory, Mathematical Statistics, Ordinary Differential Equations, Regression and Analysis of Variance, Functional Analysis, Algorithms, Operating Systems, Database Systems, Formal Language.

- VI. Members of the Qualification Examination Committee are to be retained by the head of the Department. The Committee can be made up of both CYCU and outside experts and scholars.
- VII. A paper published by the student that counted towards the qualification examination may not count towards the credits for the degree dissertation.
- VIII. The Regulations were approved by the Department Affairs Meeting and will be implemented after being submitted to the Office of Academic Affairs for reference. The Regulations apply to all Ph.D. students that have not yet completed the Ph.D. qualification examination. Any revisions to the regulations will follow the same process.