

Ph.D. Degree Requirements

Revised on September 27, 2012

1. Period of the Study

The period of the Doctoral study is limited to two to seven years (excluding accumulated leave of absence up to four semesters).

2. Course Requirements

2.1 The Ph.D. degree requires at least 21 graduate credit hours beyond a master's degree, where the course codes must begin with E or W, and the course numbers must higher than 400. For direct Ph.D. students, the Ph.D. degree requires at least 45 graduate credit hours beyond a baccalaureate degree, where the course codes must begin with E or W, and the course numbers must higher than 300. The courses with code numbers less than 500 must be approved by the advisor.

2.2 Graduate seminars of at least two credit hours are required.

2.3 At least 6 (two-semester) dissertation credits are required.

2.4 For the drop-out and re-entry student, who has passed the qualified exam before drop-out, the previous coursework credits can be transferred.

3 Doctoral Candidacy Qualifying Exam

3.1 Each Ph.D. student must pass the qualifying exam within the first six semesters (excluding the leave of absence).

3.2 A Ph.D. student, who has passed the qualifying exam and met the course requirement, will become the doctoral candidate.

3.3 The qualifying exam is held twice a year in March and August. The subjects of the qualifying exam will be specified in the rule of the Ph.D. qualifying exam by the EE department, Tatung University.

3.4 If a student quit the university after passing the qualifying exam, the qualification will be valid for ten years.

4 Preliminary Exam of Ph.D. Oral Defense

4.1 Object of the Preliminary Exam

A doctoral candidate can use either paper count or practical contribution as the object of the preliminary exam.

4.2 Application of the Preliminary Exam

(1) After a doctoral candidate completes the dissertation, he/she must submit the application form with the corresponding documents to the department.

(2) If the paper count is used as the object, a doctoral candidate must submit the

application 8 weeks before a semester ends. If the practical contribution is used as the object, a doctoral candidate must submit the application one year before the Ph.D. oral defense.

- (3) After receiving the application, the department chair will invite five to seven professors serving as the qualification committee of the Ph.D. oral defense. The applicant's advisor will be the committee member. However, if more than one advisor, only one vote is counted for all the advisors.

4.3 Procedure of the Preliminary Exam

- (1) If the paper count is used as the object, the applicant must present an oral report on papers. The committee will judge the paper points according to "Paper Count Guideline". Doctoral candidate paper points must meet the following requirements:
 - (a) The total paper points must be at least 4.0 points, among which at least 3.0 points are obtained from Class A journal papers.
 - (b) At least one paper gets 2.0 points or more.
- (2) If the practical contribution is used as the object, the committee decides the way of reviewing the results. The doctoral candidate will pass the preliminary exam if at least 3/4 of the committee members agree. If the doctoral candidate fails, the candidate can re-apply reviewing the result after six months. The candidate must submit the application 8 weeks before a semester ends.

5 Ph.D. Dissertation Oral Defense

After passing the preliminary exam, the Ph.D. candidate can be recommended by the advisor to apply for doctoral dissertation oral examination. The Ph.D. dissertation defense follows the regulation of the Ministry of Education. A doctoral candidate who fails to pass the Ph.D. dissertation defense within the prescribed period of study will be removed from the Ph.D. program.

6 Degree Granting

The Ph.D. candidate will be granted a Ph.D degree, after passing the Ph.D. dissertation defense, completing the dissertation, and completing the required procedures.

7 Degree Revocation

If the dissertation is proved as plagiarism or falsification of data, the degree will be canceled and the diploma has to be handed back to the university.

Doctoral Candidacy Qualifying Exam

Revised on February 24, 2011

1. According to the table listed below, a Ph.D. student must take 3 subjects, where 2 subjects are from the area of expertise, and pass.
2. The passing grade is 70. If failed, one has to re-take the exam.
3. Each Ph.D. student must pass the qualifying exam within the first six semesters, or otherwise the student will be removed from the Ph.D. program.
4. The qualifying exam is held twice a year in March and August.

Subjects of Doctoral Candidacy Qualifying Exam

Research Areas	Subjects	
Computer	Computer Architectures	Operating Systems
Communication/DSP	Random Processes	Discrete-Signal Processing
Electronics	Analog Electronic Circuits	Digital Electronic Circuits
Control	Linear Systems	System Identification
Microwave	Electromagnetism	Microwave Circuits
Power	Power Systems	Power Electronics

Paper Count Guideline

Revised on April 10, 2003

1. The papers must be submitted after entering the Ph.D. program, and are published or have been accepted.
2. Points of each paper are determined by the qualification committee of Ph.D. oral defense secretly. The average will be used as the paper points.
3. Papers with the same or similar contents can only be counted once, and the committee will determine which one to be taken into account.
4. According to the papers category, the paper points are listed in the table below.
5. Papers with multiple authors (excluding one advisor in the department), the paper points are calculated according to the following methods:
 - (1) If there are two authors, the first author accounts 70% of the paper points, and the second accounts 40% of the paper points.
 - (2) If there are three or more authors, the first author accounts 60% of the paper points, the second accounts 30% of the paper points, and the third accounts 20% of the paper points. The rest cannot share the points.

Paper Point Table

Paper Classification	Regular Paper	Short Paper (including Brief Paper, Correspondence, Technical Notes, Letter)
Class A (SCI or EI Journals)	1 – 4	1 – 2
Class B (Other Journals Conferences Symposiums)	0.3 – 1	