

Department of Bioenvironmental Systems Engineering Guidelines for Ph.D. program students

Amended by the 11th Departmental Affairs meeting on the 2nd semester of 2011 academic year on Jun. 29, 2012

(If there is any inconsistency or ambiguity between the English version and the Chinese version, the Chinese version shall prevail.)

Article 1 Admission qualifications :

- I. Having passed the Ph.D. admission examinations.
- II. Having been accepted for the Ph.D. admission according to “Bioenvironmental Systems Engineering Guidelines for Direct Admission into Ph.D. program”.

Article 2 Admission examinations :

- I. The admission examination is handled by the Recruitment Committee.
- II. Admission examinations are divided into two parts including an oral examination and the application document.
- III. The Recruitment Committee assigns Oral Examination Committee to take charge of the oral examination. The oral examination shall contain the “research and studying plan” provided by the students and the course “Agricultural Engineering”
- IV. Students applying for Ph.D. program shall provide the documentations as follows :
 1. Transcripts in the college and graduate school.
 2. Master thesis, publications and study plan.
 3. Recommendation letter.
- V. Students can consult the “Ph.D. program students’ research and studying plan” with our teachers.

Article 3 Graduation requirements :

- I. Ph.D. program students shall have completed a minimum of 28 credit hours; Master program students applying for Direct Admission into Ph.D. program shall have completed a minimum of 34 credit hours; Bachelor students applying for Direct Admission into Ph.D. program shall have completed a minimum of 42 credit hours. Credit hours mentioned above are excluded from thesis or dissertation, foreign language and the credit hours completed before Ph.D. program.
- II. Credit hours shall include the subjects assigned by Graduate Committee, besides the credit hours of the subjects cannot be transferred to the credit hours stipulated above.
- III. Courses selected by Ph.D. program students shall be approved by his/her advisor and teacher, otherwise being not recognized.
- IV. Students applying for Direct Admission into Ph.D. program shall follow the conditions stipulated above since the admission of Ph.D. program.

Article 4 Ph.D. Degree Committee :

- I. Ph.D. program students shall select his/her advisor within one year after registration and form a Graduate Committee that comply with the following :
 1. Assigning the necessary subjects.
 2. Handling Ph.D. qualifying examination.
 3. Investigating the proposal.
 4. Instructing the research.
 5. Oral defense of Ph.D. dissertation.
- II. There shall be 5 to 9 members for the Graduate Committee; members shall be appointed by his/her advisor and then reported to Academic and Teaching Committee for approval. (as form D-01) The changes of the membership shall be approved by Academic and Teaching Committee.
- III. Members of the Ph.D. Degree Examination Committee must possess one of the following qualifications :
 1. Having been a Professor under our department or on regular staff of other colleges.
 2. A Fellow of the Academia Sinica or having been a Research Fellow of the Academia Sinica.
 3. Having been an Associate Professor or and Associate Research Fellow with significant contribution in the academic field.
 4. Having a Ph.D. degree with significant contribution in the academic field.
- IV. Members from other departments of the Ph.D. Degree Committee shall be at least one-third of the amount.
- V. Members satisfying the qualification of Article 4, Subparagraph 3, Item 4 of the guidelines shall be only one person.
- VI. Members with significant contribution in the academic field shall have three SCI papers accepted in the recent five years.

Article 5 Qualifying examinations :

- I. Ph.D. program students shall complete the Ph.D. qualifying examination within three years of registration, but the deadline of Direct Admission into Ph.D. program students can be postponed for one year. In addition, students shall have completed minimum credit hours before Ph.D. qualifying examination. (Ph. D. program students shall have completed a minimum of 28 credit hours; Master program students applying for Direct Admission into Ph.D. program shall have completed a minimum of 34 credit hours; Bachelor students applying for Direct Admission into Ph.D. program shall have completed a minimum of 42 credit hours.) Bachelor students applying for Direct Admission into Ph.D. program shall have at least one accepted paper including SCI or SSCI paper before taking a Ph.D. qualifying examination.
- II. There will be one qualifying examination every semester, and the date and application

procedures are accepted from the second month of the term. Students shall apply to Ph.D. Degree Committee for the qualifying examination. (as form D-02)

- III. Graduate Committee shall designate two fundamental subjects as the written examination that is related to the researching field of the students and report to the Academic and Teaching Committee for approval. The Academic and Teaching Committee will hold the written examination every semester. Students shall have completed at least one related course in each fundamental field before taking the qualifying examination. If not, students shall take courses according to the following table :

| Field | Subjects | | |
|-------------|-------------------------|------------------------|----------------|
| Mathematics | Engineering Mathematics | Statistics | |
| Physics | Hydrology | Fluid Mechanics | Soil Mechanics |
| Chemistry | Environmental Chemistry | | |
| Biology | Ecology | Ecological Engineering | |

- IV. Ph.D. program students shall have passed the first stage of General English Proficiency Test of High-intermediate Level before applying for the qualifying examination. In addition, other foreign language proficiency tests approved by Academic and Teaching Committee are also valid. The equivalent are shown below :

| Test System | Minimum Score |
|-------------|---------------|
| TOEFL ITP | 503 |
| TOEFL CBT | 177 |
| TOEFL iBT | 63 |
| IELTS | 5.0 |
| TOEIC | 683 |

- V. Upon passing the written examination, Graduate Committee shall hold an oral defense. Once the students satisfy both of the above conditions, Graduate Committee shall sign a form and report to Academic and Teaching Committee for approval.(As form D-03)
- VI. All the examination procedures shall be investigated by Academic and Teaching Committee. If there is any corrections of the thesis, Graduate Committee shall sign a form and report to Academic and Teaching Committee for approval.
- VII. Students failing the Ph.D. qualifying examination shall be ordered to withdraw from the university if they fail the examination for the second time.

Article 6 Ph.D. Degree examination :

- I. The Ph. D. Degree Examination Committee is composed of the members of the Graduate Committee.
- II. Ph.D. program students shall have passed the second stage of General English Proficiency Test of High-intermediate Level before they apply for the Ph. D. degree oral defense, or presented

other language certification approved by Academic and Teaching Committee. The equivalent are shown as follows:

| Test System | Minimum Score |
|-------------|---------------|
| TOEFL ITP | 527 |
| TOEFL CBT | 197 |
| TOEFL iBT | 72 |
| IELTS | 5.5 |
| TOEIC | 750 |

- III. Ph.D. program students shall have three accepted journal papers including at least one SCI or SSCI paper. Master program students applying for Direct Admission into Ph.D. program shall have three accepted journal papers including at least two SCI or SSCI papers. Bachelor students applying for Direct Admission into Ph.D. program shall have three accepted journal papers that are all SCI or SSCI papers. Students must be the first author or the second author with the advisor being the first author on the accepted paper that is relevant to the Ph.D. research work of the students.
- IV. Students must complete the application form stipulated by University and Department (as form D-04) and then apply to Academic and Teaching Committee.
- V. The grades of each examination stage shall be reported to Academic and Teaching Committee and the Director of the institute.

Article 7 Other uncovenanted guidelines shall follow according to “National Taiwan University Guidelines for Ph.D. Degree Examination”.

Article 8 These guidelines are approved by Departmental Affairs meeting ; the same procedure applies to all amendments.