

# **NATIONAL SUN YAT-SEN UNIVERSITY**

## **Department of Computer Science and Engineering Regulations of Doctoral Degree Qualification Examinations for Doctoral Students**

Applicable to Students Starting Since Academic Year 2014

Amended and approved by the College of Engineering General Meeting June 13, 2014.

- I. This set of regulations is issued based on the Ministry of the Education Degree Conferral Law and its enforcement rules, "Academic Regulations" of National Sun Yat-sen University (NSYSU), and "NSYSU Enforcement Rules of Postgraduate Students Degree Examinations."
- II. Relevant items during study periods:
  - A. Degree-studying periods: two to seven years in accordance with regulations of the Ministry of Education (excluding periods of retainments of student status and suspensions).
  - B. Crediting and course criteria:
    1. Doctoral students of the department are required to complete at least 22 credits of master's degree or doctoral courses before graduating, with at least 19 of the 22 credits being course credits of the department. Other credits of elective courses of relevant master's degree or doctoral classes may be studied following approvals of the department. For students who directly entered doctoral courses from master's degree courses are required to complete at least 40 credits, with at least 30 of the 40 credits being course credits of the department. A doctoral student of direct entry may transfer at most two-thirds of credits obtained in the first year of master's degree study to doctoral degree study credits, with a maximum of 12 credits being transferred.
    2. Students who apply for direct entry to doctoral degree courses are required to complete compulsory courses of master's degrees (except for seminars).
    3. Doctoral students of the department are required to study elective seminar courses in every semester of the last two years of doctoral degree studies. Students are also required to each study a three-credit elective course every semester.
    4. Elective courses of doctoral students of the department in each semester shall be finalized following approvals of supervisors. In cases of supervisors being absent, elective courses of doctoral students will be finalized by mentors or the director of the department.
    5. Grades of English courses of graduating doctoral students of the department are required to meet one of the following test/exam standards with test/exam dates being no earlier than two years prior to entry to courses:
      - a) A TOEIC score of 750 or above.
      - b) Passing listening, reading, oral, and writing tests of GEPT high-intermediate level or above.
      - c) A TOFEL ITP score of 527 or above.
      - d) A TOFEL-iBT score of 71 or above.

- e) An IELTS band score of 5.5 or above.
- 6. For students who fail to meet the standards described in II-B-5 after having two attempts in tests/exams, English or relevant courses assigned by the department course committee shall be completed and passed with grades being in top 50% of the English classes. English courses credits used for graduating English requirements may not be accounted for graduating credits.
- 7. For enhancing learning, research, and English capabilities of doctoral students of the department, the department may assign students with relevant support courses.
- 8. Doctoral students may only apply for degree qualification examinations after meeting English standard criteria specified in the departmental regulations for doctoral students.

C. Assignments of supervisors:

- 1. In general, doctoral students of the department may choose full-time faculty members of the department with positions of assistant professors or above to be supervisors of doctoral theses.
- 2. In cases of specific circumstances that students choose faculty members from other departments to be supervisors, each student shall still choose one department faculty member with a position of assistant professor or above to be a co-supervisor. Should a student require a co-supervisor from another department, the student shall apply to the department after the agreement of his/her supervisor. A co-supervisor shall be disqualified in the case of a supervising period between the start of the supervision and the graduation of the student is less than one year.
- 3. Doctoral students of the department shall choose their thesis supervisors within a year after entry to the department. For students who fail to choose supervisors in time, the department shall coordinate and assign supervisors for the students.
- 4. In cases of specific circumstances that a student requires to change his/her supervisor, agreements from the original and the substituting supervisors shall be obtained, and the student shall notify the department with a written report.

III. Doctoral degree candidate qualification examinations:

Definitions of semesters: the first semester starts on August 1 of each year and ends on January 31 of the year after, whereas the second semester starts on February 1 of each year and ends on July 31 of the same year.

A. Qualification examinations:

- 1. The qualification examinations are carried out in written examinations. Examination results of each course shall be determined as “approved” or “disapproved” by department general meetings.
- 2. There are two sessions of qualification examinations each year, they are planned to occur in the last months of the first and the second semesters respectively. Doctoral students of the department shall submit applications for intended course qualification examinations three weeks prior to each exam session. Except for students with specific conditions that are reviewed and approved as separate cases by the department, a student who does not

attend the applied course examination will be marked with a score of zero (one fail).

3. When doctoral students apply for qualification examinations of the first time, four out of the following six courses shall be selected as “courses of qualification examinations” with three to be passed, no changes allowed after confirmation, and a maximum of two attempts allowed for each course exam:
  - a) Computer architectures (postgraduate course)
  - b) Computer networks (undergraduate course)
  - c) Operation systems (undergraduate course)
  - d) Design and analysis of algorithms (postgraduate course)
  - e) Digital electronics (undergraduate course)
  - f) Probability (undergraduate course)

At least one course exam must be passed for qualification examinations. For course exams that are not passed, course exams may be substituted by studying the courses. (Should there be changes to courses, notifications will be announced on department webpage one semester prior to course alternations). Course studies and course examinations may be simultaneously carried out. Courses used to substitute examinations may only be studied for once with grades passed and grades being in top 50% of all students of each course.

4. Doctoral students of the department shall pass qualification examinations (including completions of course studies) within a year and a half after entry to the department (excluding periods of suspensions). Students who do not pass in time will face withdrawals from the department.
5. Master’s degree students of the department may apply for doctoral qualification examinations with agreements from their supervisors. Results of qualification examinations (including “approved” courses and numbers of attempts of “disapproved” courses) will stay effective if the master’s degree students graduate and enter or directly enter doctoral courses of the department in the same year. In cases of master’s students not entering doctoral courses of the department two years after master’s degree graduations, results of qualification examinations will be invalid.

B. Thesis proposal reviews:

1. The doctoral thesis advisory and review committee of the department consists of the following members: supervisors, two members or more with positions of assistant processors or above recommended by the supervisors, and one member recommended by the department. Members from the department shall make up half or more of the committee members.
2. Doctoral students of the department shall pass oral assessments of the doctoral thesis advisory and review committee within one year (excluding periods of suspensions) after passing qualification examinations. A pass for an oral assessment may only be determined with agreements from all committee members. Students who do not pass their first oral assessments and re-apply for oral assessments will be exempt from the regulation of having to pass oral assessments within one year after passing qualification examinations described at the beginning of this subparagraph. Re-applications of thesis proposal oral assessments shall still be completed

within one and a half years after passing the qualification examinations. Only one re-application is allowed for each student. Students who fail for the second time will face withdrawals from the department. Doctoral degree examinations may be applied six months after approvals of thesis proposal assessments.

IV. Relevant regulations of doctoral thesis publications:

- A. Publications of theses may only be applied when doctoral students meet the minimal requirements of one of the following two criteria:

Doctoral degree examinations:

1. For students who have studied doctoral courses for four years at the time of degree exam applications:

At least one SCIE representative journal article, and at least one article included in IEEE/IET Electronic Library or ACM Digital Library or a grade-B international conference article (or an implementing system relevant to graduating thesis).

2. For students who have studied doctoral courses for less than four years at the time of degree exam applications:

Apart from meeting the criteria described previously, at least one of the publications must be a grade-A SCIE long journal article or a grade-B international conference article, or an implementing system relevant to graduating thesis awarded with top three places in national or international competitions. (Grades of journal articles and conference articles will be announced on the department websites).

Of the journal articles mentioned above, a doctoral student must be the lead author (other than the supervisor) of at least one SCIE article. The representative publication may not be that of other (graduated or graduating) doctoral students.

- B. Articles recognized by the department and accounted for degree criteria described previously in this set of regulations are those published by the doctoral students of the department during study periods of master's degree or doctoral courses of the department and in the full title of the department (or the full title of the department follows by other units of services) with supervisors listed as authors.
- C. Doctoral students are required to each attend at least one international conference and orally deliver an article (please attach proofs) before applying for doctoral degree examination qualification assessments.

V. Doctoral degree examinations:

- A. A doctoral student of the department who has completed a thesis that is signed and approved by the supervisor to recognize that the originality and the completion of thesis have met the standards of doctoral articles may apply for the doctoral degree examination. Students who intend to apply for doctoral degree examinations are required to submit applications and be approved by the Department Academic Committee one month prior to exam days. (Reviewed items include years of study, credits earned, doctoral candidate qualification examinations, English proficiencies, whether thesis proposals are approved within time limits, whether relevant thesis publication requirements are met, and other reviewed items specified in regulations of the university). Students who are approved by the committee may enter the doctoral degree examinations.

- B. A student who has reached the completion of study period but failed to meet English requirements at the time of degree examination application may apply with declaration for other graduating criteria to be first assessed. All graduating criteria shall still be met before applying for degree examinations.
- C. Doctoral degree examinations are processed in accordance with the university's "Enforcement Rules of Postgraduate Student Degree Examinations."

VI. Graduation:

Students who meet all criteria described in this set of regulations may apply for graduations.

- VII. This set of regulations shall be implemented following approvals of department general meetings and college general meetings, as well as the authorization of the president. The same procedure shall be carried out when amendments are to be made.