

# NATIONAL SUN YAT-SEN UNIVERSITY

## Department of Computer Science and Engineering

### Regulations of Degree Qualification Examinations for Doctoral Students

(Applicable to Students Enrolled after Academic Year 2019)

Amended by Department General Meeting on Feb. 26, 2003

Amended by College General Meeting on Mar. 25, 2003

Amended by Department General Meeting on Dec. 29, 2004

Amended by College General Meeting on Jan. 25, 2005

Amended by Department General Meeting on Mar. 9, 2005

Amended by College General Meeting on Mar. 23, 2005

Amended by Department General Meeting on Sep. 27, 2006

Amended by College General Meeting on Nov. 1, 2006

Amended by Department General Meeting on Mar. 30, 2007

Amended by College General Meeting on Jun. 15, 2007

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Amended by College General Meeting on Jun. 10, 2008

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Amended by Department General Meeting on Feb. 25, 2019

Amended by College General Meeting on Mar. 28, 2019

Amended by Department General Meeting on May 8, 2020

Amended by College General Meeting on May 25, 2020

- I. This set of regulations is issued based on the Ministry of the Education Degree Conferral Law and its enforcement rules, and "Academic Regulations" of National Sun Yat-sen University (Hereafter referred as NSYSU) and " NSYSU Implementation Bylaws for Ph.D. and Master Degree Examination."
- II. Degree study periods :
  - A. Degree-studying Duration : two to seven years in accordance with regulations of the Ministry of Education (excluding periods of retainments of student status and suspensions).
  - B. Credit and course requirements :
    - (1) Prior to graduation application, students must complete at least 22 credits, and 19 out of 22 credits shall be courses from Department of Computer Science and Engineering (Hereafter referred as the Department). Approval of the Department is required if students wish to take courses from other related departments. Students admitted via Direct Admission to Doctoral Program from Master's Program are required to take 40 credits prior to graduation application, and 30 out of 40 credits shall be courses from the Department. Students admitted via Direct Admission to

Doctoral Program from Master's Program may apply for credit waived from two-third and with maximum of 12 credits taken from 1<sup>st</sup> year of master's study.

- (2) Students admitted via Direct Admission to Doctoral Program from Master's Program shall complete all required courses for master's degree (except for seminars) prior to graduation application.
- (3) Compulsory courses: students shall take Seminar ( I ) to Seminar ( IV ) and at least a three-credit course each semester within first two years after enrollment.
- (4) Students study for doctoral degree in Information Security shall complete two core courses listed as follows prior to graduation: Secure Cryptographic Protocols, Digital Signature Schemes and Applications, Cryptography, Secure Programming, Hack Technology and Computer Forensic, Network Security, and Computer Architectures.
- (5) Students shall have their advisor's approval for course selection each semester. If doctoral program students do not have an advisor, they shall have their mentor or program director's approval for course selection.
- (6) Students shall meet any of English Proficiency requirements listed as follows prior to graduation application. Students may provide an English Proficiency Test score report or certificate with an issued date within two years prior to their enrollment.
  - a. A TOEIC score of 750 or above;
  - b. Passing listening and reading tests of GEPT high-intermediate level or above;
  - c. A TOEFL ITP score of 527 or above;
  - d. A TOEFL iBT score of 71 or above;
  - e. An IELTS band score of 5.5 or above.
- (7) For students who fail to meet the standards described in II-B-(6) 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.
- (8) In order to enhance professional knowledge, research capability or English proficiency of students, the Department may assign students with relevant support courses.
- (9) Students may only apply for degree qualification examinations after meeting English standard criteria specified in the departmental regulations for doctoral students.

#### C. Selection of Advisors :

- (1) In principle, students may choose full-time faculty of the Department with position of assistant professors or above to be dissertation advisor.
- (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) A student shall confirm their dissertation advisor within one year after enrolment. The Department will assign and coordinate a dissertation advisor for students who are not able to confirm their advisors in time.
- (4) A student may request an advisor variation by submitting application form with an approval of their original advisor and shall provide a written report to the Department.

### III. Doctoral Qualifying Examination :

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 will be written one. Each examination result will be determined as “Pass” or “Fail” by the Department’s General Meeting Committee.
- (2) The qualifying examination will be held during the last month of each semester every year.
- (3) The subjects for qualifying examination are Computer Architectures, Computer Networks, Operating Systems, Design and Analysis of Algorithms, Electric and Digital Electronics, and Probability.
- (4) Students failing to pass half of subjects listed above within two years after enrollment will face withdrawals from the Department.
- (5) Master students may apply for doctoral qualification examinations with agreements from their advisors. Results of qualification examinations (including “Pass” courses and numbers of attempts of “Fail” 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. Dissertation Proposal Reviews :

- (1) The dissertation advisory and review committee of the department consists of the following members: An advisor, two members or more with positions of assistant processors or above recommended by the advisor, and one member recommended by the Department. Committee from the Department shall take up half or more of the committee members.
- (2) Students shall pass oral defence of the doctoral dissertation within one year (excluding periods of suspensions) after passing qualification examinations. A pass for an oral defence may only be determined with agreements from all advisory and review committee. Students failing to pass first oral defence and re-apply for another one will be exempt from the regulation of having to pass oral defence 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 receiving approvals of dissertation proposal review.

#### IV. Relevant regulations of dissertation publications :

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

(1) For students who have studied doctoral degree program 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 dissertation).

(2) For students who have studied doctoral degree program 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 advisor) of at least one SCIE article. The representative publication may not be that of other (graduated or graduating) students.

B. Articles recognized by the Department and accounted for degree criteria described previously in this set of regulations are those published by the students of the Department during study periods of master's degree or doctoral degree 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 advisors listed as authors.

C. Students are required to attend at least one international conference and orally deliver an article (please attach proofs) before applying for doctoral degree qualification examination.

#### V. Doctoral degree examinations:

A. A student who has completed a dissertation signed and approved by the advisor to recognize that the originality and the completion of dissertation have met the standards of doctoral articles may apply for the doctoral degree examination. A student who intends to apply for doctoral degree examinations is required to submit written applications and be approved by the Department's Academic Committee at least a month prior to exam days. If necessary, the Department Academic Committee may hold a meeting to discuss on the matter (including years of study, credits earned, doctoral qualification examinations, English proficiencies, whether dissertation proposals are approved within time limits, whether relevant dissertation publication requirements are met, and other reviewed items specified in regulations of the university). Students who receive approvals from Academic Committee may take 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 students shall complete a dissertation with a topic and contents related to their seeking degree.

D. Doctoral degree examinations are proceeded 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.