National Sun Yat-sen University
Department of Computer Science and Engineering
Regulations of Ph.D. Candidacy and Degree Examinations for Program in Computer Science and Engineering and Program in Information Security

(Applicable to students enrolled from the Academic Year 2022)

I. The Regulations of Ph.D. Candidacy and Degree Examinations for Program in Computer Science and Engineering and Program in Information Security (hereinafter referred to as "the Regulations") are formulated in accordance with the Degree Conferral Act of the Ministry of Education, as well as the Academic Regulations and the Implementation Bylaws for Ph.D. and Master Degree Examination of National Sun Yat-sen University (hereinafter referred to as "NSYSU").

II. Relevant matters during the study:
   A. Study duration: Two to seven years in compliance with the requirement of the Ministry of Education (excluding deferred enrollment and voluntary suspension periods).
   B. Credit and course requirements:
   (1) Prior to graduation application, a minimum of 20 graduate level credits is required for Ph.D. students. At least 17 credits must be earned from courses offered by the Department of Computer Science and Engineering

(hereinafter referred to as "the Department"). Other graduate courses can be taken with approval of the Department. Students admitted via direct admission to Ph.D. programs shall earn at least 38 credits, and 30 out of 38 credits shall be courses from the Department. Two-thirds of credits (up to 12 credits) from the first-year Master's program can be added to credits of the Ph.D. program.

(2) General compulsory courses: Seminar (I) to Seminar (II) with two credits in total.

(3) Professional compulsory courses:
Ph.D. Program in Information Security: At least two of the following professional compulsory courses must be completed before graduation: Security Cryptographic Protocol, Digital Signature Schemes and Application, Cryptography, Secure Programming, Hacking Technology and Computer Forensic, Network Security, Computer Architectures and Information Security Theory and Practice.

(4) Students determine the courses to be taken every semester upon their advisors' approval. Students who do not have advisors shall request approval from their homeroom teachers or the chair of the Department.

(5) Students are required to achieve the specified score for one of the following exams to meet the English proficiency requirement for graduation (the exam date must fall within two years prior to enrollment):
  a. TOEIC 750 or above;
  b. Passing the writing and speaking test of High-Intermediate Level of the General English Proficiency Test (GEPT) or above;
  c. TOFEL ITP 527 or above;
  d. TOFEL-iBT 71 or above.
  e. International English Language Testing System (IELTS) 5.5 or above

(6) A student who fails to meet the standard stated above twice can take and pass a course instructed in English specified by the department curriculum committee and with passed grades being in the top 50% of the class. Credits earned in this case will not be accumulated for graduation.

(7) The Department may request students to take other relevant courses to enhance their knowledge, research abilities, or English proficiency.

(8) A student who meets the requirement of English proficiency is eligible to apply for the degree examination.

C. Advisor assignment:

(1) A student shall choose a full-time faculty member at the rank of assistant professor or above from the Department as the advisor for his or her dissertation.

(2) If a student has to choose a faculty member from another department due to special circumstances, one full-time faculty member of the Department at the rank of assistant professor or above must be chosen as the co-advisor. When co-advising from another department is required, the student shall submit an application to the Department upon approval of his or her advisor. A co-advisor who only provides instruction for a period of less than one year at the time the student applying for graduation will be disqualified.

(3) Students are required to choose their dissertation advisors within one year after enrollment. The Department will assign an advisor to those without ones after the deadline.

(4) If students need to change their advisors due to special circumstances, they

must obtain consent from their original and new advisors and submit a written statement to the Department.

   D. International academic exchange: Home students are required to gain international exchange experience before graduation. One of the following requirements must be met prior to degree examination application.

     (1) Apply for overseas exchange/study (3months or above).

     (2) Complete an overseas study program or project (semester/summer vacation) organized by the Department (3 months or above).

     (3) Obtain a dual degree granted in collaboration with an overseas university.

     (4) If it is verified that a student not able to complete long-term overseas academic exchange due to their regular job or other reasons by the Department General Meeting, the student is required to present papers at international conferences three times or above, and at least two oral presentations must be made at these conferences.

III. Ph.D. candidates qualifying examination:

Definition of semester: The fall semester starts from August 1st to January 31st of the following year. The spring semester starts from February 1st to July 31st.

   A. Qualifying examination:

     (1) It is a paper-based examination. The test result for each subject shall be determined as Pass or Fail at the Department General Meeting.

     (2) The qualifying examination takes place within one month after the final exam of the fall and spring semesters, respectively, every year.

     (3) Subjects to be tested are Computer Architectures, Computer Networks, Operating Systems, Design and Analysis of Algorithms, Electric and Digital Electronics, and Probability. There is no limit on the number of tests which students can take for each subject.

     (4) Students must pass three out of six subjects within two years of enrollment (excluding voluntary suspension periods). Students who fail to fulfill this requirement will be withdrawn by the Department.

     (5) A current master degree student of the Department can apply for the qualifying examination upon the advisor's approval with signature.

     (6) If a former graduate student enrolls as a doctoral degree student of the Department within five years after leaving NSYSU, the passed subjects taken from last student status may be applied for a waiver.

IV. Dissertation proposal review:

   (1) Members of the Dissertation Proposal Consultation Committee: Advisor, two faculty members at the rank of assistant professor or above recommended by the advisor, and one faculty member recommended by the Department. Half or more members shall be the faculty of the Department.

   (2) After passing the qualifying examination, a student is required to take the oral examination conducted by the Dissertation Proposal Consultation Committee. Only when all members give their approval can the student pass the oral examination. Ph.D. degree examination can be applied six months after receiving approvals of dissertation proposal review.

V. Relevant regulations of dissertation publications:

   A. The following requirements must be met prior to application for Ph.D. degree examination.

(1) The research field of published papers shall be in the range of the dissertation and be closely related to the dissertation topic. Points are given based on the SCIE (Science Citation Index Expanded) journal rankings and three or more points must be obtained for graduation. Journals are classified by the quartile based on their Impact Factor according to the Journal Citation Reports (JCR): 3 points for Q1, 2 points for Q2, and 1 point for Q3.

The rank of quartile will be adopted based on the best of research category selected by JCR listed in the published journal in the year of submission or published. The best quartile for the journal in its category in the year of paper submission or publication according to JCR shall be used.

B. Points for the articles stated above can only be given to one doctoral student (including current or former students). A doctoral student must earn at least two points with papers published as the first author (except the advisor). If doctoral students change their advisors, the points earned during the period under supervision of previous advisors will not be accumulated as graduation points.

C. 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.

D. If students earned all points from published papers directly republished by SCIE journals without second reviews, they will be regarded as failing to achieve this regulation and will not be able to apply for degree examination.

VI. Ph.D. degree examination:

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, Ph.D. qualifying examinations, English proficiencies, whether dissertation proposals are approved by deadline, whether relevant dissertation publication requirements are met, and other reviewed items specified in regulations of the university). Students who receive approvals from the Department Academic Affairs Committee may take the Ph.D. degree examinations.

B. A student who has reached to the 7th year of study period but failed to meet English proficiency requirements at the time of Ph.D. degree examination application may sign an affidavit to review fulfillment of other graduation requirements first; however, all graduating criteria shall still be met before applying for Ph.D. degree examinations.

C. Students shall complete a dissertation with a topic and contents related to their seeking degree.

D. The Ph.D. degree examination shall be administered according to the "Implementation Bylaws for Ph.D. and Master Degree Examination of NSYSU."

VII. Graduation: Students who meet all requirements stipulated above may apply for graduation.

VIII. The Regulations shall be implemented following approvals of the Department General Meeting and the College General Meeting, as well as the authorization of the president. The same procedure shall be carried out when amendments are to be made.