Regulations for ISA PhD Students

I. Course Work

Apart from the courses required by the university, and the course "Thesis", all students have to complete 18 credits, of which at least 12 credits are related to ISA, CS5xxx～7xxx, COM, SNHCC or IIS. For students who are directly transferred to the PhD program, they have to complete 30 credits, of which at least 24 credits are related to ISA or CS.

1. ISA or CS related courses are those with course codes which (i) begin with ISA, COM, SNHCC, or IIS or (ii) are of the form CS 5xxx ~ 7xxx; however, "Thesis", "Topics" courses, and English language courses are excluded. A course not listed above may be considered as an ISA or CS related course under permission from ISA Chairperson.

2. At least one course ("Thesis" can be counted) has to be taken in each semester. Failing to do so may risk discontinuation of studies from the university.

3. Credits from taking undergraduate courses with initial subject numbers of 4 may be counted under permission from both the research advisor and the ISA Chairperson.

II. Basic Subjects Assessment

In each of the following groups, at least one course has to be completed with B- or above before graduation (or during previous studies). Yet, credits from these courses are not counted as graduating credits:

- Group A: Operating Systems, Computer Architecture, Networking
- Group B: Probability, Statistics, Discrete Mathematics, Linear Algebra
- Group C: Data Structures, Algorithms

III. Qualifying Examination

1. It includes "Professional Subjects Assessment" and "Research Potentials Assessment."

2. "Research Potentials Assessment" can be taken only after "Professional Subjects Assessment" has been passed.

3. Professional Subjects Assessment:

   (1) Has to complete 18 credits of courses approved by the research advisor, of which at least 12 credits are ISA or CS related.

   (2) Only credits from courses completed with B+ or above are counted.

4. Research Potentials Assessment:

   (1) Its focus is to assess a student's ability in conducting research, which includes evaluating if a student can thoroughly understand his/her research topic and the related background knowledge.

   (2) A student has to apply for "Research Potentials Assessment" on or before the end of the sixth semester (leave of absence period is counted), and pass such an assessment on or before the end of the seventh semester (leave of absence period is counted). Failing to apply or pass within the stated time period will result in discontinuation of studies.

   (3) A student can apply for "Research Potentials Assessment" at most twice (including those applied during the leave of absence period) in total, and at most once in each semester.

   (4) The assessment consists of two parts, namely a written research report evaluation and an oral exam. Details are as follows.

   i. An application form and a written research report (in English) should be submitted two weeks prior to the scheduled oral exam. Both the form and the report should be approved and signed by the research advisor.
   ii. Three ISA professors (excluding the research advisor) will be appointed by ISA Academic Committee to form an exam committee.
   iii. Information of the oral exam should be announced publicly one week prior to the exam. The research advisor, or any professor not in the exam committee, or any student may attend the oral exam, but they have to remain silent throughout.
   iv. The oral exam normally includes a 40-min presentation and an 80-min Q&A session. Questions beyond the scope of the presentation topic may be asked.
   v. The exam committee assesses the student's research potentials based on the written report and the oral exam. Decision is made by a majority vote, where the outcome is either "Pass" or "Fail."

IV.Language Requirement

1. Before applying for the "Final Oral Defense" (see section VI), a student must qualify one of the following public tests to prove his/her English proficiency (results within 5 years prior to the PhD studies are also valid):

    (1)   New Internet-based TOEFL, with score 87 or above.

    (2)   TOEIC, with score 785 or above.

    (3)   GEPT High-Intermediate level (or above), passing all stages.

    (4)   IELTS, with score 6.0 or above.

2. After enrolling, you take 6 credits for the following English courses, and the scores must be B+ or above.

    (1)   CS 5912 English for Science and Technology and CS 5913 Academic Research Writing.

    (2)   Courses whose No. belongs to the LANG (Language Center) are marked as "Institute Priority", "Limited to Graduate Student", "Intermediate", or "Advanced".

    (3)   Other English courses approved by the Director.

3. A student with a university degree from a native English speaking country, together with official approval of such a degree from ROC Ministry of Education, can be exempted from the English proficiency test in IV.1.

Note: PhD students of the Institute enrolling after the 107 academic year (inclusive) apply to these regulations, and other students enrolling before 107 academic year apply to both old and new version of regulations.

V. Research Advisor

1. Every student should find a research advisor.

2. The research advisor must be an ISA faculty member, with rank equal to an assistant professor or above.

3. A student may find one co-advisor with rank equivalent to an assistant professor or above.

4. Research advisor cannot be changed within one year before graduation.

5. Research advisor can be changed under written consent of both the original advisor and the new advisor, and such a change must be reported to the ISA office for record.

VI. Oral Defense

1. It consists of "Internal Oral Defense (IOD)" and "Final Oral Defense (FOD)." The exam committee in IOD consists of 3 to 5 professors, including the research advisor. The exam committee in FOD consists of 5 to 9 professors, including the research advisor, where at least 1/3 of the committee must come from the IOD committee, and at least 1/3 of the committee must be external examiners. (The list of FOD exam committee members is suggested by the research advisor, which is then passed to the Headmaster via ISA Chairperson for approval and official appointment.)

2. IOD can be taken only after passing the "Qualifying Examination" for at least 6 months.

3. FOD can be taken only after passing IOD and the evaluation from ISA Academic Committee.

4. Evaluation from ISA Academic Committee can be applied only if the following conditions are all met:

   (1) Fulfilling the "Basic Subjects Assessment" and passing the "Qualifying Examination."

   (2) At least one paper is accepted or published in a notable international journal or in a top international conference.

5. The above evaluation should be applied before the 15th day of each month, where evaluation is expected to be taken before the end of that month.

6. During the FOD, all FOD committee members must be present, while the student can be required to demonstrate his/her implementation.

7. The result of the FOD is normally decided by the average score of all the FOD committee members; 70 or above means "Pass", and 69 or below means "Fail". However, if 1/3 of the committee members gives a failing score (69 or below), the FOD is also considered "Fail". A student failing the FOD may apply for one re-exam in the upcoming semester or upcoming academic year, provided that this re-exam is taken within the time limit of the PhD studies.

VII. Failure in Oral Defense

If a student fails in the oral defense (either IOD or FOD), but his/her research results qualify for a master degree, then a master degree from ISA can be granted, provided that he/she is directly transferred to PhD program from NTHU undergraduate or master degree program.

VIII. Regulations Revision

When the regulations, or the revisions, are passed by the ISA Institute Meeting, they are immediately applied thereafter.

Remarks:

1   According to the regulations by NTHU Office of Student Affairs, if a student fails in all the registered courses (excluding "Thesis") in any semester, he/she can be discontinued from the PhD studies by the decision of the Department/Institute/Curriculum Meeting.

2   Any graduate student who is registered in, or after, the 2015-2016 academic year must register for the "Research Ethics" course, and must pass this course before applying for the final exam (i.e., FOD in our case).

3   The current version of the regulations applies to any student who is registered in, or after, the 2017-2018 academic year. For those registered before the 2017-2018 academic year, they may choose to follow exclusively the regulations in the older version (if it applies) or the current version.