

**National Taiwan University of Science and Technology**  
**Department of Computer Science and Information Engineering**  
**Doctoral Degree Requirements**

- I. Doctoral students must pass the Foundation Course Exams and Specialized Course Exam within two years of entering the program (excluding temporary leave of absence) to qualify as doctoral candidates and continue with the program. Those who do not pass the exams within the time requirement will be dropped out of the program.
- II. Foundation Course Exams
  1. Foundation course exams include written tests in Operating Systems, Algorithms, Computer Networks, and Computer Architecture. Students must pass two out of the four courses. Before applying for the exams, students must notify the department of intended courses. A test re-take must be the same course.
  2. For foundation course exams, students can elect to waive the written test with course credits. Students failing to pass the waiver may take the written tests.
  3. If students fail the written foundation course exams the first time, they must apply for a re-take. Failing the re-take is equivalent to failing the foundation course and the students will be dropped out of the program. The number of times students fail the written test is counted independent of leave of absences.
  4. For the doctoral student electing to waive the foundation course written exams with course credits:
    - A. The student must apply within two weeks of the beginning of the semester and provide relevant documents including grades for foundation courses, ranking, proof of courses taken, and undergraduate transcript.
    - B. The waiver evaluation is conducted by the department's Doctoral Degree Requirement Foundation Courses Evaluation Committee consisting of 5-7 full-time instructors, including the department Chair. The student's advisor is not permitted to be part of the evaluation committee, but may attend the meeting to explain the student's circumstances at the invitation of the committee. The evaluation meeting convenes within four weeks after the beginning of the semester and evaluation will proceed according to the documents provided by the student. The evaluation committee convenes once every semester.
    - C. The passing grades for a foundation course is based on the course grade and any relevant achievements in that particular course, and is equivalent to a

grade of 80 (grade level A-) or above in the department's undergraduate foundation courses. After the student join our program, the courses to waive the written test should be offered by the undergraduate program in our department or in the same level. Otherwise, if the courses are offered out of this department, the course credits should be pre-approved by both the Department Academic Committee and the Department Affairs Committee before taking the courses.

#### 5. Foundation Course Written Exams:

- A. Students should apply to take the exams within one month of the beginning of the semester.
- B. Exams for foundation courses are held once every semester. The exam date will be set by the department.
- C. Two instructors appointed by the department Chair will form the written exams committee for the foundation courses. They will be responsible for setting the questions and grading the exams.
- D. Passing grade for the written exam will be determined by the Doctoral Degree Foundation Course Written Exams Committee, which is comprised of the department Chair and all instructors involved in setting the exam questions. The student's advisor is excluded to be part of the written exams committee.

#### III. Specialized Course Exams:

1. Doctoral students must submit a technical report based on their doctoral research to the oral exam committee. Research results may include major conference papers, journal papers, or systems development.
2. The doctoral student advisor will convene an oral exam committee of 3-5 members to conduct an oral defense for the specialized course exams. The passing grade for the specialized course exams is 70 or above in the oral defense.
3. Specialized course exams can only be taken once.

IV. The requirements above are implemented following the approval of the Department Affairs Committee. Any amendments will require the approval of the Department Affairs Committee.