

Rules and Regulations for Doctoral Program Students of the Department of Physics of National Chung Cheng University

The Standards are set in accordance with the *Academic Regulations of National Chung Cheng University* and its *Post-graduate Degree Granting Method* as academic reference for doctoral students. Other related regulations that are not included in the Standards shall subject to the university regulations.

I. Adviser

1. The entering doctoral students must decide a faculty member from the Physics Department as the research adviser to assist him or her in planning his or her academic schedule.
2. The research adviser also gives advice on selecting graduate courses and finding research opportunities.
3. Students are strongly encouraged to meet their research adviser regularly.
4. In some cases, a student may petition for change of research adviser. The petition must receive approval from the current advisor .
5. On rare occasions, a student may choose his or her research adviser outside the Physics Department. If so, a co-adviser from the Physics Department is needed.

II. Course Requirements

1. For the Ph.D. degree, 20 units are required, being typically 8 to 9 courses.
2. The following six required courses must be taken to satisfy this requirement and must be passed for the Ph.D. degree:

Quantum Mechanics (I)	3 credits
Electrodynamics (I)	3 credits
Statistical Mechanics	3 credits
Classical Mechanics	3 credits
Special Topics: Colloquium (I)	1 credits
Special Topics: Colloquium (II)	1 credits

3. The remaining units may be acquired by taking elective courses in physics.

III. Credit Waiver and Course Selection

1. For those who have previously taken similar required courses in the Master's program, these courses may be substituted by graduate elective courses, approved by the Department Committee beforehand.

2. For those who have previously taken similar required courses in another Ph.D. program, these courses may be waived at the discretion of the Department Committee. However, no more than six units in total may be garnered.
3. Students may take courses for up to six units in a related field from other departments with prior approval of their research adviser.
4. All first-year doctoral students are required to enroll in a minimum of six units each semester. Beginning in the second academic year until graduation, the students are expected to take at least three units of courses each semester

IV. Any student who receives the enrollment scholarship must work as Teaching Assistant for two semesters.

V. Oral Qualifying Examination

1. Academic Regulations require all students to complete and pass university oral qualifying examination before advancing to doctoral candidacy.
2. Students are expected to take and pass the oral qualifying examination no later than their sixth semester.
3. In consultation with the student's research adviser, a doctoral committee comprised of three to five CCU faculty members is nominated, approved by the department chair.
4. The main purpose of examination is to discuss and evaluate the student's proposed dissertation problem, based on the student's field of specialization and related materials.
5. If students fail to pass the oral qualifying examination, they may take it a second, and final, time.

VI. Advancement to Candidacy

Students are advanced to candidacy upon successfully completing the oral qualifying examination.

VII. Doctoral Dissertation

The doctoral degree requires the completion of an approved dissertation that demonstrates the ability of student to perform original, independent research.

VIII. Publications

1. Publication of peer-reviewed journal papers is must for all students before graduation.
2. A minimum of one first(corresponding)-author article, published in top-rank twenty-five percent (Q1) journals in a specific field of the SCI(SCIE) database, is necessary.

3. If there is no Q1 article published, two first(corresponding)-author journal articles in the SCI(SCIE) database are needed.

IX. Final Oral Examination (Defence of Dissertation)

1. It is required for all students in the program.
2. Before requesting the final oral examination, the students must pass the online tests of Academic Ethics Education Courses.
3. The online academic ethics courses can be reached in the Center for Taiwan Academic Research Ethics Education homepage (<http://ethics.moe.edu.tw>).

- X.** The Rules and Regulations of the program are passed and implemented by the Department Committee, same as in revision.