

NTHU Institute of Photonics Technologies (IPT) Doctoral Degree Program

Translated from the Chinese version revised and passed at IPT affairs meeting on
2021/09/30

Article I. Admissions Requirements

- i. All those who have a master's degree in disciplines related to photonics from public universities, registered private universities, independent colleges, or foreign graduate institutes that have been recognized by the Ministry of Education may enroll in the doctoral program of IPT after passing the doctoral admission examinations of NTHU.
- ii. Students in the IPT master's program may enroll directly into the doctoral program of this Institute by recommendation and approval of IPT. The grades of the student must meet the criteria written in the "Regulations for Master's Students Applying Directly to Study for Doctoral Degrees" of NTHU.
- iii. Doctoral students from the other departments or institutes of NTHU may study in the doctoral program of IPT after receiving IPT approval of transfer. (Those who passed the entrance exam through Taiwan's Universities' IPT system for PhD study are also included.)

Article II. Duration of Study

The IPT doctoral program may take a minimum of two years and a maximum of seven years. Students with an approved full-time job may extend the maximum duration of study by two years.

Article III. Required Curriculum and Credits

- i. Four credit units of "Seminar" earned from four semesters are required. For those graduating within four semesters, the number of seminars taken should be equivalent to the number of semesters of study. Any exception is subject to approval by the Institute director.
- ii. A dissertation is required.
- iii. Three credit units of Photonics I and three credit units of Photonics II are required. Those who have studied and passed courses that are equivalent

to Photonics I and Photonics II prior to joining the doctoral program may apply for exemption, subject to approval by the director of the Institute.

In addition to the above curriculum and course unit requirements, 8 units of curriculum courses approved by IPT must be completed. Those who enroll directly into the doctoral program (with the status of a one-year of incomplete master's program) must complete at least 20 units of courses approved by IPT. The aforementioned units may not include those earned from courses related to liberal arts or languages, and the courses must be approved by the student's thesis advisor. For students who do not yet have a thesis advisor, the curriculum must be approved by the director of the Institute.

Article IV. Qualifying Examination

- i. Doctoral students may apply for the qualifying examination immediately after admission. The rules are described in the "Code of Practice for IPT PhD Qualifying Examination".
- ii. Doctoral students of IPT must pass the qualifying examination within the first six semesters after entering this Institute (not counting semesters on leave of absence). A doctoral student is not allowed to take an examination of the same subject more than three times. Those who fail to pass the qualifying examination within the prescribed period of time will be suspended from the PhD program by the Institute. The grade and number of examinations taken are counted even if the qualifying examination is taken during the student's on-leave period.

Article V. Dissertation Supervision

- i. A doctoral student must find a thesis advisor within the first academic year of admission. The thesis advisor is responsible for supervising the course and research performance of the student. If a doctoral student fails to find a thesis advisor by the end of his/her second year of admission, the Institute director will appoint two faculty members to determine whether the student should be suspended from the doctoral program of the Institute.
- ii. The thesis advisor should be a full-time faculty member (professor, associate professor, or assistant professor of this Institute) at the time the student enrolls into IPT. If the advisor is not a full-time faculty member of this Institute, a faculty member of IPT must agree to serve as a co-advisor.

- iii. Change of a thesis supervisor is subject to approval by IPT.

Article VI. Dissertation Content and Quality

- i. The PhD dissertation should be a completed work of original creative research by the PhD student under the guidance of his/her dissertation advisor. The dissertation should be rigorous and arranged in a systematic order.
- ii. Without the original dissertation advisor's permission, the student should not change his/her advisor, should not change the original plan or result, and should not remove dissertation content or publish it in a journal.
- iii. Aside from the dissertation presentation, a PhD student should, during the research period, prove his/her research ability and quality at the academic journal publication level, domestic or international. At the least, the PhD student should publish one article as first author (other than his/her professor). The publication should include the author's affiliation with IPT. Whether or not the article meets the level of qualification needs to be determined by an IPT Affairs meeting.

Article VII. Dissertation Presentation

- i. Review of Research Plan
 - A. Each PhD dissertation advisory committee should contain at least four members. The appropriate number is decided by both the PhD advisor and the director of the Institute. The PhD advisor is an obvious member, and the coordinator/convener is appointed by the director of the Institute.
 - B. The Advisory Committee shall review the plan orally. The applicant needs to put forward the research plan to all committee members two weeks prior to the review date. Passing the plan requires approval by at least two thirds of the members. If failed, the applicant needs to wait for at least three months to reapply.
 - C. Each PhD student is limited to apply for a dissertation plan review twice, and the review should be approved before three and a half years after the student entered NTHU. If the plan fails its review in the regulated time, the student is asked to quit the program.
- ii. Oral Review of Dissertation Qualification

Before the graduate student applies for review of his/her dissertation, a preparation of appropriate materials regarding graduation qualification is needed. It includes:

- A. Proof of passing the qualify exam.
- B. Proof of passing the review of the dissertation research plan.

The time between passing the review and the dissertation oral exam should be at least one complete semester or more than six months.
- C. Published journal paper(s).
- D. Transcript records for all the credited courses taken (with proof of passing all the required courses).
- E. Proof of foreign language ability.
- F. Draft of dissertation.
- G. Proof of being the Teaching Assistant for at least two semesters for IPT's courses or EE4150 Optics and Photonics Laboratory.

After the preparation of the above materials, an application for an Institutional Affairs meeting for review of the dissertation is required. It requires at least half of the members present to pass the application.

For special situation that the application cannot be reviewed in the regular Institutional Affairs meeting, the students should submit the application before the last working day in December (the Fall semester) or May (the Spring). The director of the Institute could form a temporary dissertation review committee which should contain at least five members. The requirement is for at least 3 out of 5 members or the same ratio to pass the approval.

Article VIII. Dissertation Exam

Conducted according to NTHU's governing act for PhD degree.

Article IX. Revoking Dissertation

If it is found that the PhD dissertation involved plagiarism, forgery and copying and is proved to be serious, NTHU shall form a review committee to decide whether to revoke the degree; the student is not allowed to continue even if his/her course work has not been completed.

Article X.

In order to be qualified for a PhD degree, students who entered this PhD program through Taiwan's universities' IPT system not only have to follow all the regulations put forward by the program, but also have to satisfy these IPT's rules.

Article XI.

In the event of a discrepancy between the original Chinese version and this English translation, the Chinese version shall prevail.

Article XII.

These regulations is effective following their approval at an IPT Affairs meeting.