Study Regulations for the International Doctoral Program in Environmental Science and Technology (University System of Taiwan) at National Yang Ming Chiao Tung University

Approved at the program meeting on March 31, 2021 Revised at the program meeting on March 8, 2022 Revised at the program meeting on March 14, 2023 Revised at the institute meeting on March 18, 2024

[Name]

This program is approved by the Ministry of Education as the "International Ph.D. Program in Environmental Science and Technology (University System of Taiwan)" (hereinafter referred to as the Program).

[Integration of Program Regulations]

The Program integrates the enrollment, faculty advisors, requirements for study, and graduation qualifications of the four universities as follows:

- (a) The "Student Affairs Committee of the International Ph.D. Program in Environmental Science and Technology (University System of Taiwan)" is composed of faculty members from the main departments of the four universities to discuss and coordinate student-related matters.
- (b) The Program emphasizes interdisciplinary integrated courses and research development. Therefore, each doctoral student is co-supervised by two professors from different universities within the University System of Taiwan: a primary supervisor and a co-supervisor. They are responsible for guiding the student throughout their academic journey, including course selection, readings, research experiments, and dissertation writing.
- (c) The doctoral program must be completed within two to seven years. During this period, students are encouraged to take courses not offered at their primary university within the University System of Taiwan.
- (d) The degree examination will be conducted according to the relevant provisions of the four universities' "Regulations for Awarding Graduate Degrees."

[Admission Requirements]

Eligible applicants include current foreign students or graduates with a master's degree or higher from domestic or foreign universities, in accordance with the Ministry of Education's "Regulations Regarding International Students Undertaking Studies in Taiwan" and "National

Yang Ming Chiao Tung University's Admission Regulations for Foreign Students."

[Credit System]

- (a) Doctoral students must complete a minimum of 18 credits, including mandatory subjects specified by the Program. A direct admission Ph.D. student should complete at least 30 credits.
- (b) Credits for which students may apply for exemption are limited to one-third of the total graduation credits specified by the Program. Exemptions beyond one-third of mandatory subject credits require Program approval.
- (c) Ph.D. students may be exempt from repeating previously completed mandatory subjects. Exemption eligibility is subject to Program approval.
- (d) Graduates of related master's programs may be exempt from repeating previously completed mandatory subjects upon agreement by the course instructor and approval by the Program supervisor.

[Course Requirements]

Mandatory courses (total of 6 credits) and elective courses are to be taken according to the academic affairs announcements of each academic year.

[Subject Exams, Grades]

- (a) Subject exams may include continuous assessment, mid-term exams, and end-of-term exams. Examination times, locations, and methods are determined by the instructors.
- (b) Semester grades for each subject are calculated based on continuous assessment, midterm exams, and end-of-term exams. Grades are recorded using the university's online grading system and finalized within two weeks after the end of the semester.
- (c) Teachers requesting a change in the original assessment of grades due to errors or omissions should submit relevant supporting documents and apply for the change of grades in writing. Matters related to the correction of grades by teachers shall be handled in accordance with the school's regulations on student grade operations.
- (d) The academic performance of doctoral students is graded, with A+ being the highest and B- considered passing. Matters related to the grading system shall be handled in accordance with the school's "Student Grade Operations Regulations."
- (e) Doctoral students who fail required courses must retake them. If they still fail after one retake, they shall be required to withdraw from the Program.
- (f) Those unable to participate in examinations due to official duties, illness, or major accidents shall be handled in accordance with relevant regulations of the school.

[Qualification Examination for Ph.D. Candidates]

The qualification exam may be applied for once per semester. If unsuccessful, candidates may apply for re-examination in the following semester, limited to one re-examination.

- (a) Eligibility criteria include completion of mandatory subjects specified by the Program and meeting credit requirements.
- (b) The qualification exam must be completed within the first three years of the doctoral program. Candidates who fail the exam may retake it once within the specified period. Continuous failure results in withdrawing from the Program.
- (c) Candidates must apply for the qualification exam in the semester they intend to take it, with approval from their advisor and the Program supervisor.
- (d) Doctoral students should apply for qualification examination to the program during the semester scheduled for the examination. After approval by the advising professor and the Program supervisor, the list should be submitted to the program office within two weeks after the start of the semester.

For approved applications that are not conducted due to unforeseen circumstances or require a retake due to failing grades, an application should still be submitted to the program for the semester in which the examination is intended to be held, without the need to attach various application documents.

- (e) Qualification Examination Committee:
 - 1. Three to seven examination committee members shall be nominated by the advising professor. One member shall be designated as the convener with the approval of the Program supervisor, and the advising professor himself/herself may not serve as the convener.
 - 2. The composition and qualifications of the doctoral degree qualification examination committee shall be handled in accordance with relevant regulations of the university's "Procedures for Conferring Graduate Degrees."

- (f) Examination:

- 1. Written Examination: The examination covers two professional subjects. It is held twice a year, in March and October. Students wishing to participate must apply to the program during registration. The exam is scored out of 100 points, with 70 points considered a passing grade. The subject content for the exams is as follows:
 - Compulsory Subjects: Special Topics in Environmental Science and Technology, Special Topics in Environmental Pollution and Health Risks, Special Topics in Environmental Monitoring and Analysis. Students choose two out of these three subjects, with each subject being prepared by at least two teachers.
 - Elective Subjects: Special Topics on Environmental Hygiene, Study Designs in Epidemiology, Molecular Toxicology, Health Risk Assessment, and Environmental Control and Management. Students choose two out of these five subjects, with each

subject being prepared by at least two teachers.

- 2. Research Proposal Oral Defense: Only those who pass the written examination are eligible for the oral defense. The timing is determined by the Qualification Examination Committee. Applications must be submitted one month in advance, and the doctoral research proposal must be submitted to all members of the Qualification Examination Committee one week prior to the defense. A passing grade is achieved if two-thirds or more of the committee members approve.
- 3. Students who pass the qualification examination within the stipulated period are listed as candidates for the doctoral degree.

[Advising Professor]

Guidelines for dissertation supervision and related regulations are based on "Guidelines for Dissertation Supervision and Interaction with Graduate Students at National Yang Ming Chiao Tung University."

Regarding the provisions stipulated in Articles 4 and 5 of the aforementioned guidelines, which govern self-imposed regulations and obligations of graduate students, if a graduate student intends to terminate the advisor-student relationship or change their dissertation advisor during their period of study, they must follow the necessary written application procedures stipulated by the academic unit and complete relevant transition matters with the original laboratory. After deliberation by the departmental council (with the advisor abstaining), approval shall be granted, and the change shall take effect upon consent from the new advisor.

- (a) Before the end of the academic year, Ph.D. students must select a primary supervisor and a cross-campus supervisor, submitting a consent form signed by the primary supervisor.
- (b) The primary academic advisor for each student must be a full-time or adjunct assistant professor or above in the program.

[Graduation Requirements]

- (a) Graduation-related procedures and regulations, as well as the application deadlines for doctoral degree examinations, shall be conducted in accordance with the principles stipulated in Article 9 of the "National Yang Ming Chiao Tung University Regulations for Graduate Degree Conferral Operations". Candidates for doctoral degree examinations must submit their application to the Institute no later than ten working days before the examination date, along with all required documents. Upon approval by the advisor and the institute director, the institute shall submit the approved list of examination committee members to the Office of Academic Affairs. Applications for qualification examinations and degree examinations shall be made once per semester. If the examination is not passed, candidates may apply for re-examination once in the following semester.
- (b) Doctoral candidates must, within the stipulated period of the program, complete the application form and submit it to the program along with a recommendation letter from

their advisor, transcripts of academic records, proof of passing the qualification examination, and other required documents as specified in the following third item. After review by the advisor and the program supervisor, the approved list of examination committee members shall be submitted to the Office of Academic Affairs.

- (c) Other requirements for examination:

- 1. When applying for the doctoral degree examination, candidates must submit a printed copy of a dissertation related to the content of the doctoral dissertation that has been published in a journal or accepted for publication, or other supporting documents (acceptance letter of the dissertation).
- 2. The number of required dissertation publications and journals are as follows: Candidates must have published or had accepted at least two dissertation, all of which must be in journals indexed in international scientific databases (SCI, SSCI, EI). At least one of the theses must be authored solely as the first author, and both must be published under the name of the program during study.
- 3. The initial draft of the dissertation must pass the preliminary review by the advisor.
- 4. Doctoral students who have completed the required course credits, passed the qualification examination, and published their graduation dissertation according to program regulations may be recommended by their advisor to apply for the dissertation defense. Upon passing the defense, the doctoral degree will be conferred.

- (d) Examination Committee for Degree Examination:

- 1. The composition and qualifications of the doctoral degree examination committee shall be handled in accordance with relevant regulations in the "Regulations for Graduate Degree Conferral Operations" of the university.
- 2. Once approved, changes to the composition of the doctoral degree examination committee shall not be made arbitrarily.

Drafting of the Dissertation:

The drafting of the initial dissertation must follow the prescribed format and be approved by the advisor. Two weeks before the degree examination, the required number of printed copies (equal to the number of examination committee members) must be submitted to each committee member.

Dissertation Defense:

- 1. Prior to the degree examination, an originality report of the dissertation must be completed and provided for committee review.
- 2. Committee members must attend the defense in person and may not delegate their attendance. For doctoral degree examinations, at least two-thirds of the committee members must be present, with a minimum of five committee members for doctoral candidates. External committee members must constitute at least one-third of the attendance. The defense score is calculated as the average score given by all attending

- committee members. If one-third or more of the committee members give a failing grade, the defense is considered failed.
- 3. The dissertation defense score is graded on a scale from A+ (highest) to B- (passing).
- 4. Additional conditions imposed during the examination evaluation process must be deemed satisfactory by the examination committee before the degree examination can be completed.

[Graduation and Departure Procedures]

- (a) After passing the dissertation examination, if there are suggestions for modifications from the examination committee, the candidate must either complete the modifications as suggested or provide reasons why certain modifications cannot be made. The revised dissertation must include an originality comparison report confirmed by the advisor after their review. Upon the advisor's approval, the final version of the dissertation can be prepared, and a dissertation approval form must be signed by all members of the examination committee.
- (b) The final version of the dissertation must be printed in the format prescribed by the Ministry of Education or the university.
- (c) After the degree examination, the program must submit the examination results of students who did not pass to the Office of Academic Affairs Registration Office for registration within the stipulated period (February 15 for the first semester, August 31 for the second semester). Students who pass the degree examination must complete the data filing and electronic submission on the university's "Dissertation Upload System" within the stipulated period. They must also prepare one copy of the dissertation with signatures of the examination committee, the original dissertation approval form, the originality comparison report, and the academic ethics and originality comparison statement, all to be submitted to the institute. Additionally, a printed copy of the dissertation, duly signed by the program, must be submitted to the Office of Academic Affairs Registration Office. After completing the school leaving procedure, the Registration Office may issue the degree certificate according to the regulations of the academic year.

One copy of the submitted dissertation must be sent to the National Library, and the rest will be handled according to the graduation and departure regulations of the program and the university library. Students who pass the degree examination but cannot complete the graduation departure procedure within the stipulated period due to special circumstances must, before the program's deadline, submit the original statement and the degree examination results table. After obtaining signatures from the advisor and program supervisor, they may apply to the program for retention. If approved, they must still register and pay fees the following semester and complete dissertation submission and departure procedures within the stipulated period. Students who fail to submit their dissertation and complete the departure procedures by the end of the study period will be considered as

failing the degree examination and subject to dismissal according to regulations.

- (d) After completing the graduation departure procedures, students may receive their degree certificate and be awarded the "Ph.D. Program in School of Public Health (Doctor of Philosophy)".

[Miscellaneous]

Any matters not covered herein shall be handled in accordance with other relevant regulations of the university.

[Implementation and Amendments]

These regulations are implemented following approval by the curriculum committee at all levels, and amendments shall be treated similarly.