

Course Requirements for International Ph.D. Program in Environmental Science and Technology (University System of Taiwan)

Institute of Environmental and Occupational Health Sciences, National Yang-Ming University

Students in the Ph.D. Program of Environmental Science and Technology in the Institute of Environmental and Occupational Health Sciences, National Yang-Ming University (hereinafter “the Program”) shall take all courses in accordance with the rules stated in the requirements. Admission and related matters shall be handled in accordance with the rules stated in the admission brochure of the respective academic year.

I. Admission Requirements

International students with a master’s degree from a college or university recognized by the Ministry of Education (MOE) in Taiwan are eligible to apply for the Ph.D. programs. The application qualification should abide with the “Regulation of UST International Students Admissions” and “MOE Regulations Regarding International Students Undertaking Studies in Taiwan.”

II. Degree Requirements

1. Students must complete their program of study within 2 to 7 years. At least 18 credits including the required courses and seminars are required. Students should pass the qualifying examination for Ph.D. candidates. Other rules not included here should abide by the requirements of the University and the MOE.
2. All administrative procedures must be handled in accordance with the administrative procedures of the applicant’s respective Institute. The course instructor may arrange an exemption examination for the applicant if needed. In cases where the applicant passes the examinations, credit exemption shall be granted in accordance with the rules governing credit exemption (maximum 6 credits). Should the applicant fail the examination, s/he shall retake the course.
3. Postgraduates who advance to the Ph.D. program are not required to retake required courses for which they have already obtained credits.
4. Students who wish to apply for credit exemption shall submit details of the curriculum and transcripts of academic performance for the received course(s). Applicants shall then obtain consent from their course instructors, the Program

Director, and director of respective Institute(s).

III. Curriculum of the Program

1. Required courses: Students are required to take courses from two out of the following three courses: Special Topics on Environmental Science and Technology (3 credits), Special Topics on Environmental Pollutions and Health Risk (3 credits) and Special Topics on Environmental Monitoring and Analysis (3 credits).
2. Elective courses: Students must take 12 or more credits from courses related to their field of study.

IV. Ph.D. Qualifying Examination

Qualifying assessment is based on implemented Ph.D. degree qualifying assessment principles of National Yang-Ming University.

1. Requirements: completion of compulsory courses while meeting credit requirements of the Environmental Science and Technology Program.
2. Qualifying assessment must be completed by the end of third academic year after attending the Ph.D. program.
3. Students who fail the second attempt shall be expelled from the Program.
4. Qualifying assessment application, withdrawal, and grade registration must be handled in accordance with school regulations.
5. Qualifying assessment committee members
 - (a) Three to five committee members shall be nominated by the student's advisor and approved by the Program Director and the Director of the Institute of Environmental & Occupational Health Sciences. The Program Director and Institute Director shall then appoint one of the committee members as the convener. The student's advisor cannot be appointed as the convener.
 - (b) Committee members must be at least an associate professor or a research associate fellow, and meet Article 5 of the Postgraduates Degree Assessment Implementation Provisions. Change of committee members shall be proposed

by the student's advisor and approved by the Program Director and Director of the Institute of Environmental & Occupational Health Sciences.

6. There are two parts for the qualifying assessment: written exam and oral exam. In cases where the student fails the written and oral examinations, s/he may retake the examinations within the designated time frame. A student who wishes to take the qualifying written examination must first obtain approval from his/her advisor.
 - (a) Written examination: Students are required to take examination from two out of the three required courses, i.e. **Advanced Environmental Science and Technology, Advanced Environmental Health and Risk Assessment, Advanced Environmental Measurement and Analysis**. Additionally, students need to take examination from two out of the following 5 elective courses as determined by the examination committee: **Advanced Environmental Health, Molecule Toxicology, Research Design of Epidemiology, Health and Risk Assessment and Environmental Management and Control Engineering**. The examination is held twice per year (March and October respectively). Those students wishing to apply for the examination must apply to the graduate institute to which they belong at the time of registration. Examination scores are given with 100 points as the maximum and 70 points as passing the exam.
 - (b) Oral Examination on Dissertation Proposal: To be qualified for the oral exam, students must first pass the written exam. The application for oral exam shall be submitted at least one month in advance so that the committee members can arrange the date. Students must submit a research proposal to all committee members at least one week before taking the exam. Approval by at least two-thirds of the committee members must be obtained in order to pass the examination.
 - (c) Students who pass the oral exam within the designated time shall receive the title of Ph.D. candidate.

V. Dissertation advisor

1. During the first school year, the main advisor at the Institute of Environmental & Occupational Health Sciences and cross-school advisor for Ph.D. dissertation shall be determined and officially filed with the school office, including any change.

Following the determination on the advisor, the class selection form shall be signed by the advisor.

2. Ph.D. students shall be advised by an associate professor or above from the Institute of Environmental & Occupational Health Sciences in accordance with the Qualification Requirements for Advisors to Postgraduate and Ph.D. Students.

VI. Degree examination

1. Within the designated time frame, the Ph.D. candidate shall submit the application for oral defense, as well as a transcript of academic performance, a certificate to indicate that the student has passed the qualifying examination and the requirements listed below, to the Program and the Institute of Environmental & Occupational Health Sciences at National Yang-Ming University. After obtaining approval from the student's advisor and Director of the Institute of Environmental & Occupational Health Sciences, the form shall be forwarded to the Office of Academic Affairs (OAA) along with a list of the members of the doctoral dissertation committee.
2. Other requirements
 - (a) SCI journal papers that have been published or accepted. For the latter, an acceptance letter from the respective journal shall be provided.
 - (b) The Ph.D. candidate shall have two original SCI journal papers, with at least one of them bearing the name of the student as the "single" first author. All papers shall be published in a SCI, SSCI or TSSCI journal and shall include the Institute of Environmental & Occupational Health Sciences at National Yang-Ming University in the Ph.D. candidate's affiliation(s).
 - (c) The draft of the doctoral dissertation shall be reviewed by the Ph.D. candidate's advisor.
3. Doctoral dissertation committee
 - (a) Qualifications of the committee members shall be verified in accordance with the requirements listed in Article 5 of the Postgraduates Degree Assessment Implementation Provisions.
 - (b) Once decided, members of the committee may not be changed.

4. Draft writing

Draft of the doctoral dissertation must be written in accordance with designated formats. After being approved by the advisor, it must be duplicated, and a copy must be sent to each committee member at least two weeks before the oral defense.

5. Oral defense of the dissertation

(a) The final grade is the average of scores given by all committee members that are present in the date of oral defense. However, in cases where more than one third of members assign a failing score, the student shall fail the examination.

(b) The grade for an oral defense is given in a percentage score, where the full score is one hundred points and the standard for passing the exam is seventy points.

(c) In cases where the student fails his/her oral defense before the period of study is due, s/he may apply for one more defense. The student may retake the oral defense upon approval of his/her advisor, Director of the Institute of Environmental & Occupational Health Sciences, and director of the OAA. If the student fails on the second attempt, s/he shall be subject to expulsion from the program.

(d) After passing the oral defense, the student must either revise the draft of the doctoral dissertation in accordance with the committee members' suggestion(s) or provide explanation for non-revision. The final dissertation may not be submitted until after approval is obtained from the advisor and after all committee members have signed the final approval form.