

National Tsinghua University Institute of Biomedical Engineering General Academic  
Regulations (PhD Degree)

- I. These regulations are formulated in accordance with the Academic Rules of National Tsinghua University.
- II. Admission
  1. General Graduate Students:
    - a) Students who have a master's degree in their home country recognised by the Ministry of Education, who have passed doctoral entrance examination or institute entrance examination, are eligible for admission into the doctoral program offered by the Institute of Biomedical Engineering at the National Tsinghua University.
    - b) Postgraduate students in the Institute of Biomedical Engineering's master's degree program who have completed the first academic year, have an average grade of 80 or above, and have excellent research potential may be admitted into the doctoral degree program subject to regulations stipulated in the "Master's students applying for transfer to doctoral programs." With recommendation of the student's advisor, application documents should be submitted to the institute office before July 31<sup>st</sup> for Fall semester admissions, or January 31<sup>st</sup> for Spring semester admissions.  
Following approval through an executive meeting, the application will be forwarded to the Office of Academic Affairs for approval by the dean.
    - c) Foreign students, students from mainland China, Hong Kong, and Macau, and overseas Chinese students may apply for admission in accordance with relevant regulations.

2. In-Service Graduate Students:

Students other than general graduate students must meet other relevant conditions. Please refer to the recruitment guide for postgraduate doctoral students of the university.

III. Duration of Study

Duration of Study in the doctoral program is two to seven academic years (excluding leave). In-Service graduate students may extend their study duration by two academic years. Students are allowed accumulated leave of up to two academic years.

IV. Academic Thesis

1. Following postgraduate enrolment, students are expected to identify a suitable full-time professor from, or jointly appointed professor of the institute as a thesis advisor by the end of the first academic year.
2. Graduate students in the doctoral program will be guided by the institute director in course selection and other related matters before an advisor is selected.
3. Following advisor selection, students must fill in the “Advisor SelectionForm.” The advisor will be responsible for the student’s study and research guidance. Students who have appointed joint instruction of two or more advisors will need to fill in the “Joint Instruction of Advisors Form.”
4. Following admission, students who wish to change their advising thesis advisor during the course of their study must fill in the “Change of Advisor Form.”

V. Course Requirements

1. In addition to Thesis (0 credits) and Seminar (4 credits), doctoral students who have graduated from a postgraduate degree should complete a minimum of 18 course credits, a minimum of 12 of which must be specialised courses.
2. Doctoral students with direct entry from an undergraduate degree or the master program must complete a minimum of 30 course credits, a minimum of 24 of which must be specialised courses, in addition to Thesis (0 credits) and Seminar (4 credits).
3. Students must take the following compulsory courses: Seminar (4 credits), Thesis (0 credits), and Academic Research Ethics (0 credits, undertaken online and must be completed no later than the end of the first academic year following the student's admission). Students who have not completed the ethics module will not be allowed to apply for degree examination.
4. The Seminar course is a compulsory component of the doctoral program, comprising of 1 credit per semester for a total of 4 semesters, making up a maximum of 4 credits in total.
5. In addition to the above mentioned compulsory courses, students must also take at least 5 elective courses offered by the institute (as seen on the website), including 2 core courses in different specialisations (marked by the symbol  $\blacklozenge$ ). Students may take at most two prefix-of-4 courses offered by this institute (up to 6 credits).
6. According to regulations governed by the "National Tsinghua University Credit Policy," transfer credits can only make up a maximum of 2/3 of the graduation credit requirement. Courses for which the credit is applied for must at least have a prefix of 5 and shall not have contributed to graduation of the previous degree.

7. Doctoral students are required to attend and pass the general safety education and training seminar held by the school's Environmental Safety Centre upon admission. Students who have completed the training during their master's program (within three years) may be exempted during admission upon submission of proof of completion. Following completion of training, students can enter the laboratory for research.

#### VI. Inter-institutional Transfer

1. Students who have completed a total of one academic year at the institute may apply for inter-institutional transfer to the institute and the Office of Academic Affairs. Students must first discuss this with professors of the institute, complete the "Inter-institutional Transfer Application Form," and obtain approval from the student's current advisor and the institute director before transferring out of the institute. Students who transferred out of the institute will not be readmitted.
2. Transfer students from other institutes must first receive prior review and approval through a transfer review meeting. Transfer students will only be allowed to graduate after completing all requirements of the institute.

#### VII. Qualifying Examination

1. Doctoral students must pass the qualifying examination within 6 semesters of admission (excluding leave), or they may be withdrawn from the program.
2. Students must complete at least 3 core courses in different fields from three major areas offered as outlined in the curriculum map: "Biosensors", "Biomaterials", "Micro-and Nano Medicines". Students are required to score at least an A- (inclusive) on each of the core courses to qualify.

## VIII. Dissertation Proposal

1. Students must complete their dissertation proposal before the end of the third academic year, otherwise they will be withdrawn from the program. The test date is arranged by the student's advisor and is held once per semester.
2. Research plan proposed for doctoral dissertation shall be reviewed and approved by a review committee composed of 5 or 7 members, and a public oral report will be made. The student's advisor shall not serve as the chairman of the review committee. Students shall prepare 7 or 9 copies of the dissertation plan; one for the student, one for each committee member, and one for institute office.
3. Doctoral students must notify the institute office of their name, time, online or on-site method, name and title of the examiners, location, and thesis topic at least 2 weeks before the date, which will be announced by the institute office.
4. The passing grade for the dissertation proposal is 70 of 100. Students who fail the dissertation proposal can reschedule a make-up exam after 3 months. Formal dissertation review and oral examination can be conducted at least 6 months after passing the dissertation proposal. Those who have passed the Dissertation proposal examination are considered doctoral candidates.
5. For other relevant regulations, please refer to the "Notes for Thesis/Dissertation Proposal."

## IX. Oral and Degree Examination

1. Publication:
  - a) Students submitting a publication must include the name of the current institute.

- b) The publication for oral examination must be directly related to the doctoral dissertation. The student's advisor must be the corresponding or co-corresponding author.
  - c) The student is the first author (or first co-author, the advising professor is not included in the ranking), and the advisor is the corresponding author (or co-corresponding author), and meets one of the following conditions:
    - i. Publish at least 2 SCI journal papers, where at least one of them is Q1 or have an impact factor of at least more than 5 (inclusive).
    - ii. Publish an SCI journal paper with an impact factor of at least 10 (inclusive), or in the top 5% of the field. Impact factor or journal rankings in the field are based on the latest data published by SCI in the year when the paper was published (data should be provided). Special cases or circumstances can be referred to a review meeting for discussion.
2. Has completed one of the following foreign language tests:
- a) CBT-TOEFL with a test score of 180 or above.
  - b) IBT-TOEFL with a test score of 80 or above.
  - c) GRE with a test score of 234 or above.
  - d) IELTS with a test score of 5.5 or above.
  - e) The TOEIC with a test score of 800 points or above.
  - f) Pass the preliminary test of the GEPT at the "High Intermediate" level.
  - g) Pass at least 2 credits of the university's elective English courses with a grade of at least B (75 points or above), inclusive.

3. Students graduating in the Spring semester should complete their oral examinations before the 31<sup>st</sup> of July. Students graduating in the Fall semester should complete their oral examinations before the 31<sup>st</sup> of January. The date of the oral examination is arranged in consultation with the student's advisor. Students must prepare the relevant documents and submit an application to the institute office at least two weeks before the test date.
4. Oral examinations are normally undertaken on-site. Those who cannot do their oral examinations on-site due to special circumstances may be allowed to do their exams online.
5. The student's advisor should appoint 5 – 9 members for the examination committee (a minimum of one-third of which must be from outside of the campus). The advisor is to be an ex officio member but shall not be the moderator. The moderator shall be elected by the attending members.
6. Examination committee members should have any of the following qualifications:
  - a) Holding the rank of Assistant Professor, Assistant Researcher, or above.
  - b) Experts and Scholars with doctoral degrees.
  - c) Those above the rank of attending physician.
  - d) Those who have attained sufficient academic or professional achievements as recognised through an executive meeting.
7. The doctoral dissertation must be an original work completed by the doctoral student. When applying for the doctoral degree examination, students must submit a "Thesis Similarity Comparison Report" and an originality declaration statement as a reference

for the examination committee during the exam. The advisor will determine whether the student has passed the thesis similarity comparison.

8. Relevant documents and procedures shall be handled in accordance with the institute's "Doctor's Degree Examination Guidelines."
9. Students who fail the oral examination may retake the examination in the next semester or the following academic year. Students are limited to one re-examination. Students who still fail the re-examination may be withdrawn from the program. If the student's oral examination does not reach the doctoral level but reaches the competencies of a master's degree, they may be awarded a master's degree in accordance with regulations set out by the Ministry of Education (MOE). This will only apply to students with direct entry from an undergraduate degree or the master program.

#### X. Scholarship

1. Institute of Biomedical Engineering Doctoral Degree Scholarship: In order to encourage outstanding students with research potential to pursue a doctoral degree, according to the institute's regulation for doctoral degree scholarships, the advisor will grant each doctoral student NTD 10,000 per month.
2. National Tsinghua University Scholarship for the Cultivation of Outstanding Doctoral Students: For new first-year students enrolled into the university. The quota for the number of awards will be based on those approved by the Ministry of Science and Technology (MOST). The scholarship will be jointly granted by MOST and the university at NTD 40,000 per month for a maximum of four academic years. For more information,

please refer to the Office of Academic Affairs website at

<http://academic.site.nthu.edu.tw/app/index.php>.

XI. Degree Certificate

Students who have completed the required course credits, passed the preliminary and qualifying examination of the dissertation, passed the final oral examination, and have their dissertations approved will be issued a doctoral degree certificate by the school.

They can then go through the school leaving procedures according to the relevant regulations.

XII. Implementation of Regulations

These measures shall be implemented following approval through an executive meeting, and the same shall apply for any amendments thereafter.