

National Tsinghua University Institute of Biomedical Engineering General Academic  
Regulations (Master's Degree)

I. These regulations are pursuant to University Law Enforcement Rules and Degree Conferral Law promulgated by the Ministry of Education.

II. Admission

Applicants who have been accepted through the written or interview track of the postgraduate entrance examination are eligible for admission into the master's degree program offered by the Institute of Biomedical Engineering at the National Tsinghua University.

International students, Mainland Chinese students, and students from Hong Kong and Macau may apply for admission in accordance with relevant regulations.

III. Duration of Study

Duration of Study in the master's program is one to four academic years (excluding leave). Students are allowed accumulated leave of up to two academic years for any reason, while leaves due to serious illnesses or special circumstances are limited to a maximum of four 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 withdrawal deadline of the first semester. Students who have not designated a thesis advisor by the deadline must accept appropriate advisor selection guidance by the institute director.

2. Following advisor selection, students must fill in the “Advisor Selection Form.” 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.”
3. 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.” Students who reappoint a different advisor must do at least another four more semesters of study before they are allowed to do their thesis oral examinations.

#### V. Course Requirements

1. Students must complete a total of at least 24 coursework credits.
2. 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, in this case up to a total of 16 credits.
3. Students must take the following compulsory courses: Seminar (3 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. In addition to the above mentioned compulsory courses, students must also take at least 5 elective courses offered by the institute (as shown in the attached table), including 2 core courses in different specialisations (marked by the symbol ◆).  
  
Students are allowed to take up to 2 undergraduate level courses (6 credits) at level 4.

5. Electives, undergraduate electives, and transfer credits listed as graduation credits must be approved by the student's appointed advisor.

#### 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. Preliminary Oral Examination

1. Students must complete their preliminary oral examination before the end of the third semester of admission. The test date is arranged by the student's advisor and is held once per semester; before October 31<sup>st</sup> in the fall semester, or before April 30<sup>th</sup> in the spring semester. In special circumstances where the examination cannot be held before the above-mentioned dates, the preliminary oral examination may be postponed to December 31<sup>st</sup> or June 30<sup>th</sup> respectively following request by the advisor, and approval by the institute director.
2. The passing grade for the preliminary oral examination is 70 of 100. Students who fail the preliminary oral examination can reschedule a make-up exam within 2 months. The latest time for a make-up exam is December 31<sup>st</sup>/June 30<sup>th</sup> of the current academic

year. Formal thesis review and oral examination can be conducted at least 6 months after passing the preliminary oral examination.

3. Students must notify the institute office of the date and venue (online or on-site) of the preliminary oral examination, as well as the names and titles of the examination committee at least two weeks prior to the exam.
4. For other relevant regulations, please refer to the “Notes for Preliminary Oral Examination.”

#### VIII. Oral Examination

1. Students graduating at the end of the spring semester must complete their oral examination by July 31<sup>st</sup>, and those graduating at the end of the fall semester must complete their oral examination by January 31<sup>st</sup>. The date of the oral examination will be arranged in consultation with the advisor. Students should prepare the relevant documents and apply to the institute office no later than two weeks before the exam.
2. 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.
3. The student’s advisor should appoint 3 – 5 members for the examination committee. The advisor is to be an ex officio member but shall not be the moderator. The moderator shall be elected by the attending members.
4. Students admitted from the fall 2019 academic year (inclusive) onwards must submit a “Thesis Similarity Comparison Report” when applying for the oral examination as reference for the examination committee during the exam. The advisor will determine whether the student has passed the thesis similarity comparison.

5. Relevant documents and procedures shall be handled in accordance with the institute's "Master's Degree Examination Guidelines."

IX. Degree Certificate

Students who have completed the required course credits, passed the oral examination, and have their thesis approved will be issued a master's degree certificate by the school. They can then go through the school leaving procedures according to the relevant regulations.

X. Implementation of Regulations

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

## Subjects offered by the Institute of Biomedical Engineering

General	Biosensors	Biomaterials	Micro- and Nano Medicines
Seminar Thesis Clinical Bioengineering Theories and Practices in Drafting Patent Practical Skills of the Design and Development of Medical Devices Workshop Practice on Medical Device Regulations Patent Technical Analysis: Theory and Practices	◆Microelectromechanical Sensor ◆Point-of-Care Diagnostics ◆Introduction to Molecular Imaging ◆Biomedical sensing technology and statistical analysis Electrochemical Sensor Optical Nanomaterials Bioanalytical Chemistry Inorganic Materials and Engineering Advanced Microfluidic Systems Prototyping Point-of-Care Diagnostics	◆Advanced Bioimaging Technologies ◆Analytical and Sensing Technologies in Biomedical Sciences ◆Advanced Techniques in Biology and Medicine ◆Regenerative Medicine and Tissue Engineering Artificial Organs and Tissue Engineering Advanced Analytical Technologies Advanced Bioelectronics Materials Bioengineering in Cell Research Magnetic Biomaterial Synthetic Biology for Regenerative Medicine	◆Nanomaterial Chemistry ◆Cancer Biology and Therapy ◆Nano-/Bio-materials ◆Applied Cellular Bioengineering ◆Metal-based biomedicine and biomaterials ◆Liquid biopsy and its applications in translational medicine Cancer Nanotechnology Advanced Drug Delivery and Drug Targeting Biomechanics Introduction of Frontier Biomedical Technology