Boğaziçi University
Institute of Biomedical Engineering

Guide for Applicants for MSc and PhD Programs

Institute of Biomedical Engineering

- The Institute of Biomedical Engineering at Boğaziçi University was founded in 1982 as the first interdisciplinary graduate school in the field, in Turkey.
- The Institute offers a variety of education programs and research facilities, leading to MS and PhD degrees. The field of Biomedical Engineering has been established as an important profession, addressing the analyses of biological, physiological and healthcare problems with the application of engineering technologies and scientific methodologies. Graduates holding **Engineering, Medicine and Basic Science** degrees are welcome to conduct the studies described hereinafter.
- For more information: https://bme.bogazici.edu.tr

Before Application

- Stroll through the Institute's web pages, and gather information about the study areas.
- Collect more information by visiting the Institute's Labs and by talking to the researchers (research assistants and faculty members).
- Check the Institute's application requirements for an MSc and PhD degree: https://bme.bogazici.edu.tr/en/msc-and-phd-programs
- Check out the course schedule and the areas of concentration: https://bme.bogazici.edu.tr/current-courses-and-schedule

MSc Program

- The education is well structured based on an “areas of concentration” (AOC) system. Each area, represents a corresponding active research/occupational line of the Institute.
- The interview for a decision of admittance will involve;
  - ✓ inquires about the area the candidates want to apply to,
  - ✓ the prospective research projects they want to take part in, and
  - ✓ the relevancy of their previous studies
- The candidates are stronglyadvised to build a clear intention about the area in which, he/she would want to study.

PhD Program

- The candidates are expected to be clear about;
  - ✓ the AOC they would like to focus on, and
  - ✓ the laboratory they would like to join, and
  - ✓ reaching an agreement with the faculty member(s) as their PhD advisor (necessary condition for admittance).
- The interview for a decision of admittance will involve inquiries about the relevancy of the candidates' former training for the prospective research plans.
- It is necessary for a candidate to visit the Institute and to talk to the faculty member(s) in the AOC aimed, before completing the application process.

“AOC: Areas of Concentration”

- Biomaterials https://bme.bogazici.edu.tr/en/biomaterials
- Biomechanics https://bme.bogazici.edu.tr/en/biomechanics
- Biomedical Instrumentation https://bme.bogazici.edu.tr/en/biomedical-instrumentation
- Biophotonics https://bme.bogazici.edu.tr/en/biophotonics
- Clinical Engineering https://bme.bogazici.edu.tr/en/clinical-engineering
- Medical Imaging https://bme.bogazici.edu.tr/en/medical-imaging
- Neuroengineering https://bme.bogazici.edu.tr/en/neuroengineering

Biomaterials

- Biomaterials deal with biological materials, prosthetics, implants, nanomaterials, and artificial organs.

Faculty

Bora Garipcan, PhD https://bme.bogazici.edu.tr/en/bora-garipcan

Duygu Ege, PhD https://bme.bogazici.edu.tr/en/duygu-ege

Banu İyisan, PhD https://bme.bogazici.edu.tr/en/banu-iyisan

Laboratories

- Biomimetic and Bioinspired Biomaterials Research Laboratory

https://bme.bogazici.edu.tr/en/biomimetic-and-bioinspired-biomaterials-research-laboratory

- Biomaterial Production & Characterization Laboratory

https://bme.bogazici.edu.tr/en/biomaterials-production-and-characterization-laboratory

- Biofunctional Nanomaterials Design Laboratory (BIND LAB)

https://bindlab.bogazici.edu.tr/

Biomechanics

- Biomechanics is the application of engineering mechanics to biological systems for solving medical problems by studying the structure and the function of living organisms.

Faculty

Can Yücesoy, PhD https://bme.bogazici.edu.tr/en/can-yucesoy

Laboratories

- Biomechanics Laboratory https://bme.bogazici.edu.tr/en/biomechanics-laboratory
- Tissue Laboratory
- MADE in NTSP: Motion Assistive Devices Ecosystem in Neurotechnological Solutions Platform

Biomedical Instrumentation

- Biomedical Instrumentation deals with design and development of new medical devices for therapeutic and diagnostic purposes.

Faculty

Mehmed Özkan, PhD https://bme.boun.edu.tr/

Laboratories

- Robotics Laboratory https://bme.boun.edu.tr/robotics-laboratory

Biophotonics

- Biophotonics deals with the interaction between biological units and photons. This area focuses on the medical applications of lasers and near infrared spectroscopy.

Faculty

Mustafa Kemal Ruhi, PhD
https://bme.bogazici.edu.tr/en/mustafa-kemal-ruhi

Retired Faculty

Murat Gülsoy, PhD

Laboratories

- Biophotonics Laboratory
  https://bme.bogazici.edu.tr/en/biophotonics-laboratory
- Tissue Laboratory

Clinical Engineering

- Clinical engineering primarily concerns with the optimization of healthcare delivery through the quality management of medical devices and systems.

Faculty

Albert Güveniş, PhD https://bme.boun.edu.tr/albert-guvenis

Yekta Ülgen, PhD https://bme.bogazici.edu.tr/en/yekta-ulgen

Medical Imaging

- Medical imaging studies imaging modalities for diagnostic and research purposes.

Faculty

Ahmet Ademoğlu, PhD https://bme.bogazici.edu.tr/en/ahmet-ademoglu
Albert Güveniş, PhD https://bme.bogazici.edu.tr/en/albert-guvenis
Cengizhan Öztürk, MD PhD https://bme.bogazici.edu.tr/en/cengizhan-ozturk
Esin Öztürk Işık, PhD https://bme.bogazici.edu.tr/en/esin-ozturk-isik
Mehmed Özkan, PhD https://bme.bogazici.edu.tr/mehmed-ozkan
Pınar S. Özbay, PhD https://bme.bogazici.edu.tr/en/pinar-s-ozbay
Yekta Ülgen, PhD https://bme.bogazici.edu.tr/en/yekta-ulgen

Laboratories

- Neurosignal Analysis Laboratory https://neurosignal.bogazici.edu.tr/
- XLab: Imaging Instrumentation Laboratory https://xlab.bogazici.edu.tr/
- Computational Imaging Laboratory https://cil.bogazici.edu.tr/
- Robotics Laboratory https://bme.bogazici.edu.tr/en/robotics-laboratory
- Multimodal Imaging & Physiology (MIMLAB) https://mimlab.bogazici.edu.tr/

Neuroengineering

- Neuroengineering is a discipline that uses engineering techniques to understand, repair, replace, or enhance neural systems.

Faculty

Daniela Schulz, PhD https://bme.bogazici.edu.tr/en/daniela-schulz

Burak Güçlü, PhD https://bme.bogazici.edu.tr/burak-guclu

Hale Saybaşılı, PhD https://bme.bogazici.edu.tr/hale-saybasili

Laboratories

- Behavioral Biology Laboratory https://bbl.bogazici.edu.tr/
- Tactile Research Laboratory https://bme.bogazici.edu.tr/en/tactile-research-laboratory
- Cellular Imaging and Electrophysiology Laboratory https://bme.bogazici.edu.tr/en/cellular-imaging-electrophysiology-laboratory

Institute of Biomedical Engineering
Rasathane Cd
Kandilli Campus, Kandilli Mah.,
34684 Istanbul, Turkey
02165163433-3435

https://bme.bogazici.edu.tr