



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 health care problems with the application of engineering technologies and scientific methodologies. Graduates holding **Engineering, Medicine and Basic Science** degrees are welcomed to conduct the studies described herein after.

For more information: <https://bme.boun.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 the faculty members).
- Check the Institute's application requirements for a MS and PhD degree: <https://bme.boun.edu.tr/msc-and-phd-programs>
- Check out the course schedule and the areas of concentration: <https://bme.boun.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 strongly advised 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 inquires 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.boun.edu.tr/biomaterials-0>
- Biomechanics <https://bme.boun.edu.tr/biomechanics>
- Biomedical Instrumentation
<https://bme.boun.edu.tr/biomedical-instrumentation>
- Biophotonics <https://bme.boun.edu.tr/biophotonics>
- Clinical Engineering <https://bme.boun.edu.tr/clinical-engineering>
- Medical Imaging <https://bme.boun.edu.tr/medical-imaging>
- Neuroengineering
<https://bme.boun.edu.tr/neuroengineering>

Biomaterials

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

Faculty

Bora Garipcan, PhD <https://bme.boun.edu.tr/bora-garipcan>

Duygu Ege, PhD <https://bme.boun.edu.tr/duygu-ege>

Laboratories

Biomaterials Laboratory

<https://bme.boun.edu.tr/biomaterials-research-laboratory>

Biomaterial Production & Characterization Laboratory

<https://bme.boun.edu.tr/biomaterials-production-and-characterisation-laboratory>

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.boun.edu.tr/can-yucesoy>

Laboratory

Biomechanics Lab.

<https://bme.boun.edu.tr/biomechanics-laboratory>

Tissue Lab.

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/mehmed-ozkan>

Özgür Kocatürk, PhD <https://bme.boun.edu.tr/ozgur-kocaturk>

Laboratories

Biodesign Lab.

<https://bme.boun.edu.tr/biodesign-laboratory>

Robotics Lab.

<https://bme.boun.edu.tr/robotics-laboratory>

Medical Device Testing Lab.

<https://bme.boun.edu.tr/medical-device-testing>



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

Murat Gülsoy, PhD. <https://bme.boun.edu.tr/murat-gulsoy>

Laboratories

Biophotonics Lab.

<https://bme.boun.edu.tr/biophotonics-laboratory>

Tissue Lab.

Clinical Engineering

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

Faculty

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

Yekta Ülgen, PhD <https://bme.boun.edu.tr/yekta-ulgen>

Laboratories

Medical Device Testing & Calibration Lab.

<https://bme.boun.edu.tr/medical-device-testing>

Medical Imaging

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

Faculty

Ahmet Ademoğlu, PhD <https://bme.boun.edu.tr/ahmet-ademoglu>

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

Cengizhan Öztürk, MD PhD <https://bme.boun.edu.tr/cengizhan-ozturk>

Esin Öztürk Işık, PhD <https://bme.boun.edu.tr/esin-ozturk-isik>

Mehmed Özkan, PhD <https://bme.boun.edu.tr/mehmed-ozkan>

Laboratories

Computational Imaging Laboratory

<https://bme.boun.edu.tr/computational-imaging-laboratory>

Medical Imaging Laboratory <http://www.bumil.boun.edu.tr/>

Neurosignal Analysis Laboratory

<https://bme.boun.edu.tr/neurosignal-analysis-laboratory>

Neuroengineering

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

Faculty

Ahmet Ademoğlu PhD <https://bme.boun.edu.tr/ahmet-ademoglu>

Burak Güçlü, PhD. <https://bme.boun.edu.tr/burak-guclu>

Hale Saybaşıllı, Phd. <https://bme.boun.edu.tr/hale-saybasili>

Laboratories

Cellular Imaging and Electrophysiology Lab.

<https://bme.boun.edu.tr/cellular-imaging-electrophysiology-laboratory>

Neurosignal Analysis Lab.

<https://bme.boun.edu.tr/neurosignal-analysis-laboratory>

Tactile Research Lab.

<https://bme.boun.edu.tr/tactile-research-laboratory>

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