



# GRADUATE STUDIES IN BIOMEDICAL ENGINEERING

**EXPLORE YOUR BEST SELF**



Technion Israel Institute of Technology plays a major role in the innovation and brainpower that drives the Israeli economy. Coupled with the innate Israeli innovative spirit, the achievements of Technion's faculty and graduates have helped the country earn its reputation as the world's "Startup Nation."

## **We offer a wide range of exciting research opportunities in the following specialization areas:**

- Applied Biomechanics and Wearable Technology
- Artificial Intelligence in Medicine
- Bioelectric and Bioenergetic Systems
- Bioelectric and Biomechanical Interfaces
- Biofluids
- Biomaterials & Regenerative Medicine
- Biomedical Optics
- Biophysics. Nano Dynamics
- Cancer Nanomedicine and Nanoinformatics
- Cardiovascular NanoMed
- Computational MRI
- In Vivo Multi-Scale Imaging
- Ultrasound Signal and Image Processing and Modeling
- Mechanobiology of Cancer and Wounds
- Medical Imaging
- Molecular Cardiology Research
- Nano-Bio-Optics
- Neuro-Engineering
- Neurorehabilitation and Sensorimotor Neuroscience
- Single Molecule Biophysics and Bio-Nano Technology
- Stem Cell and Tissue Engineering
- Synthetic Biology and Bioelectronics

# THE FACULTY OF BIOMEDICAL ENGINEERING

## Science and Engineering for the Advancement of Medicine.

The Faculty of Biomedical Engineering aims to advance medicine by integrating various disciplines of science and engineering, and fostering a community that emphasizes academic education, technological developments and innovation.

As Israel's largest Biomedical Engineering faculty, we are integral to the international community of knowledgeable and skilled scientists and engineers who are tackling

the greatest medical challenges of today and tomorrow.

Students benefit from studying in a challenging and entrepreneurial learning environment that enables their meaningful engagement in cutting-edge science. The faculty's close relations with both industry and the healthcare system ensures our awareness of prominent issues in the field and future career opportunities for graduates, as well as cultivates future collaborations.



### **Degree programs: M.Sc. & Ph.D.**

Our degree programs are geared toward students who wish to integrate research with engineering design and development in all areas of medicine.



**The “Master of Science” (with a thesis)** program provides students with broad knowledge and a high level of expertise in a particular field. Students follow a specialized study program, conduct research, and submit a research thesis. Students can engage in theoretical or experimental research, investigate phenomena in pure or experimental science, or present a practical approach to engineering or manufacturing processes.



**The “Doctor of Philosophy” (PhD) degree** is designed for outstanding students who wish to conduct research in the field of biomedical engineering.

Programs are geared towards graduates of engineering, exact sciences, life sciences, and medicine who have strong academic and research records.

The Faculty offers three doctoral tracks:

Regular Track / Special Track / Direct Track

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For more information, visit our website at: <https://bme.technion.ac.il/en/>  
or <https://int.technion.ac.il/programs/graduate-school/>

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