

INSTITUTE OF BIOMATERIALS & BIOMEDICAL ENGINEERING

The Institute of Biomaterials & Biomedical Engineering (IBBME) at the University of Toronto is a multidisciplinary research unit where investigators and students from engineering, medicine and dentistry collaborate to develop innovative solutions for the world's most pressing health-care challenges.

Located in the heart of Canada's largest hospital and health-care research network, our renowned graduate degree programs in **biomedical** and **clinical engineering** offer hands-on training that is combined with real-world experience and exposure.

OUR 300 STUDENTS LEARN FROM MORE THAN 100 FACULTY MEMBERS ON CAMPUS AND AT 10 PARTNER HOSPITALS IN TORONTO

- » Holland Bloorview Kids Rehabilitation Hospital
- » Hospital for Sick Children
- » Mount Sinai Hospital
- » Princess Margaret Cancer Centre
- » St. Michael's Hospital
- » Sunnybrook Health Sciences Centre
- » Toronto General Hospital
- » Toronto Rehabilitation Institute
- » Toronto Western Hospital
- » Women's College Hospital

PROFESSIONAL DEGREES

- » Master of Engineering (MEng)
- » Master of Health Science (MHSc)

RESEARCH DEGREES

- » Master of Applied Science (MASc)
- » Doctor of Philosophy (PhD)

RESEARCH THEMES

- » Biomaterials, Tissue Engineering and Regenerative Medicine
- » Engineering in a Clinical Setting
- » Nanotechnology, Molecular Imaging and Systems Biology
- » Neural, Sensory Systems and Rehabilitation Engineering



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UNIVERSITY OF TORONTO



IBBME AT A GLANCE

- » The new Wildcat Fellows Program will provide outstanding PhD students with full funding for their first year to allow rotations through several supervisors' labs.
- » In 2016, MHSc clinical engineering students held 38 internships at more than 20 hospitals and partner organizations in Canada and around the world.
- » Medicine By Design brings together students, researchers and clinicians at U of T and its partner hospitals to achieve new frontiers in regenerative medicine. Led by Professor **Peter Zandstra**, the centre received a historic \$114-million grant from the federal government in 2015.
- » The Translational Biology and Engineering Program (TBEP) is an interdisciplinary initiative that will give students exposure to leading experts in engineering and medicine, collaborating to accelerate new treatments for cardiovascular disease. Led by Professor **Craig Simmons**, TBEP is part of the Ted Rogers Centre for Heart Research.

FOR FURTHER INFORMATION, CONTACT:

Research Programs

416-978-4841

admissions.ibbme@utoronto.ca

Professional Programs

416-978-6102

clinicaleng.ibbme@utoronto.ca

meng.ibbme@utoronto.ca

www.ibbme.utoronto.ca

164 College Street, Room 407

Toronto, Ontario, M5S 3G9 Canada

PROFESSIONAL DEGREES

The **Master of Engineering (MEng) in Biomedical Engineering** program focuses on the design and commercialization of biomedical devices. Students will have the opportunity to take on applied design challenges and meet the growing demands of this industry through course work and a four-month internship.

The **Master of Health Science (MHSc) in Clinical Engineering** program educates students on how to apply and implement medical technologies to optimize modern health-care delivery. The degree requirements include a blend of academic courses, a research thesis and a series of internships to give students real-world exposure and a competitive edge in the field. MHSc students may transfer to the PhD concentration in clinical engineering during their first year of study.

Admission Requirements: A four-year undergraduate degree in engineering from an accredited institution with a minimum grade of A- in the final two years of study. MEng applicants must also have at least a minor in biomedical engineering or equivalent.

RESEARCH DEGREES

This stream immerses students in the application of biomedical sciences and engineering principles to advance health care. The MAsc and PhD programs are research-intensive and require full-time studies. MAsc candidates are guaranteed funding for two years while PhD students receive funding for four years plus tuition and fees. Exceptional students can be directly admitted into the PhD concentration in biomedical engineering.

Admission Requirements: A four-year undergraduate degree in engineering, medicine, dentistry, physical or biological sciences from an accredited institution with a minimum grade of A- in the final two years of study.

COLLABORATIVE PROGRAM IN BIOMEDICAL ENGINEERING

This program allows students to earn a certificate in biomedical engineering in conjunction with a research-stream degree concentration offered in 14 other academic units at U of T. This option provides students with the opportunity to cross traditional discipline boundaries and gain in-depth exposure to biomedical engineering.

Collaborating graduate units at U of T include departments in the Faculties of Applied Science & Engineering, Arts & Science, Dentistry, Medicine and Pharmacy. Please visit www.ibbme.utoronto.ca for a full listing.

English Proficiency Requirements: There is a minimum English proficiency requirement for all applicants educated outside Canada whose primary language is not English. It is a requirement of admission and should be met before applying for admission. Please visit www.uoft.me/englishfacility to determine whether you are required to take a test and for a list of accepted tests and their minimum required scores.

MEng & MHSc

MEng length of study: one year (full time)

MEng Domestic Tuition (2016–2017, full-time): \$14,248.08

MEng International Tuition (2016–2017, full-time): \$45,540.08

Deadline: Apply by March 27, 2017 for a September 2017 start.

MHSc length of study: two years (full time)

MHSc Domestic Tuition (2016–2017, full-time): \$13,308.08

MHSc International Tuition (2016–2017, full-time): \$39,090.08

Deadlines: For a September 2017 start, international students should apply by December 1, 2016 and domestic students should apply by February 16, 2017.

MAsc & PhD

MAsc median length of study: two years (full time)

PhD median length of study: five years (full time)

Domestic Tuition (2016-2017, full-time): \$8,492

International Tuition (2016-2017, full-time): \$22,604

Deadlines: For a September 2017 start, international students should apply by December 1, 2016 and domestic students should apply by February 16, 2017.

MSc, MAsc & PhD

Admission Requirements: Application requirements vary for this program and are set by the primary academic unit. Students interested in this option must apply at the time of their initial application for graduate studies at the University of Toronto. Please visit www.ibbme.utoronto.ca for more information.