## UNIVERSITY OF TORONTO ENGINEERING GRADUATE STUDIES

# DEPARTMENT OF MATERIALS SCIENCE & ENGINEERING

U of T is the top-ranked school in Canada for materials science. Learn from our world-renowned researchers to earn one of the most competitive graduate degrees in the field.

As a discipline that enables all technologies, Materials Science & Engineering at the University of Toronto is at the forefront of addressing global issues that have a direct impact on our lives today. Our cutting-edge research in advanced materials provides graduates with the tools to create technological solutions for sustainability challenges such as climate change, resource depletion and energy availability.

As a world leader in new materials applications and processing, our commitment to excellence fosters innovative thinking in our students, leading to the development of brilliant minds who make a global impact.

#### We offer the following graduate degrees in our department:

Master of Engineering (MEng)
Master of Applied Science (MASc)
Doctor of Philosophy (PhD)

#### FOR FURTHER INFORMATION, CONTACT:

**MSE Graduate Studies Office** 

416-978-1374

mse.grad@utoronto.ca

www.mse.utoronto.ca

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#### **DEPARTMENT AT A GLANCE**

- » U of T is ranked the top school in Canada for materials science by US News & World Report: Best Global Universities 2018 & National Taiwan University Ranking 2017
- » More than 100 graduate students from across Canada and around the world
- » Eleven electron microscopy and surface characterization instruments in the Ontario Centre for the Characterization of Advanced Materials (OCCAM)
- » Five analytical instruments in the Walter Curlook Materials Characterization & Processing Laboratory
- » A dedicated space for graduate students to prepare optical and electron microscopy samples in the new, fullyequipped Metallographic Laboratory
- » 21 faculty members conducting stateof-the-art research, including Professor Naomi Matsuura's Medical Imaging Materials Laboratory (pictured above), which specializes in designing new materials that interact specifically with imaging radiation

#### **RESEARCH AREAS**

- » Advanced Electronic Materials & Systems
- » Advanced Coating Technologies & Ceramics
- » Biomaterials & Biotechnology
- » Composites, Polymers & Hybrid Materials
- » Computational Materials Engineering
- » Materials Fracture & Failure
- » Multiscale Mechanics & Additive Manufacturing
- » Nanomaterials & Nanotechnology
- » Renewable Energy Devices, Systems and Technology
- » Sustainable Materials Processing & Modelling

#### MASTER OF ENGINEERING

This program provides an advanced professional education in materials engineering through coursework and an optional project. In just one year of full-time study, you can obtain a degree respected by employers that differentiates you in a crowded marketplace. Exceptional MEng students may fast-track into the MASc program; please visit our website for details.

**Certificates & Emphases:** Advanced Manufacturing; Advanced Water Technologies; Analytics; Engineering & Globalization; Entrepreneurship, Leadership, Innovation & Technology in Engineering (ELITE); Forensic Engineering; Identity, Privacy and Security; Robotics & Mechatronics; Sustainable Energy.

**Admission Requirements**: A Bachelor of Applied Science (BASc) in Engineering or Bachelor of Engineering (BEng) with a minimum B (73%+) over the final two years of an undergraduate program from an accredited institution.

### MASTER OF APPLIED SCIENCE

The MASc program is oriented toward a career in research. All MASc students carry out a thesis which reports the findings of research conducted by the student. All successfully admitted MASc students will receive annual support of \$16,000 plus tuition and fees for up to two years of study. Exceptional students can fast-track into the PhD program.

**Admission Requirements**: A Bachelor of Applied Science (BASc) in Engineering or Bachelor of Engineering (BEng) with a minimum average of B+ (78%+) over the final two years of an undergraduate program from an accredited institution.

#### DOCTOR OF PHILOSOPHY

The PhD program consists of courses and an extensive thesis, which you will complete under the supervision of a faculty member. All successfully admitted PhD students will receive annual support of \$17,500 plus tuition and fees for up to four years of study.

**Admission Requirements**: Successful completion of a research master's degree in engineering, with an overall average of at least B+ (78%+), from an accredited institution. Current MASc students within our department can apply to fast-track into the PhD program before completing the MASc degree requirements.

#### **MEng**

**Length of Study:** One year, regular full-time study; or, two years extended full-time study (see MSE website for details). Those studying on a part-time basis must complete all degree requirements within six years.

**Domestic Tuition** (2018–2019, full-time): \$16,460 **International Tuition** (2018–2019, full-time): \$57,054

**Deadline**: Apply by June 1 for a September 2019 start. International students should apply by May 1.

#### MASc

**Length of Study**: Two years of full-time study

**Domestic Tuition** (2018–2019, full-time): \$8,490 **International Tuition** (2018–2019, full-time): \$24,854

**Domestic & International Deadline**: Apply by March 1 for a September 2019 start.

**Please Note**: We encourage you to contact potential supervisors prior to applying.

#### PhD

**Length of Study**: Four years of full-time study

**Domestic Tuition** (2018–2019, full-time): \$8,490 **International Tuition** (2018–2019, full-time): \$9,114

**Domestic & International Deadline**: Apply by March 1 for a September 2019 start.

**Please Note**: We encourage you to contact potential supervisors prior to applying.

**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.