## UNIVERSITY OF TORONTO ENGINEERING GRADUATE STUDIES

# DEPARTMENT OF CHEMICAL ENGINEERING & APPLIED CHEMISTRY

As Canada's top-ranked department in our discipline, we offer a unique combination of chemical engineering and applied chemistry that allows students to do high-impact work on important real-world problems.

From human health and the environment to climate change and sustainable energy, the world is facing tremendous challenges. Our dynamic professors have outstanding international reputations for innovative research addressing these urgent issues. Under their supervision, you will work with a wide range of industrial sectors, including bioprocessing, biomedical, environmental, financial, health, resource extraction, and pulp and paper.

Our unique blend of research in engineering and applied chemical and biochemical sciences will give you a powerful combination of skills. You will work in a collaborative, interdisciplinary environment and take advantage of our strong research and training collaborations with other departments and institutions.

You will have access to our well-equipped facilities, located in the heart of a vibrant, multi-cultural city that is Canada's economic centre. Our program provides opportunities for entrepreneurship training and commercialization support to help bring ideas from the lab to the marketplace. We are proud of our department's collegial, enthusiastic and supportive atmosphere and our strong student associations, whose aim it is to help you to succeed.

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

Master of Engineering (MEng)

Master of Applied Science (MASc)

Doctor of Philosophy (PhD)





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

- » Ranked #1 in Canada in the 2014 QS World Ranking for Chemical Engineering
- » Received more than \$21 million in research funding in 2013
- » Our research has resulted in more than 54 invention disclosures since 2008
- » Home to more than 200 graduate students from across Canada and around the world
- » Alumni network of more than 5,700 globally

#### **RESEARCH AREAS**

- » Biomolecular & Biomedical Engineering
- » Bioprocess Engineering
- » Chemical & Materials Process Engineering
- » Environmental Science & Engineering
- » Informatics
- » Pulp & Paper
- » Surface and Interface Engineering
- » Sustainable Energy

#### FOR FURTHER INFORMATION, CONTACT:

**ChemE Graduate Studies Office** 416-946-3987

admissgrad.chemeng@utoronto.ca www.chem-eng.utoronto.ca

200 College Street, Room WB212 Toronto, Ontario, M5S 3E5 Canada

#### MASTER OF ENGINEERING

This program provides you with advanced professional training in chemical engineering. In just one year of full-time study, you can obtain a degree respected by employers that differentiates you in a crowded marketplace.

**Areas of Emphasis**: Advanced Water Technologies and Process Design; Engineering & Public Policy; Engineering & Globalization; Entrepreneurship, Leadership, Innovation & Technology in Engineering (ELITE).

**Admission Requirements**: Bachelor of Applied Science (BASc) in Engineering or a Bachelor of Engineering (BEng) with at least a mid-B in each of the final two years of study.

MASC

**MEng** 

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

**Domestic Tuition** (2014–2015, full-time): \$7,115 **International Tuition** (2014–2015, full-time): \$18,620

**Deadline**: Apply by February 1 for a September 2015 start.

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

Length of Study: One year of full-time study. On a part-time basis,

the requirements of the degree must be completed within six years.

**Deadline**: Apply by April 1 (International) or June 1 (Domestic)

**Domestic Tuition** (2014–2015, full-time): \$12,250

to start in September 2015.

International Tuition (2014–2015, full-time): \$39,580

### MASTER OF APPLIED SCIENCE

This research-based degree will allow you to complete courses and a thesis under the supervision of a faculty member. Upon being admitted, you will be eligible to receive a minimum of \$15,000 plus tuition in support of your studies. Exceptional students can fast-track into the PhD program before completing the MASc degree requirements.

**Admission Requirements**: A four-year bachelor's degree (or equivalent) in engineering or the physical/chemical/biological sciences with a B+ average (or equivalent) in each of the final two years of study.

#### **DOCTOR OF PHILOSOPHY**

The PhD program consists of courses and an extensive thesis, which you will complete under the supervision of a faculty member. Upon being admitted, you will be eligible to receive a minimum of \$15,000 plus tuition in support of your studies.

**Admission Requirements**: B+ in each of your final two years of study in the undergraduate program, and successful completion of a research master's degree with an average of at least B+. In exceptional cases, admission to the PhD program may be considered for those who have completed an MEng program. Current MASc students within our department can apply to fast-track into the PhD program before completing the MASc degree requirements.

#### PhD

Length of Study: Four years of full-time study

**Domestic Tuition** (2014–2015, full-time): \$7,115 **International Tuition** (2014–2015, full-time): \$18,620

**Deadline**: Apply by February 1 for a September 2015 start.

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

**English Facility Requirements**: There is a minimum English facility 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.gradstudies.engineering.utoronto.ca/EPT** to determine whether you are required to take a test and for a list of accepted tests and their minimum required scores.