Master of Engineering (MEng) in MIE

Murray Thomson Associate Chair-Graduate Studies, Department of Mechanical & Industrial Engineering

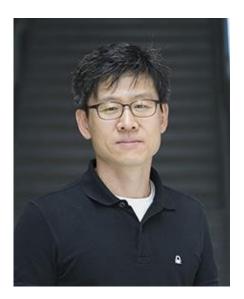




Welcome!



MEng Academic Advisors





Industrial Professor Chi-Guhn Lee cglee@mie.utoronto.ca Mechanical Professor Kamran Behdinan behdinan@mie.utoronto.ca



MIE MEng regulations

10 courses:

- at least 6 from MIE
- up to 4 APS/ELITE, CS, RSM (Rotman)
- or 7 courses + MEng project:
 - at least 4 from MIE
- any other courses?
 - ask the Graduate Program Assistant for MEng: Aisha Mirza,



MIE MEng regulations ...

- no limit on the number of 500-level courses
- reading course cannot be taken



MEng projects

- equivalent to three courses
- type of project depends on the professor
 some are more "researchy", some more applied
- project list posted at:

www.mie.utoronto.ca/graduate/graduate-programs/meng/meng-projects/

- but not a complete list
- MEng project intro event
 in September



MEng projects

 supervisors from MIE, but also elsewhere in Engineering

- and even beyond, with permission
- duration usually 2 terms

– but sometimes 1 or 3 or ... consecutive terms

- can begin any term
 - need to add a project via the Graduate Studies office



MEng projects ...

- might be a way into MASc or even PhD
- also available:
 - Multidisciplinary MEng projects
 - http://imdi.mie.utoronto.ca/
 - IMDI internships (not for credit)
 - http://imdi.mie.utoronto.ca/



important dates

- MIE courses available fall, winter and summer — APS/ELITE, and a few others, in the summer too — plan accordingly
 fall 2018 deadlines:
 - add a course: September 24
 - drop a course: October 28

please ... decide quickly to drop

https://sgs.calendar.utoronto.ca/sessional-dates

advice on deadlines

- don't try to drop after the deadline
 doing poorly is no reason to request a drop
- if you're on a waitlist ...
 - attend the first few lectures
 - perhaps let the prof know of your interest
 - hope that you get in



Faculty-wide Emphases



ADVANCED MANUFACTURING

Developed by the Toronto Institute for Advanced Manufacturing, this emphasis focuses on manufacturing management and manufacturing engineering.



ADVANCED WATER TECHNOLOGIES Offered through the Institute for Water Innovation, this emphasis

Offered through the Institute for Water Innovation, this emphasis explores water treatment methods and design of treatment processes.



ANALYTICS (NEW FOR 2018)

Learn techniques and strategies to translate large data sets into useful insights for sectors such as transportation, banking and health care.



ENGINEERING & GLOBALIZATION

Sponsored by the Centre for Global Engineering, this emphasis examines how to leverage engineering to address complex global challenges, like clean water and basic health care.



ENTREPRENEURSHIP, LEADERSHIP, INNOVATION & TECHNOLOGY IN ENGINEERING (ELITE)

One of our most popular MEng emphases, ELITE develops the whole engineer through courses in leadership, business and more.



FORENSIC ENGINEERING

Gain specialized expertise applicable to enhanced engineering investigation, including those involving accidents and failures causing injury and nancial loss.



IDENTITY, PRIVACY AND SECURITY

Created by the Identity, Privacy and Security Institute, this emphasis focuses on interdisciplinary education in security technologies.



ROBOTICS AND MECHATRONICS

Developed by the Institute for Robotics & Mechatronics, this emphasis explores the development of smart and highperformance systems, including Control Systems, Dynamics and Modelling.



SUSTAINABLE AVIATION

Created by the Centre for Sustainable Aviation, this emphasis focuses on the impact of aviation on the environment through engineering and technology.



SUSTAINABLE ENERGY

Offered through the Institute for Sustainable Energy, this emphasis provides exposure to a variety of energy issues, from energy production and consumption to environmental impact.



gradstudies.engineering.utoronto.ca/professional-degrees



Emphasis in Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE)



Emphasis for Master of Engineering (MEng) Students

Engineering practice today demands a breadth of skills: not only technical, but also an understanding of leadership, finance and business, management, entrepreneurship and innovation. Engineers often appreciate the importance of such skills only after they join the workforce.

The Emphasis in ELITE offers University of Toronto MEng students a broad range of courses in these topics. The first of its kind in Canada, the ELITE Emphasis is targeted at engineers seeking to develop a more well-rounded skill set. To earn the Emphasis in ELITE, MEng students must complete at least four of the courses listed below. The Emphasis can be integrated into MEng programs offered by any of six departments in the Faculty (Aerospace, Chemical, Civil, Electrical & Computer, Mechanical & Industrial, and Materials Science).

As best we can, ELITE courses are scheduled with working professionals in mind. We offer a mix of daytime, evening and Saturday morning courses in each of the fall, winter, and summer sessions. The format of the courses varies: some are taught once a week for 12 weeks. A few are taught online. Others, especially in the summer, are taught on a 2-week intensive basis.



gradstudies.engineering.utoronto.ca/professional-degrees/elite-certificate/

ELITE courses to consider

- APS1035H: Technology Sales for Entrepreneurs
 - Dr. Steve Treiber
 - FALL 2018 Sept 10 to Dec 3
 - Mondays 6-9pm in BA1240
- APS1036H: Formative Experiential Entrepreneurial Learning
 - Mr. Joseph Orozco
 - WINTER 2019: Jan 7 April 3
 - Wednesdays 12-3pm in MY480



MEng Certificates

- Financial Engineering
 - Prof. Kwon, kwon@mie.utoronto.ca
 - Prof. Lee, cglee@mie.utoronto.ca
- Healthcare Engineering
 - Prof. Carter, carter@mie.utoronto.ca
- Information Engineering
 - Prof. Fox, msf@mie.utoronto.ca
- Computational Mechanics in Design
 Prof. Meguid, meguid@mie.utoronto.ca

www.mie.utoronto.ca/graduate/graduate-programs/meng

Computing facilities

- MEng students have access to:
 - ECF labs, GB144/150, WB255, SF1013/1012/1106
 - MIE labs, RS303, MB123, and MB67
 - Login using UTORid



"MEng Lounge" and lockers

- in the new Myhal Centre
 6th floor
- also, MC330 is the MIE grad student room
- rent a locker at www.lockers.skule.ca

