

# Master of Engineering (MEng) in MIE

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# Welcome!



## MEng Academic Advisors



Industrial  
Professor Chi-Guhn Lee  
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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 Associate Chair, Professor Thomson



## MIE MEng regulations ...

- no limit on the number of 500-level courses
- a reading course can only be taken with a project



## 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/](http://www.mie.utoronto.ca/graduate/graduate-programs/meng/meng-projects/)
  - but not a complete list
- MEng project intro event
  - in a few weeks



## 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
  - IMDI internships (not for credit)
  - Professor Behdinan will say more



## important dates

- MIE courses available fall and winter
  - 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.



**FORENSIC ENGINEERING**  
Gain specialized expertise applicable to enhanced engineering investigation, including those involving accidents and failures causing injury and financial loss.



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



**IDENTITY, PRIVACY AND SECURITY**  
Created by the Identity, Privacy and Security Institute, this emphasis focuses on interdisciplinary education in security technologies.



**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.



**ROBOTICS AND MECHATRONICS**  
Developed by the Institute for Robotics & Mechatronics, this emphasis explores the development of smart and high-performance systems, including Control Systems, Dynamics and Modelling.



**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.



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



**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.



**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](http://gradstudies.engineering.utoronto.ca/professional-degrees)



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## 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/](http://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](http://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
  - 6<sup>th</sup> floor
- also, MC330 is the MIE grad student room
- rent a locker at [www.lockers.skule.ca](http://www.lockers.skule.ca)





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