Collaborative Graduate Program in

# Advanced Design & Manufacturing MEng

#### Why GRADUATE STUDIES in ADVANCED DESIGN & MANUFACTURING?

The Advanced Design and Manufacturing Institute (ADMI) offers an exciting graduate program (MEng) for practicing engineers seeking to further their technical knowledge in addition to learning the business and management skills necessary for advancement to the forefront of their profession.

ADMI, through the partnership of Queen's University and the University of Western Ontario delivers this part-time, in-class program in the Greater Toronto Area.

The collective resources of both universities and industry partners are leveraged to provide participants with access to an integrated program of world-class technology, expertise and experience, and leading training in innovative technology applications and best business practices. The ADMI vision is to create a new generation of Canadian design and manufacturing engineers with the ability and mindset to propel Ontario Industry into a world leadership position.

### Program STRUCTURE and CURRICULUM

The program is delivered in a focused, time-compressed modular format designed to allow working engineering professionals to pursue a Master's Degree while working in their field. Each course is composed of two weekend modules comprising approximately 36 hours of in-class time per course spent on lectures, discussion and application work.

The modules are separated by a one month interval to facilitate the learning process and allow for selected projects and assignments to be undertaken. ADMI MEng courses are structured to include a variety of elements including classroom



lectures & discussions, case studies, practical industrial applications, individual coaching, and group interaction. The ADMI MEng program requires participants to dedicate a total of six full days of focused in-class participation in each course, as well as complete take-home assignments.

The ADMI program currently offers fifteen courses through the two universities - three core and eleven electives. Students are required to take 9 courses to complete their degree: 3 core, 3 technical and 3 business. Additional elective courses are scheduled to be added in the future.

#### CORE Courses (Required)

- DM 816 Design for Innovation
- DM 872 Engineering Leadership
- DM 885 Advanced Project Management

### TECHNICAL Electives (Take 3)

- DM 810 Intelligent Manufacturing
- DM 812 Finite Element Analysis for Design Engineers
- DM 814 Rapid Mechanical Design
- DM 817 Ergonomics
- DM 822 Mechatronics
- DM 824 Materials Selection in Design
- DM 826 Advanced Industrial Energy Management

### BUSINESS Electives (Take

- DM 863 Financial & Managerial Accounting
- DM 864 Principles of Professional Communication
- DM 881 Technical Entrepreneurship & Innovation
- DM 890 Operations and Supply Chain Management
- · DM 865 Marketing Management





# Advanced Design and Manufacturing



## Faculty RESEARCH and SUPERVISION

- Beno Benhabib, Mechanical & Industrial Engineering (University of Toronto)
- Brian Surgenor, Mechanical & Materials Engineering (Queen's)
- Claire Davies, Mechanical & Materials Engineering (Queen's)
- Colin McDougall, Ivey Business School (Western)
- Darren Meister, Ivey Business School (Western)
- Darya Duma, Mechanical & Materials Engineering (Queen's)
- David Barrett, Ivey Business School (Western)
- David Strong, Mechanical & Materials Engineering (Queen's)
- Dominic Lim, Ivey Business School (Western)
- Gene Zak, Mechanical & Materials Engineering (Queen's)
- George Knopf, Mechanical & Materials Engineering (Western)
- Keith Pilkey, Mechanical & Materials Engineering (Queen's)
- Mary Weil, Ivey Business School (Western)
- Mohamed Hamed, Mechanical Engineering (McMaster)
- Paul Kurowski, Mechanical & Materials Engineering (Western)

### **Application FAQs**

# What do I need to know to APPLY?

#### **REOUIREMENTS**

Academic requirements are an accredited 4 year Bachelor's degree in Engineering or Applied Science, or science equivalent, with a minimum B- (70% or GPA 2.7). Three or more years of industry experience is recommended (but not required). This is your chance to create an MEng program customized to suit your personal and business needs and interests from Technical and Business Course Streams.

#### **DEADLINES**

As the ADMI MEng is a part-time degree, there is no application deadline in the normal sense. However, students must register their interest at least one month before the start date of a course that they wish to take.

#### **DOCUMENTS & ENROLLMENT**

Students can enrol through either Queen's or Western. The university in which they choose to enrol will be the one that grants the degree. The program is the same for both universities. The application procedure is also essentially the same, with a requirement for the following basic documentation:

- Completion of online form
- University transcript(s)
- Letters of recommendation (initiated within the online form)
- Payment of application fee

Apply now to the ADMI program through the School of Graduate Studies and Postdoctoral Affairs:

https://www.queensu.ca/grad-postdoc/grad-studies/apply

For students applying to Queen's, the on-line application form will not have ADMI in the drop down menu for the desired program, please select "MEng" as the program and enter "ADMI" for the statement of interest.



Jane Davies, Graduate Assistant (613) 533-6928 mme.graduate@queensu.ca admicanada.ca