

# **Degree Level Expectations for Graduates Receiving the Degree of Master of Engineering**

## **Faculty of Applied Science and Engineering University of Toronto**

This degree is awarded to students who have demonstrated the following:

### **1. Depth and Breadth of Knowledge**

A systematic understanding of engineering and applied science knowledge including, where appropriate, relevant knowledge outside the field and engineering discipline, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their engineering or applied science discipline.

### **2. Knowledge of Methodologies**

A conceptual understanding and methodological competence that

- (a) Enables a working comprehension of how established techniques of inquiry are used to interpret knowledge in the discipline;
- (b) Enables a critical evaluation of current developments in the discipline;
- (c) Enables a treatment of technical issues and judgments based on established principles and techniques.

### **3. Level of Application of Knowledge**

Competence in the application of an existing body of data in the critical analysis of advanced problems or issues. Here, advanced indicates a difficulty level beyond that encountered at the undergraduate level.

### **4. Professional Capacity/Autonomy**

- (a) The qualities and transferable skills necessary for employment requiring:
  - (i) The exercise of initiative and of personal responsibility and accountability; and
  - (ii) Decision-making in complex situations;
- (b) The intellectual independence required for continuing professional development;
- (c) The ethical behaviour consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct in a professional context; and

(d) The ability to participate meaningfully as leaders in society.

## **5. Level of Communications Skills**

The ability to communicate ideas, issues, and conclusions clearly in oral and written form. This includes being capable of constructing a credible argument and presenting it in appropriate formats.

## **6. Awareness of the Limits of Knowledge**

Cognizance of the complexity of knowledge, its underlying assumptions, and the potential contributions of other interpretations, methods, and disciplines.

*Approved on March 8, 2011 by Faculty Council*