

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