

Department/Academic Unit: Graduate Program in Electrical & Computer Engineering

Degree Program: M.Eng.

Degree Level Expectations, Learning Outcomes, Indicators of Achievement and the Program Requirements that Support the Learning Outcomes

Expectations	Learning Outcomes	Indicators of Achievement	Relevant Courses and academic requirements
<p><b>Depth and breadth of knowledge</b></p>	<p>A systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study or area of professional practice.</p> <p>Integrating knowledge and skills acquired in other disciplines into their course work and research in Electrical &amp; Computer Engineering</p>	<p>Successful completion of course work requirements</p> <p>Developing an in-depth knowledge of current research and best practices in Electrical &amp; Computer Engineering.</p> <p>Integrating and applying knowledge and skills of inquiry to courses taken outside Electrical &amp; Computer Engineering (if applicable).</p>	<p>8 graduate level courses or 6 graduate level courses + project course ELEC 898.</p> <p>If applicable, successful completion of research project (ELEC 898).</p>

<p><b>Research and scholarship</b></p>	<p>A conceptual understanding and methodological competence that:</p> <p>Enables a working comprehensive of how established techniques of research and inquiry are used to create and interpret knowledge in the discipline;</p> <p>Enables a critical evaluation of current research and advanced research and scholarship in the discipline or area of professional competence and;</p> <p>Enables a treatment of complex issues and judgements based on established principles and techniques and</p> <p>On the basis of that competence, has shown as least one of the following:</p> <p>The development and support of a sustained <b>argument</b> in written form, or</p> <p>Originality in the application of knowledge</p>	<p>Successful completion of course work requirement</p> <p>Enrolling in, and fulfilling the requirements of, courses which focus on methods of inquiry in Electrical &amp; Computer Engineering</p> <p>Using their chosen methodology to complete their M.Eng. Project in Electrical &amp; Computer Engineering (if applicable).</p>	<p>8 graduate level courses or 6 graduate level courses + project course ELEC 898</p> <p>If applicable, successful completion of research project (ELEC 898).</p>
<p><b>Application of knowledge</b></p>	<p>Competence in the research process by applying an existing body of knowledge in the critical analysis of a new question or of a specific problem or issue in a new setting.</p>	<p>Successful completion of course work requirement of 4 graduate-level courses</p> <p>The investigation of inquiry pertaining to their interests in the area of Electrical &amp; Computer Engineering, and integration of this thread of inquiry throughout their course work and research.</p>	<p>4 graduate level courses</p> <p>Successful completion and defense of research-based thesis.</p>

<p><b>Professional capacity/autonomy</b></p>	<p>The qualities and transferable skills necessary for employment training:</p> <p>The exercise of initiative and of personal responsibility accountability; and</p> <p>Decision-making in complex situations; and</p> <p>The intellectual independence required for continuing professional development;</p> <p>The ethical behaviour consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and</p> <p>The ability to appreciate the broader implications of applying knowledge to particular contexts</p>	<p>A conceptual understanding of the relationship between theory, practice, and reflection in Electrical &amp; Computer Engineering.</p> <p>A demonstrated comprehension of academic integrity in all scholarly activities.</p> <p>Responsibility taken for the creation of their course work portfolio and the execution of their scholarly activities (e.g. presentations, publications, etc).</p>	<p>Creation of a roster of courses (8 graduate level courses) that fulfills their own personal goals for professional development.</p> <p>Portfolio</p>
<p><b>Communication skills</b></p>	<p>The ability to communicate ideas, issues and conclusions clearly.</p>	<p>A demonstration of communication skills through written projects and oral presentations in the course work activities.</p>	<p>Successful completion of course work requirement (8 graduate level courses or 6 graduate level courses + project course ELEC 898).</p> <p>If applicable, successful completion of research project (ELEC 898).</p>
<p><b>Awareness of limits of knowledge</b></p>	<p>Cognizance of the complexity of knowledge and of the potential contributions of other interpretations, methods, and disciplines.</p>	<p>An ability to understand the limitations of research and the boundaries of present-day understanding in the specific area of research in Electrical &amp; Computer Engineering.</p>	<p>Successful completion of course work requirement (8 graduate level courses or 6 graduate level courses + project course ELEC 898).</p> <p>If applicable, successful completion of research project (ELEC 898).</p>