

**International Masters in Civil Engineering Dual Degree Program (International Master of Applied Science in Civil Engineering/Laurea Magistrale in Civil Engineering)**

**Learning Outcomes**

Last Updated: May 25, 2018

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<b>Program Learning Outcomes (Degree Level Expectations)</b>  <u>At the end of this program, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b>  <u>A UWindsor graduate will have the ability to demonstrate:</u>	<b>OCGS-approved Graduate Degree Level Expectations</b>
A. appropriately incorporate an international perspective in economics and business practices, such as project, risk, and change management, into the practice of engineering, and to understand its limitations.	A. the acquisition, application and integration of knowledge	1. Depth and Breadth of Knowledge 2. Research and Scholarship 3. Level of Application of Knowledge 6. Awareness of Limits of Knowledge
B. Apply research skills to define and solve complex engineering problems within the Civil Engineering discipline in an international context (eg. with an understanding of different practices and regulatory standards in different jurisdictions).	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)	2. Research and Scholarship 3. Level of Application of Knowledge 6. Awareness of Limits of Knowledge
C. Design solutions for complex, open-ended engineering problems, and design systems, components, or processes that meet specified needs with appropriate attention to the assessment of health and safety risks, legislative/regulatory standards, cultural, societal, economic, and environmental considerations, including multi-national level design and compliance issues.	C. critical thinking and problem-solving skills	1. Depth and Breadth of Knowledge 2. Research and Scholarship 3. Level of Application of Knowledge 4. Professional Capacity/autonomy 6. Awareness of Limits of Knowledge
D. Integrate their literacy and numeracy skills in the formulation, discussion, solution, and reporting of engineering projects in a bilingual environment.	D. literacy and numeracy skills	2. Research and Scholarship 5. Level of Communication Skills
E. Explain the roles and responsibilities of the professional engineer in society, especially the primary role of protecting the public and the public interest. Demonstrate through actions adherence to the Code of Ethics of Professional Engineers Ontario, including its requirements to behave ethically toward the public, employers and other practitioners.	E. responsible behaviour to self, others and society	4. Professional Capacity/Autonomy 6. Awareness of Limits
F. Communicate effectively in a bilingual international setting about complex engineering activities within the engineering profession and with society at large, and he/she will write effective reports and design documentation,	F. interpersonal and communications skills	5. Level of Communication Skills

<b>Program Learning Outcomes (Degree Level Expectations)</b>  <u>At the end of this program, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b>  <u>A UWindsor graduate will have the ability to demonstrate:</u>	<b>OCGS-approved Graduate Degree Level Expectations</b>
comprehend such reports and documentation prepared by others, make effective presentations, and to give and effectively respond to clear instructions or take the steps necessary to clarify them.		
G. Work independently and as a member and/or leader of diverse teams and in multi-disciplinary and multi-cultural settings.	G. teamwork, and personal and group leadership skills	4. Professional Capacity/Autonomy 5. Level of Communication Skills
H. Design solutions for complex, open-ended engineering problems that both meet engineering requirements and the imperative to respond to consumer or other end-user desires for innovative and successful solutions that will lead the marketplace and command a premium.	H. creativity and aesthetic appreciation	2. Research and Scholarship 4. Professional Capacity/autonomy 6. Awareness of Limits of Knowledge
I. Assess and defend the commitment to engage in, life-long learning as part of maintaining their professional competence and their commitment to ensuring the best possible engineering solutions to the problems within their scope of practice.	I. the ability and desire for continuous learning	4. Professional Capacity/autonomy