Ensuring the Value of University Degrees in Ontario

ONTARIO UNIVERSITIES

CONSEIL DES UNIVERSITÉS DE L'ONTARIO

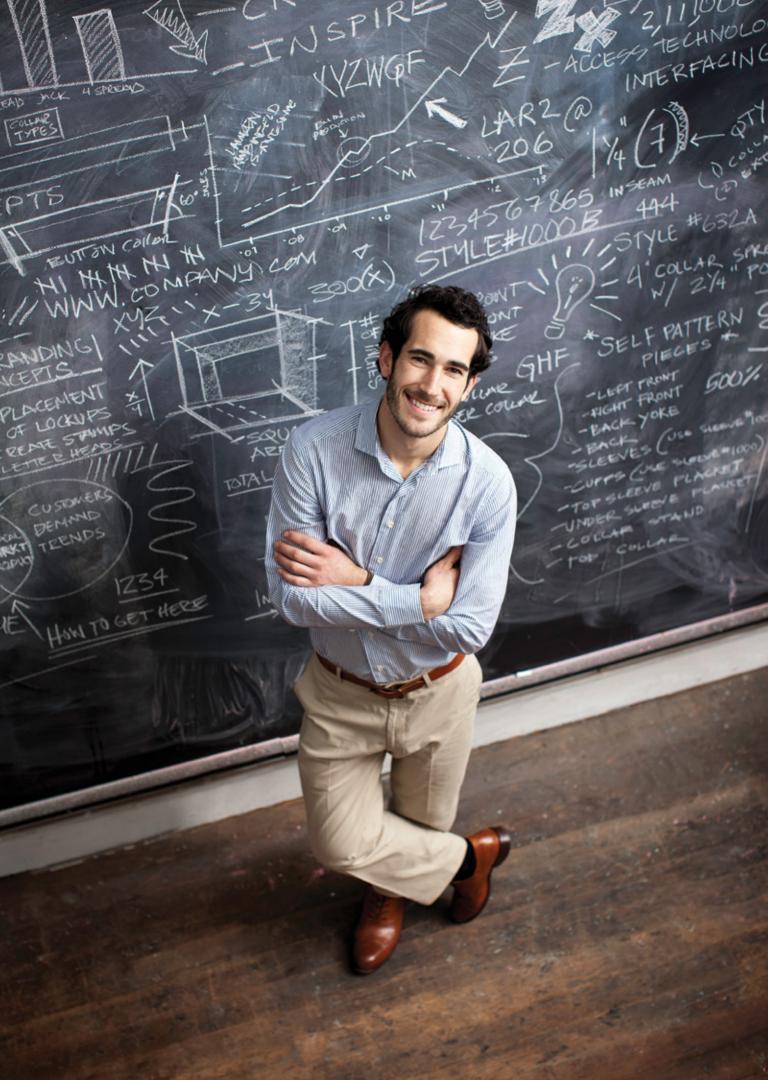


Higher Learning for Students

Degree Level Expectations tell students, parents and future employers what university graduates will know and be able to do.

Learning outcomes explain what students should know and be able to do by the end of an assignment, activity, class or course.

Degree Level Expectations and learning outcomes make it easier for students to move between educational institutions in Canada and around the world.



Higher Quality for Universities

Degree Level Expectations are the academic standards of universities. They help faculty members design new programs and assess existing programs.

They are at the heart of the Quality Assurance Framework and the foundation of a culture of continuous quality improvement at Ontario universities.

The Quality Assurance Framework ensures the quality and value of Ontario university degrees.



Higher Value for Society

Ontario university graduates are engines of innovation and growth in a globally competitive economy.

Degree Level Expectations, learning outcomes and the Quality Assurance Framework assure taxpayers, policymakers and government of the excellent return on investment of a university education.

Introduction

This guide explains how Ontario universities ensure that students have the necessary skills and knowledge expected of graduates from specific degree programs, and how universities ensure that degree programs meet the highest standards of quality. Quality considerations are deeply embedded in university processes and in third-party scrutiny by the Ontario Universities Council on Quality Assurance (the Quality Council). Ontario universities have been at the forefront of Canadian efforts to develop degree frameworks and quality assurance processes, and Ontario's quality assurance system for publicly assisted universities is one of the strongest in the wold.

The Value of a University Education

A university education develops learners as socially responsible and globally-aware citizens, who value critical thought and ethical action. University degrees provide students with the knowledge and skills that help make their lives meaningful and rewarding, and strengthen their contributions to society. University graduates expect their degrees to prepare them for careers, or for further graduate or professional studies, whether at home or abroad. Graduates want to know that the quality of their educational credentials will be understood and valued by employers.

Graduates also expect that their degrees will allow mobility between educational institutions, and from one jurisdiction to another. Ontario's publicly assisted universities are also attracting international students, and students from across Canada, in increasing numbers, and our graduate students are being accepted at universities across Canada and around the world. It is essential that Ontario university degrees continue to be recognized locally and internationally for their quality.

A Changing Postsecondary Landscape

Ontario's postsecondary education landscape has changed dramatically over the last decade. There are now a range of new degree-granting institutions, new types of degree credentials, and many new online and distance education options. Students, parents, employers and other stakeholders understandably want assurance of the quality and value of university degrees, and want to know how new credentials and institutions fit with existing degree programs at Ontario's publicly assisted universities. It is increasingly important to have a way to assess and compare the qualifications granted by academic institutions, whether for purposes of credit transfer, graduate study, professional qualifications, employment or to study abroad.

Ontario's quality assurance system for publicly assisted universities is one of the strongest in the world.

Quality Assurance, Degree Level Expectations and Learning Outcomes

Ontario universities ensure the quality and value of university degrees through learning outcomes, Degree Level Expectations (DLEs), and the Quality Assurance Process and Framework. The Quality Assurance Framework requires the approval of new programs by an independent body called the Ontario Universities Council on Quality Assurance (the Quality Council) and the evaluation of existing programs by the universities on an eight-year cycle.

The quality assurance process is based on the use of Degree Level Expectations (DLEs) and learning outcomes. Degree Level Expectations are frameworks (also called "degree profiles") describing what students should know, and be able to do, after successful completion of a degree program at the bachelor's, master's and doctoral degree levels. Learning outcomes are used to align individual courses with degree level expectations.

The Quality Assurance Framework Requires the approval

of new programs by the Quality Council and the review of existing programs by universities, which are also subject to Council audit.

Learning Outcomes

Define what a student should know, and be able to do, after successful completion of an assignment, activity, class, course or program.

Degree Level Expectations

Are frameworks (also called "degree profiles") describing what students should know, and be able to do, after successful completion of a degree program at the bachelor's, master's and doctoral degree levels.

Degree Level Expectations

Degree Level Expectations describe the intellectual and creative development of students and the acquisition of relevant skills at different degree levels—in other words, the meaning of the bachelor's, master's and doctoral degrees. These expectations focus on the higher order intellectual skills that are the hallmark of a university education. Such skills are vital to the knowledge economy, and are what distinguishes a university education from other types of postsecondary education and training.

Degree Level Expectations clarify what graduates know, and are able to do, at each degree level from a bachelor's degree through to a doctoral degree. These skills and abilities are described in general terms in order to represent the widest range of degrees, from arts and humanities to professional programs in specialized disciplines, such as medicine and engineering.

Degree Level Expectations help students, policymakers and the public understand what is expected of students at each degree level, and what skills, knowledge and understanding students gain as they progress through a university education at the undergraduate and graduate levels. Students can also use the DLEs to help them explain to employers what skills and knowledge they have acquired in earning a university degree.

By explicitly stating the aim of each level of university education, Ontario's DLEs guide faculty members and administrators as they develop degree programs, courses and curriculum. DLEs help instructors see how each individual course fits into the larger aims of a degree program, and indicate what the goals of a course are without dictating how these goals are to be reached. There are opportunities for a variety of teaching methods and approaches to learning in order to reach these goals.

By establishing a common language and understanding for universities, DLEs help ensure consistency across institutions, and set a basic threshold for assessing quality. The Ontario DLEs use the terminology (or "descriptors") that are in common use internationally. This enables students and others to understand the character of specific degree credentials, and how degree credentials map to one another. By allowing institutions to assess transfer credits more easily, DLEs help facilitate greater mobility for students between Ontario institutions, as well as for Ontario university graduates who want to study abroad.

Ontario's Degree Level Expectations provide a framework for identifying how degree credentials compare in level and standard across jurisdictions, and provide assurance to the public that programs and institutions meet appropriate standards. The DLEs help to guide universities in assessing existing programs or planning new programs to ensure that these are offered at an appropriate level. Postsecondary institutions and employers in other countries consult the DLEs in order to understand what degree-holders from Ontario have achieved.

Degree Level Expectations are the academic standards of Ontario universities. Each publicly assisted university in Ontario uses the DLEs framework as a starting point, or foundation, for the expression of its own, more specific DLEs. Then, in articulating its particular statement of Degree Level Expectations, each institution reflects its own mission, ethos, values and culture.

Both the Guidelines for University Undergraduate Degree Level Expectations, developed by the Ontario Council of Academic Vice-Presidents (OCAV), and the Graduate Degree Level Expectations for master's and doctoral degree programs, developed by the Ontario Council of Graduate Studies (OCGS), were endorsed by the Council of Ontario Universities in December 2005.

Degree Level Expectations are the academic standards of Ontario universities.

Learning Outcomes

Where do learning outcomes fit in? Each individual program and course is expected to define objectives—not only the general skills (for example, communication), but also the subject-specific objectives (for example, statistical analysis), for what a student will acquire in the course or program. While DLEs describe what degree holders should know and be able to do in order to be awarded a university degree, learning outcomes explain what students know and are able to do by the end of an assignment, activity, course or program. The evaluation of students' learning outcomes shows the extent to which the objectives of an assignment, course or program have been achieved. Learning outcomes and objectives are generally included in a course outline or syllabus.

The description of learning outcomes often starts with the phrase, "By the end of this course/assignment, students will..."

For example:

- By the end of this course, students will be able to identify and develop data collection instruments and measures for planning and conducting sociological research.
- Upon completing this assignment, students will be able to provide accurate diagrams of cells and be able to classify cells from microscopic images.¹

The focus is on the learner and, specifically, on the knowledge and skills that the learner will acquire and use. Learning outcomes are the basis for how the student will be assessed and evaluated. All students who pass the course must be able to demonstrate that they have met the objectives for the course. The determination of learning outcomes helps faculty to shape courses and assignments that in turn help students achieve these outcomes. This allows university instructors and departments to plan courses and programs that help students develop the appropriate knowledge and skills for each degree level set out in the Degree Level Expectations.

Learning outcomes guide the development of degree programs and courses.

¹ http://www.teaching.utoronto.ca/topics/coursedesign/learning-outcomes/examples.htm

Examples: Interaction of Degree Level Expectations and Learning Outcomes

Undergraduate

Political Science Nursing	Autonomy and Professional Capacity Autonomy and Professional Capacity	Moral Maturity Moral Maturity	An ethical practitioner who values diversity of opinion and perspective A graduate of BScN program practices in compliance with the College of Nurses of Ontario Ethics Practice Standard	Will utilize Canada's Charter of Rights and Freedoms in determining resolution to case studies Will demonstrate respect for life in clinical practicum course by following the behavioural directives defined in the Ethics Practice Standard
Graduate				
PhD program in any field	Research and scholarship	Ability to produce original research	Publication of a research paper in a peer-reviewed scholarly/professional journal	Assess strengths and weaknesses of various research methodologies to test hypotheses
	Degree Level Expectations	University Outcomes	Program Outcomes	Course Outcomes

Ontario's Quality Assurance Process

Degree Level Expectations and learning outcomes are at the heart of Ontario's 2010 Quality Assurance Framework (QAF).²

The QAF sets out requirements for the approval of new undergraduate and graduate programs, as well as the evaluation of existing programs at Ontario's publicly assisted universities.

University departments and programs must explain how the Degree Level Expectations have been integrated into their programs and curriculum. Each academic unit is asked: What do you expect your students to be able to do, and to know, when they graduate with a specific degree? How are you assessing students to make sure that these educational goals have been achieved?

The Quality Council operates at arm's length from universities and the government.

Review of Programs

Determining whether a proposal for a new program meets the QAF criteria involves two stages. First, proposals for new programs are reviewed by external expert consultants at arm's length from the university. The reviewers provide comments and advice to the university about any gaps or inconsistencies between the proposals and the QAF criteria. Each proposal for a new program must identify learning outcomes, and show how they are consistent with DLEs and the university's mission. The proposal must also indicate the methods to be used to assess student achievement of those outcomes. In response to this external review, the university then makes adjustments to the proposal.

Once the proposal has been approved to go forward by the university, it moves to the second stage of the process when it is submitted to the Quality Council. Operating at arm's length from the universities and government, the Quality Council has the authority to approve all new undergraduate and graduate

New Program Approval Process

University level Quality Council level Proposal developed Appraisal Institutional program · External, arm's-Committee review monitoring lenath review **Quality Council** Cyclical program Internal response approval review Institutional approval through university governance

² http://www.cou.on.ca/related-sites/the-ontario-universities-council-on-quality-assura/policies/quality-assurance-framework---guide.aspx

Review of Existing Programs



programs offered by publicly assisted universities in Ontario. The Quality Council reviews each proposal to ensure that the evaluation criteria included in the QAF are met as a condition of approving a proposed new program.

Ontario's Quality Assurance Framework requires universities to review every existing program at least once every eight years against a set of criteria that is similar to those for new programs. External arm's-length experts conduct the review and provide objective analysis and recommendations to the university about its programs. The review of programs must include input from students, as well as from faculty and staff.

Each cyclical review of an existing program must identify and measure learning outcomes to determine whether they have been achieved. Universities are required to develop implementation plans, including timelines and responsibilities, to remedy any gaps or shortcomings identified in the cyclical review of an existing program. Executive summary reports of each program review, and the university's corresponding plan for implementing any changes, will be posted on the university's website, and these are also submitted to the Quality Council. The Quality Council audits each university every eight years to ensure that the university is adhering to the protocols of the QAF.

A Culture of Quality

The intent of Ontario's quality assurance system is to foster a culture of quality in all university programs across the province. Its use of arm's-length expert reviewers and attention to both new and ongoing program review makes Ontario's QAF one of the strongest quality assurance systems for postsecondary education in the world. The QAF focus on Degree Level Expectations and student learning outcomes ensures a solid foundation for accountability, not just to students but also to faculty, administrators and governing bodies of the university, and for government and the public.

International and National Context

Ontario's Degree Level Expectations and the Quality Assurance Framework were developed in the context of international efforts to create more comparable, compatible and coherent higher education systems.

The best known of these efforts is the Bologna Process, which began in 1999 and resulted in the creation of the European Higher Education Area (EHEA). The EHEA adopted an overarching qualifications framework in 2005, and this framework sets the parameters within which each member country developed its own national qualifications framework by 2010.

At least 47 countries across Europe are now part of the EHEA, and their use of harmonized undergraduate and graduate degree structures, qualifications frameworks, emphasis on learning outcomes and quality assurance, has resulted in programs and degrees that are understandable across jurisdictions. This makes it easier for students to move between postsecondary education institutions, and jurisdictions, across Europe and internationally.

In 2007, the Council of Ministers of Education, Canada (CMEC) adopted DLEs for its Canadian Degree Qualifications Framework, which was part of a Ministerial Statement on Quality Assurance of Degree Education in Canada [http://www.caqc.gov.ab.ca/pdfs/CDQF-FINAL.pdf]. Each province/territory is expected to develop more detailed qualifications frameworks describing the degree credentials offered in its jurisdiction. Ontario's DLEs framework meets this requirement.³

³ In Ontario, the Ministry of Training, Colleges and Universities established the Post Secondary Education Quality Assessment Board (PEQAB) to approve degree programs offered by colleges and other postsecondary institutions, such as out-of province providers that do not have their own statutes granting them degree-granting authority in Ontario. PEQAB reviews program proposals against a similar degree level expectations framework, the Ontario Qualifications Framework [http://www.peqab.ca].

Canadian Degree Qualifications Framework (Council of Ministers of Education, Canada)

Bachelor's Degree

"The credential awarded for the bachelor's degree is designed to acquaint the student with the basic conceptual approaches and methodologies of the principal discipline or disciplines that constitute the program of study, to provide some specialized knowledge, and to nurture the capacity for independent work in the discipline/disciplines and field of practice. All bachelor's programs are designed to provide graduates with knowledge and skills that enable them to develop the capacity for independent intellectual work."

Master's Degree

"A master's degree program builds on knowledge and competencies acquired during related undergraduate study and requires more specialized knowledge and intellectual autonomy than a bachelor's degree program. Much of the study undertaken at the master's level will have been at, or informed by, the forefront of an academic or professional discipline. Students will have shown some originality in the application of knowledge, and they will understand how the boundaries of knowledge are being advanced through research. They will be able to deal with complex issues both systematically and creatively, and they will show independent capacity in addressing issues and problems."

Doctoral Degree

"A doctoral degree program builds on the knowledge and competencies in a field or discipline acquired during prior study, usually at the graduate level. Study at the doctoral level is at the forefront of an academic or professional discipline. Holders of the doctoral degree must have demonstrated a high degree of intellectual autonomy, an ability to conceptualize, design, and implement projects for the generation of significant new knowledge and/or understanding, and an ability to create and interpret knowledge that extends the forefront of a discipline, usually through original research or creative activity."

Ontario Universities' Degree Level Expectations

The Degree Level Expectations for undergraduate and graduate degrees awarded by Ontario's publicly assisted universities identify the broad categories of knowledge and skills that students must demonstrate in order to be awarded a degree:

- Depth and breadth of knowledge
- ② Knowledge of methodologies
- Research and scholarship
- Application of knowledge
- **6** Communications skills
- O Awareness of the limits of knowledge
- Autonomy and professional capacity

The specific expectations in these categories are set out for each degree level:

- Baccalaureate / Bachelor's degrees
- Baccalaureate / Honours Bachelor's degrees
- Master's degrees
- Doctoral degrees

While each of these categories is defined separately in the DLEs, they are inextricably linked. At the undergraduate level, for example, a student's knowledge of methodologies is an aspect of his or her wider disciplinary knowledge.

Each degree level builds on the student's mastery of skills and knowledge demonstrated at the previous degree level. The DLEs shows how each category of intellectual skills builds, incrementally and cumulatively, from undergraduate through graduate degrees.

Degree Level Expectations

• Depth and Breadth of Knowledge

At the Baccalaureate / Bachelor's degree level, students demonstrate:

General knowledge and understanding of many key concepts, methodologies, theoretical approaches and assumptions in a discipline; broad understanding of some of the major fields in a discipline, including, where appropriate, from an interdisciplinary perspective, and how the fields may intersect with fields in related disciplines; ability to gather, review, evaluate and interpret information relevant to one or more of the major fields in a discipline; some detailed knowledge in an area of the discipline; critical thinking and analytical skills inside and outside the discipline; and ability to apply learning from one or more areas outside the discipline.

At the Baccalaureate / Honours Bachelor's degree level, students demonstrate:

Developed knowledge and critical understanding of the key concepts, methodologies, current advances, theoretical approaches and assumptions in a discipline overall, as well as in a specialized area of a discipline; developed understanding of many of the major fields in a discipline, including, where appropriate, from an interdisciplinary perspective, and how the fields may intersect with fields in related disciplines; developed ability to: gather, review, evaluate and interpret information; and compare the merits of alternate hypotheses or creative options, relevant to one or more of the major fields in a discipline; developed detailed knowledge of and experience in research in an area of the discipline; developed critical thinking and analytical skills inside and outside the discipline; and ability to apply learning from one or more areas outside the discipline.

At the Master's degree level, students demonstrate:

A systematic understanding of knowledge, including, where appropriate, relevant knowledge outside the field and/or discipline, 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.

At the Doctoral degree level, students demonstrate:

A thorough understanding of a substantial body of knowledge that is at the forefront of their academic discipline or area of professional practice including, where appropriate, relevant knowledge outside the field and/or discipline.

2 Knowledge of Methodologies

At the Baccalaureate / Bachelor's degree level, students demonstrate:

An understanding of methods of enquiry or creative activity, or both, in their primary area of study that enables the student to evaluate the appropriateness of different approaches to solving problems using well established ideas and techniques; and devise and sustain arguments or solve problems using these methods.

At the Baccalaureate / Honours Bachelor's degree level, students demonstrate:

An understanding of methods of enquiry or creative activity, or both, in their primary area of study that enables the student to evaluate the appropriateness of different approaches to solving problems using well established ideas and techniques; devise and sustain arguments or solve problems using these methods; and describe and comment upon particular aspects of current research or equivalent advanced scholarship.

Research and Scholarship

At the Master's degree level, students demonstrate:

A conceptual understanding and methodological competence that enables a working comprehension of how established techniques of research and inquiry are used to create and interpret knowledge in the discipline; enables a critical evaluation of current research and advanced research and scholarship in the discipline or area of professional competence; and enables a treatment of complex issues and judgments based on established principles and techniques; and, on the basis of that competence, has shown at least one of the following: The development and support of a sustained argument in written form; or originality in the application of knowledge.

At the Doctoral degree level, students demonstrate:

The ability to conceptualize, design, and implement research for the generation of new knowledge, applications, or understanding at the forefront of the discipline, and to adjust the research design or methodology in the light of unforeseen problems; the ability to make informed judgments on complex issues in specialist fields, sometimes requiring new methods; and the ability to produce original research, or other advanced scholarship, of a quality to satisfy peer review, and to merit publication.

4 Application of Knowledge

At the Baccalaureate / Bachelor's degree level, students demonstrate:

The ability to review, present, and interpret quantitative and qualitative information to develop lines of argument; make sound judgments in accordance with the major theories, concepts and methods of the subject(s) of study; and the ability to use a basic range of established techniques to: analyze information; evaluate the appropriateness of different approaches to solving problems related to their area(s) of study; propose solutions; and make use of scholarly reviews and primary sources.

At the Baccalaureate / Honours Bachelor's degree level, students demonstrate:

The ability to review, present and critically evaluate qualitative and quantitative information to develop lines of argument; make sound judgments in accordance with the major theories, concepts and methods of the subject(s) of study; apply underlying concepts, principles, and techniques of analysis, both within and outside the discipline; where appropriate use this knowledge in the creative process; and the ability to use a range of established techniques to: initiate and undertake critical evaluation of arguments, assumptions, abstract concepts and information; propose solutions; frame appropriate questions for the purpose of solving a problem; solve a problem or create a new work; and to make critical use of scholarly reviews and primary sources.

At the Master's degree level, students demonstrate:

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.

At the Doctoral degree level, students demonstrate:

The capacity to undertake pure and/or applied research at an advanced level; and contribute to the development of academic or professional skills, techniques, tools, practices, ideas, theories, approaches, and/or materials.

O Communication Skills

At the Baccalaureate / Bachelor's degree level, students demonstrate:

The ability to communicate accurately and reliably, orally and in writing to a range of audiences.

At the Baccalaureate / Honours Bachelor's degree level, students demonstrate:

The ability to communicate information, arguments, and analyses accurately and reliably, orally and in writing, to a range of audiences.

At the Master's degree level, students demonstrate:

The ability to communicate ideas, issues and conclusions clearly.

At the Doctoral degree level, students demonstrate:

The ability to communicate complex and/or ambiguous ideas, issues and conclusions clearly and effectively.

O Awareness of the Limits of Knowledge

At the Baccalaureate / Bachelor's degree level, students demonstrate:

An understanding of the limits to their own knowledge and how this might influence their analyses and interpretations.

At the Baccalaureate / Honours Bachelor's degree level, students demonstrate:

An understanding of the limits to their own knowledge and ability, and an appreciation of the uncertainty, ambiguity and limits to knowledge and how this might influence analyses and interpretations.

At the Master's degree level, students demonstrate:

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

At the Doctoral degree level, students demonstrate:

An appreciation of the limitations of one's own work and discipline, of the complexity of knowledge, and of the potential contributions of other interpretations, methods, and disciplines.

Autonomy and Professional Capacity

At the Baccalaureate / Bachelor's degree level, students demonstrate:

Qualities and transferable skills necessary for further study, employment, community involvement and other activities requiring the exercise of personal responsibility and decision-making; working effectively with others; the ability to identify and address their own learning needs in changing circumstances and to select an appropriate program of further study; and behavior consistent with academic integrity and social responsibility.

At the Baccalaureate / Honours Bachelor's degree level, students demonstrate:

Qualities and transferable skills necessary for further study, employment, community involvement and other activities requiring the exercise of initiative, personal responsibility and accountability in both personal and group contexts; working effectively with others; decision-making in complex contexts; the ability to manage their own learning in changing circumstances, both within and outside the discipline and to select an appropriate program of further study; and behavior consistent with academic integrity and social responsibility.

At the Master's degree level, students demonstrate:

The qualities and transferable skills necessary for employment requiring the exercise of initiative, personal responsibility and accountability; decision-making in complex situations; the intellectual independence required for continuing professional development; the ethical behavior consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and the ability to appreciate the broader implications of applying knowledge to particular contexts.

At the Doctoral degree level, students demonstrate:

The qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex situations; the intellectual independence to be academically and professionally engaged and current; the ethical behavior consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and the ability to evaluate the broader implications of applying knowledge to particular contexts.

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The Council of Ontario Universities fosters discussion between our 20 member universities and one associate member institution on a wide range of university issues, including funding, research, graduate studies, international relations and accessibility.

Working closely with our provincial and federal governments on public policies, we strengthen the ability of our universities to foster the talent, research and innovation that boost the economic and social well-being of Ontario and Canada. COU also co-ordinates initiatives and communications around issues, such as university accountability, quality assurance, academic integrity and the greening of our campuses.

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