

Telling Our Story

Integrated Academic-Research Plan 2019-2021

(Version 2.0)

Executive Summary



Vision

With its foundation in technology, the sciences and professional practice, Ontario Tech University advances the discovery and application of knowledge that accelerates economic growth, regional development and social innovation and inspires graduates who will continue to make an impact on the world, as it is and as it will be.

Mission

At Ontario Tech, we aim to:

Provide superior undergraduate and graduate programs that are technology-enriched and responsive to the needs of students and the evolving workplace

Conduct research that creates knowledge, solves problems, results in economic and social innovation and engages students

Facilitate life-long learning that is flexible, inclusive and emphasizes college university transfers

Develop academic and research collaborations with industry and community that stimulate and enhance the region and university at home and abroad

Cultivate a dynamic learning environment for students by promoting social engagement, fostering critical thinking and integrating experiences inside and outside the classroom

Values

At Ontario Tech, we value:

Integrity and Respect

We embrace honesty, inclusivity, and equity in all that we do.

Accountability

Our actions reflect our values, and we are accountable for both.

Dedication to Quality and Intellectual Rigour

We strive for excellence with energy, commitment and passion.

Pursuit of Innovation

We cultivate creativity, adaptability and flexibility in our students, faculty, and staff.

The Integrated Academic-Research Plan

Disruption is all around and higher education is changing, yet opportunity abounds. We are well-positioned compared to a number of other universities throughout Canada to build on our existing strengths and past accomplishments to be innovative leaders in the future of Canadian higher education. ***Let's lead the way by embracing this opportunity, while at the same time continuing to build an environment in which everyone can thrive by being collaborative, collegial, and welcoming to all.***

This Plan, including our goals, objectives, commitments, and actions, necessarily aligns with Ontario Tech's four key strategic directions. These include: tech with a conscience, learning re-imagined, creating a sticky campus, and partnerships. Moreover, we hope to accomplish what we have outlined in this document so that we may continue to tell our story.

Tech with a conscience:

Innovation, impact, and the social and ethical implications of technology

We aim to improve the lives of humans and the planet through the ethical application of technology. It's a key component in our teaching and learning practices, administrative processes, and innovative research projects.

Our Commitments

- Establish new research institutes, centres, and chairs
- Be national leaders in the conversation pertaining to the future of energy in Canada
- Intentionally differentiate ourselves as an institution committed to using technology in all that we do

Attainment of these goals will be measured against actions that contribute to making Ontario Tech a great place to work, study, and play. We will know if we are on track if by 2021 we have:

- Launched new research institutes, centres, and chairs which examine the use, application, social and ethical implications, and impact of technology on everyday life
- Built on existing strengths by establishing interdisciplinary research teams in select areas to create innovative and ethical technological solutions for the future
- Established advisory boards or consortia to guide complex interdisciplinary conversations and community-based research initiatives pertaining to technology and its promise for the future, as well as its challenges
- Successfully implemented a new Learning Management Platform (i.e., CANVAS™)
- Increased the quantity of online curricular and course offerings and use of open educational resources (OERs) with a concomitant commitment to enhancing the quality of the same
- Expanded faculty, staff, and student usage of digital/virtual platforms

Learning re-imagined: Learner-centred educational options

We adapt to the ever changing educational landscape by experimenting with the most effective ways to deliver flexible and dynamic learning, giving more choices to more people.

Our Commitments

- Prepare students for careers that contribute to individual, societal, and global solutions and prosperity
- Re-invent learning via continuous learning and technological solutions
- Provide students with experiential learning and work integrated learning opportunities, including entrepreneurial and research-intensive options domestically and globally

Attainment of these goals will be measured against actions that contribute to making Ontario Tech a great place to work, study, and play. We will know if we are on track if by 2021 we have:

- Increased the number, quality, and diversity of undergraduate and graduate student engagements in experiential and/or work integrated learning and co-op opportunities via enhanced community-, industry-, and partner-sponsored options
- Increased enrolment in Continuous Learning offerings
- Increased job readiness offerings and enrolment in these offerings
- Increased the number of graduate programs
- Leveraged existing technological assets to provide a greater number of degrees, courses, and other for credit offerings (e.g., micro-credentials, badges) via online formats
- Leveraged existing and emerging technological assets to elevate the integration and use of “immersive” learning strategies within existing and new program offerings
- Increased the production of open educational resources (OERs) amongst our full-time and part-time faculty and staff
- Increased the usage of OERs in each of our Faculties
- Introduced new or re-vamped existing offerings to increase our collaborations with stakeholders, either within and between Faculties, externally with university and college partners, or with local communities, municipalities and industry

Creating a sticky campus: A place to make lasting connections

We promote positive social change and encourage an accessible, equitable, diverse, and inclusive culture for our campus community.

Our Commitments

- Create new campus spaces and experiences at our downtown and north locations
- Broaden and diversify our university community demographics while at the same time celebrating and promoting equity, diversity, and inclusion in all that we do
- Expand our virtual campus assets

Attainment of these goals will be measured against actions that contribute to making Ontario Tech a great place to work, study, and play. We will know if we are on track if by 2021 we have:

- Completed construction and moved into a new multipurpose building to support faculty, staff, student, and community educational, research, and service needs
- Repurposed vacated spaces to support growing teaching, research, and service needs, while at the same time creating new “collision” and social spaces where innovative ideas may thrive
- Established a new standard in food delivery with improved selection, choice, pricing, points of purchase, and nutritional value to meet the needs of our diverse campus communities
- Expanded our commitment to sustainability through waste reduction initiatives
- Intentionally committed to the Truth and Reconciliation Commission’s Calls to Action in support of Indigenous students and the local Indigenous communities
- Increased the number of international students, scholars, and visitors on our campuses
- Welcomed greater participation from members of our local communities and region via age-specific programming and community-specific needs
- Hired a Director of Equity, Diversity, and Inclusion who has begun to develop a comprehensive EDI plan for the university
- Embraced and gained, with intention, a better understanding of the diversity of our on campus demographics through robust employee and student data collection methods
- Introduced and implemented new orientation, mentorship, and leadership programs for our faculty, staff, and students
- Implemented a culture-changing approach to conflict resolution
- Committed to student success and retention via enhanced first year experiences, greater investments in student advising and mental health supports, and cost reductions via OER and other digital delivery strategies

Partnerships:

Meaningful connections with our local and global communities

We help industry, community, government, and academic partners be more effective by bringing them together with students and researchers to uncover innovative solutions for our partners' most pressing problems.

Our Commitments

- Strengthen existing and cultivate new industry, community, and government relationships within the Durham Region, Northumberland County, and the Greater Toronto Area (GTA)
- Strengthen and add to our existing academic partnerships – regionally, nationally, and internationally
- Broaden our impact and reach beyond the Durham Region and Northumberland County

Attainment of these goals will be measured against actions that contribute to making Ontario Tech a great place to work, study, and play. We will know if we are on track if by 2021 we have:

- Engaged a greater number of students in Brilliant Catalyst and Brilliant Solutions activities
- Increased the number of faculty, staff, and students in City of Oshawa's Teaching City and Downtown Business Improvement Area (BIA) initiatives
- Increased the number of faculty, staff, and student engagements with other municipalities within the Durham region, Northumberland County, and beyond
- Increased the number of students enrolled in collaborative programs offered between Ontario Tech and other universities and colleges
- Established up to five new international partnerships (with at least one in the United States) with universities renowned for their technologically-oriented research and academic programs
- Increased the number of university-industry research chairs
- Increased the number of pan-university partnership agreements with industry, community partners, and collaborative international research teams
- Improved our ability to manage and leverage intellectual property
- Experienced an increase in research granting success from funding sources outside Canada
- Completed our first community engagement survey to benchmark Ontario Tech's engagement within community
- Set up a satellite research and partnerships collaboratory in the Greater Toronto Area

Resources

Members of the Ontario Tech University community are annually invited to contribute to our planning exercises. Using a rolling plan approach, this Integrated Academic-Research Plan is supported by a complimentary five year Strategic Research Plan and framed within multi-year and annual resource planning exercises. Together, these documents comprise an integrated university-wide planning approach that will support our efforts through 2021 and beyond.

Conclusion

Ontario Tech is continuing to grow, expand, and mature into the promise its founders envisioned when it was established in 2002. It is a technologically forward-looking institution characterized by innovation, entrepreneurship, and its commitment to the betterment of society and the planet.

This Plan builds on the University's ever evolving position as a dynamic, conscientious, and innovative technological leader in the province's higher education sector. We are young, yet with intention, our campus now more than ever welcomes faculty, staff, students, and the greater community to engage in strategic education and research initiatives with the aim of building a better and brighter future for all. Importantly, Ontario Tech is growing, expanding, and diversifying to include students, staff, and faculty from around the world. Together, through an overt appreciation of our differences – products of our individual backgrounds, world views, and choices - we are aspiring to excellence in all that we do.

We are motivated to continue pursuing solutions to complex societal problems and value the opportunity to serve as a catalyst for improvement and change within our local and global communities. Within this planning cycle, we are confident that we will realize our goals through hard work and the implementation of the commitments articulated herein.

Contacts

Provost and Vice-President, Academic
Ontario Tech University
2000 Simcoe Street North
Oshawa, ON, Canada
L1G 0C5
Telephone: (905) 721-8668, Ext. 5467
Canada
provost@uoit.ca

Vice-President, Research and Innovation
Ontario Tech University
2000 Simcoe Street North
Oshawa, ON, Canada
L1G 0C5
Telephone: (905) 721-8668, Ext. 5420
Canada

vprii@uoit.ca

Assistant Vice-President, Planning and Administration
Ontario Tech University
2000 Simcoe Street North
Oshawa, ON, Canada
L1G 0C5
Telephone: (905) 721-8668, Ext. 3149
planning@uoit.ca

www.ontariotechu.ca

Telling Our Story

Integrated Academic-Research Plan 2019-2021

(Version 2.0)



Vision, Mission, and Values

The University of Ontario Institute of Technology Act¹ envisioned a new type of university, one that would focus on offering programs that were innovative and responsive to the individual needs of students and to the market-driven needs of employers. And over the past 18 years, Ontario Tech has embraced this vision with its strategic commitment to being a change-maker and leader in technology-driven research and scholarship.² As the institution nears the end of its second decade of operation, this commitment is stronger than ever. Our Vision, Mission, and Values capture the essence of our potential.

Vision

With its foundation in technology, the sciences and professional practice, Ontario Tech University advances the discovery and application of knowledge that accelerates economic growth, regional development and social innovation and inspires graduates who will continue to make an impact on the world, as it is and as it will be.

Mission

Provide superior undergraduate and graduate programs that are technology-enriched and responsive to the needs of students and the evolving workplace

Conduct research that creates knowledge, solves problems, results in economic and social innovation and engages students

Facilitate life-long learning that is flexible, inclusive and emphasizes college university transfers

Develop academic and research collaborations with industry and community that stimulate and enhance the region and university at home and abroad

Cultivate a dynamic learning environment for students by promoting social engagement, fostering critical thinking and integrating experiences inside and outside the classroom

Values

Integrity and Respect

We embrace honesty, inclusivity, and equity in all that we do.

Accountability

Our actions reflect our values, and we are accountable for both.

Dedication to Quality and Intellectual Rigour

We strive for excellence with energy, commitment and passion.

Pursuit of Innovation

We cultivate creativity, adaptability and flexibility in our students, faculty, and staff.

¹ See <https://www.ontario.ca/laws/statute/02u08>

² See <https://shared.uoit.ca/shared/department/opp/Governance/Office-of-the-President/2017-2022-strat-plan1.pdf>

Our Current Context

Ontario Tech is a differentiated university where students, staff, and faculty are immersed in a technology-enriched learning environment with a commitment to science, technology, engineering, and math (STEM) and professional degree offerings, and an impressive and growing suite of innovative social science, humanities, and arts programs. We are labour market-focused and we were established³ with a mandate to advance the highest quality of learning, teaching, research, and professional practice and a special mission “to provide career-oriented university programs...with a view to creating opportunities for college graduates to pursue a university degree.” As stated in our Vision and Mission Ontario Tech “advances the discovery and application of knowledge that accelerates economic growth, regional development and social innovation.”

We embrace our role in stimulating and enhancing the economy and social fabric of the Durham Region, Northumberland County, and the eastern GTA. We also work closely with university (e.g., Trent University, OCAD University, University of Toronto–Scarborough), college (e.g., Georgian, Fleming, Centennial, and Durham College), and community partners (e.g., City of Oshawa Teaching City) to meet the aforementioned objectives while finding efficiencies, reducing duplication, and creating innovative and future-facing opportunities in the province’s post-secondary education sector.

Importantly, Ontario Tech is a regional university that supports the needs of our growing and changing local populations, employers, and communities. We are an access institution and, with our Oshawa locations, enhanced use of technology (e.g., on-line learning, OERs, etc.), and flexible learning options (e.g., stackable credentials, microcredentials), one that is committed to lowering the cost of post-secondary education while also promoting continuous lifelong learning and upskilling in the local workforce. We are educating people in our catchment area for the catchment area. Through our research (e.g., with an emphasis in energy, digital technology, intelligent manufacturing, environmental sustainability, clean technologies, autonomous vehicles, aerospace, computer science, life sciences, dementia care, and much more), we are helping to re-shape the local and provincial economic landscape. Through our provision of employment, educational, and infrastructure development opportunities, we are helping to revitalize the City of Oshawa’s downtown core while at the same time anchoring development and growth in the north end of the city. The social and intellectual capital invested by our faculty, staff, and students is building resilience across Durham Region and Northumberland County and providing much needed support to community organizations in their efforts to address poverty, crime, opioid addiction, and quality of life issues.

Looking Forward

In 2020 Ontario Tech finds itself immersed in an environment filled with tremendous opportunity and heightened expectations, but facing immense economic and

³ See <https://www.ontario.ca/laws/statute/02u08>

technological disruptions. The world around us is in a constant state of flux and therefore evolving in new, exciting, previously unforeseen, and spontaneous directions. In this milieu, realizing our potential will depend upon our ability to value, celebrate, and respect our collective strengths as well as our individual differences. Each and every member of our university community contributes in diverse ways to our successes and it is our differences that are our strength. Collectively rallying around shared priorities will be essential if we are to be successful in navigating the opportunities and challenges that lie ahead for post-secondary institutions provincially, nationally, and globally.

Continued adherence to a traditional university model is not and will not be a viable option as the world around us continues to change. Global trends including increased reliance on existing and emerging technologies, digitization, and the demand for flexible education options are driving us to transform the way we deliver our core academic programs while also supplementing them with job readiness training opportunities. We are also more accountable than ever in ensuring that our graduates are employable and that the generation, analysis, retention, and meaningful translation of our data sets and research findings support the greater good of society. The most effective universities will be those with faculty and staff who reach beyond their walls to find opportunities to immerse and encourage students to seek out opportunities for experiential learning and civic engagement within our communities. Universities have an important role to play in addressing societal challenges and problems in visible and meaningful ways. In times of crisis, we need to envision ourselves as community leaders committed to rising and supporting those in need.

In comparison to our provincial competitors, Ontario Tech is uniquely positioned to adapt to technological change because of our founding institutional commitment to STEM and our longstanding pledge to embed technology throughout our market-driven educational programs, our campus learning environments, and our research. We must build upon our current research strengths in energy, manufacturing, and digital technology while also growing our capacity in areas such as quantum computing and personalized health and medicine. Advances in technological innovation based on these research strengths are leading the way to a future unlike anything seen before with promises of greater productivity and enhanced quality of life.⁴ Ongoing technological innovation will afford our society the capacity to do almost anything, yet the more important questions may be “What should we do?” and “How should we do it?” not “What can we do?”⁵ Asking these questions reflects our commitment to focusing on more than just the use of technology. Our commitment at Ontario Tech for both research and learning is on applications of technology with a conscience.

Technology is also contributing to tremendous change in the way universities deliver educational programs. Post-secondary education is on the cusp of enormous change and at the forefront of that change is the demand for flexible and accessible education options. Ontario Tech will use virtual platforms and resources to expand our reach beyond

⁴ See <https://www.inc.com/greg-satell/these-3-technology-inflection-points-will-change-our-future-beyond-recognition.html>

⁵ As stated by Bill Buxton (2019), a noted technology theorist, designer and principal researcher at Microsoft. See <https://news.ontariotechu.ca/archives/2019/05/ontario-tech-university-sharpens-its-focus-on-technology-with-a-conscience.php>

our physical campus boundaries, which will both break down geographical barriers and reduce for our students the cost of earning a degree. We will also explore new options in program delivery including stackable credentials⁶ and microcredentialling⁷ to meet the needs of existing and emerging workforces. This will require us to work closely with industry and employers to immerse our current students in work integrated and experiential learning opportunities, and, to define curriculum and identify the skillsets and competencies required for their successful transition into future careers. This is learning re-imagined.

The role of a university includes much more than simply the delivery of educational programs and the awarding of credentials. Universities need to envision themselves as community hubs – places where people come together to meet one another and engage in social and cultural activities that reflect community needs. We do this both virtually and physically and our two locations, commonly referred to as the Downtown and North locations, contribute to the economic and social cohesion of our community. Through our research and service commitments, our students, staff, faculty, and alumni are helping to address significant societal challenges. At Ontario Tech, we are actively committed to the concept of social accountability and the creation of a sticky campus.

Universities also need to envision themselves as centres for research excellence and innovation. Ontario Tech has evolved since its early beginnings to be recently recognized as a rising star in terms of research output. The Maclean's 2020 national rankings for research at primarily undergraduate universities list Ontario Tech as 1st in SSHRC grants and 4th in Medical/Science grants (i.e., based on average size and number) and 2nd in citations as a measure of scholarly output. Importantly, our scholarship is of high quality, diverse in nature, and applicable on a local, national, and global scale. Our ability and willingness to work effectively with industry, community, government and other academic partners underpins our success in this domain. We are also well aware that our future successes in research and innovation will be dependent upon maintaining and constantly seeking out new opportunities for successful partnerships.

This Integrated Plan is important because it keeps us collectively focused as we work to realize further successes for Ontario Tech. It also aligns our activities with our vision, mission, values, strategic priorities, and resources. This is exceptionally important during periods of fiscal restraint such as the one that we are currently experiencing in the province. Decisions by the current provincial government, including last year's decision to freeze domestic tuition for the foreseeable future, combined with tying future grant funding to performance metrics have changed the fiscal environment for Ontario universities. This fiscal uncertainty is further complicated by the possible emergence of broader degree granting privileges within the province's colleges as well as a growing number of industry-based education and training programs. We are being asked to do more with less while facing increased competition and also being held to greater levels of

⁶ See <https://www.insidehighered.com/print/views/2016/05/23/understanding-differences-what-credentials-are-being-stacked-and-why-essay>

⁷ See <https://www.forbes.com/sites/petergreene/2019/02/16/education-micro-credentials-101-why-do-we-need-badges/#4886fb462419>

accountability by government and society in general.

Disruption is all around and higher education is changing, yet opportunity abounds. We are well-positioned compared to a number of other universities throughout Canada to build on our existing strengths and past accomplishments to be innovative leaders in the future of Canadian higher education. ***Let's lead the way by embracing this opportunity, while at the same time continuing to build an environment in which everyone can thrive by being collaborative, collegial, and welcoming to all.***

The Process

Building on previous annual planning efforts - and the determination and successes of our past and present administrative leaders, faculty, staff, students, and alumni - this plan is intended to assist us in staying focused as we aspire to new levels of accomplishment and achievement in four key strategic areas: tech with a conscience, learning re-imagined, creating a sticky campus, and partnerships. It also reflects on and aligns with the recently renewed Ontario Tech Strategic Research Plan ([Appendix A or Link](#)).

This document aligns our key strategic areas with explicit commitments (or goals) and the actions required to achieve them. It is informed by our previous integrated plans as well as the multiple annual plans generated by Ontario Tech's individual academic and administrative units over the past six months. It is important to note that this Integrated Academic-Research Plan differs from prior plans in that it is a short-term rolling plan, one which applies to a briefer time frame (i.e., from now to March, 2021) than in years past. This allows us to commit to doing "fewer things better" and to be more action oriented. It also allows for the introduction of an annual review and evaluation cycle to determine the success of our actions, as well as the opportunity to adjust to changing resource realities. It is intentionally brief.

This year's planning exercise began with visits to Faculty Councils by the Provost and Vice-President, Academic and the Vice-President, Research and Innovation to explain the planning process and invite all members of the Ontario Tech community to engage in planning activities. Similar group meetings were also held with key leaders and members of administrative units.

Following the completion of individual unit plans, a day long retreat with all academic and administrative unit leads was held to identify key points of intersection (or integration) between the various plans. Thereafter an Executive Summary version of this document was drafted and used as the basis for university-wide town hall sessions in November, 2019. The Executive Summary version which will be available to those outside the institution complements this version of the Plan which is intended for internal use only.

Before reading the remainder of this document it is important to note that even though these key strategies are sequentially presented, the commitments and anticipated outcomes associated with each are interconnected and therefore not mutually exclusive. Moreover, these strategies and the bulleted lists found therein are devoid of any order of

priority and may not reflect the full diversity of activities happening within the university. This is because plans like this one are prone to expressing our common goals and objectives while inadvertently understating the tremendous contributions that each and every member of our university community makes on a daily basis. It is important to explicitly recognize this shortcoming while at the same time expressing our sincere hope that every member of the Ontario Tech community will see their day-to-day contributions somehow reflected within this document. Moreover, we hope to accomplish what we have outlined in this document so that we may continue to tell our story.

The Integrated Academic-Research Plan

This Plan, including our goals, objectives, commitments, and actions, necessarily aligns with Ontario Tech's four key strategic directions. In each section that follows, a brief statement on what we aim to accomplish, our commitments (or goals), and the actions we will employ to accomplish them is included. These are followed by a contextual narrative in which a limited number of examples are provided for illustrative purposes.

Tech with a conscience:

Innovation, impact, and the social and ethical implications of technology

We aim to improve the lives of humans and the planet through the ethical application of technology. It's a key component in our teaching and learning practices, administrative processes, and innovative research projects.

Our Commitments

- Establish new research institutes, centres, and chairs
- Be national leaders in the conversation pertaining to the future of energy in Canada
- Intentionally differentiate ourselves as an institution committed to using technology in all that we do

Attainment of these goals will be measured against actions that contribute to making Ontario Tech a great place to work, study, and play. We will know if we are on track if by 2021 we have:

- Launched new research institutes, centres, and chairs which examine the use, application, social and ethical implications, and impact of technology on everyday life
- Built on existing strengths by establishing interdisciplinary research teams in select areas to create innovative and ethical technological solutions for the future
- Established advisory boards or consortia to guide complex interdisciplinary conversations and community-based research initiatives pertaining to technology and its promise for the future, as well as its challenges
- Successfully implemented a new Learning Management Platform (i.e., CANVAS™)
- Increased the quantity of online curricular and course offerings and use of open educational resources (OERs) with a concomitant commitment to enhancing the

- quality of the same
- Expanded faculty, staff, and student usage of digital/virtual platforms

Context

Technology pervades virtually every aspect of our society and daily lives. Nowhere is this more apparent than within Ontario Tech, where our founding commitment to STEM continues to play a role in uniquely situating us as a technologically differentiated university within the province. We have nationally and internationally recognized researchers who are generating knowledge and leading important interdisciplinary discussions with community stakeholders on a plethora of topics including technological innovation and the use of technology with a conscience. Importantly, while we have embraced our commitment to advancing technological innovation, we have also challenged ourselves to critically examine both the positive and negative impacts of technology on our everyday lives.

Within the timeframe of this Plan we are committed to the establishment of several new research institutes, centres, and chairs. These initiatives include the establishment of the Digital Life Institute and the UNESCO Research Chair in Hate Studies within the Faculty of Social Sciences and Humanities (FSSH), and a research Institute in Cyber Protection within the Faculty of Business and Information Technology (FBIT). The Library is also beginning to plan for a Digital Scholarship Centre to advance interdisciplinary collaboration and engagement with the use of digital tools amongst researchers, undergraduate and graduate students, postdoctoral fellows, and faculty members.

Also high on our priority list is our commitment to establish an Energy Consortium to lead the national conversation about Canada's energy future. Ontario Tech's single largest thematic area of research expertise is in the area of energy and sustainability (i.e., clean and sustainable energy including human powered transportation, as well as nuclear, geothermal, hydraulic, hydrogen, natural gas, solar and wind) and we are uniquely positioned to play a leadership role in creating regional and national energy policies rooted in scientific evidence.

The presence and use of technology in our teaching will continue to exponentially increase over time as we become increasingly reliant on digital and virtual platforms to support our daily operations. We must constantly challenge ourselves to "up our game" so to speak, ensuring that we have robust systems in place to support what it is that we do. To this end, in 2020, we will transition to a new learning management system (i.e., CANVAS™) which provides for a higher level of functionality and integration between different learning technologies.

Learning re-imagined: Learner-centred educational options

We adapt to the ever changing educational landscape by experimenting with the most effective ways to deliver flexible and dynamic learning, giving more choices to more

people.

Our Commitments

- Prepare students for careers that contribute to individual, societal, and global solutions and prosperity
- Re-invent learning via continuous learning and technological solutions
- Provide students with experiential learning and work integrated learning opportunities, including entrepreneurial and research-intensive options domestically and globally

Attainment of these goals will be measured against actions that contribute to making Ontario Tech a great place to work, study, and play. We will know if we are on track if by 2021 we have:

- Increased the number, quality, and diversity of undergraduate and graduate student engagements in experiential and/or work integrated learning and co-op opportunities via enhanced community-, industry-, and partner-sponsored options
- Increased enrolment in Continuous Learning offerings
- Increased job readiness offerings and enrolment in these offerings
- Increased the number of graduate programs
- Leveraged existing technological assets to provide a greater number of degrees, courses, and other for credit offerings (e.g., micro-credentials, badges) via online formats
- Leveraged existing and emerging technological assets to elevate the integration and use of “immersive” learning strategies within existing and new program offerings
- Increased the production of open educational resources (OERs) amongst our full-time and part-time faculty and staff
- Increased the usage of OERs in each of our Faculties
- Introduced new or re-vamped existing offerings to increase our collaborations with stakeholders, either within and between Faculties, externally with university and college partners, or with local communities, municipalities and industry

Context

A continued adherence to a traditional university model is not and will not be a viable option as the world around us rapidly changes. Ontario Tech is evolving to meet the demands of this new place where we will all work and live. To this end, we are positioning ourselves to be responsive to the needs of our students, including preparing them for career success in a shifting work landscape. Importantly, “work” will be more automated, data driven, collaborative, and mobile in nature.⁸ Continual upskilling or credentialing of the workforce – underpinned by a recognition of the need for briefer, more accessible modular educational units - will also be in demand as industries and businesses seek to train their employees on the job.

⁸ See <https://www.workfront.com/blog/2017-trends-7-biggest-changes-coming-to-the-workplace>

In response, we are expanding our commitment to work-integrated and experiential learning opportunities for our undergraduate and graduate students. In May 2020 we will introduce our Open Educational Resource Lab (OER Lab), an initiative that will employ students to work with faculty and staff to develop and produce new OER products for use at Ontario Tech. In the process, students will acquire declarative knowledge and enhance their procedural skillsets through their work experience. The development of a new Minor in Social Enterprise, a combined effort involving FBIT and FSSH, is complemented by the introduction of new internship opportunities.

We are also committed to expanding our Continuous Learning and job readiness offerings and enrollments through existing and newly conceived initiatives. For example, the Faculty of Energy Systems and Nuclear Science (FESNS) is planning to expand its already existing Advanced Operations Overview for Managers (AOOM) course, while the Faculty of Health Sciences (FHSc) is taking a lead role in delivering the AGE-u-cate® Training Institute's dementia training program throughout Ontario in 2020. In the long term, the goal is for Ontario Tech to deliver this much needed dementia program nationwide.

Moving forward, it will be important for us to re-conceptualize how we provide training to our students. Twelve-week courses will fade away as shorter duration stackable credentials or skill-oriented microcredentials gain favour with employers and students alike. Several microcredentials are currently in development and will be completed in 2020. Participants in a one-day simulation exercise involving nursing and medical laboratory professionals will earn a badge in interdisciplinary communication

Importantly, our efforts in re-imagining learning also include the introduction of new degree programs, minors, and offerings, including the launch of BA and BSc degrees in Psychology and a new TESOL program offered by the Faculty of Education (FEEd). The Faculty of Science (FSc) and FHSc have worked closely on the development of an undergraduate degree in Integrated Neuroscience, and work related to the creation of a Minor in Indigenous Studies (FSSH) continues in collaboration with the Indigenous Education Advisory Circle (IEAC) and other academic stakeholders.

Creating a sticky campus: A place to make lasting connections

We promote positive social change and encourage an accessible, equitable, diverse, and inclusive culture for our campus community.

Our Commitments

- Create new campus spaces and experiences at our downtown and north locations
- Broaden and diversify our university community demographics while at the same time celebrating and promoting equity, diversity, and inclusion in all that we do
- Expand our virtual campus assets

Attainment of these goals will be measured against actions that contribute to making Ontario Tech a great place to work, study, and play. We will know if we are on track if by 2021 we have:

- Completed construction and moved into a new multipurpose building to support faculty, staff, student, and community educational, research, and service needs
- Repurposed vacated spaces to support growing teaching, research, and service needs, while at the same time creating new “collision” and social spaces where innovative ideas may thrive
- Established a new standard in food delivery with improved selection, choice, pricing, points of purchase, and nutritional value to meet the needs of our diverse campus communities
- Expanded our commitment to sustainability through waste reduction initiatives
- Intentionally committed to the Truth and Reconciliation Commission’s Calls to Action in support of Indigenous students and local Indigenous communities
- Increased the number of international students, scholars, and visitors on our campuses
- Welcomed greater participation from members of our local communities and region via age-specific programming and community-specific needs
- Hired a Director of Equity, Diversity, and Inclusion who has begun to develop a comprehensive EDI plan for the university
- Embraced and gained, with intention, a better understanding of the diversity of our on campus demographics through robust employee and student data collection methods
- Introduced and implemented new orientation, mentorship, and leadership programs for our faculty, staff, and students
- Implemented a culture-changing approach to conflict resolution
- Committed to student success and retention via enhanced first year experiences, greater investments in student advising and mental health supports, and cost reductions via OER and other digital delivery strategies

Context

A sticky campus is defined as “...a place where [people] choose to be rather than have to be.”⁹ At Ontario Tech, where a large proportion of our students, staff, and faculty commute to work, we experience significant ebbs and flows in the numbers of people that are on campus at any one time. This is sometimes seasonally dependent – but we want to change this. It begins with having infrastructure and activities that will draw diverse groups of people in, but also a positive and welcoming campus climate that will keep them here.

In terms of infrastructure, there is a lot happening. Under the auspices of our new highly visible and bold branding, the construction of a new multipurpose building is underway on

⁹ See <https://www.indesignlive.sg/happenings/sticky-campus-education-getting-social>

the north campus location. This building, which is due to be completed and ready for move in by July 2021, will become the new home of the Ontario Tech Student Union, Student Life, the Teaching and Learning Centre, and the Faculty of Health Sciences just to name a few. It will also create new classroom and social spaces and its design will lend itself to the hosting of academic and professional conferences and other special events. In 2020, Ontario Tech will also introduce new bookstore operations and a new standard in food delivery (i.e., improved selection, choice, pricing, points of purchase, and nutritional value) to meet the needs of our community.

In terms of activities, we will build upon our past events to enhance our efforts year over year while at the same time expanding our offerings. We have specialized activities for our incoming students offered through Student Life and the School of Graduate and Post-Doctoral Studies (SGPS) to assist our students in transitioning to Ontario Tech and to thrive while they are here. Through the Teaching and Learning Centre, we also offer tailored programming for new incoming faculty members and staff, and support continuous improvement via Learning and Organizational Development offerings through Human Resources.

We attract numerous people to our campuses via a variety of events (e.g., Annual Powwow, Futures Forum, Women in STEM, Science Rendezvous, Ridgeback Athletic events, Convocation, and others), but we could be doing more. Ontario Tech's recent designation as an internationally recognized Age-Friendly University¹⁰ is the latest opportunity for us to reimagine ourselves as a community hub to enrich the lives of older adults and seniors who wish to venture onto our campuses.

The Ontario Tech community is also very diverse yet even with our best efforts, historical and systemic barriers and challenges may still exist. In 2020, we are committed to expanding the presence of international students on our campus. We will also hire and welcome to Ontario Tech our first Director of Equity, Diversity, and Inclusion (EDI). This individual will work closely with all stakeholder groups to create a framework, governance structures, and data collection methods to support an evidence-informed approach to addressing EDI issues. Importantly, we will remain intentionally committed to the Truth and Reconciliation Commission's Calls to Action in support of Indigenous students and local Indigenous communities. We will also continue to support the LGBTQ2+ community via continued involvement in the Toronto Pride Parade and associated events, while ensuring our campus locations are welcoming and truly inclusive.

Partnerships:

Meaningful connections with our local and global communities

We help industry, community, government, and academic partners be more effective by bringing them together with students and researchers to uncover innovative solutions for our partners' most pressing problems.

¹⁰ See <https://news.ontariotechu.ca/archives/2019/07/ontario-tech-university-creating-a-great-learning-environment-for-older-adults.php>

Our Commitments

- Strengthen existing and cultivate new industry, community, and government relationships within the Durham Region, Northumberland County, and the Greater Toronto Area (GTA)
- Strengthen and add to our existing academic partnerships – regionally, nationally, and internationally
- Broaden our impact and reach beyond the Durham Region and Northumberland County

Attainment of these goals will be measured against actions that contribute to making Ontario Tech a great place to work, study, and play. We will know if we are on track if by 2021 we have:

- Engaged a greater number of students in Brilliant Catalyst and Brilliant Solutions activities
- Increased the number of faculty, staff, and students in City of Oshawa's Teaching City and Downtown Business Improvement Area (BIA) initiatives
- Increased the number of faculty, staff, and student engagements with other municipalities within the Durham region, Northumberland County, and beyond
- Increased the number of students enrolled in collaborative programs offered between Ontario Tech and other universities and colleges
- Established up to five new international partnerships (with at least one in the United States) with universities renowned for their technologically-oriented research and academic programs
- Increased the number of university-industry research chairs
- Increased the number of pan-university partnership agreements with industry, community partners, and collaborative international research teams
- Improved our ability to manage and leverage intellectual property
- Experienced an increase in research granting success from funding sources outside Canada
- Completed our first community engagement survey to benchmark Ontario Tech's engagement within community
- Set up a satellite research and partnerships collaboratory in the Greater Toronto Area

Context

Ontario Tech's focus on STEM and technology-driven research and development provides opportunities for collaboration with corporate partners across various business sectors, including but not limited to the growing startup community in Durham Region and Northumberland County, small to medium size enterprises (e.g., in intelligent manufacturing), and large national and international firms. Our major partners include General Motors, Toyota, Honda, Nike, Uber, Emerson Climate Technologies, Kubota Canada, Infineum, and L-3 Wescam. With this in mind, the Faculty of Engineering and

Applied Science (FEAS) and FESNS are particularly well positioned to strengthen and expand upon their existing relationships, both within and beyond our local region.

Ontario Tech's Strategic Research Plan (Appendix A) provides the impetus for us to increase our efforts to secure grant funding from funding sources outside Canada, as well as the development of a wide range of new partnerships. Collectively such efforts should also effectively support the establishment of new university-industry research chairs and pan-university partnership agreements with industry, community partners, and collaborative international research teams.

We also intend to move our efforts beyond our current geographical boundaries, to raise our profile, and to enhance our reputation nationally and internationally. To this end, we will explore and build academic partnerships with reputable academic institutions on an international scale (e.g., Africa, Asia-Pacific, Great Britain and Ireland) including a select few in the United States.

Key to our successes in this domain will be the integration of our students within a variety of industries. Employers are seeking talented graduates who are job ready. This includes not only the acquisition of a requisite degree or diploma, but the "value added" skills (e.g., communication skills, critical and innovative thinking, empathy, etc.) which allow them to make immediate contributions in their new roles. We will use our Brilliant Catalyst and Brilliant Solutions programs, along with opportunities to engage students in the City of Oshawa's Teaching City and Downtown Business Improvement Area (BIA) initiatives, to assist our students in developing these skill sets.

Resources

Members of the Ontario Tech University community are annually invited to contribute to our planning exercises. Using a rolling plan approach, this Integrated Academic-Research Plan is supported by a complimentary five year Strategic Research Plan and framed within multi-year and annual resource planning exercises. Together, these instruments comprise an integrated university-wide planning approach that will support our efforts through 2021 and beyond.

Conclusion

Ontario Tech is continuing to grow, expand, and mature into the promise its founders envisioned when it was established in 2002. It is a technologically forward-looking institution characterized by innovation, entrepreneurship, and a strong commitment to the betterment of society and the planet.

This Plan builds on the University's ever evolving position as a dynamic, conscientious, and innovative technological leader in the province's higher education sector. We are young, yet with intention, our campus now more than ever welcomes faculty, staff, students, and the greater community to engage in strategic education and research initiatives with the aim of building a better and brighter future for all. Importantly, Ontario

Tech is growing and diversifying to include students, staff, and faculty from around the world. Together, through an overt appreciation of our differences – products of our individual backgrounds, world views, and choices - we are aspiring to excellence in all that we do.

We are motivated to find through our research and teaching solutions to complex societal problems that can serve as catalysts for improvement and change within our local and global communities. Within this planning cycle, we are confident that we will realize our goals through hard work and the implementation of the commitments articulated herein.

Contacts

Provost and Vice-President, Academic
Ontario Tech University
2000 Simcoe Street North
Oshawa, ON, Canada
L1G 0C5
Telephone: (905) 721-8668, Ext. 5467
Canada
provost@uoit.ca

Vice-President, Research and Innovation
Ontario Tech University
2000 Simcoe Street North
Oshawa, ON, Canada
L1G 0C5
Telephone: (905) 721-8668, Ext. 5420
Canada
vprii@uoit.ca

Assistant Vice-President, Planning and Administration
Ontario Tech University
2000 Simcoe Street North
Oshawa, ON, Canada
L1G 0C5
Telephone: (905) 721-8668, Ext. 3149
planning@uoit.ca

www.ontariotechu.ca

Appendix A

Ontario Tech University Strategic Research Plan