



Integrated Academic-Research Plan 2023-2028

## Building our future, together

We have many reasons to be exceptionally proud of Ontario Tech University's achievements over its first 20 years. Our entrepreneurial spirit, passion for inquiry and pursuit of excellence are foundational to our innovative academic programs, our leading research portfolio, and our unwavering commitment to our broader communities. Underpinning all of this is our focus on tech with a conscience, which has compelled us to understand the social and ethical implications and applications of technology to improve the lives of humans and the planet.

This version of our Integrated Academic-Research Plan coincides with our 20th anniversary. It sets the stage for our continued differentiation and growth as a front-running, forward-thinking university. We're proud of our past, and confident in who we are and where we're headed. Our story is only beginning.

Lori A. Livingston, PhD

Provost and Vice-President, Academic

## Vision, Mission and Values

The University of Ontario Institute of Technology Act¹ envisioned a new type of university, one focused on offering programs that were innovative and responsive to the individual needs of students and to the market-driven needs of employers. Over the past 20 years, Ontario Tech has embraced this vision with its strategic commitment to being a change-maker and leader in technology-driven research, teaching and scholarship. As the institution enters its third decade of operation, this commitment is stronger than ever.

These Vision, Mission, and Values<sup>2</sup> statements differentiate us from other universities and capture the essence of our potential.

### **Vision**

Embracing technology with a conscience to advance knowledge and promote sustainability.



#### Mission

#### We equip future leaders to solve complex problems.

We respond to the needs of students, and the evolving world, by providing superior undergraduate, graduate, and lifelong learning experiences. To this end, **what we do** to achieve our mission and to tell our story is guided by a community-focused approach on our strategic priorities:

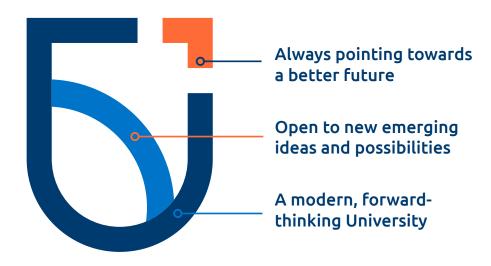
- **Tech with a conscience:** Innovating to improve lives and the planet by incorporating technology-enhanced learning strategies, and promoting the ethical development and use of technology for good through intensive research and inquiry.
- Learning re-imagined: Co-creating knowledge by adapting to the ever-changing educational landscape through the provision of flexible and dynamic learning and research opportunities.
- Creating a sticky campus: Cultivating student- and community-centric engagement opportunities by encouraging an inclusive culture for our institution through online and on-campus activities.
- Partnerships: Uncovering innovative solutions for their most pressing problems through purposeful
  research and collaboration with industry, community, government and academic partners especially as it
  relates to all facets of global sustainability and well-being.

### **Values**

Ontario Tech is a place where every person belongs and is free to grow their skillsets and mindsets.

We cultivate lasting relationships through:

- Integrity: Supporting a culture of trust and belonging by consistently promoting equity, fairness, kindness and ethics.
- **Inclusion:** Advancing a learning community where we achieve success by prioritizing reconciliation, valuing diversity and eradicating discrimination and hate.
- Intellectual resilience: Pursuing excellence in all that we do by respecting different points of view and engaging constructively when exploring ideas and advancing knowledge.
- **Innovation**: Inspiring world-changing ideas by re-imagining learning and in so doing, fostering an environment that provokes curiosity, creativity, ingenuity and failure while stimulating growth.



## Creating the Plan

This 2023-2028 Integrated Academic-Research Plan (IARP) is a five-year plan that charts our course towards our goal of being a preeminent STEM institution. The IARP is the anchoring planning document that guides other initiatives in place or underway at the university. It works in tandem with the already existing Ontario Tech *Driving the Future with Research Excellence: Strategic Research Plan 2020-2025* and it drives our year-over-year budgeting and capital planning processes.

This document aligns our four 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 academic and administrative units. It aligns with our Vision, Mission, and Values statements and its print format follows the annually evaluated rolling plan layout first introduced in 2019. This allows us to commit to doing fewer things better and to being more action oriented. It also affords the opportunity to implement an annual review and evaluation cycle to determine the success of our previously identified actions, as well as the opportunity to adjust to changing resource realities. It is intentionally brief.

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 that follow, 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 campus community member makes daily. It is also important to explicitly recognize this shortcoming while expressing our sincere hope that every Ontario Tech community member will see their day-to-day contributions reflected within this document. Additionally, and perhaps most importantly, we hope to accomplish what we have outlined in this document so that we may continue to tell our amazing story.

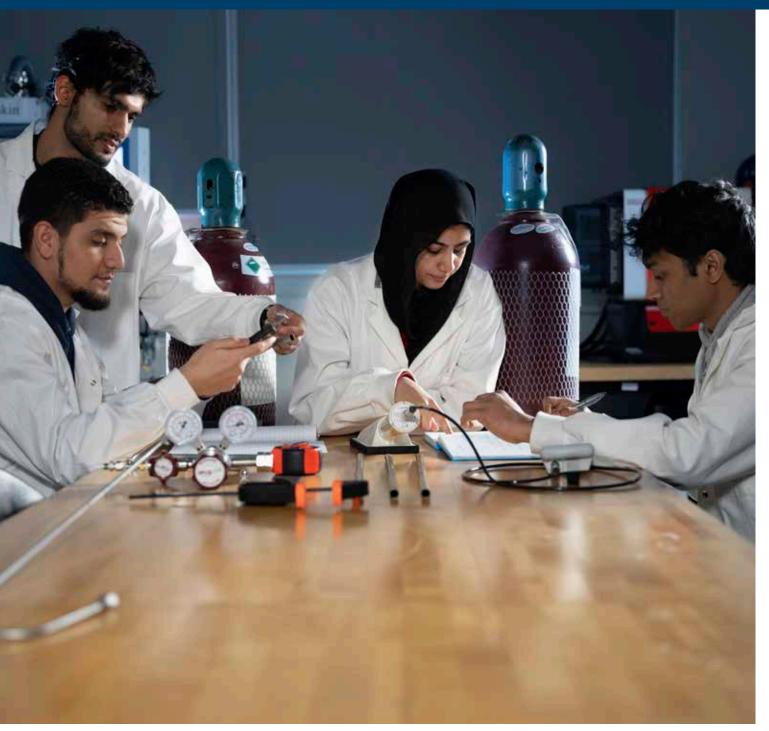




Image: Undergraduate Teaching Lab, Ontario Tech University

# The 2023-2028 Integrated Academic-Research Plan

This plan, including our goals, objectives, commitments, and actions, necessarily aligns with Ontario Tech's four key strategic pillars. Within each priority that follows, we have included a brief statement on what we aim to accomplish, our commitments (or goals), and the actions we will employ to accomplish them.



## 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

- Intentionally differentiate ourselves as an institution committed to using technology by investing in, and utilizing, an expanded array of technological platforms and assets in research and teaching.
- Create core teaching and research facilities that are purposeful and scalable.
- Deliberately examine and question the use, application, social and ethical implications and impact of technology on everyday life.
- Commit to being national leaders in the conversation pertaining to the future of energy, applied bioscience, environmental sustainability and technology in Canada.

- Created and expanded "clusters of excellence" (i.e., including faculty, staff, students, alumni, community partners, industry and global scholars) to add to and build on existing areas of research strength, while continuing to support the establishment of research chairs and research institutes/centres.
- Fostered societal awareness amongst our students by providing in-program opportunities to study the real-world impacts and ethics of their field.
- Expanded student, staff, and faculty usage of digital and virtual platforms governed by robust policies and processes that are guided by key principles pertaining to diversity, inclusion and belonging.
- Reached beyond our campus walls to establish new advisory boards and/or industry consortia to
  guide complex interdisciplinary conversations and community-based research and experiential learning
  initiatives pertaining to technology and its promise for the future, as well as its challenges.

## 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 student-centred learning, giving more choices to more people.

#### Our commitments

- Provide flexible and personalized approaches to the student experience to create opportunities to learn from everywhere.
- Embrace, engage and support students across the full student life cycle, from the time they apply to a program through completion of it and beyond as alumni.
- Re-invent learning by defining and constructing flexible and innovative high quality pedagogical practices
  that combine technological solutions with on-campus and beyond-campus classes and experiential
  components.
- Focus on being leaders in pedagogy, andragogy, and technology-related research and scholarship that is learner-focused.



- Developed and launched at least one fully online degree program per academic faculty to access and meet the needs and expectations of newly emerging student markets.
- Supported differentiated learning by ensuring a mixture of in-person, online, hybrid (including flexible hybrid) and asynchronous course options, while simultaneously committing to enhancing learner engagement.
- Achieved at least a quarter of all undergraduate students participating in work integrated-learning opportunities, including co-operative education, internships, and practicums and entrepreneurial activities.
- Strengthened student learning experiences by maintaining a judicious student-to-faculty ratio, and by prioritizing course instruction by full-time faculty members.
- Developed and offered a greater number of newly emerging for credit offerings (e.g., micro-credentials, stackable credentials).
- Designed and incorporated flexible approaches to the scheduling, structuring and formatting of on-campus and virtual program offerings.
- Provided enhanced upskilling, reskilling and training opportunities and supports for instructors.
- Developed and implemented new methods of assessment that clearly align with defined learning
  outcomes and desired learner competencies while at the same time building resilience against emerging
  technologies and the challenges they create related to academic integrity.
- Provided students with flexible learning by offering an open (or build your own) degree program.
- Increased usage of existing (i.e., simulation, gaming, AR/VR/XR) and evolving (i.e., artificial intelligence) capabilities, technological platforms and assets to support student learning, engagement, and success.
- Increased the development, creation, production, adaptation, adoption and usage of open education resources (OERs) in each of our academic faculties.
- Increased enrolment in a suite of increasingly diversified Continuous Learning offerings.



## 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, in combination with our virtual and technological assets, to define new and unique learning and work environments.
- Use technology to provide personalized student, staff, faculty, alumni and community experiences.
- · Commit to being an educational and social leader in the community.
- · Celebrate and promote diversity, inclusion, belonging and accessibility in all that we do.



- Achieved a baseline response rate of at least 30 per cent on our institutional student, staff, and faculty self-identification survey to allow us to report on our campus community demographics.
- Progressed towards a student population mix more reflective of the system medians related to the proportion of graduate students, and of international students.
- Strengthened undergraduate student retention rates between Year 1 and Year 2 and Year 2 to Year 3 of their studies.
- Achieved our annual intake targets for undergraduate, master's and PhD enrolments.
- Supported student persistence and success evidence through higher participation rates in transition programing (e.g., Orientation events, student supports, etc.).
- Continued to establish a strong and experienced campus community through high annual employee retention.
- Continued our commitment to practical and interactive learning by maintaining space efficiency targets based on the Council of Ontario Universities (COU) benchmarks for instructional space to overall student full-time equivalents.
- Hired a new Assistant Vice-President (Diversity, Inclusion and Belonging) to inform forward-thinking university initiatives for students, staff and faculty.
- Constructed new, or reconstructed existing, capital spaces to support faculty, staff, student, and community educational, research and service needs.
- Re-imagined existing physical spaces (i.e., indoor and outdoor) in combination with virtual platforms to create dedicated meeting, recreational, and social spaces and social hubs.
- Invited and engaged with students on an ongoing basis to deliberately gather up-to-date and informed perspectives on their experiences, desires and career aspirations.
- Supported student recruitment, persistence and success through continued investments in the
  Registrar's Office, undergraduate and graduate student Academic Advising, the use of Al driven analytics
  (e.g., early alert systems), and dedicated undergraduate (e.g., UPREP, Learner Engagement Academic
  Program (LEAP)) and graduate student support (e.g., Grad Pro Skills) programming.
- Supported the mental and physical health needs of our students, staff, and faculty via the provision of enhanced health and well-being programmatic supports.
- Acted on the Truth and Reconciliation Commission's Calls to Action in support of Indigenous students and the local Indigenous communities.
- Welcomed greater participation from members of our local communities and region via age- and interest-specific programming (e.g., Junior Ridgebacks, Age-Friendly University initiatives) and community-specific needs.
- Introduced and implemented new orientation, mentorship, and leadership programs for our faculty, staff, and students.
- Expanded our commitment to sustainability through ongoing and new energy and waste-reduction initiatives.

## 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 their most pressing problems.

#### Our commitments

- Focus on strengthening and expanding current partnerships, philanthropy efforts and community connections to support student learning and employment opportunities, academic programs, and research priorities.
- Establish dynamic, synergistic partnerships with government, community, and alumni as a differentiator for Ontario Tech.
- Build our international reputation by drawing in partners and researchers from around the world.



Image: Shawenjigewining Hall, Ontario Tech University

- Enhanced alumni engagement through a variety of activities, opportunities and partnerships.
- Extended Ontario Tech TALENT Inc. in conjunction with corporate partners and developed a business model to help our students and our employees upskill or reskill to ensure or enhance job-readiness.
- Leveraged our career-oriented programs to establish a growing number of partnerships with small- and medium-sized local businesses and industries to support experiential and work-integrated learning opportunities.
- Established and nurtured respectful, collaborative connections with local and regional Indigenous communities.
- Created satellite research and partnerships offices.
- Increased the number of students enrolled in collaborative programs offered between Ontario Tech and other universities and colleges, including international exchange programs.
- Established new international partnerships with universities renowned for their technologically oriented research and academic programs.
- Increased the number of university-industry research chairs and institutes.
- Increased the number of Ontario Tech-lead pan-university partnership agreements with industry, new startup companies, employers, community partners, and collaborative international research teams.
- Experienced an increase in research granting success from funding sources both within and from outside Canada.



Image: ACE Climatic Aerodynamic Wind Tunnel, Ontario Tech University

## Tracking Our Success

As part of evolving our integrated planning processes, we will create an Institutional Metrics report card that identifies specific metrics aligned with our goals. Each metric will have values, definitions and targets that we want to achieve to demonstrate how we are progressing towards these goals. Dashboards for all our IARP metrics will be created and reported annually to our community. Performance against the plan will be assessed and targets will be revised as required based on progress to date and where we want to be by the end of the planning period. The metrics report card will provide opportunities to reflect on our successes and strategies as well as factors that may impact our progress.

# Conclusion: Looking Toward a Sustainable Future

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

With the pandemic growing ever more distant in the rear-view mirror, a new normal is emerging on the road ahead. We cannot return to our old way of doing business and expect to survive in an era where choice and innovation is the new norm. We must expand our virtual and digital infrastructures to create flexible learning and support options for our students, staff and faculty while at the same time supporting in-person services and activities to strengthen and grow our already strong sense of community spirit. With intention, we must pursue a bold transformational plan—one focused on a differentiated program mix and growth in student numbers—to ensure a sustainable future for Ontario Tech.

This plan articulates what we aim to do, but it does not define how we will get there. To fulfill our priorities, we need a grassroots all-in approach, to bring the plan to life, and commit to working differently and pushing the boundaries of the possible. Through our enabling plans we will articulate how we get there from here. This will require each and every member of the Ontario Tech community—students, staff, faculty, alumni, community members and partners—to collectively engage and contribute on an every-day basis. In doing so, we will hold ourselves capable and pursue our goals with kindness, integrity, and respect. It is with our collective efforts that we will succeed and build on the solid foundation that we have already created and push Ontario Tech towards a bright, sustainable future.

This plan builds on our rapidly rising reputation as a dynamic, conscientious and innovative technological leader in the province's higher education sector. We want to climb to the forefront of Ontario's post-secondary sector and to establish ourselves as an employer of choice and destination of choice for students, scholars, industry partners and community. We have a lot to offer and we want everyone to know about us. If we are to achieve this, we must commit to telling our story by exceling in all that we do.

As we enter our third decade of operation, we now more than ever need to welcome 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, and products of our individual backgrounds, worldviews and choices, we are motivated to find 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.



Image: Charles Hall, Ontario Tech University

### **Contacts**

Lori A. Livingston, PhD **Provost and Vice-President, Academic** 

Sarah Thrush, MEd Associate Vice-President, Strategic Planning and Analysis

Ontario Tech University 2000 Simcoe Street North Oshawa, ON, Canada L1G 0C5 Canada

