

## BOARD OF GOVERNORS' 114<sup>th</sup> REGULAR MEETING

### AGENDA

Thursday, February 27, 2020

1:00 p.m. to 4:30 p.m.

55 Bond Street, DTB 524

No.		Topic	Lead	Allocated Time	Suggested Start Time
		<b>PUBLIC SESSION</b>			
1		<b>Call to Order</b>	Chair		
2		<b>Agenda (M)</b>	Chair		
3		<b>Conflict of Interest Declaration</b>	Chair		
4		<b>Chair's Remarks</b>	Chair	10	1:05 p.m.
5		<b>President's Report</b>	Steven Murphy	30	1:15 p.m.
	5.1	Strategic Mandate Agreement 3			
	5.2	Strategic Discussion: Universities & the "Skills Gap"			
	5.3	Establishment of Ontario Tech Talent Initiative (M)			
6		<b>Academic Council</b>	Ferdinand Jones	25	1:45 p.m.
	6.1	Proposal to Establish Digital Life Institute* (M)			
	6.2	Proposal to Establish Centre for Small Modular Reactors* (M)			
	6.3	Post-Baccalaureate Diploma in Teaching English to Speakers of Other Languages* (M)			
7		<b>Co-Populous Report</b>	Jim Wilson	5	2:10 p.m.
		<b>Committee Reports</b>			
8		<b>Audit &amp; Finance Committee (A&amp;F) Report</b>	Nigel Allen	30	2:15 p.m.
		<b>Finance</b>			
	8.1	Third Quarter Financial Reports* (U)			
	8.2	2020-2021 Budget Update* (U)	Andy Gallagher & Lori Livingston		
	8.3	2020-2021 Tuition Fees* (M)	Nigel Allen		

No.		Topic	Lead	Allocated Time	Suggested Start Time
	8.4	2020-2021 Ancillary Fees* (M)	Nigel Allen		
	8.5	Amendments to Statement of Investment Policies* (M)	Nigel Allen		
	8.6	Project Updates (U)	Nigel Allen		
<b>9</b>		<b>Investment Committee Report</b>	Stephanie Chow	5	2:45 p.m.
	9.1	Quarterly Report			
<b>10</b>		<b>Governance Nominations &amp; Human Resources Committee (GNHR) Report</b>	Francis Garwe	5	2:50 p.m.
<b>11</b>		<b>Strategy &amp; Planning Committee (S&amp;P) Report</b>	Thorsten Koseck	5	2:55 p.m.
<b>12</b>		<b>Consent Agenda: (M)</b>	Chair	5	3:00 p.m.
	12.1	Policy on the Care & Use of Animals in Research & Teaching and Animal Care Committee Terms of Reference*			
	12.2	Minutes of Public Session of Board Meeting of November 28, 2019*			
	12.3	Minutes of Public Session of A&F Meeting of November 20, 2019*			
	12.4	Minutes of Public Session of GNHR Meeting of October 10, 2019*			
	12.5	Minutes of Public Session of S&P Meeting of October 24, 2019*			
	12.6	Minutes of Public Session of Investment Meeting of November 20, 2019*			
<b>13</b>		<b>Information Items (also available on the Board portal):</b>	Chair	5	3:05 p.m.
		<b>A&amp;F</b>			
	13.1	Compliance, Risk and Policy Update*			
	13.2	New Building Project*			
	13.3	ACE Enhancement Project*			
	13.4	Credit Rating Update*			
		<b>GNHR</b>			
	13.5	By-laws Implementation Update*			
		<b>S&amp;P</b>			
	13.6	Women for Stem*			
	13.7	Pi Day*			
<b>14</b>		<b>Other Business</b>	Chair		
<b>15</b>		<b>Adjournment (M)</b>	Chair		3:10 p.m.
		<b>BREAK</b>		<b>15</b>	

No.		Topic	Lead	Allocated Time	Suggested Start Time
		<b>NON-PUBLIC SESSION (material not publicly available)</b>			<b>3:25 p.m.</b>
<b>16</b>		<b>Call to Order</b>	Chair		
<b>17</b>		<b>Conflict of Interest Declaration</b>	Chair		
<b>18</b>		<b>Chair's Remarks</b>	Chair		
<b>19</b>		<b>President's Report</b>	Steven Murphy	20	3:30 p.m.
	19.1	Appointment, Tenure & Promotion* (M)			
	19.2	Updates: (a) Chancellor Search (b) Debenture			
	19.3	Confidential Budget Items*			
		<b>Committee Reports (confidential items only)</b>			
<b>20</b>		<b>A&amp;F Report</b>	Nigel Allen	5	3:50 p.m.
<b>21</b>		<b>Investment Report</b>	Stephanie Chow	5	3:55 p.m.
<b>22</b>		<b>GNHR Report</b>	Francis Garwe	5	4:00 p.m.
	22.1	Co-Propuluous & LGIC Membership Update			
<b>23</b>		<b>S&amp;P Report</b>	Thorsten Koseck	5	4:05 p.m.
	23.1	Advancement Update* (U)			
<b>24</b>		<b>Consent Agenda (M):</b>	Chair		4:10 p.m.
	24.1	Minutes of Non-Public Session of Board Meeting of November 28, 2019*			
	24.2	Minutes of Non-Public Session of A&F Meeting of November 20, 2019*			
	24.3	Minutes of Non-Public Session of GNHR Meeting of October 10, 2019*			
	24.4	Minutes of Non-Public Session of GNHR Meeting of November 13, 2019*			
	24.5	Minutes of Non-Public Session of S&P Meeting of October 24, 2019*			
	24.6	Minutes of Non-Public Session of Investment Meeting of November 20, 2019*			
<b>25</b>		<b>Other Business</b>	Chair		
<b>26</b>		<b>In Camera Session</b>	Chair	15	4:15 p.m.
<b>27</b>		<b>Termination (M)</b>	Chair		4:30 p.m.

Becky Dinwoodie, Secretary

***Consent Agenda:*** To allow the Board to complete a number of matters quickly and devote more of its attention to major items of business, the Agenda has been divided between items that are to be presented individually for discussion and/or information and those that are approved and/or received by consent. A Consent Agenda is not intended to prevent discussion of any matter by the Board, but items listed under the consent sections will not be discussed at the meeting unless a

*Governor so requests. Governors are supplied with the appropriate documentation for each item, and all items on the Consent Agenda will be approved by means of one omnibus motion.*



## BOARD REPORT

### SESSION:

Public ☒  
Non-Public ☐

### ACTION REQUESTED:

Decision ☒  
Discussion/Direction ☐  
Information ☐

Financial Impact ☒ Yes ☐ No

Included in Budget ☒ Yes ☐ No

TO: Board of Governors

DATE: February 27, 2020

PRESENTED BY: Dr. Steven Murphy

SLT LEAD: Dr. Steven Murphy

SUBJECT: Job Readiness Initiative – Ontario Tech Talent

### INITIATIVE OVERVIEW:

The Ontario Tech Talent Development Initiative is a technology-enhanced, partner-driven, learner-focused skills, flexible delivery assessment and training initiative focused on developing educational products for lifelong learning.

Ontario Tech's vision is to be the university of the future – a university that builds lifelong partnerships with its students, alumni, and others in the community to help them develop and keep a current and innovative skill set. The new initiative is a move away from corporate based training to designed credentialing tailored to the needs of our students, alumni and community members. The intention is to have our graduates "employment ready" on completion of a supplementary skills-based learner-focused program, thus minimizing the on-the-job learning time and increasing the speed at which these newly hired graduates can confidently compete for new roles because they are ready to fully contribute in their new roles.

### BOARD MANDATE:

**Request for Direction and Approval:** We are requesting direction from the Board of Governors regarding a proposed job readiness initiative. We are requesting approval from the Board of Governors to create a subordinate corporate entity to serve as the operational vehicle for delivering the job readiness initiative.

**Board Authority:**

Both the University and the Board have the necessary powers to direct and oversee the proposed job readiness initiative known as Ontario Tech Initiative, and to create a corporate entity to operationalize the initiative. Section 5 of The University of Ontario Institute of Technology Act (“Act”) provides that “[t]he university has all the powers necessary and incidental to its objects”. Section 9 of the Act makes it clear that the Board of Governors has the necessary powers to do what is needed to be done to govern and manage the affairs of the university. Section 9 sets out a list of specific powers that are included in this general power. Pursuant to Section 9 (n), one of the Board’s included powers is the power “to conclusively determine which body within the university has jurisdiction over any matter”. Under the Act, the Board of Governors has the sole authority to create a new corporate entity.

In considering its decision, the Board should consider the Special Mission and Objects of the University, and in particular its special mission “to provide career-oriented university programs” (s. 3), and its objects “to provide undergraduate and postgraduate university programs with a primary focus on those programs that are innovative and responsive to the individual needs of students and to the market-driven needs of employers”, and “to contribute to the advancement of Ontario in the Canadian and global contexts with particular focus on the Durham region and Northumberland County” (s. 4).

We are requesting approval of the following resolution: Appended as Appendix “A”

**BACKGROUND/CONTEXT & RATIONALE:**

The Ontario Tech Talent initiative is intended to:

- provide Ontario Tech students with a competitive advantage in the job market
- create lifelong learning relationships with Ontario Tech students
- position Ontario Tech as a leader in job readiness skills training
- supplement and complement Ontario Tech’s current academic offerings
- complement and enhance Ontario Tech’s continuous learning offerings
- create an alternate source of revenue to fund:
  - Ontario Tech strategic and academic initiatives
  - Skills training bursaries
  - Brilliant innovation initiatives
  - Student Hands-On Research Opportunities

**Rapid Change and Constant Need for Skills Improvement:** As technology evolves at a rapid pace, higher education is expected to produce graduates who get jobs. There are additional opportunities to provide for skills enhancement that would serve individuals’ needs throughout entire careers. Successful universities will not only meet the educational needs to get that first job after graduation, but also to achieve career changes and advancements over time.

**Ontario Tech Well-Positioned:** Ontario Tech recognizes that it needs to evolve to meet the expectations of individuals and employers on learning and skills acquisition as these continue to shift with changes in technology, demographics, globalization and evolving employer needs. Ontario Tech is building on a background of technology focused and applied programs. Ontario Tech has a legacy of being on the leading edge of learning in the province of Ontario.

**Skills Gaps:** There is a lot of discussion about the “skills gap”<sup>1</sup>. It can mean a number of things. It can describe the gap between the jobs people are trained to do and the jobs available in the market. It can also describe the training and skills development a graduate from a university or college needs in order to be an effective member of the work force. There is work to be done to understand more about specific skills requirements by sector and within the GTA. This initiative focuses on the job readiness aspect of the skills gap.

**Evolution of the Current Model:** As careers are adapting to the future freelance economy, students of today will adapt to outcomes-based learning and working. This means they have to learn the use of essential skills in a variety of situations. While the academic degree will continue to provide in depth knowledge, Ontario Tech is positioned to provide more opportunities for students to obtain current skills representative of the job fields they are looking to enter. While our students, alumni and community members face myriad choices for securing skills training, they will no longer be forced to get that training outside the university either through private providers or colleges. On the job training is available at some employers but many employers can’t afford to invest in good training. This initiative is focused on the opportunity to provide Ontario Tech students with a competitive skills advantage.

**Current Model is Limited:** Universities generally don’t offer comprehensive solutions to fill the skills gaps. This means that students, alumni and community members face myriad choices for securing skills training and are forced to get that training outside the university either through private providers or colleges. On the job training is available at some employers but many employers can’t afford to invest in good training. There is an opportunity to provide Ontario Tech students with a competitive skills advantage.

#### RESOURCES REQUIRED:

The intention is that the university will lend the new entity \$500k to use as operating funds for the first two years. The chart below does not take into account this loan. The loan would be advanced at market rates pursuant to a loan agreement.

Budget Ontario Tech Talent	2020-21	2021-22	2022-23
Revenue	\$213,750	\$1,175,025	\$2,735,750
Expenses			
Salary Subtotal	\$271,860	\$690,650	\$986,015
Operating Sub Total	\$135,350	\$404,094	\$761,265
Net Surplus (Deficit)	-\$193,460	\$80,281	\$988,471

<sup>1</sup> <https://polcyoptions.irpp.org/magazines/january-2020/can-universities-bridge-the-graduate-skills-gap/>

**IMPLICATIONS:****Risks:**

The following risks have been identified:

<b>Risk</b>	<b>Mitigation</b>
Significant effort and resources required to launch a new initiative.	While there will be significant energy focused on starting up the new entity in the first year (including finance, legal and operations), the Executive Director will be expected to minimize the impact into the second year. There will be a financial benefit to the university for contracted resources as the new entity must pay for them at a market rate. It is expected that after a critical mass of skills training resources have been developed, new courses will be added only as required and as financially viable.
Adding cost in a budget-constrained period.	The university has put aside \$500k in anticipation of having to fund skills training to supplement traditional academic programs. This amount will fund the new entity in its first two years. The new entity should be self-sustaining in year three and profitable and donating back to the university thereafter.
Revenue uncertainty.	Keeping the number of employees to two will allow the new entity to take on extra expense only as demand/revenue demand it. The entity will be funded for two years and a full business review will take place at the end of the second year for the purposes of course correction/termination of the project if need be.
Ensuring quality control of training materials and programs.	It will be important to Ontario Tech and to the success of the venture that the skills programs are of excellent quality. This is a reputational risk for the university as a whole as well as a significant business risk for the entity. The programs will include robust participant assessment and evaluation processes. These evaluations will be monitored by the new entity's board to ensure consistently excellent results.
Increased governance and financial complexity and compliance obligations.	There is no doubt that running a new for-profit entity will present additional and legal financial challenges and will limit the capacity of financial and legal resources to do other things. However, this is a strategic initiative that, if successful, has the potential to provide a viable source of alternate funding for the university's core academic work. It makes sense to allocate financial and legal resources to a strategic priority.

Competition in the field of skills training	Skills training is offered by multiple entities: universities, colleges, private entities, even accounting and law firms offer skills training. The opportunity to offer skills training in Durham region is significant. The university has an existing base of customers in its students and alumni, and the advantage of geography for the broader Durham community.
Unintended consequence - reduced government funding?	The university appreciates that to the extent that the new entity becomes a viable source of alternate funding, it potentially creates an argument that government sources can decrease funding. In the long-term, this may be a consequence. The reality is, however, that funding is already being cut. The university must look to be more self-sufficient and to bolster its own ability to survive and thrive.
Implications for current continuous learning initiative?	The continuous learning initiative currently underway has a very different focus than the proposed new initiative. The university intends to continue with the continuous learning program. It is anticipated that the new entity will have connections to continuous learning and that there will be a complementarity to the programs offered and a referral benefit.
Space constraints – physical and virtual	It is not anticipated that the new entity will require a lot of physical space. It is anticipated that flexible delivery will assist in minimizing the need for space. We anticipate maximizing the use of nights and weekends.

#### **Impact on Stakeholders:**

**Current Students and New Graduates:** Ontario Tech recognizes that in today's society, new graduates are also looking for ways to enhance their job readiness skills to improve their prospects for employment.

**Alumni and Community Members:** Graduates need to continue to enhance their skills and stay on top of changes in their respective fields in order to grow and continue to thrive. Community members require skills training and updating in order to remain competitive as employees.

**Faculty and Staff:** The skills initiative is complementary to and outside of current academic programming. The initiative is differentiated from and complementary to the current continuous learning offerings. It is anticipated that all employees will benefit from increased revenues from an alternate source and increased partner engagement (research dollars and student opportunities).

**Partners:**

**Large employers:** While large employers may offer inhouse programming, they require innovative and updated educational products to recruit and retain their skilled workforces. Large employers may take advantage of licensed educational products to offer skills training within their own facilities. Ontario Tech Talent initiative will offer licensed products and tools for skills training, train the trainer workshops, and training workshops (Ontario Tech trainer plus Ontario Tech content).

**Small to Medium employers:** We anticipate that these employers will have more need of external training resources as they may have limited to no inhouse training capacity. The same content will be available to these smaller employers but we anticipate more focus on the training workshops and less on licensed content or train the trainer offerings.

**Institutions:** We anticipate offering other institutions the licensed educational content to supplement their own offerings. We anticipate licensing in specialized content from other institutions to supplement Ontario Tech content.

**Government:** Both levels of government place a high priority on future skills and are looking to universities to innovate in delivering skills training. Governments are looking for universities to generate alternate sources of revenue. Should Ontario Tech Talent initiative succeed, it will generate revenue to support the academic and administrative activities of the university to the benefit of all faculty, staff and students.

**Talent Initiative Complementary to Ontario Tech Continuous Learning:** The Talent Development Initiative is unique and separate from but complementary to the current continuous learning offerings. It is proposed that Ontario Tech continue to offer programs through continuous learning. These offerings are more traditional and are similar to continuous learning offerings at other universities in the Province.

**ALIGNMENT WITH MISSION, VISION, VALUES & STRATEGIC PLAN:**

The Ontario Tech Talent Initiative aligns with the university's mission, vision and values and is highly strategic as it supports several of the university's strategic pillars. The Ontario Tech Talent initiative will enhance Ontario Tech's ability to tell our story, contribute to learning reimagined and enable the university to develop more and deeper partnerships.

**ALTERNATIVES CONSIDERED:**

The university considered offering skills training within the current university structure but there are many good reasons for creating a new entity. A separate legal entity will have a number of advantages including:

- Minimizing legal or financial exposure to the University from this start-up initiative
- Providing a vehicle that is easily distinguishable from the operations of the University
- Providing an entity whose value can be easily quantified

**For Profit Status:** After extensive consideration and input from external legal counsel, it is proposed that the Ontario Tech Talent initiative be conducted under a separate legal structure as a for profit entity with Ontario Tech as the sole shareholder. It has been confirmed that the university can invest in a for profit entity. The for-profit status will permit financial freedom.

**CONSULTATION:**

The President has discussed and explored the skills gap at length with the Board and other stakeholders. The President most recently discussed this issue at Academic Council. The Ontario Tech Talent initiative is an administrative and operational initiative designed to complement and support the core academic mission of the university. From a strategic perspective, there is continuity between this initiative and other innovations in the area of work integrated learning and the Brilliant programs. This initiative represents a first step toward a new job-readiness initiative. The university community will continue to be involved in this initiative.

**COMPLIANCE WITH POLICY/LEGISLATION:**

As noted above, the Ontario Tech Talent Initiative is squarely within the university's career-focused mission as set out in the Act. The University's General Counsel has worked closely with the President, Provost, and CFO in this matter. Legal advice has been provided by an external law firm as required.

**NEXT STEPS:**

The Board is being asked to comment on and indicate agreement with the strategic Ontario Tech Talent initiative. The Board is also being asked to pass the resolution attached as Appendix "A", approving the creation and organization of a new corporate entity, and the authorization of any two of the President, CFO and/or General Counsel to execute and deliver all materials necessary to proceed with such creation and organization in the name of the University.

The resolution provides that the corporation will be managed by its own board of **three** directors, who will serve at the pleasure of the Board of Governors. The resolution also provides (in paragraph 4) that the University, as sole shareholder, may, from time to time, impose further conditions on the corporation – a power which is afforded shareholders under corporate law in Ontario.<sup>2</sup>

The resolution appoints **Steven Murphy, Lori Livingston and Cheryl Foy** as initial directors of the corporation. From a financial perspective, the corporation will have the same financial year-end of the University and will have the audit waived for an initial period until the operations become established. The President will report on the initiative as against agreed metrics at each board meeting. Once annually, the Board will receive a financial report relating to the new entity.

**MOTION FOR CONSIDERATION:** See resolution at Appendix "A"

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<sup>2</sup>Pursuant to Section 108 of the Business Corporations Act (Ontario), a shareholder may assume from the directors the power to manage the affairs of a corporation, and in so doing, assumes the obligations and liabilities of the directors under corporate law.

**RESOLUTIONS OF THE BOARD OF GOVERNORS (the “BOARD”)  
OF THE  
UNIVERSITY OF ONTARIO INSTITUTE OF TECHNOLOGY  
(the “UNIVERSITY”)**

WHEREAS the Board has determined it is in the interest of the University to establish a for-profit corporation for the purposes of pursuing the Ontario Tech Talent initiative (the “Purpose”);

THEREFORE BE IT RESOLVED THAT:

1. the University incorporate a wholly-owned subsidiary under the Business Corporations Act (Ontario) (the “Act”), with a name as determined by the President of Ontario Tech (the “Subsidiary”), to fulfill the Purpose;
2. the following with respect to the incorporation and organization of the Subsidiary is hereby authorized and approved:
  - (a) entry into, execution and delivery of articles of incorporation for the Subsidiary, which provide for the issuance of a single class of common shares, and a board of directors ranging from 1 to 10 directors, substantially in the form of Exhibit “A” (the “Articles”);
  - (b) the issuance of 100 common shares to the University at the price of \$1.00 per share;
  - (c) that the number of directors be set at three (3);
  - (d) the adoption of a standard form of corporate by-law, substantially in the form attached hereto as Exhibit “B” (the “By-Law”), which, amongst other things, provides:
    - (i) for a quorum of the board of the Subsidiary to consist of a majority of the directors,
    - (ii) for the indemnification of directors as set out in the university’s General By-Law No. 1
    - (iii) that the directors shall have the authority to appoint officers of the Subsidiary, including the board chair,
    - (iv) that any contracts or similar documents of the Subsidiary can be signed by any two persons who are directors or officers,
  - (e) the appointment of a board of three directors of the Subsidiary, being Steven Murphy, Cheryl Foy, and Lori Livingston, to stand as directors until the earlier of

their removal by the University in its capacity as sole shareholder, or the first annual shareholders meeting of the Subsidiary, subject to their re-appointment in accordance with the By-Law;

- (f) the inclusion of the directors and officers of the Subsidiary in the directors and officers insurance policy of the University;
  - (g) the waiver of the audit of the Subsidiary and the appointment of \_\_\_\_\_ as accountants of the Subsidiary;
  - (h) the financial year-end of the Subsidiary shall be March 31;
  - (i) the opening of a bank account in the name of the Subsidiary;
  - (j) the registered office address of the Subsidiary shall be the address of the University; and
  - (k) all matters related to or ancillary to the above, which will assist with fulfilling the Purpose;
3. any **two** of Steven Murphy, Cheryl Foy and/or Lori Livingston, be and are hereby authorized and directed, for and in the name of the University, in its capacity as sole shareholder of the Subsidiary, to:
- (a) execute and deliver the Articles, the By-Law, and any shareholders resolutions regarding them;
  - (b) execute and deliver shareholders resolutions regarding the matters set out in paragraph 2 above, including any matters ancillary thereto which require shareholder's resolutions;
  - (c) execute and deliver any consents required for the Subsidiary to use any names or trademarks of the University, including "Ontario Tech" and "Ontario Tech Talent";
  - (d) execute and deliver all such other agreements, documents and instruments and to take all such further actions as determined in their absolute discretion and opinion as may be necessary or desirable to successfully incorporate, organize and establish the Subsidiary as a stand-alone entity and going concern, or necessary or desirable to carry out the foregoing provisions of this resolution, the completion of all such acts and things and the execution of all such documents, instruments and agreements in accordance with this subsection being conclusive evidence of such determination
  - (e) obtain any regulatory or other approvals required, including the arrangement of tax and business numbers and accounts;

- (f) take all such further actions as may be required to give effect to the provisions of this resolution;
- 4. from time to time, and at each annual meeting of the Subsidiary, the **President of the University** shall present a slate of directors for approval by the Board, acting in its capacity as the board of the sole shareholder of the Subsidiary; and
- 5. in accordance with the Articles, the By-Laws, and the Act, the Board reserves unto itself, in its capacity as the board of the sole shareholder of the Subsidiary, the power to impose on the Subsidiary such other conditions as the Board may deem necessary from time to time.

*[remainder of page intentionally left blank]*

**Exhibit "A" – Draft Articles of Incorporation**

Reference Info: EH/MJS  
Docket Info: 100191

Printed on February 18, 2020 09:50  
Requested Incorporation Date: ASAP

**FORM 1****FORMULE NUMÉRO 1****BUSINESS CORPORATIONS ACT****/****LOI SUR LES SOCIÉTÉS PAR ACTIONS****ARTICLES OF INCORPORATION  
STATUTS CONSTITUTIFS**

1. The name of the corporation is: *Dénomination sociale de la compagnie:*

2. The address of the registered office is: *Adresse du siège social:*

(Street & Number, or R.R. Number & if Multi-Office Building give Room No.)

(Rue et numéro, ou numéro de la R.R. et, s'il s'agit édifice à bureau, numéro du bureau)

**CANADA**

(Name of Municipality or Post Office)

(Nom de la municipalité ou du bureau de poste)

**ONTARIO**

(Postal Code/Code postal)

3. Number (or minimum and maximum number) of directors is:

Minimum 1

*Nombre (ou nombres minimal et maximal) d'administrateurs:*

Maximum 10

4. The first director(s) is/are:

*Premier(s) administrateur(s):*

First name, initials and surname

*Prénom, initiales et nom de famille*

Resident Canadian

State Yes or No

*Résident Canadien*

*Oui/Non*

Address for service, giving Street & No.  
or R.R. No., Municipality and Postal Code

*Domicile élu, y compris la rue et le  
numéro, le numéro de la R.R., ou le nom  
de la municipalité et le code postal*

Reference Info: EH/MJS

Docket Info: 100191

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5. Restrictions, if any, on business the corporation may carry on or on powers the corporation may exercise.

*Limites, s'il y a lieu, imposées aux activités commerciales ou aux pouvoirs de la compagnie.*

None.

6. The classes and any maximum number of shares that the corporation is authorized to issue:

*Catégories et nombre maximal, s'il y a lieu, d'actions que la compagnie est autorisée à émettre:*

The Corporation is authorized to issue an unlimited number of common shares.

Reference Info: EH/MJS  
Docket Info: 100191

Printed on February 18, 2020 09:50  
Requested Incorporation Date: ASAP

7. Rights, privileges, restrictions and conditions (if any) attaching to each class of shares and directors authority with respect to any class of shares which may be issued in series:  
*Droits, privilèges, restrictions et conditions, s'il y a lieu, rattachés à chaque catégorie d'actions et pouvoirs des administrateurs relatifs à chaque catégorie d'actions que peut être émise en série:*

The rights, privileges, restrictions and conditions attaching to the common shares are as follows:

(a) **Payment of Dividends:** The holders of the common shares shall be entitled to receive dividends if, as and when declared by the board of directors of the Corporation out of the assets of the Corporation properly applicable to the payment of dividends in such amount and payable at such times and at such place or places in Canada as the board of directors may from time to time determine. Subject to the rights of the holders of any other class of shares of the Corporation entitled to receive dividends in priority to or rateably with the common shares, the board of directors may in their sole discretion declare dividends on the common shares to the exclusion of any other class of shares of the Corporation.

(b) **Participation upon Liquidation, Dissolution or Winding-Up:** In the event of the liquidation, dissolution or winding-up of the Corporation or other distribution of the assets of the Corporation among its shareholders for the purpose of winding-up its affairs, the holders of the common shares shall, subject to the rights of the holders of any class of shares of the Corporation entitled to receive the assets of the Corporation upon such a distribution in priority to the holders of the common shares, be entitled to share rateably share for share and without preference or distinction in any further distributions of the assets of the Corporation.

(c) **Voting Rights:** The holders of the common shares shall be entitled to receive notice of and to attend all annual and special meetings of the shareholders of the Corporation and to one (1) vote in respect of each common share held at all such meetings.

Reference Info: EH/MJS

Docket Info: 100191

Printed on February 18, 2020 09:50

Requested Incorporation Date: ASAP

8. The issue, transfer or ownership of shares is/is not restricted and the restrictions (if any) are as follows:

*L'émission, le transfert ou la propriété d'actions est/n'est pas restreinte. Les restrictions, s'il y a lieu, sont les suivantes:*

The right to transfer securities (including for greater certainty shares), other than non-convertible debt securities of the Corporation, shall be restricted in that no such securities shall be transferred without the consent of either:

a) the directors expressed by resolution passed by the board of directors at a meeting of directors or by an instrument or instruments signed by a majority of directors; or

b) the holder or holders of a majority of the outstanding securities entitled to vote expressed by resolution passed at a meeting of the shareholders or by an instrument or instruments signed by the holder or holders of a majority of such securities,

which consent may be given either prior or subsequent to the time of transfer of such securities.

Reference Info: EH/MJS

Docket Info: 100191

Printed on February 18, 2020 09:50

Requested Incorporation Date: ASAP

9. Other provisions, (if any, are):

*Autres dispositions, s'il y a lieu:*

The Corporation shall be entitled to a lien on a share registered in the name of a shareholder or his legal representative for a debt of that shareholder to the Corporation.

Reference Info: EH/MJS

Docket Info: 100191

Printed on February 18, 2020 09:50

Requested Incorporation Date: ASAP

10. The names and addresses of the incorporators are

*Nom et adresse des fondateurs*First name, initials and last name  
or corporate name*Prénom, initiale et nom de  
famille ou dénomination sociale*Full address for service or address of registered office or of principal place of business  
giving street & No. or R.R. No., municipality and postal code*Domicile élu, adresse du siège social au adresse de l'établissement principal, y compris  
la rue et le numéro, le numéro de la R.R., le nom de la municipalité et le code postal*

\*

ONTARIO  
CANADA

Reference Info: EH/MJS

Docket Info: 100191

Printed on February 18, 2020 09:50

Requested Incorporation Date: ASAP

**ADDITIONAL INFORMATION FOR ELECTRONIC INCORPORATION****CONTACT PERSON**

First Name	Last Name
Edgar	Hielema
Name of Law Firm	
Gardiner Roberts LLP	

**ADDRESS**

Street #	Street Name	Suite #	
22	Adelaide Street West	3600	
Additional Information		City	
		Toronto	
Province	Country		Postal Code
ONTARIO	CANADA		M5H 4E3

**TELEPHONE #:** 416-865-6600**ADDITIONAL COMMENTS**

While electronically filing the Articles of Incorporation, the filer has specifically indicated intention to submit the articles as follows:-

- that the registered office address contains a PO Box or does not have an assigned Postal Code

**NUANS SEARCH DETAILS**

Corporate Name Searched on NUANS (1)

NUANS Reservation Reference #

Date of NUANS Report

//

Reference Info: EH/MJS

Docket Info: 100191

This draft printed on February 18, 2020 09:50

## **ELECTRONIC INCORPORATION TERMS AND CONDITIONS**

The following are the terms and conditions for the electronic filing of Articles of Incorporation under the Ontario *Business Corporations Act* (OBCA) with the Ministry of Government Services.

Agreement to these terms and conditions by at least one of the incorporators listed in article 10 of the Articles of Incorporation is a mandatory requirement for electronic incorporation.

- 1) The applicant is required to obtain an Ontario biased or weighted NUANS search report for the proposed name. The applicant must provide the NUANS name searched, the NUANS reservation number and the date of the NUANS report. The NUANS report must be kept in electronic or paper format at the corporation's registered office address.
- 2) All first directors named in the articles must sign a consent in the prescribed form. The original consent must be kept at the corporation's registered office address.
- 3) A Corporation acquiring a name identical to that of another corporation must indicate that due diligence has been exercised in verifying that the Corporation meets the requirements of Subsection 6(1) of Regulation 62 made under the OBCA. Otherwise, the Corporation is required to obtain a legal opinion on legal letterhead signed by a lawyer qualified to practise in Ontario that clearly indicates that the corporations involved comply with Subsection 6(2) of that Regulation by referring to each clause specifically. The original of this legal opinion must be kept at the Corporation's registered office address. The applicant must complete the electronic version of this legal opinion provided by one of the Service Providers under contract with the Ministry.
- 4) The date of the Certificate of Incorporation will be the date the articles are updated to the ONBIS electronic public record database. Articles submitted electronically outside MGS, ONBIS access hours, will receive an endorsement date effective the next business day when the system resumes operation, if the submitted Articles of Incorporation meet all requirements for electronic incorporation. Articles of Incorporation submitted during system difficulties will receive an endorsement date effective the date the articles are updated to the ONBIS system.
- 5) The electronic Articles of Incorporation must be in the format approved by the Ministry and submitted through one of the Service Providers under contract with the Ministry.
- 6) Upon receipt of the Certificate of Incorporation issued by the ONBIS system, a duplicate copy of the Articles of Incorporation with the Ontario Corporation Number and the Certificate of Incorporation must be kept in paper or electronic format. The Ministry will print and microfilm copies of the Certificate of Incorporation, the Articles of Incorporation and any other documentation submitted electronically. These will be considered the true original filed copies.
- 7) The sole responsibility for correctness and completeness of the Articles of Incorporation, and for compliance with the OBCA and all regulations made under it, lies with the incorporator(s) and/or their legal advisor(s), if any.

The incorporator(s) have read the above Terms and Conditions and they understand and agree to them.

I am an incorporator or I am duly authorized to represent and bind the incorporator(s).

First Name

Last Name

Reference Info: EH/MJS

Docket Info: 100191

Printed on February 18, 2020 09:50

Requested Incorporation Date: ASAP

Authorized Signature: \_\_\_\_\_

Verify all details and obtain approval signatures for your internal use if necessary.

**Exhibit “B” – Draft By-Law**

## **BY LAW NO. 1**

A by-law relating generally to  
the transaction of the business  
and affairs of

**[NAME OF CORPORATION]**  
(the "**Corporation**")

### **INTERPRETATION**

1.01 **Definitions** - In this by law, unless the context otherwise requires:

- (a) "**Act**" means the *Business Corporations Act*, R.S.O. 1990, c. B.16, as amended from time to time or any statute that may in the future be substituted for it;
- (b) "**by-laws**" means this by-law and all other by-laws of the Corporation from time to time in force and effect;
- (c) "**board**" means the board of directors of the Corporation and director means a member of the board;
- (d) "**contracts, documents or instruments in writing**" includes deeds, mortgages, charges, conveyances, powers of attorney, transfers and assignments of property of all kinds, including specifically but without limitation, transfers and assignments of shares, warrants, bonds, debentures or other securities and all paper writings; and
- (e) "**meeting of shareholders**" includes an annual meeting of shareholders and a special meeting of shareholders.

1.02 Words and phrases defined in the Act and used in this by-law shall, unless the context otherwise requires, have the same meaning as in the Act.

1.03 In this by law words importing the singular number only shall include the plural and vice versa; words importing the masculine gender shall include the feminine and neuter genders, and "including" means including, without limitation.

1.04 **Interpretation Not Affected by Headings** - The insertion of headings in this by law are for convenience of reference only and shall not affect its construction or interpretation.

### **MEETING OF DIRECTORS<sup>1</sup>**

2.01 **Calling of Meetings** - Meetings of the board shall be held from time to time, and at such time and at such place as the board, the President or any directors may determine.<sup>2</sup>

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<sup>1</sup> Section 126 of the OBCA.

<sup>2</sup> Section 126(1) of the OBCA.

- 2.02 Notice of Meetings - The directors may meet on not less than 48 hours' notice, or without notice if all directors are present or if those absent have waived notice of the meeting.<sup>3</sup>
- 2.03 Place of Meetings - Meetings of the board may be held at any place within or outside Ontario and in any financial year of the Corporation it shall not be necessary for a majority of the meetings of the board to be held at a place within Canada.<sup>4</sup>
- 2.04 Participation by Electronic Means - With the unanimous consent of all of the directors present at or participating in the meeting, a director may participate in a meeting of the board or in a meeting of a committee of directors by means of such telephone, electronic or other communication facilities as permit all persons participating in the meeting to communicate with each other simultaneously and instantaneously, and a director participating in such a meeting by such means is deemed for the purposes of the Act and this by-law to be present at that meeting. A consent pursuant to this provision may be given before or after the meeting to which it relates and may be a "blanket" consent, relating to all meetings of the board and/or committees of the board.<sup>5</sup>
- 2.05 Quorum - Subject to the Act and the articles, a majority of the directors then in office shall constitute a quorum at any meeting of directors; provided that if the Corporation has only one or two directors, all of the directors must be present at any meeting of directors to constitute a quorum.<sup>6</sup>
- 2.06 Votes to Govern - At all meetings of the board every question shall be decided by a majority of the votes cast on the question; and in case of an equality of votes the chairman of the meeting shall not be entitled to a second or casting vote.
- 2.07 Interest of Directors and Officers Generally in Contract - No director or officer shall be disqualified by his or her office from entering into a material contract or transaction with the Corporation nor shall any material contract or transaction entered into by or on behalf of the Corporation with any director or officer or in which any director or officer is in any way interested in be liable to be voided nor shall any director or officer so entering into a material contract or transaction or being so interested be liable to account to the Corporation for any profit realized by any such material contract or transaction by reason of such director or officer holding that office or of the fiduciary relationship thereby established unless the director or officer shall have failed to provide the notice required or otherwise failed to comply with the provisions of the Act. Subject to certain exceptions provided for in the Act, a director or officer who is a party or has a material interest in any person who is a party to, a material contract or transaction or proposed material contract or transaction with the Corporation, shall disclose in writing, or request to have entered in the minutes of any meeting of the board, the nature and extent of his or her interest at the time and in the manner provided by the Act. Any such director shall not vote on any resolution to approve any such material contract or transaction nor attend any meeting where the entering of any such material contract or transaction is being determined, except as otherwise provided by the Act.<sup>7</sup>

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<sup>3</sup> Section 126(9) of the OBCA.

<sup>4</sup> Section 126(2) of the OBCA.

<sup>5</sup> Section 126(13) of the OBCA.

<sup>6</sup> Section 136(3) of the OBCA.

<sup>7</sup> Section 132 of the OBCA.

## **SHAREHOLDERS' MEETINGS**

- 3.01 Calling of Meetings of Shareholders - The annual meeting of shareholders and any special meeting of shareholders shall be held at such time or times and at such place as the board may determine.<sup>8</sup>
- 3.02 Notice of Meetings - Not less than 10 and not more than 50 days' written notice (exclusive of the day of mailing but including the day of the meeting for which such notice is given) shall be given to each voting shareholder, director and auditor of the Corporation of any annual or special meeting of shareholders.<sup>9</sup>
- 3.03 Participation by Electronic Means - A meeting of the shareholders may be held by telephone or other communication facilities. A shareholder who, through these means, votes at the meeting, or establishes a communication link to the meeting, shall be deemed to be present at the meeting.<sup>10</sup>
- 3.04 Quorum at Shareholders' Meetings - At any meeting of shareholders, a quorum shall be the holders of a majority of the shares entitled to vote at the meeting, present in person, deemed present pursuant to Section 3.03 or represented by proxy.<sup>11</sup>
- 3.05 Casting Vote - In the case of an equality of votes at any meeting of shareholders the chairman of the meeting shall not be entitled to a second or casting vote.
- 3.06 One Shareholder - Where the Corporation has only one shareholder or only one holder of any class or series of shares, the shareholder present in person or duly represented constitutes a meeting.<sup>12</sup>

## **OFFICERS**<sup>13</sup>

- 4.01 Appointment of Officers - The board may annually or as often as may be required by the Corporation, appoint a President, a Secretary, a Chairman of the Board, one or more Vice Presidents, a Treasurer and such other officers as the board may determine, including one or more assistants to any of the officers so appointed. Two or more of such offices may be held by the same person. Such officers shall have such authority and shall perform such functions and duties as may from time to time be prescribed by the board.
- 4.02 Removal of Officers - All officers shall be subject to removal by the board at any time, with or without cause.
- 4.03 Chairman of the Board - Unless otherwise determined by the board, the Chairman of the Board (if any) shall, when present, preside at all meetings of the board.
- 4.04 President - Unless otherwise determined by the board, the President (if any) shall, when present, preside at all meetings of the board in the absence of the Chairman of the Board and at all meetings of shareholders and shall, subject to the authority of the board, be responsible for the general supervision of the business and affairs of the Corporation.

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<sup>8</sup> Section 94(1) of the OBCA.

<sup>9</sup> Section 96(1) of the OBCA.

<sup>10</sup> Section 94(2) of the OBCA.

<sup>11</sup> Section 101(1) of the OBCA.

<sup>12</sup> Section 101(4) of the OBCA.

<sup>13</sup> Section 133 of the OBCA.

- 4.05 Vice President - Unless otherwise determined by the board, the Vice President (if any), or, if more than one, the Vice Presidents, shall assist the President in the performance of his or her duties and, in order of seniority as determined by the board, may perform and exercise the powers of the President during the absence or inability to act of the President. If a Vice President exercises any such duty or power, the absence or inability of the President shall be presumed with reference thereto.
- 4.06 Secretary - Unless otherwise determined by the board, the Secretary (if any) shall give, or cause to be given, all notices required to be given to shareholders, directors, auditors and members of committees of the board and of the shareholders and shall enter or cause to be entered in books kept for that purpose minutes of all proceedings at such meetings; and shall be the custodian of the corporate seal of the Corporation, if the Corporation maintains a corporate seal.
- 4.07 Treasurer - Unless otherwise determined by the board, the Treasurer (if any) shall keep or cause to be kept full and accurate books of account in which shall be recorded all receipts and disbursements of the Corporation and, under the direction of the board, shall control the deposit of money, the safekeeping of securities and the disbursement of the funds of the Corporation; and shall render to the board at the meetings thereof, or whenever required, an account of all transactions as Treasurer and of the financial position of the Corporation.
- 4.08 Additional Duties - From time to time the board may vary, add to or limit the powers and duties of any officer or officers of the Corporation, but, subject to section 184 of the Act, shall not delegate to any officer any of the powers set forth in subsection 127(3) of the Act.

## **INDEMNIFICATION**

- 5.01 Indemnification of Directors and Officers - The Corporation shall indemnify a director or officer of the Corporation, a former director or officer of the Corporation or an individual who acts or acted at the Corporation's request as a director or officer of a body corporate of which the Corporation is or was a shareholder or creditor, and his or her heirs and legal personal representatives against all costs, charges and expenses including an amount paid to settle an action or satisfy a judgment, reasonably incurred by such person in respect of any civil, criminal, administrative, investigative or other proceeding in which such person is involved because of that association with the Corporation or other corporate entity, to the extent permitted by the Act.<sup>14</sup>
- 5.02 Indemnity of Others - Except as otherwise required by the Act, the Corporation may from time to time indemnify and save harmless any individual who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation) by reason of the fact that he or she is or was an employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee, agent of or participant in another corporation, partnership, joint venture, trust or other entity, against expenses (including legal fees), judgments, fines and any amount actually and reasonably incurred in connection with such action, suit or proceeding provided that (i) such individual acted honestly and in good faith with a view to the best interests of the Corporation, or the best interests of the other entity for which the individual acted as director or officer or in a similar capacity at the Corporation's request; and (ii) with respect to any criminal or administrative action or proceeding that is enforced by a monetary penalty, had reasonable grounds for believing that his or her conduct was lawful. The termination of any action,

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<sup>14</sup> Section 136(1) of the OBCA.

suit or proceeding by judgment, order, settlement, or conviction, shall not, of itself, create a presumption that the individual did not act honestly and in good faith with a view to the best interests of the Corporation, or the best interests of the other entity for which the individual acted as director or officer or in a similar capacity at the Corporation's request and, with respect to any criminal or administrative action or proceeding that is enforced by a monetary penalty, had no reasonable ground for believing that his, her or its conduct was lawful.<sup>15</sup>

- 5.03 Advance of Costs - A Corporation shall advance money to a director, officer or other individual for the costs, charges and expenses of any proceeding referred to in Section 5.01, provided that in the case of an individual who is not a director or officer, such individual shall be required to repay the money advanced to him or her if such individual does not fulfill the conditions set out in subsections 5.02(i) and/or 5.02(ii).<sup>16</sup>
- 5.04 Right of Indemnity Not Exclusive - The provisions for indemnification contained in the by laws of the Corporation shall not be deemed exclusive of any other rights to which those seeking indemnification may be entitled under any by law, agreement, vote of shareholders or disinterested directors or otherwise, both as to action in an official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs and legal personal representatives of such a person.
- 5.05 No Liability of Directors or Officers for Certain Acts, etc. - To the extent permitted by law, no director or officer for the time being of the Corporation shall be liable for the acts, receipts, neglects or defaults of any other director, officer, employee or agent, or for joining in any receipt or act for conformity or for any loss, damage or expense happening to the Corporation through the insufficiency or deficiency of title to any property acquired by the Corporation, or for or on behalf of the Corporation or for the insufficiency or deficiency of any security in or upon which any of the moneys of the Corporation shall be invested, or for any loss or damage arising from the bankruptcy, insolvency or tortious act of any person with whom or which any moneys, securities or effects of the Corporation shall be deposited or for any loss or damage occasioned by any error of judgment or oversight on his or her part, or for any other loss, damage or misfortune which may happen in the execution of the duties of his or her respective office or in relation thereto unless the same shall happen by or through his or her failure to act honestly and in good faith with a view to the best interest of the Corporation and in connection therewith to exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. If any director or officer of the Corporation shall be employed by or shall perform services for the Corporation otherwise than as a director or officer or shall be a member of a firm or a shareholder, director or officer of a body corporate which is employed by or performs services for the Corporation, the fact of his or her being a director or officer of the Corporation shall not disentitle such director or officer or such firm or body corporate, as the case may be, from receiving proper remuneration for such services. Nothing herein shall relieve any director or officer from the duty to act in accordance with the Act or from liability for any breach thereof.<sup>17</sup>

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<sup>15</sup> Section 136(4.2) of the OBCA.

<sup>16</sup> Section 136(2) of the OBCA.

<sup>17</sup> Section 136(1) of the OBCA.

- 5.06 Insurance - Subject to the Act, the Corporation may purchase and maintain such insurance for the benefit of those persons described in subsections 5.01 and 5.02 hereof as the board may from time to time determine.<sup>18</sup>

## **DIVIDENDS**

- 6.01 Dividend Cheques - A dividend payable in cash may be paid by cheque drawn on the Corporation's bankers or one of them to the order of each registered holder of shares of the class or series in respect of which it has been declared and mailed by ordinary mail, postage prepaid, to such registered holder at the address appearing on the register of shareholders, unless such holder otherwise directs. In the case of joint holders the cheque shall, unless such joint holders otherwise direct, be made payable to the order of all of such joint holders and mailed to them at the address appearing on the register of shareholders in respect of such joint holding, or to the first address so appearing if there are more than one. The mailing of a cheque in this manner, unless it is not paid on due presentation, shall satisfy and discharge the liability for the dividend to the extent of the sum represented by the cheque, plus the amount of any tax which the Corporation is required to and does withhold.
- 6.02 Non Receipt of Cheques - If a dividend cheque is not received by the person to whom it is sent, the Corporation shall issue to such person a replacement cheque for a like amount upon such terms as to indemnity and evidence of non receipt and of title as the board may from time to time prescribe, whether generally or in any particular case.

## **BANKING ARRANGEMENTS, CONTRACTS, ETC.**

- 7.01 Banking Arrangements - The banking business of the Corporation, or any part thereof, shall be transacted with such banks, trust companies or other financial institutions as the board may designate, appoint or authorize from time to time and all such banking business, or any part thereof, shall be transacted on the Corporation's behalf by such one or more officers and/or other persons as the board may designate, direct or authorize from time to time and to the extent therein provided.<sup>19</sup>
- 7.02 Execution of Instruments - Contracts, documents or instruments in writing requiring execution by the Corporation may be signed by **[any one director or officer]** of the Corporation and all contracts, documents or instruments in writing so signed shall be binding upon the Corporation without any further authorization or formality. The board is authorized from time to time to appoint any officer or any other person on behalf of the Corporation to sign and deliver either contracts, documents or instruments in writing generally or to sign either manually or by facsimile signature and deliver specific contracts, documents or instruments in writing.

## **NOTICES - GENERAL**

- 8.01 Notice - Notice to any shareholder, director, officer or auditor of the Corporation for any meeting of shareholders or otherwise, shall be sufficiently given if sent to the last address of the shareholder, director, officer or auditor recorded on the books of the Corporation by delivery, by prepaid ordinary mail, or, if prior written consent has been given by the intended recipient whether specifically or in the form of a "blanket" consent, by means of facsimile, electronic mail or other method of transmitted or recorded communication. A notice so mailed shall be deemed to have

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<sup>18</sup> Section 136 (4.3) of the OBCA.

<sup>19</sup> Section 117(1)(f) of the OBCA.

been given when deposited in a post office or public letter box; a notice sent by any means of transmitted or recorded communication shall be deemed to have been given when it is transmitted by the Corporation directly or when it is delivered to the appropriate communication company or agency or its representative for dispatch; and a notice given by personal delivery or by courier shall be deemed to have been given when so delivered to the recipient. No error or omission in giving notice of any annual or general meeting or any adjourned meeting, whether annual or general, of the shareholders of the Corporation shall invalidate such meeting or make void any proceedings taken thereat and any person entitled to receive such notice may at any time waive notice of any such meeting and ratify, approve and confirm any or all proceedings taken or had thereat.<sup>20</sup>

- 8.02 Notice to Joint Shareholders - If two or more persons are registered as joint holders of any share, notice to one of such persons shall be sufficient notice to all of them. Any notice shall be addressed to all such joint holders and the address to be used by the Corporation shall be the address appearing on the register of shareholders in respect of such joint holding, or the first address so appearing if there are more than one.

### **SECURITY CERTIFICATES**

- 9.01 Certificates - Subject to Section 9.02, every holder of one or more securities of the Corporation shall be entitled, at his or her option, to a security certificate, stating the number and class or series of securities held by him or her as shown in the securities register. Such certificates shall be in such form as the board may from time to time approve and need not be under the corporate seal. Unless otherwise ordered by the board, any such certificate shall be signed manually by at least one of the directors or officers of the Corporation.<sup>21</sup>
- 9.02 Uncertificated Securities - Unless otherwise provided in the articles, the board may provide by resolution that any or all classes and series of shares or other securities shall be uncertificated securities, provided that such resolution shall not apply to securities represented by a certificate until such certificate is surrendered to the Corporation.<sup>22</sup>

### **MISCELLANEOUS**

- 10.01 Invalidity of any Provisions of this By law - The invalidity or unenforceability of any provision of this by law shall not affect the validity or enforceability of the remaining provisions of this by law.
- 10.02 Shareholders' Agreement - All the provisions of By-law No. 1 and all other by-laws of the Corporation in force from time to time shall be subject to the provisions of any shareholders' agreement which may be entered into by the shareholders of the Corporation and approved and adopted by the Corporation from time to time (such shareholders agreement, as amended from time to time, being referred to herein as the "Shareholders Agreement"). In the case of any inconsistency between any matter or thing provided for or contemplated in the Shareholders Agreement and any provision of By-law No. 1 or of any other by-law of the Corporation in force from time to time, the provisions of the Shareholders Agreement shall prevail and By-law No. 1 and the other by-laws of the Corporation shall be and shall be deemed for all purposes to be amended accordingly.

**MADE** as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

<sup>20</sup> Section 262(1) of the OBCA.

<sup>21</sup> Sections 54(1) and 56 of the OBCA.

<sup>22</sup> Sections 54(1) and (2) of the OBCA.

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Name:  
Title: President

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Name:  
Title: Secretary





## BOARD REPORT

### SESSION:

Public ☒

### ACTION REQUESTED:

Decision ☒  
 Discussion/Direction ☐  
 Information ☐

Financial Impact ☐ Yes ☒ No

Included in Budget ☐ Yes ☒ No

TO: Board of Governors

DATE: February 27, 2020

FROM: Academic Council

SUBJECT: Establishment of the Digital Life Institute

### BOARD MANDATE:

In accordance with Article 1.4(b) of By-law No. 2, Academic Council will make recommendations to the Board on matters including the establishment of faculties, schools, institutes and departments. Academic Council is seeking the Board's approval of the establishment of a Digital Life Institute at the university.

### BACKGROUND/CONTEXT & RATIONALE:

The Digital Life Institute will integrate a trans-disciplinary community of researchers interested in examining the human and social dimensions of current and projected digital technologies, with the overarching goal of advancing our understanding of their human impact. The Digital Life Institute will be a hub for the critical analysis of digital technologies and will build upon an extant community of interdisciplinary scholars interested in the social implications of disruptive technological advancement. It will position the social and ethical analysis of technology at the forefront of Ontario Tech University's role as a leader advancing the research mandate of "technology with a conscience" within the context of national and international research spheres.

Disruptive technology is changing how people live, in vastly different ways. Even in global innovation and marketing spheres, digital life technology is clearly a controversial concept highlighting issues of privacy, security, identity, human dignity, quality of social connection, and cultural values. The emerging notion of a thoroughly quantified, observable, and perpetually mediated self will be transformative in myriad ways, propelling discussions of personal privacy, human agency, creativity, consent, education, and appropriate legal and ethical modes of protection and guidance in these new tech-infused futures. Digital technologies will continue to evolve in ways that impact social structure, culture, law and governance, politics and political

economy, business, and education. The Digital Life Institute will fill this knowledge gap by integrating a community of trans-disciplinary scholars and researchers with the goal of reaching a more holistic understanding of the impact of technology on humans and society.

Digital Life research does not have a large, dedicated research home in Canada. Similarly focused large scale research centres in the United States include the MIT Media Lab (<https://www.media.mit.edu/>), and Data & Society in New York City, which is a not-for-profit organization that grew out of New York University (NYU), which is now composed of several university, civil society, and business entities (<https://datasociety.net/>). Complementary research centres in Canada with which the Digital Life Institute could potentially form partnerships include the Centre for Law, Technology and Society at the University of Ottawa (<https://techlaw.uottawa.ca/>) and the Inclusive Design Institute at the University of Toronto (<https://inclusivedesign.ca/>). The Digital Life Institute could also serve as a hub for the social and cultural analysis that will surely form a central aspect of the new partnership between Ontario Tech and OCADU going forward, given that Drs. Pedersen, Slane and Tokuhiko have already been involved in the first collaborative project between our institutions on the Digital Human Connection.

The Digital Life Institute is a logical extension of infrastructure and resources currently dedicated to Digital Life research at Ontario Tech. The flourishing of digital life research will be appreciated through banding together existing entities under the umbrella of the Digital Life Institute: including the Digital Life Research Group, Decimal Lab, STEAM 3D Maker Lab, the Laboratory for Games and Media Entertainment Research (GaMER Lab), Human Machine Lab, and Sigma Lab.

Given the strategic priority of broadening and intensifying Ontario Tech's research agenda under the broader theme of "technology with a conscience," the various entities that will be housed under the umbrella of the Digital Life Institute will benefit from the efficiencies and strengths that joining together brings. In particular, the Digital Life Institute aims to support collaborations and partnerships in the following ways:

- Infrastructure: Leveraging grants and donations to support a project coordinator position; shared position of technician maintaining archive and other project based technologies; shared technologies for research projects (e.g. robots, sensors, wearable devices)
- Space: Facilitate use of existing lab space for collaborative projects; aim to support establishment of new Living and Learning Lab space, which could be used by faculty across all of Ontario Tech;
- Networking: Provide a hub for incubating new project ideas;
- Partnerships: Provide a broader central entity with which organizations and donors could more easily see themselves affiliated;
- Students: Provide a hub for graduate students both within and outside of FSSH, FEd, FBIT and FESNS to work with faculty in social science and humanities disciplines, and to interact with other students across disciplines interested in Digital Life research. This could include supporting the Ontario Tech-OCADU partnership, which similarly aims to bring together engineering students with artists and designers, with the aim of improving the sophistication and sensitivity of the process of technology development.

### **Research Mandate**

The Digital Life Institute will bring together a trans-disciplinary community of researchers interested in examining the human and social dimensions of current and projected digital technologies, with the overarching goal of advancing our understanding of their human impact. The Digital Life Institute will be a hub for the critical analysis of digital technologies and will build upon an extant community of interdisciplinary scholars interested in the social implications of disruptive technological advancement, from philosophical, empirical, and theoretical perspectives, supporting production of new knowledge, new means of mobilizing that knowledge, and new applications of that knowledge. It will bring the social and ethical analysis of technology to the forefront, positioning Ontario Tech University as a leader, advancing the research mandate of "technology with a conscience." The Institute will concentrate on digital life as a

social and cultural turn, with specific focus on: (1) human subjectivity, bodies, agency, experiences, perceptions, and identities; (2) technological disruption, emergence, innovation, future plans, policies, practices, and the intended/unintended consequences and possibilities that result from these developments.

**Goals:**

- To become a globally recognized hub for theoretical and applied social science and humanities research in human life lived with and through digital technology, thus expanding the breadth and depth of Digital Life scholarship.
- To stimulate productive engagement between social scientists, humanists, engineers, computer scientists, policy makers and the public to critically assess the impact of technological advancement on society.

The deliberately broad research mission of the Digital Life Institute is designed to advance our understanding of digital life. Methodologies are drawn from humanities and social science perspectives, in dialogue with both technology development, applications, and artistic practice. The Digital Life Institute will become a lively venue for debates, argumentation, discussion and design within domains key to human thriving, such as ethics, democracy, subjectivity, education, and social justice. Issues to be addressed include human agency, culture, power and control, equity, identity, creativity, and governance. The philosophical scope includes transhumanism & posthumanism, humanities fields long associated with artificial Intelligence (AI) and other human capability enhancement technologies.

The Digital Life Institute will provide a base from which to integrate researchers and labs from across the university, including Digital Life Research Group, Decimal Lab, STEAM 3D Maker Lab, the GaMER Lab, Human Machine Lab and Sigma Lab. The Digital Life Institute will further serve as a base for enhancing existing partnerships and forging new ones with national and international research centres and labs engaging in human-centered research on digital technologies. The Digital Life Institute will stimulate interaction among scholars through research collaborations, knowledge mobilization events (symposia, conferences, speaker series), and work-in-progress supports (idea jams, co-design and maker workshops, work-in-progress workshops).

The institute plans to host visiting scholars and post-doctoral fellows, and to facilitate the inter-disciplinary training of new Digital Life scholars by providing access to networks, archives, equipment and collaborative opportunities in one centralized physical and virtual space.

**RESOURCES REQUIRED:**

The Digital Life Institute will utilize the space that is currently housing the Decimal Lab at Bordessa Hall at 55 Bond St in Oshawa, as well as the Decimal Lab space within the Centre for Social Innovation (CSI) at 192 Spadina Ave, Toronto (<https://socialinnovation.org/location/192-spadina/>). These spaces do not require any additional renovation or equipment, as they are part of collective spaces that have access to phones, wifi, and printers.

Since the Digital Life Institute builds on existing faculty collaborations and labs, a main area of growth is the acquisition of staff to help with coordination. We therefore consider the main goal for the first two years to be to establish a stable means of funding an Institute Coordinator who will be tasked with 1) managing needs and providing administrative support to all of the Digital Life Institute projects and grants acquisition, both ongoing and in development or proposal stages, and 2) providing administrative support for publicity and marketing for projects and events. Ideally this will be a full time job at \$42,000 annually, but our initial aim is half-time at \$21,000. All steering committee members will be encouraged to include funding for the project coordinator in grant applications. We are seeking internal contributions for this position (from the Deans, President's Office) to begin with, as well as working towards a submitting a SSHRC Partnership Grant application in February 2021 requesting up to \$500,000 per year for five years.

Dedicated tech support is a longer-term goal of the Digital Life Institute fundraising efforts. All of our labs suffer from outdated technology or technology that needs maintenance and updating: by pooling our grant monies and seeking donors to this end, we hope to be able to fund a tech support position as well, over the course of the next two years.

Dr. Pedersen has secured tri-council funding for Digital Life Institute because it is one of the major projects vetted through the CRC peer-reviewed renewal process, which she was awarded to support the growth of this infrastructure. If passed, the Digital Life Institute will be the first research entity to secure *both* tri-council vetted funding *and also* go through the Ontario Tech University's rigorous procedure to establish an entity.

#### **IMPLICATIONS:**

Ontario Tech University will benefit greatly from the establishment of the Digital Life Institute, the first research institute at our university. The Institute will enhance Ontario Tech's reputation in the area of multi-disciplinary Digital Life studies. Dr. Pedersen is already globally renowned as a leader in this emerging field. Establishing the Digital Life institute will both recognize our institution's existing expertise and catalyze continued and sustainable growth in research capacity in this area.

An Institute will better serve its research partners by providing a permanent platform for coordination, and will serve as a magnet for others working in the field within the GTA and beyond. Importantly, The Digital Life Institute will further enhance the credibility of its existing networks and lend greater support for Ontario Tech University researchers, including those who currently do not have proper affiliation with graduate programs or a pool of graduate trainees. It will empower international teams seeking funding, formalize extant research partnerships across Ontario Tech Faculties, and facilitate formal relationships with national and international partners, for instance by lending Digital Life expertise to the existing partnership between Ontario Tech University and Shizuoka University in Japan, in which Drs. Kapralos, Hung, and Uribe Quevedo (FBIT) are already central.

#### **ALIGNMENT WITH MISSION, VISION, VALUES & STRATEGIC PLAN:**

In addition to aligning closely with Ontario Tech University's overall theme of "technology with a conscience," the Digital Life Institute aligns with the general goals of the Strategic Research Plan as well as with several of the identified priority research areas. Namely, the Digital Life Institute, like Ontario Tech as a whole, seeks to:

- Build effective and sustainable partnerships with our academic and scientific collaborators, and with industry and community-based agencies and organizations,
- Enable our researchers to become global leaders and innovators, and
- Improve the competitiveness of our researchers nationally and internationally.

In terms of strategic research area alignment, the Digital Life Institute fits squarely in the following identified themes:

(1) Information & Communication Technology (ICT) and Informatics: The focus of the Institute will be on the current societal change resulting from new inventions and adaptation to technologies. The Canadian economy is driven by the flow of information. There is an overwhelming supply of technology-driven devices available in response to our increased demand for information. Research in the area of ICT has largely focused on advancing the technical capabilities of devices. Research activities at Digital Life Institute will strive to address a current gap in knowledge by examining the social and human impact of technological advancement, thereby positioning Ontario Tech to provide a holistic approach to ICT and Informatics education and research.

(2) Human Health and Community Wellness describes the need to create "[s]ustainable and healthy communities [which] are those that are capable of planned growth that maintains physical, social, economic, and environmental health, while promoting social justice and citizen

participation.” The Digital Life Institute will continue Dr. Pedersen’s examination of the various stages of human-technology interaction that occur before the release of a device to the general consumer. Research in this area provides insight into how we are conditioned to accept technologies prior to their public release. Research on immersive technologies from a societal, humanist perspective aligns well with this SRP theme as it can shed light on how the use of these devices can impact the well-being of individuals and society as a whole. The adoption of new technologies in every facet of life also raises issues of how to best protect the interests of vulnerable users, such as the youth and seniors, and who will bear responsibilities for protecting privacy, ensuring consent to collect and use personal information, and how the values of transparency and accountability will be incorporated into these future technologies, their social uses, and the business models that profit from them, all of which expands directly on the work of Dr. Slane. Political discourse (Drs. Mirrlees, Douai, Stoett), crime prevention, control and understanding (Dr. Downing), and issues of public safety and social justice (Tokuhiko, Downing, Slane, Stoett, Hung, etc). all figure centrally into the theme of community wellness.

(3) Education for the 21st Century: Ontario Tech’s education researchers investigate the ways in which “learning and teaching can be reformed and improved through the use of digital technologies.” As evidence of the University’s leadership in this discipline, Dr. Janette Hughes was awarded the Canada Research Chair in Technology and Pedagogy in 2015 (currently under review for renewal for another five-year term 2020-2025). Dr. Hughes’s work addresses the evolution of the 21st-century workplace and investigates how to best prepare students and workers for the digital economy in an era in which disruptive technologies are transforming the nature of work. The SRP challenges our researchers to evaluate the impact of the evolving workplace “on the content and methods of creating relevant and effective learning experiences”; Dr. Hughes has taken on this challenge and is leading Ontario Tech to become a recognized authority in the field of technology and pedagogy.

Further, the mandate of the Digital Life Institute is broad, flexible and therefore nimble: we will be easily adaptable to a new Research Strategy, which we anticipate will soon be developed for Ontario Tech going forward.

#### **ALTERNATIVES CONSIDERED:**

**N/A**

#### **CONSULTATION:**

The Digital Life Institute proposal is the result of an extensive consultation process with internal and external stakeholders:

- *Vice President, Research, Innovation and International and the Canada Research Chairs (CRC) Program Secretariat:* CRC renewal project to establish the Digital Life Institute was first proposed to Michael Owen, VP Research, on August 4, 2016 and with his encouragement it was included in Dr. Pedersen’s CRC renewal application. Dr. Shahid Alvi SSH Associate Dean Research also gave permission to pursue the institute; Dr. Pedersen’s Canada Research Chair in Digital Life, Media and Culture was renewed for a second five-year term, which started Fall 2017.
- *Office of Research Services:* May 2016 – November 2019
- *Internal researchers:* Dean Stoett’s request, first discussed at SSH Faculty research retreat to form research cluster for Institute based on Digital Life Group on Jan 12, 2018
- *External researchers/partners:* Discussions Jan 2018-Jan 2020, three formal letters secured
- *All seven faculty Deans’ meeting:* October 17, 2018, six Deans in attendance; Deans’ Letters of Support collected
- *SSH Faculty council:* Motion passed October 22, 2019

- Academic Council on January 28, 2020

Through these consultations, over the last three years, the Digital Life Institute proposal has been honed, strengthened and revised to include a more focused vision and mission statement, as well as a specific and unique research mandate; an explanation of the value and necessity of the institute; concrete examples of research and knowledge mobilization activities; a five-year budget; a governance and membership structure; and a description of student training opportunities. Please find the full proposal amended to this document.

**COMPLIANCE WITH POLICY/LEGISLATION:**

The Digital Life Institute proposal was developed in conjunction with the Office of Research Services to align with the University's Procedure for the Creation of Research Units, Centres and Institutes (see Appendix 1).

**MOTION FOR CONSIDERATION:**

**That pursuant to the recommendation of Academic Council, the Board of Governors hereby approves the establishment of the Digital Life Institute, as presented.**

**SUPPORTING REFERENCE MATERIALS:**

1. Procedures for the Establishment of Research Units, Centres and Institutes
2. Proposal for the Creation of the Digital Life Institute at Ontario Tech University
3. Governance Structure of the Digital Life Institute
4. Digital Life Institute Budget

# PROCEDURES FOR THE CREATION OF RESEARCH ENTITIES

Classification number	LCG 1199.05
Framework category	Legal, Compliance and Governance
Approving authority	Academic Council
Policy owner	Vice-President, Research, Innovation and International
Approval date	June 2005
Review date	To be assigned

## INTRODUCTION

1. A key mandate of UOIT is to advance the highest quality of research. To this end, UOIT welcomes and encourages the formation of research groups, units, centres and institutes. Not only will these research entities foster the highest standard of scholarly inquiry, they will also greatly enrich the educational environment for faculty, students and staff. It is also hoped that the ground-breaking research which UOIT envisions will better the lives of people locally, throughout the country and around the globe.

The purpose of this document is to establish clear procedures on the creation of research entities, to streamline the process, and to help ensure a level playing field for all involved.

## DEFINITIONS

2. Centres are intended to strengthen, coordinate or facilitate scholarly purposes or activities not readily undertaken within the university's unit structures and are intended to offer new areas of activity consistent with the university's strategic direction and priorities. UOIT envisions four main types of research entities: research groups, research units, research centres and research institutes.
  - a. **Research Groups:** Research groups are the most informal type. They typically consist of three or more faculty in the same Faculty who are engaged in or want to pursue a common area of research. Research groups do not require an organizational structure, dedicated physical space on campus, or funding. Responsibility for funding of these groups rests with the host Faculty.
  - b. **Research Units:** Research units are slightly more formal in nature than research groups. They may include members from different Faculties at the university and have a broader research focus. These units are organizationally part of the university and are subject to university management and control,

reporting to a designated Dean or the Associate Provost, Research. Generally, they do not include researchers from other universities or organizations, but may have a small office or similar physical presence on campus. A Research Unit may be built around a Research Chair.

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- c. **Research Centres:** Research centres are more formal than research units and have a wider research mandate. They usually involve activities beyond the scope of a single Faculty and/or involve university resources. As well, they have an on-campus office or similar physical presence. Membership includes faculty from different Faculties and disciplines and, perhaps, small-scale partnerships with other universities, governments, non-profit organizations or businesses.
- d. **Research Institutes:** Research institutes are the largest and most formal of all research entities and conduct research into a number of related or different areas of study. They have a definite on-campus presence such as an office. Membership includes faculty from at least two UOIT Faculties, as well as significant involvement from other universities, governments, non-profit organizations and/or businesses. The title of a research institute may incorporate the name of an external partner that contributes significantly to the institute, likely through the provision of resources, equipment and/or funding. In such cases, the proposed name must comply with appropriate Board policies.

## PROCEDURES

### 3. Term

Each research entity will be authorized to operate for a specific term. Research units, centres and institutes have an initial term of five years, which can be renewed. Research groups will normally be assigned an initial three-year term but are not subject to the more detailed operational requirements of other types of research entities.

### 4. Rationale

The planned research entity must have a clearly-defined rationale that demonstrates the uniqueness and need for the proposed research. The research must support UOIT's values and mission statement as well as enhance the university's standing in the academic and external communities.

### 5. Research Objectives and Activities

The research objectives and scope must be consistent with the type of research entity being proposed and adhere to the university's Research Guidelines. As well, the proposed research must clearly enhance or challenge the current body of knowledge in the proposed area(s) of inquiry or, if applicable, break new ground. A research entity will not engage in academic activities such as offering academic programs or granting degrees.

All research entities are encouraged to sponsor and organize lectures, workshops, symposia and conferences. As well, research entities must conform to all university policies and procedures.

### 6. Membership

Normally, a majority of the members of any of the four research entities must be current UOIT core faculty. Members must be in good standing with the university, have a track record of successful research, and pledge that their participation in a research entity will not prevent them from fulfilling their teaching responsibilities. The possibility of teaching release time must be discussed with the appropriate dean.

## 7. **Benefits to UOIT**

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A key consideration in approving a research entity is the benefits it will bring to UOIT. These benefits must exceed providing a service to the university community and comprise a level of research that could otherwise not take place. The research must also enhance UOIT's reputation as well as help position the university as an attractive employer to prospective faculty and staff.

## 8. **Structure and Governance**

As the most informal of the four categories, research groups may choose to appoint a leader who would keep the respective dean informed of the group's activities. Research units have a head administrator or a director, and centres and institutes have a director. The head administrator or director keeps the respective dean(s) apprised at regular intervals of the entity's activities, as well as through formal means outlined in Section 11 of this document.

Each research entity must have clearly-defined lines of accountability to one or more Deans and/or the Associate Provost, Research.

Research units, centres and institutes will hold a competition to select the head administrator or director, with the search panel comprising the dean(s) of the Faculty or Faculties associated with the entity, the Associate Provost, Research and the Provost (or delegate). The term of office of the head administrator or director should normally be five years. On a continuing basis, the head administrator or director will keep the relevant dean(s) informed of the research entity's main activities and challenges. Annual reporting and the periodic review are discussed in sections 11 and 12 of this document.

According to the UOIT Act, the university's Board of Governors has the ultimate authority for the creation and closure of all UOIT research units, centres and institutes.

## 9. **Proposal**

Faculty members interested in organizing a research unit, centre or institute must submit to the dean(s) of the Faculty or Faculties to which they are appointed a proposal outlining the planned research entity. For a full list of proposal criteria, please see Appendix I. The preferred length of the proposal is three pages.

The sponsoring dean(s) will then submit the proposal to the Research Board which, in turn, will be responsible for advising Academic Council and the Board of Governors on the establishment of the research entity.

Until final approval is granted, the proposed research entity may not use its name in any official capacity (letterhead, signage, etc.). If there is involvement from external parties such as other universities, organizations or businesses, the proposal must also be approved by all outside groups before the entity can be created.

## 10. **Financial Operation**

For the benefit of UOIT researchers and the university itself, the entity must be financially self sufficient and sustainable in the long-term. The sources of funding outlined in the proposal must be sufficient for at least the first five years of operation. Each entity shall be responsible for obtaining sufficient revenue from

grants, contracts, indirect costs or other means to offset its direct costs of operation. Research entities shall normally carry forward any year-over-year financial surpluses or losses.

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Under no circumstances is a research entity to incur debt or operate a deficit. If a research entity's financial situation becomes precarious, the head administrator or director is to immediately notify the respective dean(s), who will alert the Associate Provost, Research and the Provost. Depending on the circumstances, these individuals may recommend that a review of its ongoing viability be undertaken and that the entity be put on probation or be closed. In all reasonable circumstances, the university will work with the entity and its members to help solve financial difficulties.

#### **11. Annual Report**

Research units, centres and institutes are required to submit a written report each year for the period ending March 31 to the respective dean(s), with copies to the Associate Provost, Research and the Provost, by April 30. The report, which should not exceed five pages, will document the activities and accomplishments of the past year including the amount of external funding, its impact on the university and all partnering organizations, and any changes in membership. As well, the report must include a financial statement (including sources of funds and expenditures), and a summary of planned activities and research for the next year. If a research entity does not submit its annual report within 30 days of the deadline, further action such as probation or closure may result.

#### **12. Periodic Review**

Each research unit, centre and institute will undergo a thorough review at the end of each five-year term. The review team will consist of the respective dean(s), the Associate Provost, Research, the Provost (or delegate) and one or two outside assessors knowledgeable in the field. The review will examine the entity's operations, accomplishments, success, membership, finances and plans for future research. Upon completion of the review, the review team will recommend to Academic Council and the Board of Governors one of three courses of action: renewal, probation or closure. If probation or closure is recommended, the entity will have 60 days within which to respond before the recommendation is confirmed.

#### **13. Closure**

A recommendation for closure would only result in certain circumstances. Failure to submit an annual report (even after the 30-day "grace period" has elapsed), submission of an unsatisfactory annual report, failure to pass the periodic review, or any circumstance that could adversely affect the university in any way, may result in closure. As well, a majority of a research entity's members may recommend closure, having found that the entity has met its research goals and no further research is planned. If closure is recommended, the entity will have at least three months from the date of the recommendation to wind down its affairs.

#### **14. Contact Information**

The office of the Associate Provost, Research is responsible for maintaining a complete list of research groups, centres and institutes, their campus locations and contact information, the name and contact of the head administrators and directors, and the names and contact information for all members.

# APPENDIX 1 - PROPOSAL CHECKLIST

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15. The suggested maximum length of the proposal is three pages (excluding budget, letters of support, faculty CVs, etc.). To expedite the review of proposals, faculty members should ensure that their documents contain the following information:
  - 15.1 **Proposers**  
Give the names of the proposing faculty, their titles and contact information.
  - 15.2 **Faculties**  
Specify the Faculties involved.
  - 15.3 **Title**  
State the proposed name of the planned research entity.
  - 15.4 **Description and Justification**  
Name the type of entity<sup>3/4</sup>research unit, centre or institute. Explain why it is needed at UOIT and, if possible, by the larger community.
  - 15.5 **Research Mandate**  
Outline the type of research to be performed.
  - 15.6 **Management**  
State if the entity is to be led by a Head Administrator or Director (research units) or Director (research centres and institutes) and outline the position's responsibilities.
  - 15.7 **Proposed Members**  
This should include the names of proposed members as well as their Faculty or Faculties, contact information and an abbreviated curriculum vitae for each (degrees, employment history, professional memberships, research activities and interests, research funding record for the past five years, and a summary of their publication record).
  - 15.8 **External Involvement**  
Give details about any expected outside partners such as researchers from other universities as well as governments, organizations and businesses. State the name, address and contact information for each organization involved; the key people to participate in the research entity as well as their titles and contact information; and how their involvement will benefit the research entity. Include copies of agreements or memoranda of understanding with all outside parties.
  - 15.9 **Facilities**  
Explain the type, size and location of space desired, and how the desired space will fill the proposed research entity's needs. Specific space commitments must be secured from the office of the Provost. Mention all special equipment or other requirements that have space implications.
  - 15.10 **Resources and Equipment**  
Provide a complete list of all required resources and equipment, including computers, phones, copiers and fax machines. Specify what internal resources (i.e. library, audiovisual) will be used and to what extent.
  - 15.11 **Budget**  
Prepare a detailed budget projection for the first five years, including all sources of income and expected expenses and disbursements.
  - 15.12 **Letters of Support**  
Include all letters of support from dean(s) and external partners.



## Proposal for the Creation of the Digital Life Institute at Ontario Tech University

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October 25, 2019

### 1.1 Name of the Institute

Digital Life Institute

### 1.2 Proposers

#### Director:

Isabel Pedersen, PhD

Canada Research Chair in Digital Life, Media, and Culture

Director of *Decimal: Digital Culture and Media Lab*

[Isabel.pedersen@uoit.ca](mailto:Isabel.pedersen@uoit.ca)

#### Steering Committee:

Peter Stoett, PhD

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Bill Kapralos, PhD

Associate Professor, Game Development and Entrepreneurship

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## 1.3 Background Description and Justification

### 1.3.1 Short Description

The Digital Life Institute will integrate a trans-disciplinary community of researchers interested in examining the human and social dimensions of current and projected digital technologies, with the overarching goal of advancing our understanding of their human impact. The Digital Life Institute will be a hub for the critical analysis of digital technologies and will build upon an extant community of interdisciplinary scholars interested in the social implications of disruptive technological advancement. It will position the social and ethical analysis of technology at the forefront of Ontario Tech University's role as a leader advancing the research mandate of "technology with a conscience" within the context of national and international research spheres.

### 1.3.2 Need for Digital Life Research

Disruptive technology is changing how people live, in vastly different ways. Even in global innovation and marketing spheres, digital life technology is clearly a controversial concept highlighting issues of privacy, security, identity, human dignity, quality of social connection, and cultural values. The emerging notion of a thoroughly quantified, observable, and perpetually mediated self will be transformative in myriad ways, propelling discussions of personal privacy, human agency, creativity, consent, education, and appropriate legal and ethical modes of protection and guidance in these new tech-infused futures. Digital technologies will continue to evolve in ways that impact social structure, culture, law and governance, politics and political economy, business, and education. The Digital Life Institute will fill this knowledge gap by integrating a community of trans-disciplinary scholars and researchers with the goal of reaching a more holistic understanding of the impact of technology on humans and society.

Digital Life research does not have a large, dedicated research home in Canada. Similarly focused large scale research centres in the United States include the MIT Media Lab (<https://www.media.mit.edu/>), and Data & Society in New York City, which is a not-for-profit organization that grew out of New York University (NYU), which is now composed of several university, civil society, and business entities (<https://datasociety.net/>). Complementary research centres in Canada with which the Digital Life Institute could potentially form partnerships include the Centre for Law, Technology and Society at the University of Ottawa (<https://techlaw.uottawa.ca/>) and the Inclusive Design Institute at the University of Toronto (<https://inclusivedesign.ca/>). The Digital Life Institute could also serve as a hub for the social and cultural analysis that will surely form a central aspect of the new partnership between Ontario Tech and OCADU going forward, given that Drs. Pedersen, Slane and Takuhiro have already been involved in the first collaborative project between our institutions on the Digital Human Connection.

### **1.3.4 History of Digital Life Research at Ontario Tech and Justification for Digital Life Institute**

The Digital Life Institute is a logical extension of infrastructure and resources currently dedicated to Digital Life research at Ontario Tech. The flourishing of digital life research will be appreciated through banding together existing entities under the umbrella of the Digital Life Institute: including the Digital Life Research Group, Decimal Lab, STEAM 3D Maker Lab, the Laboratory for Games and Media Entertainment Research (GaMER Lab), Human Machine Lab, and Sigma Lab.

#### ***Digital Life Research Group***

The kernel of the idea for the Digital Life Institute began with the formation of the Digital Life Research Group in the Faculty of Social Science and Humanities in 2010 by a cohort of faculty members from diverse disciplines including communication and digital media studies, legal studies, criminology, and political science. (<http://socialscienceandhumanities.uoit.ca/research/digital-life-research-group.php>) The Group has met regularly to host speakers and engage in a lively dialogue on a range of relevant issues, including cybercrime, romance fraud, and online dating, but it has not reached its full potential as it has largely depended upon the more informal association of the faculty members and their connections to speakers who were coming to Toronto or Oshawa for other events. The Digital Life Research Group has never pursued any funding, from either the university or outside sources. Its longevity is, however, a testament to the enduring interests of the faculty members affiliated with it and their ongoing collegiality, several of whom have been in the Group since its inception (Andrea Slane, Steven Downing, Aziz Douai) or since they arrived at the university (Isabel Pedersen, Tanner Mirrlees, Gary Genosko). Other faculty members, mostly from FSSH but also sometimes FBIT and FEd attend Digital Life Research Group forums, depending on the topic. The Group of dedicated core members work well together and share keen common interest in the social and cultural analysis of digital technologies, and will continue to serve as leaders in the Digital Life Institute.

#### ***Decimal Lab***

Dr. Isabel Pedersen, Canada Research Chair in Digital Life, Media, and Culture, established Decimal Lab, which involved designing a research hub and hybrid public media arts space, which has operated at the downtown Oshawa campus since 2013 (<https://www.decimallab.ca/>). Decimal Lab is a showpiece for the university; it is a large, glassed-in research space that supports creative work and traditional research, made possible with 2013 CFI/MRI funding (\$104,000). This downtown Oshawa lab is a hub that draws together key collaborators, including researchers from across the university and from external institutions to collaborate on digital life projects.

Dr. Pedersen has built a career on human-computer interaction studies to inform digital life practices. She has been invited to speak at twenty-four significant international, national and local events, signaling her recognized expertise addressing audiences about the impact of the turn to

digital life. Events include keynote or plenary talks at IEEE International Symposium on Technology and Society, Global Affairs Canada AI Symposium, IFA Summit Berlin, Munk School of Global Affairs and Public Policy, the International Wearables Technologies Conference (Munich), The International Council on Education for Teaching (ICET) World Assembly, the Canadian Association of Journalists Annual Conference, and local events, TEDx, Spur Festival, Subtle Technologies, and Mesh Toronto.

After the second term renewal of her CRC (Sept. 2017- Aug 2022), Ontario Tech's Digital Life research infrastructure underwent a further phase of expansion. Decimal Lab research partnerships are now focusing on provincial, national, and international teams to gain funding, tighten networks, and meet more ambitious goals for publications. Office and event space related to Decimal Lab has now also been established within the lively Centre for Social Innovation (CSI) in Toronto, providing vital access to Toronto publics, stakeholders, and potential partners.

Fabric of Digital Life ('Fabric'), is an open, CollectiveAccess research database launched in 2013 and funded by CFI, CRC and SSHRC Insight grants held by Dr. Pedersen. Fabric facilitates web-based, cultural analytic research on the digital enhancements of human capabilities, especially regarding wearable, ingestible, implanted, and robotical technologies. It tracks the impact of artificial intelligence on embodied computing. It has informed social science, humanities and digital humanities research outputs over the past six years. Its digital assets include its public frontend interface at <http://fabricofdigitallife.com>, as well as a contributor's interface, and an extensive 'backend' working system to manage its customized metadata, so that researchers can contribute to it simultaneously from remote locations. Working closely with partners such as the *Canadian Science and Tech Museum* (Ingenium), *Temple University*, *University of Minnesota*, and *Trent University*, Dr. Pedersen has built its core research holdings and meta-data customization in order to accumulate further partnership to build the research. Its external network has produced collections from researchers from *University of Melbourne*, *City University of New York*, *University of Alberta*, and *University of Quebec*.

Several prototypes for the Decimal Digital Museum Project have been developed through collaborations between SSH and FBIT. TombSeer evolves museum experiences using gestural and visual augmented reality. It offers a visually augmented environment to allow a museum visitor to view artefacts from new perspectives. Its first iteration augmented the Tomb of Kitines replica at the Royal Ontario Museum in Toronto. *iMind* uses brain-computer interaction for viewing collections of digitized paintings.

Dr. Pedersen has secured several international partnerships for Decimal Lab, which work on research output, grants procurement, and knowledge mobilization. The *Digital Literacy project* is a recent partnership between the University of Minnesota's Dr. Ann Hill Duin and her Emerging Technology Research Collaboratory (ETRC, <https://etrc.umn.edu/>), Texas Tech University's UX Research Lab, and Decimal Lab at Ontario Tech U. Another related partnership is The *Human-centered AR Design* project for augmented reality, a multi-year research project involving both Canadian and American researchers. It involves multidisciplinary research studying augmented reality user adoption from a sociotechnical, media studies vantage, as well as research for

augmented reality design and content creation from technical and professional communication, curriculum-building perspectives. Dr. Ann Hill Duin (Professor, Writing Studies, University of Minnesota), Dr. Dawn Armfield (Minnesota State University, Mankato) and Dr. Pedersen work as a team along with senior American PhD students.

Strong research partnerships have been established between Ryerson University and OCADU, following a SSHRC Insight grant held by Dr. Pedersen (PI), along with Kate Hartman (Co-PI, OCADU) and R. Bruce Elder (Co-PI, RyersonU). Dr. Pedersen hosted and organized Wear Me: Art | Technology | Body, a major research knowledge mobilization event on 24–25 September 2016. It involved four parts: an art exhibit at Whitby Station Gallery (with 8 artists including Kate Hartman), an academic symposium, a graduate student conference, and a keynote talk with featured artist Tom Sherman (Governor General's award winner) at Regent Theatre.

Dr. Andrea Slane is currently leading a project in collaboration with Drs. Pedersen and Hung entitled “Involving Seniors and Caregivers in Developing Privacy Best Practices: Toward Responsible Development of Social Support Technologies for Seniors”. The project is funded by the Office of the Privacy Commissioner of Canada (OPC), and will contribute content to the Fabric collection on social support technologies, mainly robots, that are being marketed for use by seniors in their homes. This project is conceived as the initiation of a longer term research agenda, examining the social, ethical and legal practices for shaping and governing technologies that aim to alleviate especially social isolation and loneliness among the elderly. Dr. Pedersen and Decimal Lab provided student research support to the grant writing process for this project, and the OPC grant is contributing funding toward the staff project coordinator for Fabric.

Dr. Pedersen and Decimal Lab have also supported students, studies, partners and grant applications for Dr. Steven Downing, Associate Professor in the Faculty of Social Science and Humanities at Ontario Tech University. He has applied theories of crime to online and offline settings, where he qualitatively examines subcultural and social control constructs surrounding deviant and criminal behaviour, and more recently has conducted several studies examining relationships between (new) media and culture more broadly. His research considers the technology-culture nexus, examining, for example, digital representations of crime and deviance, uses of emerging technologies such as VR and AR to study traditional criminological and sociological questions, and representations of race and gender in gaming, television, and film. Dr. Downing's research has appeared in journals across disciplines, including *Deviant Behavior*, *Games and Culture*, and *Contemporary Justice Review*. One of Dr. Downing's recent co-authored pieces, “Pains of imprisonment in a “lock em’ up” video game: exploring peacemaking discourse through gaming,” considers how prison themed video games can present interactive experiences with the potential to portray and problematize pains of imprisonment, and how these portrayals may prompt a public discourse surrounding prison, particularly from a peacemaking perspective.

Dr. Pedersen has received excellent funding support from Ontario Tech U, the Faculty of Social Science and Humanities, and external funders, including especially Tri-council Funding. As Principal Investigator and co-applicant, her total is \$2,433,700. Her *Canada Research Chair in Digital Life, Media, and Culture*, spans 2012-2022. She has used CFI and MRI funds to support

Decimal Lab. She was P.I. on a SSHRC Insight Grant, 2014-2017, and a SSHRC Standard Research Grant, 2010-2013. She has been Co-PI on numerous grants including: (1) *Digital Culture and Quantified Aging* – Marshall, Barbara. (P.I.) Trent U, Stephen Katz (Co-Applicant) Trent U, Isabel Pedersen (Co-Applicant) UOIT, and Wendy Martin Brunei U, SSHRC Insight Grant, 2017-2022. (2) *Accelerating Digital Technology Adoption in Canadian Companies* – O. Ngwenyama, O. (P.I.) (Ryerson U) and W. Cukier, SSHRC Partnership Development Grant, 2014-2016, and (3) *Accessible Entertainment: Making Film, Television and Theatre More Inclusive*, Deborah Fels (P.I.) (RyersonU), SSHRC Community-University Research Alliance, 2007-2012. Dr. Pedersen has trained more than 100 HQP, including students from Ryerson University, Trent University, Calgary University, University of Toronto, and OCADU.

### ***STEAM 3D Maker Lab***

Dr. Janette Hughes joined the Faculty of Education at Ontario Tech in 2006. She was appointed Canada Research Chair in Technology and Pedagogy in 2015. Dr. Hughes established the STEAM 3D Maker Lab in 2016, with support from a CFI-JELF grant and matching MRIS infrastructure grant, and this research space has enabled her to carry out cutting-edge research in the field of technology and pedagogy. Her Maker Lab is equipped with state-of-the-art digital technologies such as 3D printers, a CNC router, programmable robots, virtual and augmented reality, artificial intelligence bots, and a wide variety of coding tools such as MicroBits, Arduino, and LilyPad microcontrollers for work with e-textiles. This innovative learning space is used regularly by her research team, as they work with students, parents, school administrators, and preservice and in-service teachers in K-12 education. Over the past 3.5 years, she has worked with more than 2400 student research participants and over 450 in-service and pre-service teachers, in 22 different schools.

In addition to the various school districts Dr. Hughes has partnered with across Ontario, she has collaborations with industry partners (GM of Canada, Dell EMC Canada, InkSmith, Invivo, LearnStyle and Pearson Canada) and community partners (Literacy Network of Durham, John Howard Society, The LivingRoom Community Art Studio, Grandview Children's Centre and several municipal libraries). Dr. Hughes has been invited to deliver 25 keynote/panel addresses to diverse audiences, including for organizations such as the Ontario Council for Technology Education (OCTE), Canadian Institute for Digital Literacies Learning, Science Teachers' Association Ontario (STAO), Catholic Principals' Council of Ontario, York Catholic Administrators' Association, Ontario Principals' Council (OPC), and the Ontario Ministry of Education.

In Canada, she has forged research partnerships with colleagues at Memorial University, Lakehead University, University of Calgary, University of British Columbia, Queen's University and the University of Ottawa. Internationally, she has partnerships with colleagues in Australia, Brazil, Denmark, Finland, Ireland and Japan, in addition to her partners involved in an Organisation for Economic Cooperation and Development (OECD) initiative which focuses on "Fostering and Assessing Creative and Critical Thinking Skills", and involves 16 higher education institutions across 12 countries. Dr. Hughes is one of the lead researchers in Canada on this project

and was one of only five researchers from 28 countries to present her research at the inaugural meeting of the group in Paris in September 2018.

Dr. Hughes has an exceptional level of grant funding over the past three years. She received a Social Sciences and Humanities Research Council of Canada (SSHRC) Insight Grant as PI (2017-2021), an Ontario Research Fund – Research Excellence Award as PI (2016-2021), an Ontario Ministry of Education Grant (2016-2019), a SSHRC Partnership Development Grant as co-I (2015-2018), and a SSHRC Insight Grant as Co-I (2016-2019). She has collaborated with researchers across Canada as well as internationally, building a solid and recognizable program of research in those contexts, and working with colleagues in a variety of fields. Prior to her tenure as a CRC, Dr. Hughes also received a SSHRC Insight Grant (2012-2015), the MRIS Early Researcher Award (2011-2014), a SSHRC Public Dissemination Grant (2012-2013), and a SSHRC Standard Grant (2007-2010). All of the funding awarded to Dr. Hughes to date has provided her with the means to establish a research team that is developing the capacity to make contributions to Canada and abroad in critical digital literacies, an area that advances Ontario Tech’s investment in innovative uses of digital technologies for learning, and aligns closely with SSHRC’s “Digital Economy” priority area.

In recognition of commitment to teaching and mentorship, particularly of graduate students, Dr. Hughes was the 2016 recipient of the UOIT Teaching Excellence Award. She is a highly sought-after supervisor for students in the graduate program at Ontario Tech University and beyond, and was nominated for the inaugural Award of Excellence in Graduate Supervision at Ontario Tech in 2018. She is currently supervising five Master’s level graduate students and is on the supervisory committee of another Master’s student in the Faculty of Health Sciences. She is also co-supervising a PhD student from Brazil, who is a visiting scholar at Ontario Tech University. Since becoming a CRC, Dr. Hughes has supervised 18 undergraduate students (all completed), 8 Master’s students (4 completed) and co-supervised 3 PhD students from other institutions (2 completed). UOIT’s Faculty of Education does not have a PhD program, but she has Adjunct status at the University of Calgary. They have benefitted immensely from being involved in all aspects of the research process and from attending local, national and international conferences. Her graduate students have also developed important networks through the work they have done in her research lab and in the schools and organizations they have visited with her.

### ***Laboratory for Games and Media Entertainment Research (GaMER Lab)***

Dr. Kapralos is one of the key faculty members to have established the Games and Media Entertainment Research Lab (GAMER Lab), a state-of-the-art, interdisciplinary research laboratory where faculty and students (graduate and undergraduate alike) conduct research related to serious games, human factors, simulation, games for fitness and health, applied game design, augmented reality, stereo-vision gaming, and affective computing. The GAMER Lab is equipped with a variety of state-of-the-art equipment including stereoscopic displays, physiological monitoring equipment, tabletop computer, high-fidelity audio equipment, various input devices, amongst others. In addition to this research space, specific to the Game Development and

Entrepreneurship program is the Undergraduate Game Development Laboratory (UGDL) which Kapralos helped establish and currently maintains. The UGDL consists of state-of-the-art game development software and equipment to enable the development of video games from a variety of perspectives. It contains a full-body motion capture system to be used for ground-truth millimeter accurate estimation of joint postures. It houses 15 graphics/gaming workstations, an audio-recording chamber (audiometric room), high-end audio recording equipment, and the latest motion controller technology for evaluation such as Sony's Move Controller, Nintendo's Wii, and Microsoft Kinect. Software installed on the workstations ranges from software development environments to 3D modeling packages (Autodesk Maya) for the creation of digital assets to be manipulated in-game. A variety of display technologies are available for testing user experiences in stereoscopic 3D that employ active or passive 3D displays.

### ***Human Machine Lab***

The Human Machine Lab is an interdisciplinary research laboratory focused on designing computer systems around human needs and capabilities while maintaining human-level intelligence. Dr. Hung is a primary faculty lead in this lab, and the technical aspects of the project with Drs. Slane and Pedersen on social support technologies for seniors has been housed in this lab. This collaboration builds on Dr. Hung's work developing a privacy protection framework for companion robots and smart toys. A companion (social) robot is a device consisting of a physical humanoid robot component that connects through a network infrastructure to web services that enhance traditional robot functionality. The objective of this research is to build a theoretical and technical data privacy protection engine for culture-aware robots and smart toys on enabling users to be in control of their privacy by specifying their privacy preferences in human-robot interaction (HRI). Overall the Human Machine Lab's interdisciplinary projects fall in various fields including human-computer interaction, usable security, privacy, and artificial intelligence.

### ***FESNS Sigma Lab***

Dr. Tokuhiro as FESNS Dean has started the Sigma Lab in ERC. The Lab is led by a TF (S. Perera) and two technical support staff (C. Brown, R. Ulrich). The primary goal of the Lab is to provide experiential (technical project) learning for FESNS students. The projects are focused on industry needs. As digital tools such as VR equipment and haptic feedback devices become accessible, industry relevant projects using digital tools are emerging as a major activity in the Lab. Further, with advances in computing and software, simulation systems mimicking functions of a nuclear reactors (Canadian CANDU type) are becoming more interactive. These developments point to FESNS interest in digital technology applications in industrial settings and environments. Recent capstone projects include VR environments of inside and outside a generic nuclear plant and dispersal of radiation sources under hypothetical scenarios. Participation from FBIT's Dr. Uribe Quevedo and FBIT students in developing a gaming overlay was realized.

### **1.3.5 Need for the Institute**

Given the strategic priority of broadening and intensifying Ontario Tech’s research agenda under the broader theme of “technology with a conscience”, the various entities that will be housed under the umbrella of the Digital Life Institute will benefit from the efficiencies and strengths that joining together brings. In particular, the Digital Life Institute aims to support collaborations and partnerships in the following ways:

- Infrastructure: Leveraging grants and donations to support a project coordinator position; shared position of technician maintaining archive and other project based technologies; shared technologies for research projects (e.g. robots, sensors, wearable devices)
- Space: Facilitate use of existing lab space for collaborative projects; aim to support establishment of new Living and Learning Lab space, which could be used by faculty across all of Ontario Tech;
- Networking: Provide a hub for incubating new project ideas;
- Partnerships: Provide a broader central entity with which organizations and donors could more easily see themselves affiliated;
- Students: Provide a hub for graduate students both within and outside of FSSH, FEd, FBIT and FESNS to work with faculty in social science and humanities disciplines, and to interact with other students across disciplines interested in Digital Life research. This could include supporting the Ontario Tech-OCADU partnership, which similarly aims to bring together engineering students with artists and designers, with the aim of improving the sophistication and sensitivity of the process of technology development.

An Institute will better serve its research partners by providing a permanent platform for coordination, and will serve as a magnet for others working in the field within the GTA and beyond. Importantly, The Digital Life Institute will further enhance the credibility of its existing networks and lend greater support for Ontario Tech University researchers, including those who currently do not have proper affiliation with graduate programs or a pool of graduate trainees. It will empower international teams seeking funding, formalize extant research partnerships across Ontario Tech Faculties, and facilitate formal relationships with national and international partners, for instance by lending Digital Life expertise to the existing partnership between Ontario Tech University and Shizuoka University in Japan, in which Drs. Kapralos, Hung, and Uribe Quevedo (FBIT) are already central.

## **1.4: Research Mandate**

### **1.4.1. Type of Research**

The Digital Life Institute will bring together a trans-disciplinary community of researchers interested in examining the human and social dimensions of current and projected digital technologies, with the overarching goal of advancing our understanding of their human impact. The Digital Life Institute will be a hub for the critical analysis of digital technologies and will

build upon an extant community of interdisciplinary scholars interested in the social implications of disruptive technological advancement, from philosophical, empirical, and theoretical perspectives, supporting production of new knowledge, new means of mobilizing that knowledge, and new applications of that knowledge. It will bring the social and ethical analysis of technology to the forefront, positioning Ontario Tech University as a leader, advancing the research mandate of “technology with a conscience.” The Institute will concentrate on *digital life* as a social and cultural turn, with specific focus on: (1) human subjectivity, bodies, agency, experiences, perceptions, and identities; (2) technological disruption, emergence, innovation, future plans, policies, practices, and the intended/unintended consequences and possibilities that result from these developments.

#### Goals

- To become a globally recognized hub for theoretical and applied social science and humanities research in human life lived with and through digital technology, thus expanding the breadth and depth of Digital Life scholarship.
- To stimulate productive engagement between social scientists, humanists, engineers, computer scientists, policy makers and the public to critically assess the impact of technological advancement on society.

The deliberately broad research mission of the Digital Life Institute is designed to advance our understanding of digital life. Methodologies are drawn from humanities and social science perspectives, in dialogue with both technology development, applications, and artistic practice. The Digital Life Institute will become a lively venue for debates, argumentation, discussion and design within domains key to human thriving, such as ethics, democracy, subjectivity, education, and social justice. Issues to be addressed include human agency, culture, power and control, equity, identity, creativity, and governance. The philosophical scope includes transhumanism & posthumanism, humanities fields long associated with artificial Intelligence (AI) and other human capability enhancement technologies.

The Digital Life Institute will provide a base from which to integrate researchers and labs from across the university, including Digital Life Research Group, Decimal Lab, STEAM 3D Maker Lab, the GaMER Lab, Human Machine Lab and Sigma Lab. The Digital Life Institute will further serve as a base for enhancing existing partnerships and forging new ones with national and international research centres and labs engaging in human-centered research on digital technologies. The Digital Life Institute will stimulate interaction among scholars through research collaborations, knowledge mobilization events (symposia, conferences, speaker series), and work-in-progress supports (idea jams, co-design and maker workshops, work-in-progress workshops).

The institute plans to host visiting scholars and post-doctoral fellows, and to facilitate the interdisciplinary training of new Digital Life scholars by providing access to networks, archives, equipment and collaborative opportunities in one centralized physical and virtual space.

### 1.4.2: Alignment with Ontario Tech University's Strategic Research Plan

The Digital Life Institute initiative has already established a long history of institutional support from Ontario Tech, insofar as it was a central project proposed for Dr. Pedersen's successful Tier 2 CRC renewal in Digital Life, Media and Culture, which was vetted by the Canada Research Chairs program. The CRC vetting included several blind reviewers who were extremely positive of this phase of growth for Ontario Tech University. This proposal has been developed in consultation with the President, Deans of all of the Faculties at Ontario Tech University, the Provost, the Vice-President Research and the Office of Research Services.

In addition to aligning closely with Ontario Tech University's overall theme of "technology with a conscience", the Digital Life Institute aligns with the general goals of the research plan as well as enhancing the specific areas of research strength set out in the Strategic Research Plan. Namely, the Digital Life Institute, like Ontario Tech as a whole, seeks to:

- Build effective and sustainable partnerships with our academic and scientific collaborators, and with industry and community-based agencies and organizations.
- Enable our researchers to become global leaders and innovators.
- Improve the competitiveness of our researchers nationally and internationally.

In terms of specific broad subject areas, the Digital Life Institute fits squarely in the following identified themes:

**(1) Information & Communication Technology (ICT) and Informatics:** The focus of the Institute will be on the current societal change resulting from new inventions and adaptation to technologies. The Canadian economy is driven by the flow of information. There is an overwhelming supply of technology-driven devices available in response to our increased demand for information. Research in the area of ICT has largely focused on advancing the technical capabilities of devices. Research activities at Digital Life Institute will strive to address a current gap in knowledge by examining the social and human impact of technological advancement, thereby positioning Ontario Tech to provide a holistic approach to ICT and Informatics education and research.

**(2) Human Health and Community Wellness** describes the need to create "[s]ustainable and healthy communities [which] are those that are capable of planned growth that maintains physical, social, economic, and environmental health, while promoting social justice and citizen participation." The Digital Life Institute will continue Dr. Pedersen's examination of the various stages of human-technology interaction that occur *before* the release of a device to the general consumer. Research in this area provides insight into how we are conditioned to accept technologies prior to their public release. Research on immersive technologies from a societal, humanist perspective aligns well with this SRP theme as it can shed light on how the use of these devices can impact the well-being of individuals and society as a whole. The adoption of new

technologies in every facet of life also raises issues of how to best protect the interests of vulnerable users, such as the youth and seniors, and who will bear responsibilities for protecting privacy, ensuring consent to collect and use personal information, and how the values of transparency and accountability will be incorporated into these future technologies, their social uses, and the business models that profit from them, all of which expands directly on the work of Dr Slane. Political discourse (Drs. Mirrlees, Douai, Stoett), crime prevention, control and understanding (Dr. Downing), and issues of public safety and social justice (Tokuhiro, Downing, Slane, Stoett, Hung, etc). all figure centrally into the theme of community wellness.

**(3) Education for the 21st Century:** Ontario Tech’s education researchers investigate the ways in which “learning and teaching can be reformed and improved through the use of digital technologies.” As evidence of the University’s leadership in this discipline, Dr. Janette Hughes was awarded the Canada Research Chair in Technology and Pedagogy in 2015. Her work excels in the priority goal to study “the integration of learning and teaching across the life-span in the digital economy.”

Further, the mandate of the Digital Life Institute is broad, flexible and therefore nimble: we will be easily adaptable to a new Research Strategy which we anticipate will soon be developed for Ontario Tech going forward.

#### **1.4.3. Internal Researchers and Faculties**

As noted above, the Digital Life Institute grows out of existing faculty research strengths and interests, that have been leading to both formal and informal research collaborations for at least a decade, as reflected in the membership of the Institute (CVs attached):

- Dr. Aziz Douai – Communication and Digital Media Studies, FSSH – social media, digital media, political publics;
- Dr. Steven Downing – Criminology, FSSH – crime within online gaming; use of VR to study criminal behavior; cybercrime;
- Dr. Gary Genosko -- – Communication and Digital Media Studies, FSSH – theory and philosophy of machine thinking;
- Dr. Janette Hughes – Faculty of Education – digital literacies; educational uses of digital technologies, in both K-12 and teacher education;
- Dr. Patrick Hung – Networking and Information Security, FBIT – privacy and robots
- Dr. Bill Kapralos – Game Development and Entrepreneurship, FBIT -- VR/AR; serious games, acoustical modeling, and multimodal interactions;
- Dr. Tanner Mirrlees -- Communication and Digital Media Studies, FSSH – political economy of digital entertainment industry; connection between gaming, science fiction, and the military;
- Dr Isabel Pedersen – CRC in Digital Life, Media, and Culture, FSSH – AI ethics, embodied computing and human subjectivity;

- Dr. Andrea Slane – Legal Studies, FSSH – law and digital technology; privacy and data protection; cyberbullying; obligations to protect and empower vulnerable users;
- Dr. Peter Stoett – Dean, FSSH – sustainability and human rights issues associated with AI;
- Dr. Akira Tokuhiko – Dean, FESNS – data analytics, energy systems, public safety
- Dr. Alvaro Uribe Quevedo – Game Development and Entrepreneurship, FBIT – design and use of VR and 3D user interfaces towards creating interactive and meaningful experiences, including in health care in the form of exergames and serious games.

This group of faculty members have been in formal and informal collaboration, and are eager to build an institute where more formalized collaboration is consistently supported and encouraged.

The Digital Life Institute will connect several currently siloed research groups and labs to bring together trans-disciplinary groups of scholars to foster dialogue, inquiry and analysis into social and human perspectives of rapid technological advancement. The Digital Life Institute will further be bolstered by the experience of Steering Committee members Drs. Stoett (Dean) and Slane (Associate Dean, Research) at FSSH, who both have experience either establishing or running a research institute at other universities. Namely, Dr Stoett established and directed the Loyola Sustainability Research Centre at Concordia University, and Dr. Slane was Executive Director of the Centre for Innovation Law and Policy at the University of Toronto, Faculty of Law.

#### 1.4.4 External Partners and Members

Plans for the Digital Life Research Institute include fostering partnerships with external organizations, who will help form the foundation for Digital Life Institute, and in some cases, provide leadership. This process will require communication between external partners and Ontario Tech University at the Decanal and Executive levels.

Partnerships under discussion or already in the works include:

Dr Ann Hill Duin, University of Minnesota, Wearables Research Collaboratory (<https://etrc.umn.edu/> - letter of support attached);

Dr. Andrew Iliadis, Director of the Critical Data Lab, Temple University, Klein College of Media and Communication (<https://klein.temple.edu/>);

Dr. Kamen Kanev, Shizuoka University Hamamatsu (Japan), Research Institute of Electronics (<https://www.shizuoka.ac.jp/english/subject/labo/rie/>); – MOU has been signed between the two schools

Further discussions have been initiated with the following possible partners: Trent University, Centre for Aging and Society (<https://www.trentu.ca/aging/>); Shizuoka University University of Ottawa, Centre for Law, Technology and Society (<https://techlaw.uottawa.ca/>); OCADU; University of Toronto, McLuhan Centre (<https://ischool.utoronto.ca/research/institutes-labs/the->

[mcluhan-centre-for-culture-and-technology/](http://mcluhan-centre-for-culture-and-technology/)); Ontario Shores Centre for Mental Health Sciences (<https://www.ontarioshores.ca/>); Mozilla Foundation (<https://foundation.mozilla.org/en/>); Arizona State University School for the Future of Innovation in Society (<https://sfis.asu.edu/school-future-innovation-society>).

#### 1.4.5 Grant Opportunities

In terms of grant funding, the Digital Life Institute's mission also aligns closely with themes and objectives identified by the Social Sciences and Humanities Research Council (SSHRC). One SSHRC objective from its current Strategic Plan (2016-2020) is “to contribute to a future research landscape that sees: more Canadian researchers and students successfully leveraging advances in new technologies, from virtual reality environments to increasingly sophisticated data analytics; and more researchers engaged in interdisciplinary research within and beyond the humanities and social sciences.” SSHRC also lays out future challenge areas for its researchers, such as: “How can emerging technologies be leveraged to benefit Canadians?” that posits “social sciences and humanities are uniquely positioned to build knowledge on the ... human dimensions that influence the creation of technologies, their impacts and their possibilities. This includes understanding the opportunities and risks associated with the investment in—and adoption of—emergent and disruptive technologies.” By responding directly to SSHRC objectives and priorities, the Digital Life Institute is well positioned for securing the necessary external funding that will establish Ontario Tech University as a leader in this field. On a recent visit to Ontario Tech University, the president of SSHRC expressed great enthusiasm for the Digital Life Institute idea, and the work already accomplished by Dr. Pedersen and the Decimal Lab.

The Digital Life Institute will be well positioned to develop partnership grants not only through SSHRC but through those major funding opportunities that seek to enhance cross-disciplinary collaboration (e.g. with NSERC and CIHR).

#### 1.5 Student Involvement and Training

A central reason for establishing the Institute at Ontario Tech University is to afford better research sustainability at the south campus, which lacks research technology, graduate students in Digital Life Studies, and staff technicians. A goal for the Institute will be to help Ontario Tech University meet its mandate for research excellence and graduate student research training. In 2012, Ontario Tech University committed a graduate program affiliation to support the Canadian government funding (\$1,000,000) for Dr. Pedersen's *CRC in Digital Life, Media and Culture*. It has not yet met this commitment. The formalization of the Institute will assist Ontario Tech University in securing appropriate graduate programming. For example, Digital Life Institute will be closely affiliated with the envisioned emerging multi-faculty MA program in Artificial Intelligence Studies. Further, FSSH has a proposal in progress for an MA in Social Practice and Innovation, which will also provide research assistance opportunities with the Digital Life Institute. The Digital Life Institute could further help to realize the goal of infusing existing tech-focused

graduate programs at Ontario Tech University with human-centered approaches (degree programs in Computer Science, Information Security, or Health Science).

The model for HQP training that will be employed by the Digital Life Institute is, both by necessity and by design, a combination of more traditional graduate student training (research supervision plus research assistantship) and somewhat non-traditional. As a CRC, Dr. Pedersen has done an exceptional job of attracting high-calibre students and recent graduates from various academic backgrounds (e.g., History, Information Technology, Communication Studies, Philosophy), exposing them to a challenging and innovative inter-disciplinary learning and training environment; many have gone on to higher learning or jobs within start-up IT companies. Given the interdisciplinary nature of the research, Dr. Pedersen has been co-supervising graduate students in the Faculty of Business and Information Technology and the Faculty of Education. She is also appointed to the Yeates School of Graduate Studies at Ryerson University and is an Associate Member of the Joint Graduate Program in Communication & Culture at York University/Ryerson University. Her affiliations at these universities enable her to attract exceptional students and train them in the Decimal Lab, and highlight Ontario Tech as a strong dynamic academic partner in the Greater Toronto Area.

The Digital Life Institute, as a trans-disciplinary entity, can also serve as a hub for social science and humanities related training for Ontario Tech students in more technically oriented disciplines. This sort of cross-disciplinary, cross-faculty, and indeed cross-institutional training will be a central feature of the project housed in the Digital Life Institute.

Further, in line with FSSH plans to develop a “post doc culture”, the Digital Life Institute will actively recruit post-doctoral researchers, who will be supported as they pursue SSHRC and other postdoctoral funding opportunities.

## **1.6 Resource Requirements**

### *1.6.1. Physical Requirements*

The Digital Life Institute will utilize the space that is currently housing the Decimal Lab at Bordessa Hall at 55 Bond St in Oshawa, as well as the Decimal Lab space within the Centre for Social Innovation (CSI) at 192 Spadina Ave, Toronto (<https://socialinnovation.org/location/192-spadina/>). These spaces do not require any additional renovation or equipment, as they are part of collective spaces that have access to phones, wifi, and printers.

### *1.6.2. Staffing Requirements*

Since the Digital Life Institute builds on existing faculty collaborations and labs, a main area of growth is the acquisition of staff to help with coordination. We therefore consider the main goal for the first two years to be to establish a stable means of funding an Institute Coordinator who will be tasked with 1) managing needs and providing administrative support to all of the Digital Life Institute projects and grants acquisition, both ongoing and in development or proposal stages, and 2) providing administrative support for publicity and marketing for projects and events.

All proposed steering committee members will be encouraged to include funding for the project coordinator in grant applications. Dedicated tech support is another longer term goal of the Digital Life Institute fundraising efforts.

Future targeted partnerships and investors to grow and sustain the institute include:

- FOUNDATIONS:
  - Mozilla Foundation
  - Alfred P. Sloan Foundation
  - Bill & Melinda Gates Foundation
  - Digital Trust Foundation
  - Ford Foundation
  - Hewlett Foundation
  - International Data Responsibility Group
  - John D. and Catherine T. MacArthur Foundation
  - John S. and James L. Knight Foundation
  - Media Democracy Fund
  - Open Society Foundation
  - Responsible Data Forum
  - Robert Wood Johnson Foundation
  - Sara & Evan Williams Foundation
  - Siegel Family Endowment
  - Solidago Foundation
  - W.K. Kellogg Foundation
  - Pivotal Ventures (Melinda Gates)
- NOT FOR PROFIT GROUPS:
  - Canadian Civil Liberties Association
  - Center for Democracy & Technology
  - Canadian Internet Policy and Public Interest Clinic
  - The Engine Room (<https://www.theengineroom.org/>)
  - Upturn (<https://www.upturn.org/>)
- GOVERNMENT/PUBLIC SERVICE:
  - Durham Region
  - City of Oshawa
  - Toronto Public Library
  - Oshawa Public Libraries
  - Information and Privacy Commissioner of Ontario
  - Privacy Commissioner of Canada
- MUSEUMS:
  - Royal Ontario Museum
  - Art Gallery of Ontario

- Robert McLaughlin Art Gallery
  - Whitby Station Gallery
- COMPANIES:
  - Amazon
  - Google
  - Microsoft
  - Microsoft Research
  - North, Inc.
  - Samsung Accelerator
  - Ontario Power Generation
  - Bruce Power
  - Kinetrics
- INTERNATIONAL:
  - UN Global Pulse
  - UNICEF



## Initial Governance of the Digital Life Institute

Friday, October 25, 2019

Digital Life Institute is based on the mission to support researchers and labs from across the University and that of external partners. Governance and oversight of the Institute will be through a Director and a Steering Committee comprised of the Institute Partners.

Role	Mandate	Appointment of Members
Director	<ul style="list-style-type: none"> <li>Coordinate and Manage administration of Institute</li> <li>Foster opportunities for partnerships, donors</li> </ul>	Five-year term appointed according to university policy <ul style="list-style-type: none"> <li>Initial director: Isabel Pedersen</li> </ul>
Steering Committee: Internal and External representation	<ul style="list-style-type: none"> <li>Set annual goals for the Institute for research funding; events; projects; training</li> <li>Monitor progress toward those goals</li> </ul>	Three-year term

### *Director*

The *Director* will govern the Digital Life Institute's progress and management, including budgetary matters and overall concerns. The Director will compile the annual report on research activities, will cultivate partnership opportunities and work with existing partners, and will set the agenda for the annual meeting. It will be submitted to the respective dean(s), with copies to the Vice-President, Research and Innovation and the Provost.

### *Steering Committee*

The Steering Committee will be comprised of representatives from partner organizations and affiliated faculties within Ontario Tech University. The Steering Committee will set annual goals for the Digital Life Institute for research funding; events; projects; training activities and monitor progress toward those goals. The Steering Committee will meet at a minimum of two times per year (one of them can include the annual meeting) and help prepare the annual report with the Director.

*Annual General Meeting*

All stakeholders of the Institute will be invited to an annual meeting to discuss the activities of the Institute in the past year (as reflected in the Director's Annual Report), as well as plans for the coming year. Stakeholders include partners, collaborating researchers, graduate students, collaborating community members, and faculty previously or prospectively involved in Institute research projects.

*Goal Setting and Metrics*

The Digital Life Institute will pursue the following initial goals.

Year One	<ul style="list-style-type: none"> <li>• Initiate new research collaborations</li> <li>• Secure national and international partners</li> <li>• Research mobilization events, in Oshawa and/or Toronto</li> <li>• Work to apply for a SSHRC Partnership Grant or a comparable grant application.</li> </ul>
Year Five	<ul style="list-style-type: none"> <li>• Measure success via:               <ul style="list-style-type: none"> <li>○ Research projects brought to fruition (publications, KM events, public resources)</li> <li>○ Research funding obtained</li> <li>○ Innovative trans-disciplinary collaborations</li> <li>○ Further commitments from sources outside Ontario Tech                   <ul style="list-style-type: none"> <li>– other universities, companies, not-for-profit organizations</li> </ul> </li> </ul> </li> </ul>

**Membership List and CVs**

The CVs of the initial Ontario Tech University members of the Institute are attached as Appendix 1, including Drs. Aziz Douai, Steven Downing, Gary Genosko, Janette Hughes, Patrick Hung, Bill Kapralos, Tanner Mirrlees, Isabel Pedersen, Andrea Slane, Peter Stoett, Akira Tokuhito, and Alvaro Uribe Quevedo.

	Institute Budget						Justification
	Year 1	Year 2	Year 3	Year 4	Year 5	Total	
1. Operational Budget							
1.1 Labour Costs - Institute Staff							
Institute Coordinator Technician	\$ 20,586 \$	\$ 20,998 \$	\$ 21,418 \$ \$ 5,000 \$	\$ 42,642 \$ \$ 5,000 \$	\$ 43,495 \$ \$ 5,000 \$		50% FTE, 2% inflation rate (level 4, step 1 \$41.172) for first 3 years; 100% FTE in Year 4 IT does not support research labs, equipment, website administration and maintenance
Benefits (9%)	\$ 1,853 \$	\$ 1,890 \$	\$ 2,378 \$	\$ 4,288 \$	\$ 4,365 \$	-	Employer Costs @ 9%
SUB-TOTAL LABOUR	\$ 22,439 \$	\$ 22,888 \$	\$ 28,796 \$	\$ 51,930 \$	\$ 52,860 \$	-	
1.2 Labour Costs - Director							
Teaching Releases (Director)	\$ 7,717 \$	\$ 7,871 \$	\$ 16,058 \$	\$ 16,379 \$	\$ 16,258 \$		Two are necessary after the CRC ends, one is confirmed from SSH
Benefits (9%)	\$ 695 \$	\$ 708 \$	\$ 1,445 \$	\$ 1,474 \$	\$ 1,463 \$		
SUB-TOTAL LABOUR	\$ 8,412 \$	\$ 8,579 \$	\$ 17,503 \$	\$ 17,853 \$	\$ 17,721 \$	-	
1.3 Institute Operating Costs							
Decimal Lab Space (Pedersen)	\$ 32,720 \$	\$ 32,720 \$	\$ 32,720 \$	\$ 32,720 \$	\$ 32,720 \$		In Kind from FSSH (818 sq ft @ \$40/sq ft)
Toronto CSI Space	\$ 14,306 \$	\$ 14,306 \$	\$ 14,306 \$	\$ 14,306 \$	\$ 14,306 \$		Split between FSSH and Isabel (her faculty Funds)
STEAM-3D maker lab (Hughes)							In Kind from Fed (879 sqft @ \$40/sqft)
IT Support							
Equipment							
Office Supplies and Services	\$ 200 \$	\$ 200 \$	\$ 200 \$	\$ 200 \$	\$ 200 \$		basic office supplies, toner - faculties will cover most
Staff and Director Travel							
Steering Committee travel and Other (explain)							
SUB-TOTAL-Institute Operating Costs	\$ 47,226 \$	\$ 47,226 \$	\$ 47,226 \$	\$ 47,226 \$	\$ 47,226 \$	-	
2. Research Networking							
Annual Meeting							
Work-in-progress Workshops							
Partnerships							
Other (explain)							
SUB-TOTAL-Research Networking	\$ - \$	\$ - \$	\$ - \$	\$ - \$	\$ - \$	-	
3. Communications							
Website	\$ 2,000 \$	\$ 1,000 \$	\$ 1,000 \$	\$ 1,000 \$	\$ 1,000 \$		create, maintain, expand, update website, Domain name server fees
Other (Merchandise)							
SUB-TOTAL Communications	\$ 2,000 \$	\$ 1,000 \$	\$ 1,000 \$	\$ 1,000 \$	\$ 1,000 \$	-	
4. Knowledge Transfer and Dissemination							
Speaker Series							honararia, room booking, speaker travel
Maker Workshops							
Symposia							
Publication Costs							
Conference							
Other (explain)							
SUB-TOTAL	\$ 0 \$	\$ 0 \$	\$ 0 \$	\$ 0 \$	\$ 0 \$	0	
TOTAL OPERATIONAL BUDGET REVENUE	\$ 80,076 \$	\$ 79,693 \$	\$ 94,525 \$	\$ 118,009 \$	\$ 118,807 \$	-	
FSSH Contribution to Institute Coordinator	\$ 4,000 \$	\$ 4,000 \$	\$ 4,000 \$	\$ 4,000 \$	\$ 4,000 \$		
FSSH Contribution to Toronto CSI Space	\$ 14,306 \$	\$ 14,306 \$	\$ 14,306 \$	\$ 14,306 \$	\$ 14,306 \$		
FSSH Contribution to Course release	\$ 8,267 \$	\$ 8,412 \$	\$ 8,559 \$	\$ 8,708 \$	\$ 8,861 \$		
FSSH Inkind Contribution of Decimal Lab Spa	\$ 32,720 \$	\$ 32,720 \$	\$ 32,720 \$	\$ 32,720 \$	\$ 32,720 \$		
TOTAL REVENUE	\$ 59,293 \$	\$ 59,438 \$	\$ 59,585 \$	\$ 59,734 \$	\$ 59,887 \$	-	
TOTAL OPERATIONAL BUDGET LESS REVENUE	\$ (20,783) \$	\$ (20,255) \$	\$ (34,940) \$	\$ (58,275) \$	\$ (58,920) \$	-	

Student and Postdoc Salaries									
									Comments
	Research Assistants								
	Masters Students								
	PhD Students								
	Post-Doctoral Students	\$	45,000						Pedersen will supervise one SSHRC Postdoctoral Fellow
	Visiting Scholar								
	Other (explain)								
	Training fee								
	Benefits (9%)								
SUBTOTAL Trainees		\$	45,000	\$	-	\$	-	\$	-
Research Operating Costs									
	Travel								
	Equipment								
	Other (explain)								
		\$	-	\$	-	\$	-	\$	-
SUBTOTAL Operating		\$	45,000	\$	-	\$	-	\$	-
TOTAL RESEARCH COSTS									
REVENUE RESEARCH		45,000							

## BOARD REPORT

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**SESSION:**Public ☒**ACTION REQUESTED:**Decision ☒  
Discussion/Direction ☐  
Information ☐Financial Impact ☐ Yes ☒ NoIncluded in Budget ☐ Yes ☒ No**TO:** Board of Governors**DATE:** February 27, 2020**PRESENTED BY:** Les Jacobs, Vice-President, Research and Innovation**SUBJECT:** Establishment of the Centre for Small Modular Reactors

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**BOARD MANDATE:**

In accordance with Article 1.4(b) of By-law No. 2 and the [Procedures for the Creation of Research Entities](#), Academic Council makes recommendations to the Board on matters including the establishment of research centres.

The Research Board, at its February 6, 2020 meeting, reviewed the proposal by Dr. Kirk Atkinson from the Faculty of Energy Systems and Nuclear Science to establish the Centre for Small Modular Reactors and unanimously approved the motion of a recommendation that it go forward to Academic Council.

Academic Council will be considering whether to recommend the establishment of the Centre for Small Modular Reactors to the Board of Governors for approval at their meeting on Tuesday, February 25.

Given the time sensitive nature of the proposal, we are including it on the agenda for the Board meeting pending Academic Council's recommendation on February 25.

**BACKGROUND/CONTEXT & RATIONALE:**

Ontario has traditionally had a thriving nuclear industry and has relied on electricity generated by its three Nuclear Generating Stations (NGS) to power its homes and businesses. In the 1970's, Canadian engineers and scientists successfully designed the Canadian Deuterium Uranium (CANDU) reactor, the first of which produced 1744 Megawatts of heat and 515 Megawatts of electricity. The CANDU design was improved in the following decades and has been exported to Argentina, China, India, Pakistan, Romania and South Korea. There are currently 18 CANDU reactors operating in Ontario, along with one in New Brunswick. In 2025, one quarter of the nuclear generating capacity in Ontario will be lost through the planned closure of the six reactors at the Pickering NGS in Durham Region. This loss of generating capacity will need to be replaced in the near-term by fossil-fuels, as evidenced by Ontario Power Generation's (OPG) recent acquisition of gas-fueled power stations, and will reduce Ontario's ability to meet its climate change targets

and in so doing diminish its green credentials. Whilst in the medium-term construction of new CANDU units would be an option, experience from around the world has shown that building Gigawatt-scale reactors is too great an economic risk.

Recognizing the benefits of diversified power generation, and taking advantage of modern manufacturing techniques whilst understanding the need to comply with more stringent safety regulations; for the past decade a number of vendors have proposed Small Modular Reactor (SMR) designs that are 10-100 times smaller than the existing power reactors. Capable of being built in a factory where they can benefit from improved quality control and economies of scale, they can be transported to and from site using road, rail, or water-based transport. These transportation options facilitate deployment in remote, often indigenous, communities where energy supply is a limiting factor in quality of life and economic development, or to support energy-intensive extractive industries such as mining. The potential of SMRs has led to many nations racing ahead to realize the fiscal and employment benefits gained through being an early adopter. As well as being capable of meeting base-load and surge electricity demands, SMRs could potentially be manufactured quickly enough to provide the province, and Canada, with a major source of near-zero-carbon energy within the next ten years. To date, eleven SMR designs have been submitted to the regulator, the Canadian Nuclear Safety Commission (CNSC), for consideration.

Following the methodology developed by Rolls-Royce, the UK technical authority for small pressurized water reactors (PWR's) used on-board nuclear submarines, the SMR life cycle has six stages: Assessment, Concept, Development, Manufacture, Use, and Disposal. The first three stages are collectively referred to as 'design'. All eleven SMR vendors have done some initial market analysis and requirements capture, and all have successfully completed concept designs. All vendors are currently at the development (detailed design) stage. None of the eleven proposed SMRs has been manufactured and the first is unlikely to be operational until at least the mid-to-late 2020s. OPG has not yet selected a preferred vendor, or vendors, for commercial deployment.

Many of the eleven proposed SMR designs are based on, or adapted from, feasible concepts last investigated in the 1960's. Whilst a number of prototype reactors were built and operated during this period; the scientific understanding, technical capabilities, and regulatory oversight of today was not there. As a consequence, despite some of the early prototypes, or their underpinning technologies, showing great promise; all SMR vendors must undertake significant research and development (R&D) before they will be able to build and operate first-of-a-kind (FOAK) systems. Moreover, responsibility for the environment now requires that proposed SMRs undergo extensive environmental impact assessment, including their whole life carbon footprint, and be 'designed for disposal', a complicated endeavor given its socio-political dimensions. The speed at which R&D work can be completed will largely determine which design is first to market. Some vendors have indicated a commitment to manufacture all, or part, of their SMRs in Canada.

Nuclear engineering, like automotive engineering, is an application-focused field-of-study rather than a subject in its own right. Engineers and scientists, whether they be working on mechanics, electrics, controls, or human factors, along with professional colleagues working in such domains as ethics, business, and public relations, are all necessary to bring a new product to market. In the case of automobiles, Ontario Tech University has recognised the need for this multi-disciplinary approach through the establishment of the Automotive Centre of Excellence (ACE). All universities undertaking significant nuclear reactor-focused research across more than one domain have opted to establish a research centre to focus their efforts.

Despite strong interest nationally, no academic research centre focused exclusively on SMRs has, to date, been established and hence there exists the time-limited opportunity for Ontario Tech University to become the focal point for SMR research in Canada. Moreover, uniquely in Canada, Ontario Tech currently has the only two faculty members with real-world industrial experience of

SMRs. Prior to joining the university in January 2019, for a decade, Dr. Atkinson worked in the UK Naval Nuclear Propulsion Programme (NNPP), most notably as Technical Lead for Reactor Physics and High-Performance Computing, and later as Technical Lead for Radiation Physics and Criticality. Involved in multiple aspects of research, consultancy, education and training in support of light-water cooled pressurised water reactors (PWRs), Dr. Atkinson has deep experience in the design, manufacture, operation, and decommissioning of these canonical SMRs. Dr. Tokuhiro joined Ontario Tech in 2017 after several years as Senior Principal Engineer at NuScale Power, a PWR-based SMR start-up in Oregon, and leading vendor in North America. Prior to this, Dr. Tokuhiro worked on small fast reactors. According to Ontario Power Generation (OPG), subject to financial and regulatory approval, it is likely that installation of Canada's first grid-scale SMR will commence in Durham Region (at the Darlington new-build site) mid-decade, first power being intended for 2028. Given the short timescale it makes a light-water cooled reactor (i.e. a PWR) the only near term viable option.

Branching out of the Faculty of Energy Systems and Nuclear Science (FESNS), the Centre for Small Modular Reactors (hereafter referred to as "CSMR" or "the centre") will become a major focal point and single point-of-contact for SMR research, consultancy, education and training within the university, in Canada, and Worldwide. At its heart is the principle that the whole is better than the sum of its parts. CSMR will bring together the diverse capabilities of individual university academics and research groups, leveraging their combined expertise towards SMR-specific problems, setting the narrative for Canada's burgeoning SMR industry, and allowing more significant funding opportunities to be exploited. Requiring large and often World-leading teams, such opportunities include Ontario Research Fund Research Excellence campaigns and New Frontiers Research Fund Transformation grants, each of which potentially offers funding circa \$1M per annum. In this regard, Dr. Atkinson has received an encouraging level of support from Ontario Power Generation (OPG), SNC-Lavalin Group, Kinectrics, U-Battery Canada, Westinghouse Electric Canada, Terrestrial Energy, Promatom Nuclear and Ecometrix. Initially, for the purposes of this proposal, membership of CSMR has been drawn from a quorum of persons within FESNS that have significant SMR-related experience. It is intended that, through the centre, any Ontario Tech faculty member (or indeed any Canadian academic) with serious interest in SMRs can become 'SMR-ready' by working with more experienced colleagues, as well as gaining increased credibility through membership.

## **RESOURCES REQUIRED:**

### **Physical Requirements**

Due to the virtual nature of the centre, where the capabilities and facilities of individual faculty members' research groups are leveraged towards the collective effort; **no additional office or laboratory space is currently required.** If a project manager is hired (e.g. as required by a large Ontario Research Fund submission), they would co-locate with the Graduate Program Manager in ERC 4026. It is also proposed that the large graduate student office, ERC 4100, be subdivided such that one half houses the graduate students who are employed on centre-based projects. There is sufficient free desk space in ERC 4100 to accommodate a twofold increase in graduate students if hot-desking is enforced. It is projected that a maximum twofold increase in cross-faculty graduate student enrollment could occur if all targeted grants were successful.

### **Staffing Requirements**

Upon establishment, **no additional support staff are required.** Administration, advertising and website/social media maintenance will be undertaken by CSMR members in the first instance. Subject to sufficient funding being secured (e.g. from a large program grant), a project manager will be employed to co-ordinate work packages and undertake some of the other administrative functions. Additional staff support (e.g. technician time) will follow a pay-on-demand model, again reflecting the expand and contract model of operation. Graduate and undergraduate students will be employed in the normal way, and visiting scholars will be hosted on an ad-hoc basis in accordance with Ontario Tech University policy.

### **Budget and Financial Requirements**

**No start-up funding is requested.** The Faculty of Energy Systems and Nuclear Science will underwrite the administrative (i.e. communications and advertising, and one, one-day on-site workshop per annum) costs of the centre from its operating budget unless and until external funding is secured. These costs are not expected to exceed \$7500 per annum. Given that many of the initial meetings required to establish the centre and build-up partnerships will either be in the GTA, or can happen at major events which faculty already attend (e.g. the Canadian Nuclear Association conference), costs of travel will be borne initially by individual faculty members. As one of the aims is to be a force-multiplier for existing strengths; it is intended that the centre be able to be adaptable to funding, yet be able to successfully operate with a limited budget. The limited budget is the planning assumption, although larger revenues and hence larger budgets are expected (e.g. the Ontario Research Fund submission requested a cash budget of \$3,162,686 over five years). **No unsecured funding has been assumed** for budget planning purposes. Given FESNS has control over, and experience of delivering training courses, a conservative estimate of revenue from such courses **has** been assumed. Profits will be shared between the centre, the faculty and the University following existing precedent. In addition to this Prof. Atkinson has recently conditionally secured five [5] years of SMR-relevant funding through a UNENE/NSERC Industrial Research Chair and, in 2019, Prof. Tokuhiro secured six [6] years of NSERC CREATE funding for up to four graduate students. SMR-focused Alliance and CREATE grants are planned for submission in 2020. It is anticipated that additional opportunities will stem from NRCAN and the Canada-UK dialogue if CSMR is established.

### **IMPLICATIONS:**

Ontario Tech has exceptional individual expertise in SMR or SMR-related topics, as well as growing infrastructure and equipment capabilities. Most recently, in addition to its health physics dose response facility, its design lab, and its materials and chemistry labs, FESNS has commissioned a two-storey (9 m) thermal-hydraulics loop, a unique facility in Canada and ideal for validation and verification (V&V) work that SMR vendors must undertake in order to get regulatory approval. Currently, FESNS is in the process of acquiring a unique graphite-based subcritical reactor that industry has already expressed an interest in using for V&V activities. Given the diversity of disciplines (i.e. nuclear materials, reactor physics, thermal hydraulics, radiation protection, control and instrumentation, etc.) needed to support nuclear projects, the burgeoning SMR industry is looking for academic partners of sufficient size and, currently, despite being the only school in Canada with faculty member experts across the full range of disciplines, Ontario Tech does not effectively project that. SMR funding is starting to become available and, thus far, small amounts are going to our competitor universities. Worse still is the fact that, as these competitors do not have the full range of capabilities needed to complete larger projects, funding is being sent overseas (especially to the UK and US) where nuclear researchers have set up centres of excellence.

Ontario Tech is losing market share in what should be one of its key markets. This must cease immediately. There is currently a short window of time during which Ontario Tech can address this and hence take the lead before others have time to adapt. By bringing together its disparate existing capabilities under one umbrella, not just from FESNS, but from all faculties, Ontario Tech will be able to demonstrate it has the size and scale to undertake this important work. This is a one-time opportunity, SMRs will start being built in the next five years, and in ten years the first SMR will be connected to the grid. This is a Worldwide phenomenon and Ontario Tech is ideally placed to take advantage of this nexus in energy production. Moreover, by having an established SMR brand, we become the go-to place in Canada, which has the added benefit of public relations opportunities and increased visibility. There is currently no SMR centre in Canada, but if we delay there will be.

In terms of timeliness, this proposal reflects several external factors, the most important being the SMR timeline described above. In addition to this the forthcoming Canadian Nuclear Association (CNA) conference in Ottawa is an ideal forum at which to publicise the centre, especially since Prof. Atkinson is joining the CEO of Canadian Nuclear Laboratories (CNL) and the CTO of Westinghouse, on a panel discussing 'SMRs as a disruptive technology', and because several strategic meetings on the way forward for SMRs in Canada are being held. Following on from the 2019 meeting, contracts were signed with competitor universities for a number of work packages. Through CSMR, Ontario Tech will be better able to challenge for this work. Furthermore, Prof. Atkinson has been asked by Natural Resources Canada to join the Canadian government delegation to the UK (led by the Associate Deputy Minister, Shawn Tupper) in March 2020. During this dialogue, SMR collaboration at the industry and academic levels are key agenda items, the outcome of the meeting being a harmonization of efforts between the two countries. From this, it is expected that opportunities funding will result. As UK centres above will be in attendance, through the vehicle of CSMR, Ontario Tech can challenge for a key role in this international development. Once again, this is a one-time opportunity for Ontario Tech to demonstrate it is a leader in the SMR field.

#### **ALIGNMENT WITH MISSION, VISION, VALUES & STRATEGIC PLAN:**

Given its industrial partners (i.e. OPG) and the threat posed by climate change; energy was one of the cornerstone themes in UOIT's 2013-2020 Strategic Research Plan, and remains as such in the Ontario Tech 2020-2025 research plan currently under review. Moreover, the President of the university is currently pursuing an energy initiative which may culminate in Ontario Tech becoming a regional hub or larger institute. Together with the Clean Energy Research Laboratory (CERL), and the extensive work undertaken on hydrogen-based fuel, CSMR would fit under this umbrella and be a distinct part of this endeavour. More broadly, the 2019 Ontario Economic Outlook and Fiscal Review had a number of themes (e.g. Make life more affordable: Lowering the cost of living in the north) for which energy provision is a key part. The cost and supply security of energy in Canada's north is one quality-life challenges facing our Northern and remote indigenous communities. SMRs, especially very small SMRs (vSMRs) are a potential solution to this that is under active investigation at a Federal level. The Canadian SMR Roadmap (<https://smrroadmap.ca/>), the development of which was led by the Nuclear Energy Division of Natural Resources Canada (NRCan), outlines the plan for SMRs within the country. OPG is actively looking at building an SMR plant in Darlington within this decade and CSMR would place Ontario Tech at the forefront in terms of both R&D and provision of the, as-yet, untrained SMR workforce.

#### **ALTERNATIVES CONSIDERED:**

- Do nothing – does not meet the objective, coordination of activities is not enhanced, no increase in status of Ontario Tech, contrary to the university's stated position in terms of energy initiatives, no advantage in applications for large-scale funding.
- Delay establishing a centre – would partially meet the objective in the longer term, but would do so at significant strategic cost. By not being first, we would cede advantage and influence to competitor universities.
- Join an established centre – given that existing centre's with a nuclear power-related focus currently lack significant SMR-specific expertise, Ontario Tech would be losing advantage, increase in status of Ontario Tech would be diminished through the subordinate role, contrary to the university's stated position in terms of energy initiatives.

#### **CONSULTATION:**

- *Office of Research Services*: Concept shared May 26, 2019.
- *VPR*: Discussed at length October 2, 2019.

- *Partnership/advancement teams*: Concept shared May 14, 2019 and June 27, 2019, respectively.
- *Internal researchers*: March 29 – September 20, 2019.
- *External researchers/industry partners*: Summer 2019.
- *FESNS Faculty council*: Concept introduced in Spring 2019, update on progress provided February 20, 2020.
- *Research Board*: Motion passed February 6, 2020.
- *Academic Council*: considered on February 25, 2020.

#### **COMPLIANCE WITH POLICY/LEGISLATION:**

The Centre for Small Modular Reactors proposal was developed in conjunction with the Office of Research Services to align with the University's [Procedures for the Creation of Research Entities](#).

#### **MOTION FOR CONSIDERATION:**

*That pursuant to the recommendation of Academic Council, the Board of Governors hereby approves the establishment of the Centre for Small Modular Reactors, as presented.*

#### **SUPPORTING REFERENCE MATERIALS:**

1. Proposal for the Creation of the Centre for Small Modular Reactors at Ontario Tech University
2. Centre for Small Modular Reactors Budget

## **Proposal for the establishment of the Centre for Small Modular Reactors (CMSR) at Ontario Tech University**

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### **1. Name of the Entity:**

Centre for Small Modular Reactors (CMSR)

### **2. Proposers:**

#### **2.1. Director:**

Kirk D. Atkinson, PhD  
Associate Professor, Faculty of Energy Systems and Nuclear Science  
[kirk.atkinson@ontariotechu.ca](mailto:kirk.atkinson@ontariotechu.ca)

#### **2.2. Co-Proposers:**

Akira Tokuhiro, PhD  
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[akira.tokuhiro@ontariotechu.ca](mailto:akira.tokuhiro@ontariotechu.ca)

Markus Piro, PhD  
Assistant Professor and Canada Research Chair (Tier II) in Nuclear Fuels and Materials,  
Faculty of Energy Systems and Nuclear Science  
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[filippo.genco@ontariotechu.ca](mailto:filippo.genco@ontariotechu.ca)

### 3. Background, Description and Justification

#### 3.1. Background

Ontario has traditionally had a thriving nuclear industry and has relied on electricity generated by its three Nuclear Generating Stations (NGS) to power its homes and businesses. In the 1970's, Canadian engineers and scientists successfully designed the Canadian Deuterium Uranium (CANDU) reactor, the first of which produced 1744 Megawatts of heat and 515 Megawatts of electricity. The CANDU design was improved in the following decades and has been exported to Argentina, China, India, Pakistan, Romania and South Korea. There are currently 18 CANDU reactors operating in Ontario, along with one in New Brunswick. In 2025, one quarter of the nuclear generating capacity in Ontario will be lost through the planned closure of the six reactors at the Pickering NGS in Durham Region. This loss of generating capacity will need to be replaced in the near-term by fossil-fuels, as evidenced by Ontario Power Generation's (OPG) recent acquisition of gas-fueled power stations, and will reduce Ontario's ability to meet its climate change targets and in so doing diminish its green credentials. Whilst in the medium-term construction of new CANDU units would be an option, experience from around the world has shown that building Gigawatt-scale reactors is too great an economic risk.

Recognizing the benefits of diversified power generation, and taking advantage of modern manufacturing techniques whilst understanding the need to comply with more stringent safety regulations; for the past decade a number of vendors have proposed Small Modular Reactor (SMR) designs that are 10-100 times smaller than the existing power reactors. Capable of being built in a factory where they can benefit from improved quality control and economies of scale, they can be transported to and from site using road, rail, or water-based transport. These transportation options facilitate deployment in remote, often indigenous, communities where energy supply is a limiting factor in quality of life and economic development, or to support energy-intensive extractive industries such as mining. The potential of SMRs has led to many nations racing ahead to realize the fiscal and employment benefits gained through being an early adopter. As well as being capable of meeting base-load and surge electricity demands, SMRs could potentially be manufactured quickly enough to provide the province, and Canada, with a major source of near-zero-carbon energy within the next ten years. To date, eleven SMR designs have been submitted to the regulator, the Canadian Nuclear Safety Commission (CNSC), for consideration.

Following the methodology developed by Rolls-Royce, the UK technical authority for small pressurized water reactors (PWR's) used on-board nuclear submarines, the SMR life cycle has six stages: Assessment, Concept, Development, Manufacture, Use, and Disposal. The first three stages are collectively referred to as 'design'. All eleven SMR vendors have done some initial market analysis and requirements capture, and all have successfully completed concept designs. All vendors are currently at the development (detailed design) stage. None of the eleven proposed SMRs has been manufactured and the first is unlikely to be operational until at least the mid-to-late 2020s. OPG has not yet selected a preferred vendor, or vendors, for commercial deployment.

Many of the eleven proposed SMR designs are based on, or adapted from, feasible concepts last investigated in the 1960's. Whilst a number of prototype reactors were built and operated during this period; the scientific understanding, technical capabilities, and regulatory oversight of today was not there. As a consequence, despite some of the early prototypes, or their underpinning technologies, showing great promise; all SMR vendors must undertake significant research and development (R&D) before they will be able to build and operate first-of-a-kind (FOAK) systems. Moreover, responsibility for the environment now requires that proposed SMRs undergo extensive environmental impact assessment, including their whole life carbon footprint, and be 'designed for disposal', a complicated endeavor given its socio-political dimensions. The speed at which R&D work can be completed will largely determine which design is first to market. Some vendors have indicated a commitment to manufacture all, or part, of their SMRs in Canada.

Nuclear engineering, like automotive engineering, is an application-focused field-of-study rather than a subject in its own right. Engineers and scientists, whether they be working on mechanics, electrics, controls, or human factors, along with professional colleagues working in such domains as ethics, business, and public relations, are all necessary to bring a new product to market. In the case of automobiles, Ontario Tech University has recognised the need for this multi-disciplinary approach through the establishment of the Automotive Centre of Excellence (ACE). All universities undertaking significant nuclear reactor-focused research across more than one domain have opted to establish a research centre to focus their efforts.

In Canada, there are three such nuclear reactor research centres of note. Established in 1992, the Centre of Nuclear Energy Research (CNER) at the University of New Brunswick (UNB), a small entity comprising four faculty members and six graduate students, undertakes applied research in chemistry and instrumentation for industry partners including NB Power, operator of the Point Lepreau Generating Station. Traditionally their work has focused on Canadian Deuterium Uranium (CANDU) reactors, however, backed by matched funding from the Province of New Brunswick, recent investment by ARC Nuclear and Moltex Energy, has led to investment of \$10M in aspects of SMR research and development (R&D) of which CNER has, so far, received almost \$1M. In 2009, the Centre for Advanced Nuclear Systems (CANS) was established at McMaster University with \$24M of funding from the Canadian Fund for Innovation (CFI) and the Province of Ontario. This regional research centre focuses on behaviour of nuclear materials and thermal-hydraulics systems with no specific focus of either CANDU reactors or SMRs. Most recently, in 2019, backed by Bruce Power, the Nuclear Innovation Institute (NII) was established in Bruce County with the explicit purpose of improving Bruce Site operations and the local community.

Further afield, in the United Kingdom, a number of institutes and centres have been established at various universities. The Dalton Nuclear Institute was established by the University of Manchester in 2005. Initially pooling skills and facilities of individual research groups across the university under a single banner, it remained a virtual entity until funding allowed breakout expansion. In 2007, in a similar manner, Imperial College London established the Centre for Nuclear Engineering (CNE). With thirty-three faculty and staff members; CNE is managed via a management team responsible for strategy and administration, a management committee comprised of faculty members, and an advisory board drawn from industry. CNE has very

strong industry support and is a major participant in international consortia. At the University of Strathclyde, the Advanced Nuclear Research Centre (ANRC) was founded in 2015. Whilst the same virtual structure is employed, it differs by having tier 1 (large enterprise) and tier 2 (small-and-medium enterprise) industry members that pay membership dues to the centre. The dues, separately to any grants awarded to academic faculty members, allows a project manager to be employed. This project manager is responsible for assessing those cross-cutting issues pertinent to all industry members, and subsequently devising work packages to be undertaken by academics using the remaining funds available from membership dues. As the outcomes of these work packages are shared freely amongst all members, this approach provides industry partners with maximum value-for-money and minimum financial risk as contributions are leveraged. NII, due to its longstanding links with the University of Strathclyde, has emulated aspects of ANRC's operating model. Subsequent to Dr. Atkinson's visit to the University of Strathclyde in February 2019, ANRC members visited Ontario Tech University for exploratory discussions in May 2019.

Despite strong interest nationally, no academic research centre focused exclusively on SMRs has, to date, been established and hence there exists the time-limited opportunity for Ontario Tech University to become the focal point for SMR research in Canada. Moreover, uniquely in Canada, Ontario Tech currently has the only two faculty members with real-world industrial experience of SMRs. Prior to joining the university in January 2019, for a decade, Dr. Atkinson worked in the UK Naval Nuclear Propulsion Programme (NNPP), most notably as Technical Lead for Reactor Physics and High Performance Computing, and later as Technical Lead for Radiation Physics and Criticality. Involved in multiple aspects of research, consultancy, education and training in support of light-water cooled pressurised water reactors (PWRs), Dr. Atkinson has deep experience in the design, manufacture, operation, and decommissioning of these canonical SMRs. Dr. Tokuhiko joined Ontario Tech in 2017 after several years as Senior Principal Engineer at NuScale Power, a PWR-based SMR start-up in Oregon, and leading vendor in North America. Prior to this, Dr. Tokuhiko worked on small fast reactors. According to Ontario Power Generation (OPG), subject to financial and regulatory approval, it is likely that installation of Canada's first grid-scale SMR will commence in Durham Region (at the Darlington new-build site) mid-decade, first power being intended for 2028. Given the short timescale it makes a light-water cooled reactor (i.e. a PWR) the only near term viable option.

### **3.2. Description**

Branching out of the Faculty of Energy Systems and Nuclear Science (FESNS), the Centre for Small Modular Reactors (hereafter referred to as "CMSR" or "the centre") will become a major focal point and single point-of-contact for SMR research, consultancy, education and training within the university, in Canada, and Worldwide. At its heart is the principle that the whole is better than the sum of its parts. CMSR will bring together the diverse capabilities of individual university academics and research groups, leveraging their combined expertise towards SMR-specific problems, setting the narrative for Canada's burgeoning SMR industry, and allowing more significant funding opportunities to be exploited. Requiring large and often World-leading teams, such opportunities include Ontario Research Fund Research Excellence campaigns and New Frontiers Research Fund Transformation grants, each of which potentially offers funding circa \$1M per annum. In this regard, Dr. Atkinson has received an encouraging

level of support from Ontario Power Generation (OPG), SNC-Lavalin Group, Kinectrics, U-Battery Canada, Westinghouse Electric Canada, Terrestrial Energy, Promation Nuclear and Ecometrix. Initially, for the purposes of this proposal, membership of CSMR has been drawn from a quorum of persons within FESNS that have significant SMR-related experience. It is intended that, through the centre, any Ontario Tech faculty member (or indeed any Canadian academic) with serious interest in SMRs can become ‘SMR-ready’ by working with more experienced colleagues, as well as gaining increased credibility through membership. Whilst it is expected that members participate in the centre’s larger, SMR-focused grant proposals and contribute to industry-funded work packages where agreed, all members remain free to pursue their own external funding.

In terms of research management; individual investigators will have autonomy to manage their individual work packages, although weekly meetings will be encouraged. More formally, three working groups will be struck up; a technical working group, a management working group, and a stakeholder advisory group. The Technical Working Group (TWG) will meet monthly and will comprise of faculty and staff members. The function of the TWG is to agree on strategy, consider funding opportunities, and to communicate technical progress amongst investigators. The Management Working Group (MWG) will meet quarterly and will comprise the Director, the Dean of FESNS (the supporting faculty), and, initially, representatives from Ontario Tech's Office of Research Services (ORS), Research Partnerships and Research Accounting teams. The function of this is group is the reporting of progress relative to the stakeholder expectations and milestones, and to assure that funding is be appropriately spent. As additional public or private revenue becomes available, over time, additional administrative staff will be employed to take over some of those management functions initially delegated to central services. The Stakeholder Advisory Group (SAG) will meet soon after the centre is established (a kick off meeting) and then annually at the start of each subsequent year. It will be comprised of industry supporters (support has been secured from SNC-Lavalin, Kinectrics, U-Battery Canada, Westinghouse Electric Canada, Terrestrial Energy and Promation Nuclear), SMR end-users (support has been secured from OPG and COG), the Director, and two peers from academia. Observers are welcome, where appropriate. The function of the SAG is to provide high level direction, and will be a forum for the centre to be responsive to industry need. The Ontario Tech Research Board and SAG members will be provided with an annual report at the end of each full year.

The aim of the CSMR is to be an umbrella entity that operates on a **low operating cost model** (initially via faculty support) yet can **expand and contract** as funding permits. As external research contract funding is received, it is expected that the centre would receive back its 25% share of the indirect costs charged (as stated in university policy). This 5% (in real terms) of any eligible research contract secured (e.g. \$50k from a \$1M award), would be directed towards the centre’s operating budget to pay for additional promotional activities and human support. In due course, industry membership will be explored. Here, member companies would pay a predetermined amount per annum into a research fund from which mutually beneficial research – adjudicated by the SAG – is funded. This approach maximises leverage and reduces individual risk. This model, used by ANRC, is not appropriate from day one because we start from a different baseline.

### 3.3. Justification

Ontario Tech has exceptional individual expertise in SMR or SMR-related topics, as well as growing infrastructure and equipment capabilities. Most recently, in addition to its health physics dose response facility, its design lab, and its materials and chemistry labs, FESNS has commissioned a two-storey (9 m) thermal-hydraulics loop, a unique facility in Canada and ideal for validation and verification (V&V) work that SMR vendors must undertake in order to get regulatory approval. Currently, FESNS is in the process of acquiring a unique graphite-based subcritical reactor that industry has already expressed an interest in using for V&V activities. Given the diversity of disciplines (i.e. nuclear materials, reactor physics, thermal hydraulics, radiation protection, control and instrumentation, etc.) needed to support nuclear projects, the burgeoning SMR industry is looking for academic partners of sufficient size and, currently, despite being the only school in Canada with faculty member experts across the full range of disciplines, Ontario Tech does not effectively project that. SMR funding is starting to become available and, thus far, small amounts are going to our competitor universities. Worse still is the fact that, as these competitors do not have the full range of capabilities needed to complete larger projects, funding is being sent overseas (especially to the UK and US) where nuclear researchers have set up centres of excellence (e.g. the Dalton Nuclear Institute at the University of Manchester and the ANRC at the University of Strathclyde).

Ontario Tech is losing market share in what should be one of its key markets. This must cease immediately. There is currently a short window of time during which Ontario Tech can address this and hence take the lead before other have time to adapt. By bringing together its disparate existing capabilities under one umbrella, not just from FESNS, but from all faculties, Ontario Tech will be able to demonstrate it has the size and scale to undertake this important work. This is a one-time opportunity, SMRs will start being built in the next five years, and in ten years the first SMR will be connected to the grid. This is a Worldwide phenomenon and Ontario Tech is ideally placed to take advantage of this nexus in energy production. Moreover, by having an established SMR brand, we become the go-to place in Canada, which has the added benefit of public relations opportunities and increased visibility. There is currently no SMR centre in Canada, but if we delay there will be.

In terms of timeliness, this proposal reflects several external factors, the most important being the SMR timeline described above. In addition to this the forthcoming Canadian Nuclear Association (CNA) conference in Ottawa is an ideal forum at which to publicise the centre, especially since Prof. Atkinson is joining the CEO of Canadian Nuclear Laboratories (CNL) and the CTO of Westinghouse, on a panel discussing ‘SMRs as a disruptive technology’, and because several strategic meetings on the way forward for SMRs in Canada are being held. Following on from the 2019 meeting, contracts were signed with competitor universities for a number of work packages. Through CMSR, Ontario Tech will be better able to challenge for this work. Furthermore, Prof. Atkinson has been asked by Natural Resources Canada to join the Canadian government delegation to the UK (led by the Associate Deputy Minister, Shawn Tupper) in March 2020. During this dialogue, SMR collaboration at the industry and academic levels are key agenda items, the outcome of the meeting being a harmonization of efforts between the two countries. From this, it is expected that opportunities funding will result. As UK centres above will be in attendance, through the vehicle of CMSR, Ontario Tech can

challenge for a key role in this international development. Once again, this is a one-time opportunity for Ontario Tech to demonstrate it is a leader in the SMR field.

## 4. Research Mandate

### 4.1. Scope

Small Modular Reactors present a viable way of both meeting our societal need for energy whilst protecting our climate. Unlike large nuclear generating stations, SMR's are designed to be super safe, yet it is known that trust comes by demonstration. As such, working with the leading nuclear supply chain companies, and supported by SMR vendors and end-users, the centre will address those key research needs required to gain public trust. Conscious of work done elsewhere, CSMR will seek to address aspects of SMR manufacture and use that are uniquely novel, or unique to Canada. Initial discussions with the aforementioned SAG industry partners identified four key research themes, each of which has specific focus areas:

- SMR manufacture:
  - Economic analysis demonstrating reduction in capital costs.
  - Additive manufacturing techniques.
  - Design and characterisation of specialised heat exchangers.
- SMR fuel considerations:
  - Accident tolerant fuels for SMRs.
  - Molten salt reactor fuels and materials modeling and characterisation.
- SMR end user applications:
  - Use of SMRs to manufacture medical isotopes.
  - impact of SMR construction on carbon dioxide emissions.
- SMR safety and security:
  - Probabilistic risk metrics for SMR selection.
  - Source term, environmental impact and emergency zone modeling.
  - Physical security and protection factors for SMRs.
  - Bio-dosimetry to determine the radiological impact of low dose radiation.
  - Remote reactor ambient radiation monitoring.

'Manufacture' in this case specifically considers the exploitation and justification of advanced manufacturing techniques (e.g. additive manufacture) to reduce cost of SMRs, as well as SMR fuel considerations (as no SMR design uses natural uranium, the traditional CANDU fuel). 'Use' in this case includes both SMR end user applications (e.g. electricity generation, hydrogen co-generation, desalination, district heating and healthcare) and SMR safety and security considerations (e.g. probabilistic risk, environmental impact, emergency preparedness, remote monitoring and operation, and physical security).

To support SMR manufacturing research, faculty members of FEAS would be encouraged to join CSMR to provide additional technical expertise, whereas faculty members from FBIT could contribute to the economics-based activities. SMR end user applications would benefit from the inclusion of FSSH faculty members, especially on activities related to social license, whilst faculty members from the Faculty of Education could contribute to advanced training

methodologies. As human factors are important to SMR safety and security, as well as end user applications, faculty members from FHS could add additional insight, and, lastly, faculty members from the Faculty of Science could provide additional rigour in the exploration of mathematical modeling (e.g. risk metrics) and bio-dosimetry. In short, **there is a place in CMSR for faculty members from all faculties at Ontario Tech.**

#### 4.2. Alignment

Given its industrial partners (i.e. OPG) and the threat posed by climate change; energy was one of the cornerstone themes in UOIT's 2013-2020 Strategic Research Plan, and remains as such in the Ontario Tech 2020-2025 research plan currently under review. Moreover, the President of the university is currently pursuing an energy initiative which may culminate in Ontario Tech becoming a regional hub or larger institute. Together with the Clean Energy Research Laboratory (CERL), and the extensive work undertaken on hydrogen-based fuel, CMSR would fit under this umbrella and be a distinct part of this endeavour. More broadly, the 2019 Ontario Economic Outlook and Fiscal Review had a number of themes (e.g. Make life more affordable: Lowering the cost of living in the north) for which energy provision is a key part. The cost and supply security of energy in Canada's north is one quality-of-life challenges facing our Northern and remote indigenous communities. SMRs, especially very small SMRs (vSMRs) are a potential solution to this that is under active investigation at a Federal level. The Canadian SMR Roadmap (<https://smrroadmap.ca/>), the development of which was led by the Nuclear Energy Division of Natural Resources Canada (NRCAN), outlines the plan for SMRs within the country. OPG is actively looking at building an SMR plant in Darlington within this decade and CMSR would place Ontario Tech at the forefront in terms of both R&D and provision of the, as-yet, untrained SMR workforce.

#### 4.3. Sustainability

Not wanting to delay, an opportunistic Ontario Research Fund proposal was submitted in late 2019 and a New Frontiers Research Fund Transformation is in preparation. In addition to this, Prof. Atkinson is under consideration for a five [5] year NSERC Industrial Research Chair which has a 50% focus on SMRs, and Prof. Tokuhiro secured six [6] years of SMR-related funding from NSERC in 2019. An SMR-focused Alliance grant, and an NSERC CREATE grant, are planned for 2020. The latter will focus on modeling and simulation and will seek to align with the existing graduate program in modeling and computational science in the Faculty of Science. NRCAN is currently in discussion with its counterparts in the United Kingdom with regards to nuclear energy collaboration. Professor Atkinson has been asked by NRCAN to join the Canadian government delegation to the UK (led by the Associate Deputy Minister, Shawn Tupper) at start-March 2020. During this dialogue, SMR collaboration is one of the key agenda items, the desire being a harmonization of efforts between the two countries. From this, additional opportunities for cross-border funding will result.

### 5. Student Involvement and Training

Graduate students, both MASc and PhD, will be essential to generate research outcomes. In the aforementioned Ontario Research Fund RE-10 submission, funding for sixteen [16] MASc and eight [8] PhD students was requested over the five-year term of the award. In addition to this, Professor Tokuhiko has funding for four [4] PhD students via his CREATE funding. Additional grant proposals, if successful, will sustain further numbers of graduate students. Furthermore, as specific funding may be provided by industry partners under sub-contract, the opportunity for student involvement is clear (undergraduate involvement will be included where appropriate). It is proposed that, for industry funded work, we will award additional Research Assistantships. Due to the engagement of SMR industry partners, all involved Ontario Tech students would, by definition, become the SMR workforce the industry has stated it will need over the next decade.

CSMR will also play a leading role in SMR training and education. Firstly, engagement with SMR vendors allows FESNS faculty members to enhance its undergraduate curriculum to benefit enrolment in the existing undergraduate Nuclear Engineering, and Health Physics and Radiation Science, programs. Emulating what CSI did for Forensic Science; SMR is a major driver of enthusiasm for these disciplines in a climate change-conscious World. Secondly, via its recently awarded NSERC funding and its position within UNENE, Ontario Tech is already developing SMR-focused graduate courses, the first being titled ‘Next generation Reactor Concepts and Design Engineering.’ Finally, emulating the success of the AOOM course delivered by FESNS, CSMR will develop four specialised training courses to address industry needs for upskilling. The first of these courses, addressing light-water reactor technology, is slated to run in Summer 2020. It is expected that this become a revenue generator for the centre, and, by extension, FESNS and the University. Absorbing these courses within a new GDip in SMR Science and Technology will be investigated. The key aim is for Ontario Tech, via CSMR, to be the go-to place for SMR training and education in Canada.

## **6. Research Dissemination and Service Plan**

Research findings will be rapidly published in the public domain (principally key, high-impact journals). Commercially-sensitive and security-sensitive findings will be rapidly shared with the respective sub-contracting partners in order to inform their development (detailed design) and decision-making. An annual one-day SMR workshop will be hosted at Ontario Tech. This workshop will present results and report progress during the year to a wider Canadian audience. A frequently-updated website will be maintained and a social media presence established. It is anticipated that additional media opportunities will be forthcoming. Via the outreach element included in the Ontario Research Fund RE-10 submission or otherwise (e.g. using NSERC Promo Science funding), outreach to potential SMR host communities will be undertaken. The latter is especially important with regards to indigenous communities who are often overlooked and to whom SMRs could provide improved quality of life and economic opportunities.

## **7. Membership List, CVs and Affiliations**

The initial membership on day one will be:

<b>Name:</b>	<b>Position, Faculty:</b>	<b>Expected contributions:</b>
Kirk D. Atkinson, PhD	Associate Professor, Faculty of Energy Systems and Nuclear Science.	<ul style="list-style-type: none"> <li>• Founding Director of CMSR.</li> <li>• (under consideration) NSERC/UNENE Industrial Research Chair in Health Physics and Environmental Safety.</li> <li>• Will lead projects on SMR environmental impact assessment, operations, methods development radiation physics, and diagnostics.</li> </ul>
Akira Tokuhito, PhD	Dean and Professor, Faculty of Energy Systems and Nuclear Science.	<ul style="list-style-type: none"> <li>• Senior leadership support to CMSR.</li> <li>• Via FESNS, budget support.</li> <li>• Will lead projects on probabilistic design/risk assessment.</li> </ul>
Markus Piro, PhD	Assistant Professor and Canada Research Chair (Tier II) in Nuclear Fuels and Materials, Faculty of Energy Systems and Nuclear Science	<ul style="list-style-type: none"> <li>• Will lead projects on SMR fuels and materials, as well as some interest in advanced manufacturing approaches.</li> </ul> <p>(note: it is anticipated that FEAS faculty members would join CMSR and contribute to/lead advanced manufacturing projects).</p>
Eleodor Nichita, PhD	Associate Professor, Faculty of Energy Systems and Nuclear Science.	<ul style="list-style-type: none"> <li>• Will lead projects on modeling and simulation of SMR neutronics.</li> </ul>
Daniel Hoornweg, PhD	Associate Dean, Associate Professor and Richard Marceau Chair, Faculty of Energy Systems and Nuclear Science	<ul style="list-style-type: none"> <li>• Will lead projects on social license and sustainability of SMRs.</li> </ul>
Glenn Harvel, PhD	Associate Professor, Faculty of Energy Systems and Nuclear Science	<ul style="list-style-type: none"> <li>• Will lead projects on design, SMR thermal-hydraulics and decommissioning technologies.</li> </ul>
Filippo Genco, PhD	Associate Teaching Professor, Faculty of Energy Systems and Nuclear Science.	<ul style="list-style-type: none"> <li>• Will lead projects on gas-cooled reactor thermal-hydraulics and materials performance issues.</li> </ul>
Hossam Gaber, PhD	Professor and Graduate Program Director, Faculty of Energy Systems and Nuclear Science.	<ul style="list-style-type: none"> <li>• Will lead projects on SMR control systems and grid connectivity.</li> </ul>

Liliana Trevani, PhD	Associate Professor, Faculty of Science	<ul style="list-style-type: none"> <li>Will lead projects on light-water coolant electrochemistry.</li> </ul>
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It is anticipated that additional faculty members from FESNS, FEAS and FS, and perhaps from FBIT, FED and FSSH, will join CSMR and hence provide it with enhanced capability. Faculty members with experience in education, psychology and human factors, microbiology, economics and advanced manufacturing techniques would be especially welcome on day one. It is anticipated that we can engage a suitable (external) associate member to assist with indigenous engagement activities. Further such associate members can be drawn from our national and international collaborator base. Interest from a faculty member from Queen Mary University of London has already been received. Upon approval of the centre, a targeted call for additional membership will be made.

## 8. Resource Requirements

### 8.1. Physical Requirements

Due to the virtual nature of the centre, where, like at ANRC, the capabilities and facilities of individual faculty members' research groups are leveraged towards the collective effort; **no additional office or laboratory space is currently required**. If a project manager is hired (e.g. as required by a large Ontario Research Fund submission), they would co-locate with the Graduate Program Manager in ERC 4026. It is also proposed that the large graduate student office, ERC 4100, be subdivided such that one half houses the graduate students who are employed on centre-based projects. There is sufficient free desk space in ERC 4100 to accommodate a twofold increase in graduate students if hot-desking is enforced. It is projected that a maximum twofold increase in cross-faculty graduate student enrollment could occur if all targeted grants were successful.

### 8.2. Staffing Requirements

Upon establishment, **no additional support staff are required**. Administration, advertising and website/social media maintenance will be undertaken by CSMR members in the first instance. Subject to sufficient funding being secured (e.g. from a large program grant), a project manager will be employed to co-ordinate work packages and undertake some of the other administrative functions. Additional staff support (e.g. technician time) will follow a pay-on-demand model, again reflecting the expand and contract model of operation. Graduate and undergraduate students will be employed in the normal way, and visiting scholars will be hosted on an ad-hoc basis in accordance with Ontario Tech University policy.

### 8.3. Budget and Financial Requirements

**No start-up funding is requested**. The Faculty of Energy Systems and Nuclear Science will underwrite the administrative (i.e. communications and advertising, and one, one-day on-site workshop per annum) costs of the centre from its operating budget unless and until external funding is secured. These costs are not expected to exceed \$7500 per annum. Given that many of the initial meetings required to establish the centre and build-up partnerships will either be

in the GTA, or can happen at major events which faculty already attend (e.g. the Canadian Nuclear Association conference), costs of travel will be borne initially by individual faculty members. As one of the aims is to be a force-multiplier for existing strengths; it is intended that the centre be able to be adaptable to funding, yet be able to successfully operate with a limited budget. The limited budget is the planning assumption, although larger revenues and hence larger budgets are expected (e.g. the Ontario Research Fund submission requested a cash budget of \$3,162,686 over five years, albeit the submission would have been strengthened had it been submitted by a centre). **No unsecured funding has been assumed** for budget planning purposes. Given FESNS has control over, and experience of delivering training courses, a conservative estimate of revenue from such courses **has** been assumed. Profits will be shared between the centre, the faculty and the University following existing precedent. In addition to this Prof. Atkinson is under consideration for five [5] years of SMR-relevant funding through a UNENE/NSERC Industrial Research Chair and, in 2019, Prof. Tokuhiro secured six [6] years of NSERC CREATE funding for up to four graduate students. SMR-focused Alliance and CREATE grants are planned for submission in 2020, albeit they would be strengthened if submitted by the centre. It is anticipated that additional opportunities will stem from NRCAN and the Canada-UK dialogue if CSMR is established.

## 9. Intellectual Property and Commercialization

As the core membership of the centre will be Ontario Tech University faculty and students, notwithstanding any legal constraints (e.g. data that has been shared with the centre, or with its individual members, through non-disclosure agreements) or licensing agreements (e.g. to use necessary computer codes from third parties), ownership of intellectual property created or developed by the centre using public-derived funds will be retained by faculty and/or students in accordance with Ontario Tech University policy. Ownership of, and the rights to exploit, intellectual property created or developed using private and/or industry funding, or where private and/or industry funding is leveraged to get public funding, will be established on a case-by-case basis with private and/or industry partners. Rights to publish non-commercially and non-security sensitive works will be sought during any negotiations.

[illegible]

		Research Costs						
		Year 1	Year 2	Year 3	Year 4	Year 5	Total	
Student and Postdoc Salaries								
								Comments
	Research Assistants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	None currently projected.
	Masters Students	\$ 96,000	\$ 114,000	\$ 68,000	\$ 18,000	\$ -	\$ 296,000	Leveraged from IRC, CRC, and CREATE funding.
	PhD Students	\$ 20,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 20,000	\$ 160,000	Leveraged from IRC, CRC, and CREATE funding.
	Post-Doctoral Students	\$ 33,435	\$ 33,435	\$ 33,435	\$ -	\$ -	\$ 100,305	Leveraged from IRC, CRC, and CREATE funding.
	Visiting Scholar	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Self-funded.
	Other (explain)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	None currently projected.
	Benefits (9%)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
SUBTOTAL Trainees		\$ 149,435	\$ 187,435	\$ 141,435	\$ 58,000	\$ 20,000	\$ 556,305	
Research Operating Costs								
	Travel	\$ 6,000	\$ 8,000	\$ 6,000	\$ -	\$ -	\$ 20,000	Leveraged from IRC, CRC, and CREATE funding.
	Equipment	\$ 22,000	\$ 2,000	\$ 1,000	\$ -	\$ -	\$ 25,000	Leveraged from IRC, CRC, and CREATE funding.
	Other (explain)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
SUBTOTAL Operating		\$ 28,000	\$ 10,000	\$ 7,000	\$ -	\$ -	\$ 45,000	
TOTAL RESEARCH COSTS		\$ 177,435	\$ 197,435	\$ 148,435	\$ 58,000	\$ 20,000	\$ 601,305	
REVENUE RESEARCH								
	IRC, CRC, and CREATE funding	\$ 177,435	\$ 197,435	\$ 148,435	\$ 58,000	\$ 20,000	\$ 601,305	
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
TOTAL REVENUE		\$ 177,435	\$ 197,435	\$ 148,435	\$ 58,000	\$ 20,000	\$ 601,305	
TOTAL REVENUE LESS EXPENSES		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	



## BOARD REPORT

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### ACTION REQUESTED:

Recommendation	<input type="checkbox"/>
Decision	<input checked="" type="checkbox"/>
Discussion/Direction	<input type="checkbox"/>
Information	<input type="checkbox"/>

**DATE:** February 27, 2020

**FROM:** Academic Council

**SUBJECT:** New Program Proposal – Post-Baccalaureate Diploma in Teaching English to Speakers of Other Languages

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### COMMITTEE MANDATE:

In accordance with Article 1.4 (a) of By-law No. 2, Academic Council will make recommendations to the Board on matters including the establishment or termination of degree programs. Academic Council is seeking the Board's approval of the establishment of a Post-Baccalaureate Diploma in Teaching English to Speakers of Other Languages program.

### MOTION FOR CONSIDERATION:

That pursuant to the recommendation of Academic Council, the Board of Governors hereby approves the establishment of a Post-Baccalaureate Diploma in Teaching English to Speakers of Other Languages program, as presented.

### BACKGROUND/CONTEXT & RATIONALE:

Graduates of the TESOL program will earn a post-baccalaureate diploma in Teaching English to Speakers of Other Languages from Ontario Tech University and a TESL certificate from TESL Ontario and will be eligible to teach English to adults both in Canada (in privately and publicly-funded institutions) and in a variety of institutions overseas. Graduates will also be eligible to teach in publicly funded programs in Ontario once they have applied for the TESL Ontario accredited membership and have been approved for the TESL Ontario Adult ESL Teacher Certificate of Accreditation.

The program will run over two academic terms and will be a hybrid program, with at least 72 hours of the TESL Ontario-required 250 hours taking place online in Adobe Connect. The program consists of eleven semester-length courses (nine 36-hour course equivalents) including 274 hours of coursework, 30 observation hours and 20 practicum hours. Taken full-time, the program can be completed in 8 months (two semesters). Graduating students would convocate with other program graduands from the Faculty of Education at the regular Convocation ceremonies.

**RESOURCES REQUIRED:**

A number of existing faculty members in the Faculty of Education have expressed an interest in teaching in the program and experienced part-time instructors will be hired as necessary. Existing administrative management and support staff are experienced with revenue based academic programs, such as the Additional Qualifications Program, in addition to degree programs and non-credit Continuing Education courses. Sufficient administrative and student supports are in place both within the Faculty of Education and within the central service units (Office of the Registrar, IT, Communications & Marketing, Human Resources, Payroll, English Language Centre, etc.).

The TESOL program would run alongside the other degree, diploma, and certificate programs offered by the Faculty of Education. Currently the Faculty of Education has the physical and online space to meet TESOL program requirements. It is anticipated that offering daytime spring/summer courses and evening or weekend fall/winter courses will allow for better utilization of current space. Looking forward, the Faculty of Education building's lease for 11 Simcoe St North is up for renewal within a few years. Any relocation will take into account the need for classroom space for the TESOL program, bearing in mind that as the program grows, more courses will move online.

**CONSULTATION AND APPROVAL:**

Undergraduate Studies Committee Review and Recommendation: October 15<sup>th</sup>, 2019

Final Faculty Council Approval: September 30<sup>th</sup>, 2019

Program Development and Faculty Consultation: 2018-2019

Academic Council: November 19, 2019

**NEXT STEPS:**

- As a post-baccalaureate diploma, pending the approval of Academic Council (AC) the proposal will proceed through the following approval steps:
  - Board of Governors
  - Ontario Universities Council on Quality Assurance
  - Ministry of Training, Colleges and Universities
- The expected date of implementation is the fall semester of 2020

**SUPPORTING REFERENCE MATERIALS:**

- New Program Proposal with Appendices A-D
- Appendix E: New Course Templates:
  - [TESL 1000U, TESL 1100U, TESL 1200U, TESL 1300U, TESL 1400U, TESL 1550U, TESL 2100U, TESL 2200U, TESL 2300U, TESL 2400U, TESL 2500U](#)



# Post-Baccalaureate Diploma in Teaching English to Speakers of Other Languages

Academic Council Approval 26 November 2019

**Submitted Sept 2019  
Program to commence September 2020**

## 1. INTRODUCTION

### a. Background

The Faculty of Education will offer a TESOL diploma program accredited by TESL Ontario (<https://www.teslontario.org/accreditation>).

Students in the TESOL diploma program will earn a post-baccalaureate diploma in *Teaching English to Speakers of Other Languages* from Ontario Tech University and a TESL certificate from TESL Ontario. Graduates will be eligible to teach English to adults both here in Canada (in privately and publicly-funded institutions) as well as in a variety of institutions overseas. Graduates will be eligible to teach in publicly funded programs in Ontario only once they have applied for the TESL Ontario accredited membership and have been approved for the TESL Ontario Adult ESL Teacher Certificate of Accreditation.

Our program will run over two academic terms (i.e. September- April and/or January-August) and will be a hybrid program, with at least 72 hours of the TESL Ontario-required 250 hours taking place online in Adobe Connect. The program consists of eleven semester-length courses (nine 36-hour course equivalents) including 274 hours of coursework, 30 observation hours and 20 practicum hours. Taken full-time, the program can be completed in 8 months (two semesters).

### b. Alignment with Vision, Mission, and Strategic Plan

This new TESOL diploma program aligns well with Ontario Tech's 2017-22 Strategic Plan in the following ways:

CHALLENGE: "Offer a greater variety of lifelong learning through career-focused professional development"

The TESOL diploma will appeal to individuals at a variety of stages in their professional lives, from those just starting out, to those looking for a mid-life career change. Since notice of our accreditation was posted on TESL Ontario's website, we have already had inquiries from a number of potential applicants including a woman preparing for a new post-retirement career.

INNOVATE: "Double the number of courses that mix technology and face-to-face education to make learner-centered environments, because transformative learning builds problem-solving capacity".

The TESOL diploma program will take a hybrid approach and combine face-to-face traditional classroom learning with online synchronous learning through Adobe Connect, as well as asynchronous learning through a Learning Management System.

CONNECT: "Offer practical hands-on learning experiences, like co-ops, internships, research practicums, international exchanges, and entrepreneurial opportunities to every student, because experiential learning develops the skills that employers want.

"Build research partnerships that fortify our university's key strengths, because our national and international collaborations open doors to new ideas and initiatives both locally and globally."

The TESOL program includes 50 hours in practicum placements, some of which must be in an online context. These opportunities for experiential learning ensure the marketability of our students to prospective employers. This program will also be an excellent research site for faculty with research interests in the field of language teaching and learning, and will allow for research collaborations with the English Language Centre as well.

Furthermore, the new TESOL program will align well with Ontario Tech's vision, mission and values.

**VISION:** The TESOL program will truly ‘inspire graduates who will make an impact on the world’ since, as teachers of the English language, they will facilitate learning in Canadian and international classrooms while interacting with immigrants, refugees and a multitude of other individuals looking to acquire/improve their English skills.

**MISSION:** The TESOL program will be ‘technology-enriched’ via its hybrid approach, but also through its focus on developing online language teaching skills in ‘response to the evolving workplace’ which has seen a growing trend in international schools hiring Canadians to teach English from home via videoconferencing.

**VALUES:** The TESOL program courses focus on an asset-based approach to supporting culturally and linguistically diverse students acquiring English as another language thereby embracing “respect, inclusivity and equity”. The program’s commitment to “quality and intellectual rigour” is evident through our choice to meet the standards of a regulatory body (TESL Ontario) and to offer the program as a diploma (post-undergrad degree) rather than as a certificate.

The Faculty of Education, Ontario Tech, is committed to providing educational opportunities to promote life-long learning. For many years, the Faculty of Education’s Bachelor of Education program has provided first-class teacher education. For the past decade, the Master’s program and the BA program in Educational Studies at Ontario Tech have enabled the faculty to develop deep expertise in online teaching, learning, and accessibility of programs.

The proposed Teaching English as a Second/Subsequent Language program meets the goals and mission of both the University and the Faculty of Education. The intent of the program is to provide a first-class education and training experience designed to meet the evolving needs of today’s workplace and meet TESL Ontario standards of practice.

Teachers of English to speakers of other languages are in high demand globally and locally. With Canada’s commitment toward immigration, there is a need for a steady supply of individuals who have Teaching English as a Second or Subsequent Language education. There is also a steady market abroad for persons who can teach English.

The proposed TESOL program at Ontario Tech will be supported by technology that will be used to increase access to the program. The proposed hybrid format will provide face-to-face and online components to allow ease of access to students who may already be working but need to acquire new skills. The Faculty of Education at Ontario Tech, through the Master’s program and its Bachelor of Educational Studies and Digital Technology (BA ESDT) programs, has shown that it can provide an outstanding online educational experience. This proposed hybrid program will provide a needed service to the community, and will not only train students in Teaching English as a Second/Subsequent Language skills, it will also provide students with the necessary skills for online language teaching, as modelled by its professional faculty.

The Program will fall under the category of **Post-baccalaureate certificates (stand-alone, for-credit)**. The TESOL diploma program will be administered through the Faculty of Education as a diploma program taught by Ontario Tech instructors, and our graduates will convocate with the rest of the Ontario Tech degree students. Our program has been accredited by the professional association TESL Ontario, which will regularly review our program to ensure we maintain the highest standards in English teacher training.

This diploma program lays the foundation for successful teaching of English as a Second/Subsequent Language. It provides the theoretical and practical experience to teach English within Canada and abroad. The program meets the requirements for TESL Ontario certification. The key concepts of the program include: linguistic and pedagogical theory, language teaching methodologies, phonetics and phonology,

culture, grammar and reflective practice. Students will apply the theory through observations and practice teaching in an ESL classes. Graduates of this program can pursue employment inside and outside of Ontario in Language Centres, Education, private schools, colleges and universities. Graduates will have to apply to TESL Ontario individually to obtain their TESL Ontario certification.

#### c. Student Demand

The chart in section e below shows the existence of current TESL Ontario accredited programs offered by post-secondary institutions in Ontario. The Faculty of Education is eager to fill an existing gap east of the GTA. A TESOL Program at Ontario Tech would be the only accredited program between Toronto and Ottawa. Our nearest competition would be in Toronto, and as a result, we believe there will be sufficient demand from individuals living east of Toronto to make an Ontario Tech TESOL program viable and profitable.

TESL Ontario requires a minimum of six students to run a course. We anticipate having 15-20 the first time we run the program (Sept 2020 - April 2021), with sufficient time to advertise. We will promote the program within our other three programs (BEd, BA and MEd/MA). Thereafter, we anticipate 25+ students per section, with two start points (Sept and Jan) which affords us greater appeal to our B.Ed. students who graduate in December and could transition into the TESOL program in January. The two start dates would also allow for increased interest amongst international students and Canadians living overseas.

The number of course offerings will be scalable based on demand, minimum enrollment numbers and the faculty's ability to meet demand. We foresee steady growth over time for the first 3 years and will expand as demand grows.

Table 1. Projected enrolment by year of operation and program year.

#### PROGRAM Enrolment Predictions

	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Yr1	16	35	35	70	70	70
Yr2	0	0	0	0	0	0
Yr3	0	0	0	0	0	0
Yr4	0	0	0	0	0	0
Yr5	0	0	0	0	0	0
<b>TOTAL PROGRAM</b>	<b>16</b>	<b>35</b>	<b>35</b>	<b>70</b>	<b>70</b>	<b>60</b>

#### d. Societal Need

With Canada's commitment toward immigration, there is a need for a steady supply of individuals who have Teaching English as a Second or Subsequent Language training. There is also a steady market abroad for persons who can teach English. We do not anticipate drastic changes/reductions in immigration trends in the foreseeable future.

Three occupations, from the Ontario Job Futures website, that graduates from this proposed program may be employed in are:

1. College and Other Vocational Instructors (Most Ontario colleges host an ESL program for international students)
2. Educational Counsellors (International Student advising roles in educational contexts)

### 3. Social and Community Service Worker (Settlement work with immigrants/refugees)

An application for accreditation was submitted to TESL Ontario in March of 2019 and notification of approval was given in June. (Accreditation certificate is attached as Appendix A.)

#### e. Duplication

As seen in the chart below of current TESL Ontario approved providers, there are few accredited programs in Eastern Ontario, resulting in a geographical gap from Toronto to Ottawa. The Faculty of Education is eager to fill this existing gap which can be found east of the GTA. A TESOL Program at Ontario Tech would be the only accredited program between Toronto and Ottawa. Virtually all of the programs listed below are offered with on-site classes; whereas our program would include online courses, with an eye to offering an increasing number of courses online via Adobe Connect. Eventually, we will consider offering the entire program online with partner language schools handling the practicum evaluations. Currently, our nearest competition would be in Toronto, and as a result, we believe there will be enough demand from individuals living east of Toronto to make an Ontario Tech TESOL program extremely viable and profitable. This would be a stand-alone program, as per the requirements of TESL Ontario. The chart below underscores the differences among the programs with some being certificate programs, while others are diploma programs and still others are undergraduate or graduate degrees. We believe our post-baccalaureate diploma in Teaching English as a Second Language will be of interest to those wanting the academic rigour of a diploma program from a recognized university (rather than merely a certificate from a college or privately run company), but not wanting to undertake a graduate degree (Master of Arts in Language Teaching). Furthermore we believe our TESOL program will be of interest to our own Faculty of Education's BEd and BA graduates looking to increase their skill set and marketability in the field of education.

Other Ontario providers that offer similar programs:

<b>TESL Training Providers</b>	<b>Accredited TESL Training Programs</b>	<b>Delivery Mode</b>
Algonquin College, Ottawa	Teachers of English as a second/Foreign Language – Ontario Graduate Certificate Program	On-site program
Brock University, St. Catharines	BA (Hons) Applied Linguistics/ Teaching English as a Subsequent Language (including TESL Certificate)	On-site program
Canadian Centre for Language & Cultural Studies (CCLCS), Toronto	TESL Certificate Program (Part 1 and Part 2)	On-site program
Canadian College of Educators, Mississauga	TESL Diploma Program	On-site program
Carleton University, Ottawa	Master of Arts, Applied Linguistics and Language Studies	On-site program
Carleton University, Ottawa	Certificate in Teaching English as a Second Language	On-site program
Centennial College, Toronto	Teaching English as a Second Language (Part 1 and Part 2)	On-site program
Conestoga College, Kitchener	TESL Certificate Program (Part 1 and Part 2)	Online program and On-site program
Fanshawe College, London	TEFL and TESL Programs (Stream 1 and Stream 2)	On-site program
Humber College, Etobicoke	TESL Post Graduate Certificate Program	On-site program

London Language Institute, London	TESOL Program (Certificate and Diploma)	On-site program
Niagara Catholic District School Bd, St. Catharines	TESOL Program (Certificate and Diploma)	On-site program
North American Business College of Sciences & Languages (NAB College), Mississauga	TESL Diploma Program	On-site program
Peel District School Board Mississauga	TESOL Program (Certificate and Diploma)	On-site program
Renison University College, University of Waterloo, Waterloo	TESOL Program (Certificate and Diploma)	On-site program
Seneca College, Continuing Education (CE), Toronto	TESL Program	On-site program

Toronto District School Bd, Toronto	TESL Training Program	On-site program
Trinity Western University, Langley, BC	Master of Arts in Teaching English to Speakers of Other Languages (MA TESOL)	Online program and On-site program
University of Saskatchewan Saskatoon	CERTESL Program <ul style="list-style-type: none"> <li>Requires students arrange own practicum</li> <li>Distance-delivered, both paper-based &amp; internet enhanced</li> </ul>	Distance-delivered program
University of Toronto, Woodsworth College, Toronto	Teaching English to Speakers of Other Languages Certificate	On-site program
University of Windsor, Centre for English Language Development, Windsor	TESOL Certificate and TESOL Diploma	On-site program
York Catholic District School Board, Aurora	Practicum Certificate Training Program Offers only practicum component	On-site program
York University, Toronto	TESOL Certificate Program	On-site program

## 2. DEGREE REQUIREMENTS

### a. Program Learning Outcomes

Degree Level Expectations	Program Learning Outcomes By the end of the program, students graduating will be able to... *Content of this cell reflects corresponding TESL Ontario Learning Outcomes found at <a href="https://www.teslontario.org/tesl-training-domains-and-outcomes">https://www.teslontario.org/tesl-training-domains-and-outcomes</a>	Relevant courses (provide course code and course title)	Assessment of Learning Outcomes (e.g. test, rubric, self-assessment, etc.)
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Depth and breadth of knowledge	Draw on the learners' experience, interests, goals, and needs to design and implement relevant, authentic, and inspiring learning opportunities appropriate for the identified requirements of the learners.	<b>Foundations (TESL 100)</b>	1) Reflection Paper: 3-5 pages Discussion and comparison of the contexts for your L1 and L2 learning 2) In-class Grammar Quiz 3) Linguistic Analysis of a Commercially Available Lesson Plan 4) Professionalism
Knowledge of methodologies	Use various curricular models to develop appropriate plans of teaching/learning, learning materials, and activities to meet the needs and interests of the learners within the specific program/teaching organization.	<b>Methods 1 &amp; 2 (TESL 101 and 201)</b> <b>Teaching Components 1 &amp; 2 (TESL 102 and 202)</b>	1) Comparison of three Models-infographic 2) Sample Lesson Plan 3) Roundtable Leader 4) Professionalism
Application of knowledge	Use instructional flexibility, intercultural competence and interactive skills to create stimulating and relevant learning experience, and foster a sense of community among instructor and learners to best support learning.	<b>The Inclusive Classroom (TESL 203)</b>  <b>Practicum 1 &amp; 2 (TESL 105 and 205)</b>	1) Observation Reflection 2) Lesson Plan 3) Reflective Practitioner (Self Assessment of Teaching experience) 4) Professionalism
Communication skills	Adapt to the delivery needs of the hiring organization and the learners, with additional support as needed.	<b>Mobile Teaching and Learning (TESL 103)</b>	1) "Cutting Edge" Tech Talk : Short exploratory paper 2) Literature Review of Computer Assisted Language Learning (CALL) 3) LMS discussion board contributions 4) Professionalism
Awareness of limits of knowledge	Demonstrate an understanding of the importance of engaging in ongoing professional learning and reflection, through collegial discussion, action research, and dynamic interaction with her/his own learners in order to evaluate and challenge her/his own developing practice, and better meet the needs of learners.	<b>Reflective Practitioner (TESL 204)</b>	1) Community of Practice Review 2) Action Research Project 3) Critical Incident Case Study 4) Reflection Journal 5) Professionalism

Autonomy and professional capacity	Demonstrate an understanding of the influence of the instructional context in general (for example, government funded settlement program versus a college academic preparation course) and the unique demands of particular language programs (for example, multi-level, ESL literacy, and programs for specific purposes); and will be able to work with any combination of these features to best help learners to achieve their goals.	<b>Professionalism (TESL 104)</b>	1) Annotated Bibliography of ESL Professional Learning resources 2) Mock Conference or Webinar Proposal 3) LMS discussion board contributions 4) Professionalism

Progress assessment varies from course to course and includes syllabus & lesson planning, resource searches such as annotated bibliographies, peer teaching (in-class seminars), portfolios, reflection papers, as well as self- and peer- assessment. Additionally students will be encouraged to volunteer as ESL tutors with Ontario Tech's Student Learning Centre (<https://studentlife.uoit.ca/student-learning/english-as-a-second-language-esl.php>) as peer tutor or in the weekly Conversation Café, to develop their instructional skills. Course-specific assessment methods can be found within each course outline.

Each course consists of multiple assessment methods including a written (reflection, formal paper), oral (presentation, seminar/webinar), and pedagogical (lesson planning, instructional strategies) component. All courses include a Professionalism/Participation/Engagement grade that will reflect attendance, timely assignment submissions and overall engagement. In some courses, peer and self-assessment will also be incorporated.

Our program goal is to prepare language educators to teach in diverse contexts using state of the art theoretical frameworks, instructional strategies, and technological tools in all twelve of TESL Ontario's defining domains and using the corresponding outcomes (<https://www.teslontario.org/tesl-training-domains-and-outcomes>). Our assessment methods model those that we want our students to use when they are teachers in the language classroom: ensuring inclusion of all learners, targeting a variety of communication skills and supporting engagement.

#### b. Admission Requirements

The following is the required criteria to enter the program:

1. A minimum of a bachelor's degree (conferred). For applicants with an international bachelor's degree, the conferred degree must be equivalent to a 3-year Canadian bachelor's degree.
2. English facility requirements, where applicable (see English Facility Requirements below).
3. Personal suitability for the program as determined via essay formatted responses to three questions (see Personal Suitability Questions below).

#### English Facility Requirements

In addition to satisfying the academic requirements, candidates will be required to present proof of English facility if they have not complied with one of the following:

- 1) Satisfactorily completed a minimum three-year Bachelor's degree or a graduate degree with English as the language of instruction at a university in Canada.
- 2) Satisfactorily completed a minimum three-year Bachelor's degree or a graduate degree in an English language school system\* at a university outside Canada.
- 3) Satisfactorily completed grades 6-12 in Canada (each grade completed in one full school year), including minimum English Grade 12 score of at least 70%.

\*An English language school system is one that is located in a country where English is the official language for primary, secondary and tertiary levels of education, as well as for government and commerce, and where all instruction is in English, except for language courses.

Note: Applicants from universities in countries where English is not the official language for education, government, and commerce, must provide results of an English language proficiency examination as part of their application. Tests must have been taken within the last 24 months at the time of submission of their application.

Proof of English facility is demonstrated by achieving acceptable scores in one of the following five options\* (scores are valid for 2 years after the test date):

**(1) Test of English as a Foreign Language (TOEFL)**

- iBT: Minimum requirement is a total score of 87, with at least 20 in Reading, 20 in listening, 19 in speaking and 20 in Writing. The TOEFL Institution Code for the UOIT is 7178. You must list this code correctly, or we will not receive your result. Website: <https://www.ets.org/toefl>

**(2) International English Language Testing System (IELTS) Academic Version**

- The minimum requirement is an overall band of 7, with no band score below 6.5 Website: [www.ielts.org](http://www.ielts.org)

**(3) Michigan English Language Assessment Battery (MELAB)**

(While MELAB was discontinued in June 2018, we understand that TESL Ontario still considers MELAB test reports taken prior to that date. Thus it is included here.)

- The minimum requirement is a score of at least 85. Website: [www.cambridgemichigan.org/melab](http://www.cambridgemichigan.org/melab)

**(4) Canadian Academic English Language Assessment (CAEL)**

- The minimum score required to meet our English facility requirement is an overall score of 70 with no sub-score below 60. Website: [www.cael.ca](http://www.cael.ca)

**(5) Pearson Test of English (PTE) Academic**

- The minimum score is 58. Website: <https://pearsonpte.com/the-test/>

Personal Suitability Questions

The following three questions will be part of the online application. Students will be required to provide 250 word responses (minimum) to each question:

1. What sorts of professional or personal, academic or professional experiences have you had that will contribute to your success in this program?
2. Describe some of the challenges associated with being an English language instructor in both a Canadian and an overseas context.
3. Describe how would establish an inclusive and welcoming classroom for your English language students.

### c. Program Structure – Program Maps

The program consists of eleven semester-length courses (nine 36-hour course equivalents/27 credit hours) including 274 hours of coursework, 30 observation hours, and 20 practicum hours. Taken full-time, the course can be completed in 8 months (two semesters). When admission numbers warrant, we will offer students the option to study on a part-time basis. All courses are mandatory. Two courses will be taught fully online. All courses will have an online (asynchronous) component.

Our program will run over two 12 week academic terms and will be a hybrid program, with at least 72 hours of TESL Ontario's required 250 hours taking place online in Adobe Connect.

Courses in the TESOL program will comply with Ontario Tech's course scheduling (36 hours equals one full course or 3 credit hours; and 18 hours equals one half-course or 1.5 credit hours) in order to ensure that there are no conflicts when reserving classrooms in the Education building and to ensure that professor workload is based on the same formula. The first term will consist of 4 full courses and 2 half courses. The second term will consist of 3 full courses and 2 half courses.

All courses are required. Three of the first term courses are prerequisites for their second term counterparts (Methods 1>Methods 2; Teaching Components 1>Teaching Components 2; Practicum 1>Practicum 2).

The TESL Ontario-required 50-hour practicum has been incorporated into the student course load resulting in a total of 11 separate courses (nine 36-hour equivalents). Specifically, the 30 hours of Observation and 20 hours of Practice Teaching would be split between the two terms in the following way: a course called Practicum 1, taught in the first term will consist of 15 hours of observation + 10 hours of practice teaching + 11 in-class hours oriented towards enabling students to make connections between what they observe in classrooms, and the content of their courses (for a total of 36 hours). Likewise, a course called Practicum 2, taught in the second term will consist of 15 hours of observation + 10 hours of practice teaching + 11 in-class hours targeted at helping students build on their learning in course work to maximize the benefits of their observation and practice teaching experience.

### d. Calendar Copy

## **TESOL Diploma (accredited TESL Ontario program)**

### **General information**

This program offered full-time lays the foundation for successful teaching of English as a Second or Subsequent Language. It provides the theoretical and practical experience to teach English within Canada and abroad. The program meets the requirements for TESL Ontario certification. (Note: graduates will need to apply to TESL Ontario individually to obtain TESL Ontario certification). The key concepts of the program include: linguistic and pedagogical theory, language teaching methodologies, phonetics and phonology, culture, grammar and reflective practice. Students will apply the theory through observations and practice teaching within an ESL classroom. Graduates of this program can pursue employment inside and outside of Ontario in Language Centres, Education, private schools, colleges and universities. Graduates will receive a diploma from the University, and TESL certification from TESL Ontario.

### **Admission requirements**

Admission is competitive. The specific average or standing required for admission varies from year to year. Students are selected by taking into consideration a wide range of criteria including school marks, distribution of subjects taken, and performance in subjects relevant to the academic program. Possession of the minimum requirements does not guarantee acceptance. Preference will be given to applicants with the best qualifications.

The following is the required criteria to enter the program:

1. A minimum of a bachelor's degree (conferred). For applicants with an international bachelor's degree, the conferred degree must be equivalent to a 3-year Canadian bachelor's degree (minimum).
2. English facility requirements, where applicable (see <http://uoit.ca/englishproficiency>).
3. Personal suitability for the program as determined via supporting documentation (e.g. essay-formatted responses to questions related to the field of English teaching).

## **Practicum**

The 50-hour practicum has been incorporated into the student course-load. Thirty hours of Observation and 20 hours of Practice Teaching is split between two terms in the following way: Practicum 1 (taken in the first term) consists of 15 hours of observation + 10 hours of practice teaching + 11 in-class hours oriented towards enabling students to make connections between what they observe in classrooms, and their studies. Practicum 2 (taken in the second term) consists of 15 hours of observation + 10 hours of practice teaching + 11 in-class hours. The instructor of the practicum course will also liaise with host teachers and assemble host teacher evaluations of the student's performance the ESL classroom, and make referrals to the student advisor and program director as required.

### **First Term (all courses are required) [15 credit hours]**

TESL 100 Foundations  
 TESL 101 Methods 1  
 TESL 102 Teaching Components 1  
 TESL 103 Mobile Teaching and Learning  
 TESL 104 Professionalism  
 TESL 105 Practicum 1

### **Second Term (all courses are required) [12 credit hours]**

TESL 201 Methods 2  
 TESL 202 Teaching Components 2  
 TESL 203 Socio-Cultural Contexts  
 TESL 204 Reflective Practitioner  
 TESL 205 Practicum 2

## **3. RESOURCE REQUIREMENTS**

- a. Faculty Members, Current and New Faculty requirements

The Faculty of Education has experienced academic and administrative expertise in the area of English Language acquisition. A number of core faculty members have expressed an interest in teaching in the

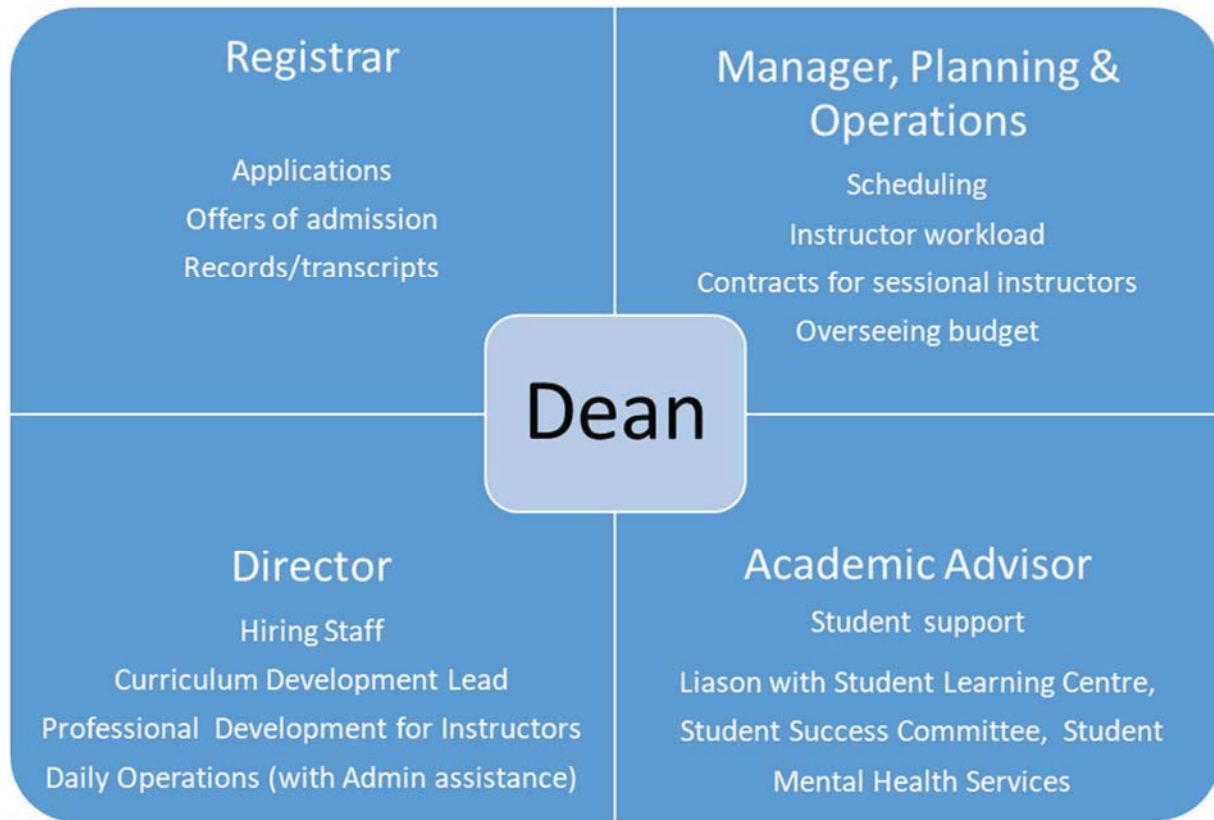
program and experienced part-time instructors will be hired as necessary. The participation of two to three core faculty members will ground the curriculum and ensure academic success at the post-baccalaureate University level. Existing administrative management and support staff are experienced with administering revenue based academic programs, such as the Additional Qualifications Program in addition to degree programs and non-credit Continuing Education courses. Additional administrative support is in place both within the Faculty of Education and within our central service units (Office of the Registrar, IT, Communications & Marketing, Human Resources, Payroll, etc.). The English Language Centre (ELC) also has established program and course offerings involving experienced instructors and administrative management and support staff. Below is a list of individuals who are qualified and have expressed interest in teaching in the TESOL program. See List of Appendices (page 19) for the link to CVs.

- Two Faculty of Education Associate Professors (Dr. Allyson Eamer and Dr. Jia Li)
- One Teaching Faculty Member (Dr. Diane Tepylo)
- One Faculty of Education Sessional Instructor (Dr. Robert Power)
- One Faculty of Education Administrator (Lori May)
- Five of Ontario Tech's English Language Centre teachers (Matthew Devlin, Rozita Bryant, Arleta Music, Jill Campbell and Sarah Khurshid)
- One Student Learning Centre Instructor (Tessa Troughton)

b. Additional Academic and Non-academic Human Resources

The TESOL program would run alongside the other degree, diploma, and certificate programs offered by the Faculty of Education. Admissions and registration would be handled via the Office of the Registrar (RO). Staffing and scheduling would be handled via the Dean, the Director, and the Manager of Planning & Operations. An Academic Advisor/Program Assistant would be available to assist students with program and personal concerns. Instructors would be drawn from amongst current professors with expertise in linguistics, online pedagogy and socio-cultural factors related to education, as well as from experienced TESL Ontario certified teachers, such as those currently teaching international students at Ontario Tech's English Language Centre. We will ensure that all instructors in the program meet TESL Ontario's eligibility standards for: Methodology Instructor, Practicum Supervisor, and Academic Coordinator as described at <http://www.teslontario.org/ accreditation/trainer> . Graduating students would convocate with other program graduands from the Faculty of Education at a June convocation organized by the university.

The following infographic presents the administrative structure of our TESOL program.



c. Academic and Non-Academic Supports

**Information Technology Resources**

IT Services strives to provide quality services to students at Ontario Tech. To support these objectives, the following components are included:

- Wireless network
- Wired network
- IT Service Desk
- General workstations
- Printing services

***Wireless network***

Wireless internet connection is available in public areas and open-air locations around the Ontario Tech campus where students congregate (North Oshawa and Downtown locations).

***Wired network***

To ensure the success of the technology-enriched learning environment, a comprehensive data network has been installed on campus. This includes a network drops in lecture halls and designated areas as well as network drops for each residence suite.

Ontario Tech students benefit from networked classrooms and learning spaces. Each ergonomically-designed space has data network connection access and electrical connections to ensure battery regeneration. In addition, classrooms include electronic projection equipment and full multimedia support.

***IT Service Desk***

The IT Service Desk is equipped with certified technicians and experienced IT professionals offering technical support services on a drop-in, call-in or email basis.

***General Workstations (GUWs)***

Ontario Tech undergraduate students are able to use general workstations available at the library and have access to BYOD TELE model course-specific software.

***Printing services***

Printing services are available to students in the following areas: labs, classrooms, study common areas, the Learning Commons and the Library. All Ontario Tech students receive print credits every year, more Printpacks can be purchased through the Campus Bookstore if students require additional printing services.

***Teaching & Learning Centre***

The mission of the Teaching and Learning Centre (TLC) at the Ontario Tech is to empower faculty to reach their potential as educators and to create a culture where effective teaching is valued. We champion the scholarship of teaching and implementation of pedagogy. We create valuable teaching and learning professional development experiences. We move Ontario Tech towards being a leader in teaching excellence, ultimately leading to greater student success.

The TLC provides faculty with a range of tools and facilities to assist them in providing a rich learning experience for students. Experts at the TLC provide support in various areas including curriculum development, multimedia design, learning technology and in the overall improvement of teaching practice.

In addition, the TLC funds teaching-related projects from the Teaching Innovation Fund (TIF) for proposals by faculty members aimed at developing new methods in teaching and learning. The TLC facilitates teaching awards at the University and supports faculty in their application for external awards and funding opportunities that focus on teaching and learning.

***Student Services***

All undergraduate students have access to an extensive support system that ensures a quality student experience. In addition to the outlined services below, students may also take advantage of the Campus Childcare Centre, Campus Bookstores, Housing and Living Resources as well as the Student Association. Further information can be found at: <http://studentlife.uoit.ca/>

***Academic Advising***

The TESOL Program Assistant and Program Director will be available to assist, guide or refer students in all academic and non-academic matters. Additionally an Academic Advisor and Program Assistant will be available to advise students.

***Student Learning Centre***

The Student Learning Centre fosters a high level of academic excellence in the Ontario Tech community by working with all Ontario Tech students, undergraduate and graduate, to achieve educational success. Foundational knowledge and prerequisite skills are essential to all university level courses, and competency with these skills is vital for strong academic performance. The subject specialists offer support services in mathematics, writing, study skills, ESL and physics. With the additional support of peer tutors and workshops, the Centre can further accommodate the needs of a specific course or program.

<http://studentlife.uoit.ca/student-learning/>

### ***Student Accessibility Services***

The staff work as a collaborative team to ensure students with disabilities have equal opportunities for academic success. The SAS operates under the Ontario Human Rights Code (OHRC) and the Accessibility for Ontarians with Disabilities Act (AODA). Services are provided for students with documented disabilities. Accommodation supports include but are not limited to:

- Adaptive technology training;
- Alternate format course material;
- Learning skills support;
- Testing support; and
- Transition support for incoming students.

### ***Careers and Internships***

The Career Centre offers comprehensive career service assistance and a variety of valuable resources to help students along their career paths:

- Assistance with creating effective job-search documents;
  - Career Counselling;
  - Interview preparation;
  - Job market information; and
  - Job search strategies.

A variety of events hosted on campus during the academic year including employer information and networking sessions, job fairs, and interviews conducted by leading employers.

### ***Student Engagement and Equity***

The Student Engagement and Equity supports students' successful transition into the university and provides opportunities for them develop your leadership and professional skills throughout their university career. Services provided through Student Engagement and Equity includes:

- Orientation and events through first year
- Specialized programming for first generation, graduate, indigenous, international, mature, online, transfer, and diploma-to-degree pathways students
- Equity and inclusivity programming
- Assistance and advice for living off campus
- Peer mentoring to help students through first year
- Opportunities to grow and develop leadership skills through the Ambassador program.

### ***Student Mental Health Services***

Student Mental Health Services helps students learn how to better manage the pressures of student life. Students can:

- Attend a drop-in session;
- Participate in events and activities that promote positive health and well-being;
- Access tools and resources online to learn about mental health and how to maintain good health and wellness;
- Work with a mental health professional to address concerns;

- Contact the Student Lifeline for immediate help and assistance; and
- Get answers to frequently asked questions about mental health.

Student Mental Health Services offers short-term counselling and therapy services to students. Students in distress will also be provided support and counselling as needed. There is no cost and services are confidential. For students who need long-term counselling support or specialized mental health services, Ontario Tech will provide referrals to assist the student in accessing resources in the local community or in the student's home community.

### ***Athletics and Recreation Facilities***

Ontario Tech offers a number of recreation facilities and fitness opportunities to meet all lifestyles and needs. On-campus facilities include the state-of-the-art FLEX Fitness Centre which overlooks Oshawa Creek, five gymnasiums, a 200-metre indoor track, two aerobic/dance studios, the Campus Ice Centre, Campus Fieldhouse, a soccer pitch, a fastball diamond, squash courts and an indoor golf-training centre.

### ***Campus Health Centre***

The Campus Health Centre provides assistance in numerous confidential health-care options including:

- A medical clinic with daily access to physician and nursing staff;
- Allergy injections, immunizations and influenza injections;
- An on-site laboratory (blood work, STI testing, throat swabs, etc.);
- Complementary Health Services featuring acupuncture, chiropractic, custom orthotics, massage therapy, nutritional counselling and physical therapy;
- Gynaecological health-care and prescriptions; and
- Treatment of disease, illness and injury.

### ***Student Awards and Financial Aid***

Student Awards and Financial Aid (SAFA) is dedicated to helping students understand the variety of options available to finance their education. Budgeting and financial planning are essential to their success and Student Awards and Financial Aid is on hand to help create the right financial plan. Financial assistance can be in the form of bursaries, employment (both on-campus and off), parental resources, scholarships, student lines of credit and the Ontario Student Assistance Program (OSAP).

#### **d. Physical Resource Requirements**

Currently the Faculty of Education has the physical (classroom), and online (synchronous Adobe Connect) space to meet TESOL program requirements. The Faculty will work with the RO and central scheduling to offer spring and fall term entry points. It is anticipated that offering day-time spring/summer courses and evening or weekend fall/winter courses will allow for better utilization of current space.

During the winter term of each academic year, there is considerable room availability due to second year BEd students finishing in December. During the fall term, the building is fuller but not at capacity; hence there will be no problem finding classroom space especially in the first few years of the program when class sizes will be small, and there will be only one section for each course. Currently only two of the courses are slotted to be offered fully online through Adobe Connect. This was a purposeful choice in order to establish the program and ensure highest possible engagement and quality course development; however over time, we can move towards offering an increasing number of courses online. Looking forward, the Faculty of Education building's lease for 11 Simcoe St North is up for renewal within a few years. Any relocation will take into account the need for classroom space for the TESOL program, bearing in mind that as the program grows, more courses will move online.

#### **4. BUSINESS PLAN**

##### **a. Statement of Funding Requirement**

#### **PROGRAM FINANCIAL SUMMARY**

See Appendix B file for Program Costs and Revenue

#### **Comparable Tuition Costs:**

1) Ontario Tech	
9 courses x \$638 = \$5,742 plus ancillary \$1,096	\$6838
2) York University	
7 courses including ancillary	\$7,532
3) University of Toronto	
8 courses x \$659 = \$5,272 plus ancillary \$1,374.36	\$ 6,646
4) Brock University	
9 courses plus ancillary	\$ 7,931

# TESL Ontario

## Certificate of Accreditation (INTERIM)

For TESL Training Programs Accredited by TESL Ontario

### Ontario Tech University

Faculty of Education  
TESL Training Program

Meets the TESL Ontario Accreditation Standards



Accreditation Renewal Due Date: September 2020



Sharon Deng

Chair

PROGRAM FINANCIAL SUMMARY

Enrolment	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Year 1	20	30	60	60	60	60
Year 2	0	0	0	0	0	0
Year 3	0	0	0	0	0	0
Year 4	0	0	0	0	0	0
Year 5	0	0	0	0	0	0
<b>TOTAL New Students</b>	<b>20</b>	<b>30</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>

Revenue	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Domestic Tuition	\$123,521	\$190,839	\$393,129	\$404,923	\$417,071	\$429,583
International Tuition	\$8,927	\$13,792	\$28,412	\$29,264	\$30,142	\$31,046
Grant	\$56,899	\$85,348	\$170,696	\$170,696	\$170,696	\$170,696
<b>Total Revenue</b>	<b>\$189,346</b>	<b>\$ 289,980</b>	<b>\$ 592,237</b>	<b>\$ 604,883</b>	<b>\$ 617,909</b>	<b>\$ 631,325</b>

Course Summary	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
# of lecture sections	9	9	18	18	18	18
# of labs	0	0	0	0	0	0
# of tutorials	0	0	0	0	0	0

Required Hires	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
# of TTT	0	\$ -	\$ -	\$ -	\$ -	\$ -
# of TF	0	\$ -	\$ -	\$ -	\$ -	\$ -
# of PT Faculty	9	9	18	18	18	18

Expenses	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
<b>Academic Salaries</b>						
FT Faculty	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500
FT Benefits (18.5%)	\$ 1,388	\$ 1,388	\$ 1,388	\$ 1,388	\$ 1,388	\$ 1,388
<b>FT Total</b>	<b>\$ 8,888</b>	<b>\$ 8,888</b>	<b>\$ 8,888</b>	<b>\$ 8,888</b>	<b>\$ 8,888</b>	<b>\$ 8,888</b>

coordination

PT Faculty	\$ 75,430	\$ 79,201	\$ 166,323	\$ 174,639	\$ 183,371	\$ 192,540
Additional TAs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TAs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lab Instructors	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PT Benefits (11%)	\$8,297	\$8,712	\$18,296	\$19,210	\$20,171	\$21,179
<b>PT Total</b>	<b>\$ 83,727</b>	<b>\$ 87,914</b>	<b>\$ 184,619</b>	<b>\$ 193,850</b>	<b>\$ 203,542</b>	<b>\$ 213,719</b>
<b>Total Academic Salaries</b>	<b>\$ 92,615</b>	<b>\$ 96,801</b>	<b>\$ 193,506</b>	<b>\$ 202,737</b>	<b>\$ 212,430</b>	<b>\$ 222,607</b>

Support Staff Salaries		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
.5 Admin Asst		\$0	\$34,000	\$35,000	\$36,000	\$37,000	\$38,000
	0	\$0	\$0	\$0	\$0	\$0	\$0
	0	\$0	\$0	\$0	\$0	\$0	\$0
	0	\$0	\$0	\$0	\$0	\$0	\$0
	0	\$0	\$0	\$0	\$0	\$0	\$0
Benefits (18.5%)		\$0	\$6,290	\$6,475	\$6,660	\$6,845	\$7,030
Total Support Staff Salaries		\$0	\$40,290	\$41,475	\$42,660	\$43,845	\$45,030

Operational Expense		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Instructional Supplies		\$6,000	\$9,000	\$18,000	\$18,000	\$18,000	\$18,000
Start-up		\$0	\$0	\$0	\$0	\$0	\$0
PD (\$2,000/ faculty)		\$0	\$0	\$0	\$0	\$0	\$0
Travel		\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Recruitment/Moving Expenses		\$0	\$0	\$0	\$0	\$0	\$0
Promotion		\$10,000	\$10,000	\$5,000	\$5,000	\$5,000	\$5,000
Telecommunication		\$0	\$0	\$0	\$0	\$0	\$0
Office Supplies		\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Equipment		\$100	\$100	\$100	\$100	\$100	\$100
TOTAL Operating		\$19,100	\$22,100	\$26,100	\$26,100	\$26,100	\$26,100

Capital		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
	0	\$0	\$0	\$0	\$0	\$0	\$0
	0	\$0	\$0	\$0	\$0	\$0	\$0
	0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL Capital		\$0	\$0	\$0	\$0	\$0	\$0

Total Expenses		\$111,715	\$159,191	\$261,081	\$271,497	\$282,375	\$293,737
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NET Income with Grant		\$77,632	\$130,789	\$331,156	\$333,386	\$335,534	\$337,589
NET Income without Grant		\$20,733	\$45,440	\$160,460	\$162,690	\$164,838	\$166,892

10.9% 15.7% 27.1% 26.9% 26.7% 26.4%

**Financial Update  
Report to the Audit and Finance Committee  
For the 9 months ending December 31, 2019**

**February 19, 2020**

**ONTARIO TECH UNIVERSITY**

**Financial Update – Report to Audit and Finance Committee – February 19, 2020**

**For the 9 months ending December 31, 2019**

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*Consolidated Financial Statements of*

**ONTARIO TECH UNIVERSITY**

*For the 9 months ending December 31, 2019*

**ONTARIO TECH UNIVERSITY**  
**Consolidated Statement of Financial Position**  
**As at December 31, 2019**

	<u>Dec 31, 2019</u>	<u>Dec 31, 2018</u>	<u>YOY Variance</u>	<u>Mar 31, 2019</u>
<b>ASSETS</b>				
<b>CURRENT</b>				
Cash and cash equivalents	\$ 34,427,334	\$ 23,811,131	\$ 10,616,203	\$ 45,236,989
Short-Term Investments	7,052,500	24,924,456	(17,871,956)	16,924,256
Grant receivable	9,088,304	8,472,911	615,393	8,669,628
Other accounts receivable	40,321,207	40,215,464	105,744	7,231,096
Prepaid expenses and deposits	2,235,284	1,319,745	915,540	2,166,750
Inventories	710,490	997,845	(287,355)	133,344
	<u>93,835,119</u>	<u>99,741,551</u>	<u>(5,906,432)</u>	<u>80,362,063</u>
INVESTMENTS	28,920,233	25,547,557	3,372,676	26,809,201
CAPITAL ASSETS	393,293,380	389,334,261	3,959,119	392,097,220
<b>TOTAL ASSETS</b>	<b>\$ 516,048,732</b>	<b>\$ 514,623,369</b>	<b>\$ 1,425,363</b>	<b>\$ 499,268,484</b>
<b>LIABILITIES</b>				
<b>CURRENT AND LONG-TERM LIABILITIES</b>				
Accounts payable and accrued liabilities	24,567,969	20,592,737	3,975,231	29,614,038
Deferred revenue	51,108,211	50,875,268	232,943	20,299,865
	<u>75,676,179</u>	<u>71,468,006</u>	<u>4,208,174</u>	<u>49,913,903</u>
LONG TERM DEBT	426,616	550,696	(124,080)	550,063
OBLIGATIONS UNDER CAPITAL LEASE	37,119,602	37,743,559	(623,958)	37,596,349
DEBENTURE DEBT	158,105,761	164,270,308	(6,164,546)	164,270,307
DEFERRED CAPITAL CONTRIBUTIONS	157,349,205	157,304,000	45,205	161,099,203
	<u>428,677,363</u>	<u>431,336,569</u>	<u>(2,659,206)</u>	<u>413,429,825</u>
<b>Net Assets</b>				
<b>UNRESTRICTED</b>				
NET ASSETS, excluding current year surplus	63,995,371	57,128,164	6,867,207	57,128,164
ENDOWMENTS	23,538,942	22,296,727	1,242,215	21,843,288
CURRENT YEAR (DEFICIT) / SURPLUS	(162,944)	3,861,909	(4,024,853)	6,867,207
	<u>87,371,369</u>	<u>83,286,800</u>	<u>4,084,569</u>	<u>85,838,659</u>
<b>TOTAL LIABILITIES AND NET ASSETS</b>	<b>\$ 516,048,732</b>	<b>\$ 514,623,369</b>	<b>\$ 1,425,363</b>	<b>\$ 499,268,484</b>

**ONTARIO TECH UNIVERSITY**  
**Consolidated Statement of Operations**  
**For the 9 months ending December 31, 2019**

	<u>Dec 31, 2019</u>	<u>Dec 31, 2018</u>	<u>YOY Variance</u>
<b>REVENUE</b>			
Grants - operating & research	\$ 56,611,867	\$ 55,290,060	1,321,806
Grant - debenture	13,500,000	13,500,000	-
Donations - operating & research	426,846	649,776	(222,930)
Student tuition fees	53,968,757	54,460,093	(491,336)
Student ancillary fees	11,178,696	10,407,882	770,814
Revenue from purchased services	2,371,748	2,616,129	(244,381)
Other income	7,365,501	7,386,732	(21,231)
Amortization of deferred capital contributions	7,056,987	6,863,533	193,454
Interest revenue	1,050,021	668,262	381,759
Unrealized gain/(loss) on investments	465,997	(1,098,365)	1,564,361
	<b>153,996,418</b>	<b>150,744,102</b>	<b>3,252,316</b>
<b>EXPENSES</b>			
Salaries and benefits	84,236,766	78,993,792	5,242,974
Student aid, financial assistance and awards	8,689,067	7,984,127	704,940
Supplies and expenses	22,322,183	21,209,601	1,112,582
Purchased Services	9,742,326	9,844,105	(101,778)
Professional fees	1,204,563	1,134,717	69,846
Interest expense - Long Term Debt	10,040,459	10,360,674	(320,215)
Interest expense - Other	108,097	101,557	6,540
Amortization of capital assets	17,709,725	17,411,463	298,262
Loss/(gain) on disposal of assets	106,175	(157,842)	264,017
	<b>154,159,362</b>	<b>146,882,194</b>	<b>7,277,168</b>
<b>Excess of expenses over revenues</b>	<b>\$ (162,944)</b>	<b>\$ 3,861,909</b>	<b>\$ (4,024,853)</b>

**UNIVERSITY OF ONTARIO INSTITUTE OF TECHNOLOGY**  
**Consolidated Statement of Cash Flows**  
**For the 9 months ending December 31, 2019**

	<u>Dec 31, 2019</u>	<u>Dec 31, 2018</u>
<b>NET INFLOW (OUTFLOW) OF CASH RELATED TO THE FOLLOWING ACTIVITIES</b>		
<b>OPERATING</b>		
Excess of expenses over revenue	(162,944)	3,861,909
Items not affecting cash:		
Amortization of capital assets	17,709,725	17,411,463
Amortization of deferred capital contributions	(7,056,987)	(6,863,533)
Unrealized (gain)/loss on investments	(465,997)	1,098,365
Loss/(gain) on disposal of assets	106,175	(157,842)
	<u>10,129,973</u>	<u>15,350,363</u>
Working Capital		
Grant and other accounts receivable	(33,508,787)	(32,983,276)
Prepaid expenses and deposits	(68,534)	299,303
Inventories	(577,146)	(756,212)
Accounts payable and accrued liabilities	(5,046,069)	(5,228,495)
Deferred revenue	30,808,345	31,295,621
	<u>1,737,781</u>	<u>7,977,303</u>
<b>INVESTING</b>		
Purchase of capital assets	(19,012,060)	(7,000,185)
Investments	8,226,721	(9,263,623)
Endowment contributions	1,695,653	1,256,299
	<u>(9,089,685)</u>	<u>(15,007,509)</u>
<b>FINANCING</b>		
Repayment of long term debt	(6,287,993)	(5,922,964)
Repayment of obligations under capital leases	(476,748)	(423,790)
Deferred capital contributions	3,306,989	1,618,630
	<u>(3,457,751)</u>	<u>(4,728,124)</u>
<b>NET CASH (OUTFLOW)</b>	<b>(10,809,655)</b>	<b>(11,758,329)</b>
<b>CASH BALANCE, BEGINNING OF YEAR</b>	<b>45,236,989</b>	<b>35,569,460</b>
<b>CASH BALANCE, END OF PERIOD</b>	<b>\$ 34,427,334</b>	<b>\$ 23,811,131</b>

**ONTARIO TECH UNIVERSITY****Financial Update – Report to Audit and Finance Committee – February 19, 2020****For the 9 months ending December 31, 2019**

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**CONSOLIDATED STATEMENT OF FINANCIAL POSITION****Assets**

Cash and short-term investments decrease of \$7.3m is mainly attributable to capital spending on the new building.

Grant receivable balance of \$9.1m includes \$6.6m Collaborative Nursing (CN) grant funded on a slip-year basis (PY balance \$2.6m receivable in CY and CY balance \$4.0m receivable in next FY) and \$2.5m of external research grants, of which \$1.0m relates to the new AVIN project.

Grant receivable increase of \$0.6m includes \$0.5m increase in CN grant associated with YOY growth.

Other accounts receivable includes student and trade receivables. Balance of \$40.3m includes \$35.4m of student A/R (\$1.0m for fall 2019 and prior, \$34.4m for the future winter semester for which payment is due Jan 2020), \$0.9m sales tax recoverable, \$0.6m trade receivables, \$0.6m ACE and other balances, none exceeding \$0.5m.

Prepaid Expenses and deposits increase of \$0.9m is due to the timing of payment for annual IT licenses and library subscriptions. These were paid in Q3 in the current year versus in Q4 in the prior year.

Investment balance of \$28.9m relates to endowed funds held at PH&N. The year-over-year increase of \$3.4m is comprised of M2M unrealized gain \$2.1m, new in-year donations \$1.0m, net investment income \$0.9m, offset by bursary disbursements \$0.6m.

Capital assets increase of \$4.0m includes net additions of \$26.7m, offset by accumulated amortization of \$22.7m in the last 12 months.

Net additions comprise \$13.8m of construction-in-progress (new building \$9.9m, Moving Ground Plane \$3.9m), \$5.6m newly capitalized major projects (\$3.5m MGP, \$2.1m AVIN), \$3.5m major equipment and FF&E, \$2.6m building and lab renovations and net \$1.2m computer equipment and laptops.

**Liabilities**

Accounts payable and accrued liabilities increased \$4.0m due to timing of recording and payment of invoices. This includes \$2.3m in trade payables including construction invoices, net \$0.5m construction holdbacks on the new student building, \$0.4m of student ancillary fees billed on behalf of third parties, and other immaterial variances.

Deferred Revenue relate to revenues deferred to subsequent periods as these have not yet been earned at the end of the reporting quarter or will be recognized as revenue in the period in which related expenses are incurred.

Balance of \$51.1m comprises \$32.9m deferred tuition representing winter term fees not earned at the end of the quarter, and \$18.2m of revenues billed or received and not yet spent at the end of the reporting quarter (\$7.4m of externally funded research revenues, \$4.4m of expendable donations, \$3.4m of student ancillary fees, and \$3.0m of miscellaneous deferred revenues).

**ONTARIO TECH UNIVERSITY****Financial Update – Report to Audit and Finance Committee – February 19, 2020****For the 9 months ending December 31, 2019**

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**CONSOLIDATED STATEMENT OF FINANCIAL POSITION (continued)**

Decrease in obligations under capital lease represents the principal lease repayments for 61 Charles and 55 Bond in the last 12 months.

Decrease in long-term debenture debt of \$6.2m relates to the principal repayment and resulting drawdown of the debt in the last 12 months. This debt is fully payable in October 2034.

Deferred capital contributions balance includes new capital grants and donations of \$9.5m received in the last 12 months, offset by \$9.4m amortization into revenues of capital grants and donations received since inception of the University.

New grants and donations received include grants of \$9.1m for various capital projects (including \$5.6m for the Moving Ground Plane, \$2.0 for the AVIN project, \$1.5m for campus renovations and retrofit projects), and \$0.4m donations received for SIRC.

**CONSOLIDATED STATEMENT OF OPERATIONS****Revenue**

Total Revenue increased \$3.3m over the prior year. Significant variances include:

- 1) Operating and research grant increase of \$1.3m, of which \$0.7m pertains to external research grants and \$0.6m increase in other miscellaneous operating grants. There is no additional grant funding from the Province for domestic enrolment growth.
- 2) Student ancillary fees increase of \$0.8m includes \$0.7m year-over-year increase due to the change in methodology of charging ancillary fees (based on headcount vs FTE), net increase of \$0.4m to reflect prior year revenues recognized for capital projects, offset by \$0.3m decrease in TELE ancillary fees attributable to all remaining programs (Nuclear, Gaming and Engineering Year 1 only) going “BYOD” in the current year, except for Engineering beyond Year 1 (the TELE hardware program will be fully decommissioned in 2020 - 21).
- 3) Unrealized gains on investments increased \$1.6m over the prior year is mainly attributable to more favourable market conditions on our endowed equity portfolio.

**Expenses**

Total Expenses increased \$7.3m over the prior year. Significant variances include:

- 1) Salaries and benefits increase of \$5.2m includes \$3.1m for staff and faculty annual salary increases, \$1.1m in net new hires (8 faculty and 10 non-faculty) and promotions, \$0.7m increase in limited term contracts for sessional and teaching assistant contracts, work study and graduate research programs, and \$0.3m increase to reflect enhanced pension benefits.

**ONTARIO TECH UNIVERSITY****Financial Update – Report to Audit and Finance Committee – February 19, 2020****For the 9 months ending December 31, 2019**

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**CONSOLIDATED STATEMENT OF OPERATIONS (continued)**

- 2) Student aid, financial assistance and awards increase of \$0.7m is mostly attributable to an increase in entrance scholarships as more students met the requirements for these scholarships for the current academic year.
- 3) Supplies and expenses increase of \$1.1m is due to the fact that the prior year balance included a one-time energy rebate of \$0.8m resulting from the introduction of The Fair Hydro Act 2017 on June 1, 2017. This rebate is no longer available.

**ONTARIO TECH UNIVERSITY****Financial Update – Report to Audit and Finance Committee – February 19, 2020****For the 9 months ending December 31, 2019****II. FINANCIAL METRICS**

The Ministry has adopted 5 financial metrics to assist with assessing university financial health and sustainability.

The table below shows Ontario Tech University's forecast metrics for fiscal year 2019 - 20 and the actuals for the 2 fiscal years 2018 – 19 and 2017 - 18. Also included are the average comparator and average sector metrics for fiscal year 2017 - 18 (latest published data). The average comparator includes the data for what are considered as “small” universities based on student FTE (‘Full-time equivalents’), and includes seven universities: Algoma, Lakehead, Laurentian, Nipissing, OCADU, Trent and Ontario Tech University.

Financial Metrics	Forecast	Actual	Actual	Average comparator	Average sector
	2019 - 20	2018 - 19	2017 - 18	2017 - 18	2017 - 18
Net Income/Loss Ratio (1)	1.3%	3.3%	7.2%	1.8%	5.4%
Net Operating Revenues Ratio (2)	9.3%	11.6%	8.3%	2.6%	8.3%
Primary Reserve Ratio (days) (3)	41	62	53	31	115
Interest Burden Ratio (4)	7.1%	7.6%	8.2%	3.0%	2.2%
(b) IBR w MTCU funding	1.7%	1.7%	1.8%	n/a	n/a
Viability Ratio (5)	12.7%	17.9%	14.1%	15.1%	4204.6%

**Financial Metrics Analysis**

**1. Net Income / Loss ratio** - tracks the trend in the University's net earnings.

Based on the current projection of a net operating surplus \$3.1m (see Section III “2019-20 Operating Forecast Summary” on Pages 10 - 12), it is forecast that the University's net earnings ratio will be positive at the end of the current fiscal year. This ratio is less favourable than in the prior years due to lower revenues as a result of a 10% cut in tuition fees and no additional funding for domestic growth from the Province, coupled with increased labour costs in the current year.

**ONTARIO TECH UNIVERSITY****Financial Update – Report to Audit and Finance Committee – February 19, 2020****For the 9 months ending December 31, 2019**

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**II. FINANCIAL METRICS (continued)**

**2. Net Operating Revenues** ratio – indicates the extent to which the University is generating positive cash flows in the long-run to be financially sustainable.

The University continues to experience positive operating and working capital and, therefore, a stable net operating revenues ratio.

**3. Primary Reserve** ratio – indicates the University’s financial strength and flexibility by determining the number of days Ontario Tech University could function using its resources that are can be expended without restrictions.

Primary reserve ratio is less favourable than in the prior years due to a deterioration in the net expendable assets as a result of lower forecast operating net surplus attributable to the tension on the revenue v/s the expense side, coupled with the increased capital investment in the current year, including \$12.5m in the construction of the new building.

**4. Interest Burden** ratio (“IBR”) – indicates the University’s debt affordability and the cost of servicing debt

Ontario Tech University’s interest burden continues to improve as it pays back its long-term debt obligations without entering into any new debt. The cost of servicing its debt is above the comparator due to its relatively higher debt obligations.

**4b. Interest Burden with MTCU funding** ratio – the “IBR” has been re-stated to reflect an annual “institution-specific” grant of \$13.5m from the Ministry to fund the University’s debenture debt. Therefore, interest expense on the debenture has been removed from the total interest expense, used in the calculation of “IBR”.

Including the impact of the Ministry funding, the University’s interest burden ratio is more favourable than the average comparator and average sector ratios.

**5. Viability** ratio - determines Ontario Tech University’s financial health, as it indicates the funds on hand to settle its long-term obligations.

Although the University’s debt obligations are decreasing, the viability ratio is less favourable than in the prior years due to the deterioration in its net expendable assets as a result of less favourable surplus in the current year, coupled with an increased investment in capital projects, including \$12.5m investment in the construction of the new building.

**ONTARIO TECH UNIVERSITY**

**Financial Update – Report to Audit and Finance Committee – February 19, 2020**

**For the 9 months ending December 31, 2019**

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**II. FINANCIAL METRICS (continued)**

**(1) Net Income/Loss Ratio**

$$\frac{\text{Total Revenues less Total Expenses}}{\text{Total Revenues}}$$

*Measures the percentage of revenues that contribute to net assets. The objective is to track trends in net earnings*

**(4) Interest Burden Ratio**

$$\frac{\text{Interest Expense}}{\text{Total Expenses - Depreciation}}$$

*Indicates debt affordability as it examines the percentage of total expenses used to cover the University's cost of servicing debt*

**(2) Net Operating Revenues Ratio**

$$\frac{\text{Cash flow from Operating Activities}}{\text{Total Revenues}}$$

*Indicates the extent to which the University is generating positive cash flow in the long-run to be financially sustainable.*

**(5) Viability Ratio**

$$\frac{\text{Expendable Net Assets}}{\text{Long-Term Debt}}$$

*Determines financial health as it indicates the funds on hand to settle its long-term obligations. Long-Term Debt is total external long-term debt, excluding the current portion of debt.*

**(3) Primary Reserve Ratio**

$$\frac{\text{Expendable Net Assets}}{\text{Total Expenses}} \times 365 \text{ days}$$

*Indicates the University's financial strength and flexibility by determining the number of days it can function using only its resources that can be expended without restrictions. Expendable net assets include: Unrestricted surplus (deficit), internally restricted net assets and endowments.*

# Ontario Tech University

## III. Management Reporting: 2019 - 20 Operating Forecast Summary (in '000 s)

### For the year ending March 31, 2020

The table below shows the variance of the year-end forecast vs the approved budget

April 1, 2019 - March 31, 2020				
	Total Annual Budget	Y/E Forecast	Fav. (Unfav.) Budget vs. Forecast \$ / %	
<b>Revenue</b>				
Grants	81,084	80,953	(131)	0%
Tuition	79,944	79,028	(916)	-1%
Student Ancillary	11,484	13,738	2,254	20%
Other	18,297	18,668	371	2%
<b>Total Revenue</b>	<b>\$ 190,810</b>	<b>\$ 192,388</b>	<b>\$ 1,578</b>	<b>1%</b>
<b>Expenditures</b>				
Academic/ACRU	76,848	77,095	(247)	0%
Academic Support	36,966	37,126	(161)	0%
Administrative	33,081	29,449	3,632	11%
<b>Sub-total</b>	<b>\$ 146,895</b>	<b>\$ 143,670</b>	<b>\$ 3,225</b>	<b>2%</b>
<b>Purchased Services</b>	<b>12,109</b>	<b>12,173</b>	<b>(64)</b>	<b>-1%</b>
<b>Total Ancillary/Commercial</b>	<b>10,460</b>	<b>9,942</b>	<b>519</b>	<b>5%</b>
<b>Debt Interest Expense</b>	<b>10,157</b>	<b>10,157</b>	<b>-</b>	<b>0%</b>
<b>Total Expenses</b>	<b>\$ 179,621</b>	<b>\$ 175,941</b>	<b>\$ 3,680</b>	<b>2%</b>
<b>Operating Contribution</b>	<b>\$ 11,189</b>	<b>\$ 16,447</b>	<b>\$ 5,258</b>	<b>47%</b>

#### Expenses disclosed on the Balance Sheet

Capital Expenses	4,201	6,336	(2,135)	-51%
Principal Repayments - debenture/leases	6,989	6,989	0	0%

#### Net Operating Surplus

\$ (0)	\$ 3,123	\$ 3,123	N/A
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#### Other disclosure - Funded by prior year reserves/deferred revenues

Capital - Basketball Change Rooms	856	843	13	2%
Capital - New Building	11,493	11,900	(407)	-4%
Capital Campaign	1,183	1,166	17	1%

#### Reconciliation to Y/E forecast GAAP FS:

Net forecast contribution from Operations	\$ 16,447
Items not budgeted:	
Externally funded research revenues (donation, grant, other)	13,053
Externally funded research expenses	(11,943)
Non-cash transactions:	
Amortization of capital assets	(23,489)
Amortization of deferred capital contributions	9,409
Unrealized gain on investments	500
Capital revenues accounted as Deferred Capital Contributions on the balance sheet	(1,981)
Forecast excess revenues over expenses (per GAAP Financial Statements)	<u>\$ 1,997</u>

**ONTARIO TECH UNIVERSITY****Financial Update – Report to Audit and Finance Committee – February 19, 2020****For the 9 months ending December 31, 2019****III. 2019 - 20 Operating Forecast Summary**

Based on the Nov 1 official enrolment count, the operating budget, after capital expenses and principal debenture and lease repayments, shows a net operating surplus of \$3.1m at the end of the fiscal year.

The variances of the year-end forecast to the approved budget are explained below.

**Enrolment**

<b>FTE's</b>	<b>2019 - 20 Approved Budget</b>	<b>2019 - 20 Nov 1 count</b>	<b>Variance to Approved Budget</b>
<b>Undergraduate</b>			
Domestic	7,923	7,882	-41
International	488	486	-2
<b>Graduate</b>			
Domestic	414	428	14
International	189	183	-6
<b>Total FTE's</b>	<b>9,014</b>	<b>8,979</b>	<b>-35</b>

Nov 1 enrolment count shows a net negative variance of 35 FTE against an original budget of 9,014 FTE, resulting in a total net decrease of \$0.7m in forecast tuition revenue.

Current eligible undergraduate and graduate enrolment projection is within the + / - 3% of Ontario Tech University's corridor midpoint.

Core Operating Grant remains flat as under the new funding formula implemented by the Ministry in 2017-18, the funding for domestic students for the current year remains at the 2016 – 17 level.

**Revenues**

Forecast total revenues are favourable \$1.6m to budget. Significant items include:

- 1) Student ancillary fees favourable variance of \$2.3m includes \$1.3m of prior year deferred revenues recognized in the current year for the construction of the basketball change rooms (see offsetting "Capital Expenses" below), and \$1.0m increase due to the change in methodology of charging ancillary fees (actual is based on headcount vs budget was based on FTE).

**ONTARIO TECH UNIVERSITY****Financial Update – Report to Audit and Finance Committee – February 19, 2020****For the 9 months ending December 31, 2019**

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**III. 2019 - 20 Operating Forecast Summary (continued)**

- 2) Other revenues are favourable \$0.4m to budget and includes \$0.8m higher than budgeted investment income on the University's bank and short-term investment balances, offset by \$1.0m decrease in ACE revenues due to lower utilization of the ACE facility by GM US (with offsetting lower expenses – See Expenses Note (1) below) and other variances, none exceeding \$0.5m.
- 3) Tuition is \$0.9m unfavourable to budget, of which \$0.7m decrease is attributable to decrease in tuition revenues due to a shortfall in student enrolment, \$0.5m decrease in ELC (English Learning Center) fees due to lower than anticipated number of summer students, offset by an increase of \$0.3m in co-op and continuous learning fees.

**Expenses**

Forecast total operating expenses are favourable \$3.7m. Significant items include:

- 4) \$3.5m release of planned building and operational reserves that will not be utilized at the end of the fiscal year and \$0.7m labour and operating expense savings as a result of lower than forecast utilization of the ACE facility by GM US (with offsetting decrease in revenues – See Revenues Note (3) above) .

**Capital Expenses**

Capital Expenses funded from Operations are unfavourable \$2.1m to budget, and includes \$1.2m of capital investments in the new basketball change rooms (funded by deferred revenues), and \$0.8m cost overrun in the Moving Ground Plane project in the current year and other immaterial variances.

**Summary**

The operating contribution is \$5.2m favourable to budget. This is offset by a higher than expected capital investment of \$2.1m (of which \$1.2m is funded by prior year deferred revenues), for a net forecast operating surplus of \$3.1m. Consistent with the prior years, and at year-end, Management will make a recommendation to the Committee to restrict any actual surplus for student initiatives and campus projects.

It is also projected that Ontario Tech University will spend a total of \$14.5m of prior year internally restricted reserves for major projects at the University.

The forecast surplus on a GAAP (generally accepted accounting principle) basis, after adjusting for non-cash transactions and for items that are not included in the budget, is \$2.0m.

**ONTARIO TECH UNIVERSITY****Financial Update – Report to Audit and Finance Committee – February 19, 2020**  
**For the 9 months ending December 31, 2019**

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**IV. 2019 – 20 CASH FLOW FORECAST**

The University administration uses a cash management forecasting model to manage its operating cash balances and operating short-term investment portfolios.

University cash balances are cyclical in nature with higher operating balances in September – November and January - March due to tuition fee collection from the fall and winter semester registration, and lower balances in December and during the early summer months.

The University has the following credit facility:

- A revolving operating LOC of up to \$17.0m, bearing interest at prime plus 0.25% with a Canadian chartered bank.

**Cash Flow Update**

- The University has not utilized its available line of credit as at the end of the reporting quarter.
- The University currently holds \$25.5m of its operating cash surplus in high interest savings accounts and annual and 30-day cashable guaranteed investment certificates (GIC's).
- **Operating cash balance**, including high interest savings and short-term investments of \$25.5m, is projected at **\$36.3m** at the end of the fiscal year.
- **Externally and internally restricted cash balances** (including Research, Advancement, Campus Childcare, Regent Theatre, and ACE) is projected at **\$12.1m** at the end of the fiscal year.

**ONTARIO TECH UNIVERSITY**  
**Cash Flow Forecast Summary for the year ended March 31, 2020**

	Actual			Forecast			Total Cash Forecast
	Apr - Jun 2019	Jul - Sep 2019	Oct - Dec 2019	Jan 2020	Feb 2020	Mar 2020	
	\$ 000 s	\$ 000 s	\$ 000 s	\$ 000 s	\$ 000 s	\$ 000 s	\$ 000 s
Operating Beginning Cash Balance	24,778	11,578	23,283	1,976	19,715	11,446	24,778
Total Operating Inflows	37,889	66,080	32,497	34,649	10,023	14,726	195,864
Total Operating Outflows	(49,752)	(50,305)	(52,108)	(15,471)	(16,517)	(13,832)	(197,985)
Net Operating Cash Flows	(11,863)	15,775	(19,611)	19,178	(6,494)	894	(2,121)
Total Operating Cash Available	12,915	27,353	3,672	21,154	13,221	12,340	22,657
New Building Outflows	(1,337)	(4,070)	(1,696)	(1,439)	(1,775)	(1,556)	(11,873)
Operating Ending Cash Balance after New Building investments	11,578	23,283	1,976	19,715	11,446	10,784	10,784
Total Internally and Externally Restricted Cash	14,957	14,450	14,380	15,365	14,814	12,063	12,063
Total Consolidated Cash Position	26,535	37,733	16,356	35,080	26,260	22,847	22,847

Total Cash Forecast as at MAR 31, 2020

Total Operating Cash after new building costs	10,784	(1)
Add: Short-term investments in GIC's	25,508	
Total Operating Cash and ST investments	\$ 36,292	
Total Restricted Cash	\$ 12,063	(2)

Budget Update  
**Board of Governors** - Public  
February 27, 2020

Presented by:  
Michael Livingston, Provost and VP Academic  
Deirdre Gallagher, Interim Chief Financial Officer



# AGENDA

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1. **Update of 2020 - 21 budget assumptions**

2. **Next steps**

3. **Questions/comments**

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# ORIGINAL BUDGET ASSUMPTIONS (NOV 20, 2019)

## ) Enrolment levels – limited growth based on population increase

(Revenue sources: 35.6% grant; 42.0% tuition; 6.0% ancillary)

	2017-18	2018-2019	e2019-2020	e2020-2021
Domestic Intake	2315	2462	2461	2631
International Intake	99	152	135	240
<b>Undergraduate - FTEs</b>				
Domestic Total	7936	7920	7905	7732
International Total	435	407	476	601
<b>Graduate - FTEs</b>				
Domestic (Incl. deregulated)	413	430	465	410
International	143	148	177	214
<b>Total - FTEs</b>	<b>8927</b>	<b>8905</b>	<b>9023</b>	<b>8956</b>

## ) Domestic Tuition Freeze/ Propose increase Yr 1 International 10%

	2019-2020	2019-20 System Average	2019-20 System Median
BCom	\$23,224	\$32,156	\$28,362
BEng, BEng & Mgmt	\$27,307	\$35,638	\$34,384
BSc, Computer Science	\$22,187	\$29,169	\$27,242

# ORIGINAL BUDGET ASSUMPTIONS (NOV 20, 2019)

Grant funding from the Province set at 2016 - 17 levels with an increasing proportion dependent on meeting SMA metric targets

	2020-21	2021-22	2022-23	2023-24	2024-25
Notional Allocation	\$ 12,9	\$ 19,1	\$ 25,2	\$ 31,4	\$ 34,5

Compensation increases and other fixed cost estimates as forecast

# 2020 – 21 DRAFT BUDGET (Original)

## ONTARIO TECH UNIVERSITY

### 2020 - 21 DRAFT OPERATING BUDGET (\$' 000s)

	Operating Budget	Purchased Services	Debtenture	TELE	ACE	Regent Theater	Campus ChildCare	Campus Field House and Arena	Total Draft Budget
<b>REVENUES</b>									
Operating Grant	57,696		13,500						71,196
Other Grants	9,498						178		9,676
Student Tuition Fees	83,428								83,428
Student Ancillary Fees	8,086	1,214		3,003					12,303
Revenues from Ancillary Operations	225	1,569							1,794
Donations	950								950
Other Revenues	5,874			15	5,175	682	821	1,623	14,115
<b>Total Operating Revenues</b>	<b>165,757</b>	<b>2,783</b>	<b>13,500</b>	<b>3,018</b>	<b>5,175</b>	<b>682</b>	<b>999</b>	<b>1,623</b>	<b>193,554</b>
<b>EXPENDITURES</b>									
<b>Base Expenditures</b>									
Labour	(94,307)	(6,576)		(1,171)	(1,691)	(107)	(367)	(637)	(104,883)
Labour	(15,710)	(132)		(325)	(122)	(334)	(349)	-	(16,552)
EXP	(37,377)	(6,320)	(16,501)	(1,473)	(3,039)	(224)	(276)	(936)	(66,116)
Capital	(338)	-		-	(7)	-	-	-	(345)
<b>Total Base Expenditures</b>	<b>(147,732)</b>	<b>(13,028)</b>	<b>(16,501)</b>	<b>(2,968)</b>	<b>(4,859)</b>	<b>(665)</b>	<b>(991)</b>	<b>(1,573)</b>	<b>(188,316)</b>
<b>Budget Surplus/(Deficit) before Asks</b>	<b>18,025</b>	<b>(10,244)</b>	<b>(3,001)</b>	<b>50</b>	<b>316</b>	<b>17</b>	<b>8</b>	<b>50</b>	<b>5,229</b>
<b>ASKS</b>									
Capital and Operating Reserves	(3,500)								(3,500)
Capital Asks	(2,335)	(1,100)		(50)	(2,154)				(5,639)
Base Asks	(687)								(687)
One-time-only Asks	(173)				(48)				(221)
One-time-only Salary Savings	2,049								2,049
<b>Total Budget Surplus/(Deficit) after Ask</b>	<b>13,380</b>	<b>(11,344)</b>	<b>(3,001)</b>	<b>-</b>	<b>(1,886)</b>	<b>17</b>	<b>8</b>	<b>50</b>	<b>(2,726)</b>

# CHANGES TO BUDGET ASSUMPTIONS

## ) Enrolment

- Domestic: Preliminary application statistics from OUAC (Jan 2020):
  - ~ 10% decrease at High School deadline
  - impact being mitigated by aggressive admissions offers, but still forecast adverse impact on tuition revenues
- International: at risk with the development of the coronavirus, coupled with new process for obtaining visas
- Working with faculties to look at new student success programs for fall 2020
- Forecast a net downside of up to \$3.0m in tuition revenues

## ) and (3): Status quo

## ) Compensation increases and other fixed cost estimates as forecast

- Adjusted based on increase in extended healthcare premium costs for a net downside of \$0.3 m

# CURRENT BUDGET STATUS

	<u>\$</u>
	(2,776)
	(3,000)
	<u>(300)</u>
	<u>\$ (6,076)</u>

**Budget deficit (per Nov 20, 2019 draft)**

**Downsides:**

Enrolment shortfall

Compensation costs

**Current deficit**

## NEXT STEPS

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The Budget Working Group (BWG) has been working with the President and Senior Leadership Team (SLT)

- to review proposals for budget reductions, taking into consideration the integrated operational plan, university priorities, and our core mission and values

Budget changes will be strategic, rather than across-the-board

- Not all units will be impacted in the same fashion
-

# BUDGET SCHEDULE

2020-21 Budget Calendar	
19-Feb-2020	High level presentation of revenues and base expenditures to A&F
20-Feb-2020	Ontario Tech University / Durham College confirm final shared services budgets
2-Mar-2020	Final budget approved by SLT
Mar 3 - Mar 20/2020	Preparation of budget presentation files for A&F/Board
23-Mar-2020	Feedback from Academic Council on SLT-approved budget prior to A&F in April 2020
25-Mar-2020	Review of budget material (for A&F/Board presentation) with President
6-Apr-2020	Budget package sent to SLT for review
8-Apr-2020	Final budget package for distribution to A&F Committee
15-Apr-2020	Presentation of proposed budget to A&F
16-Apr-2020	Final budget package for distribution to Board
23-Apr-2020	Presentation of proposed budget to Board for approval
4-Jun-2020	Presentation of Board approved budget to Academic Council

# Questions/Comments ?

## BOARD REPORT

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### SESSION:

Public ☒  
Non-Public ☐

### ACTION REQUESTED:

Decision ☒  
Discussion/Direction ☐  
Information ☐

**TO:** Board of Governors

**DATE:** Feb 27, 2020

**FROM:** Audit & Finance Committee

**SUBJECT:** 2020-21 Tuition Fees

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### COMMITTEE/BOARD MANDATE:

The committee is responsible for overseeing the financial affairs of the university including reviewing and recommending approval of the tuition fees and ancillary fees. We are seeking the Board's approval of the proposed 2020-21 tuition fees.

### BACKGROUND/CONTEXT & RATIONALE:

The tuition fee framework, released by the provincial government in December 2018, regulates all publicly funded programs and allows for tuition fee differentiation based on program and program year.

The framework is based on the principle that in 2020-21 institutions are expected to charge the same full-time and part-time domestic tuition fees that they charged in 2019-20, for each program and year of study. International and cost recovery programs are not included in the limits imposed by the provincial framework and we have increased these based on Ontario comparisons ensuring we were at or below the estimated median.

### RESOURCES REQUIRED:

N/A

### IMPLICATIONS:

The rates proposed in this document have been made to remain compliant with the provincial government's tuition framework. If not approved the budget expenses would also need to be altered.

**ALIGNMENT WITH MISSION, VISION, VALUES & STRATEGIC PLAN:**

The fees recommended will allow Ontario Tech to continue to provide superior undergraduate and graduate programs.

**ALTERNATIVES CONSIDERED:**

Various options were considered for international students. The fees presented below allow Ontario Tech to remain at or below system median fees for all programs and levels.

**CONSULTATION:**

After a comparative review of fees charged by competing programs offered by universities in Ontario, we recommend increases as permitted by the latest framework in all programs as outlined in the accompanying appendix table. The fees have been shown to Academic Council and the Student Association. The assumptions were embedded into all budget discussions.

**COMPLIANCE WITH POLICY/LEGISLATION:**

The current fees are in compliance with the existing tuition fee framework.

**NEXT STEPS:**

1. Upon obtaining Board approval, the university will update tuition within Ontario Tech's student information system and website.

**MOTION FOR CONSIDERATION:**

*That pursuant to the recommendation of the Audit & Finance Committee, the Board of Governors hereby approves the 2020-2021 tuition fees, as presented.*

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**SUPPORTING REFERENCE MATERIALS:**

- Appendix 1: Recommendations for Ontario Tech 2020-21 tuition fees

**Appendix 1: Recommendations for Ontario Tech 2020-2021 tuition fees****Undergraduate Domestic**

			Rate of Increase
	2019-2020	2020-2021	19/20 to 20/21
<b>BA, BEd, BHSc, BSc &amp; Mgt, UG Diploma</b>			
First Year	\$5,982.80	\$5,982.80	0.0%
Second Year	\$5,956.38	\$5,956.38	0.0%
Third Year	\$5,926.62	\$5,926.62	0.0%
Fourth Year	\$5,920.76	\$5,920.76	0.0%
Fifth Year	\$5,914.98	\$5,914.98	0.0%
<b>BCom</b>			
First Year	\$8,088.28	\$8,088.28	0.0%
Second Year	\$8,049.76	\$8,049.76	0.0%
Third Year	\$8,011.44	\$8,011.44	0.0%
Fourth Year	\$8,003.52	\$8,003.52	0.0%
<b>BIT</b>			
First Year	\$9,031.18	\$9,031.18	0.0%
Second Year	\$9,022.42	\$9,022.42	0.0%
Third Year	\$9,013.68	\$9,013.68	0.0%
Fourth Year	\$8,991.78	\$8,991.78	0.0%
<b>BEng, BEng &amp; Mgmt, BTech</b>			
First Year	\$9,390.18	\$9,390.18	0.0%
Second Year	\$9,381.24	\$9,381.24	0.0%
Third Year	\$9,372.30	\$9,372.30	0.0%
Fourth Year	\$9,283.04	\$9,283.04	0.0%
Fifth Year	\$9,159.26	\$9,159.26	0.0%
<b>BSc, BSc &amp; Mgt (Computer Science)</b>			
First Year	\$6,339.90	\$6,339.90	0.0%
Second Year	\$6,333.84	\$6,333.84	0.0%
Third Year	\$6,327.84	\$6,327.84	0.0%
Fourth Year	\$6,321.78	\$6,321.78	0.0%
Fifth Year	\$6,321.64	\$6,321.64	0.0%
<b>BScN</b>			
First Year	\$6,100.68	\$6,100.68	0.0%
Second Year	\$6,094.76	\$6,094.76	0.0%
Third Year	\$6,088.84	\$6,088.84	0.0%
Fourth Year	\$6,082.92	\$6,082.92	0.0%

## Undergraduate International

			Rate of Increase
	2019-2020	2020-2021	19/20 to 20/21
<b>BA, BEd, BHSc, BSc &amp; Mgt, UG Diploma</b>			
First Year	\$21,935.04	\$24,128.54	10.0%
Second Year	\$20,938.00	\$21,984.90	5.0%
Third Year	\$20,845.64	\$21,887.92	5.0%
Fourth Year	\$20,741.40	\$21,778.46	5.0%
Fifth Year	\$20,720.96	\$21,757.00	5.0%
<b>BCom</b>			
First Year	\$24,330.48	\$26,763.52	10.0%
Second Year	\$23,224.54	\$24,385.76	5.0%
Third Year	\$23,113.96	\$24,269.64	5.0%
Fourth Year	\$23,025.90	\$24,177.18	5.0%
<b>BIT</b>			
First Year	\$25,400.32	\$27,940.34	10.0%
Second Year	\$24,245.76	\$25,458.04	5.0%
Third Year	\$24,222.24	\$25,433.34	5.0%
Fourth Year	\$24,198.72	\$25,408.64	5.0%
<b>BEng, BEng &amp; Mgmt, BTech</b>			
First Year	\$28,608.16	\$31,468.96	10.0%
Second Year	\$27,307.78	\$28,673.16	5.0%
Third Year	\$27,281.78	\$28,645.86	5.0%
Fourth Year	\$27,255.80	\$28,618.58	5.0%
Fifth Year	\$26,996.20	\$28,346.00	5.0%
<b>BSc, Computer Science</b>			
First Year	\$23,244.34	\$25,568.76	10.0%
Second Year	\$22,187.78	\$23,297.16	5.0%
Third Year	\$22,166.64	\$23,274.96	5.0%
Fourth Year	\$22,145.54	\$23,252.80	5.0%
Fifth Year	\$22,124.42	\$23,230.64	5.0%
<b>BScN</b>			
First Year	\$22,367.26	\$24,603.98	10.0%
Second Year	\$21,350.56	\$22,418.08	5.0%
Third Year	\$21,329.84	\$22,369.32	5.0%
Fourth Year	\$21,309.14	\$22,374.58	5.0%

**Graduate Domestic****Program Based**

			Rate of Increase
	2019-2020	2020-2021	19/20 to 20/21
<b>MA (SSH), MHSc, MSc, PhD</b>			
First Year	\$7,579.30	\$7,579.30	0.0%
Upper Year	\$7,579.30	\$7,579.30	0.0%
<b>MASc, MEng, MEngM</b>			
First Year	\$8,859.94	\$8,859.94	0.0%
Upper Year	\$8,859.94	\$8,859.94	0.0%
<b>MSc in Nursing</b>			
First Year		\$8,761.50	
Upper Year		\$8,761.50	
<b>Graduate Diploma</b>			
Diploma in Accounting	\$7,350.00	\$7,717.50	5.0%
Diploma in Nuclear Technology	\$5,906.62	\$5,906.62	0.0%
Diploma in Nuclear Design Engineering	\$5,906.62	\$5,906.62	0.0%
Diploma in Engineering Management	\$5,906.62	\$5,906.62	0.0%

**Credit Based (per 3-credit course)**

			Rate of Increase
	2019-2020	2020-2021	19/20 to 20/21
<b>MEd, MA in Education</b>			
All Years	\$1,576.47	\$1,576.47	0.0%
<b>Graduate Diploma</b>			
Education & Digital Technology	\$1,576.47	\$1,576.47	0.0%
Work Disability Prevention	\$1,576.47	\$1,576.47	0.0%
<b>MITS</b>			
First Year	\$1,257.52	\$1,257.52	0.0%
Upper Year	\$1,257.52	\$1,257.52	0.0%

## Graduate International

### Program Based

			Rate of Increase
	2019-2020	2020-2021	19/20 to 20/21
<b>MA (SSH), MHSc, MSc, PhD</b>			
First Year	\$18,790.20	\$19,166.00	2.0%
Upper Year	\$18,790.20	\$19,166.00	2.0%
<b>MASc</b>			
First Year	\$22,794.72	\$23,250.60	2.0%
Upper Year	\$22,794.72	\$23,250.60	2.0%
<b>MEng, MEngM</b>			
First Year	\$22,794.72	\$25,074.18	10.0%
Upper Year	\$22,794.72	\$25,074.18	10.0%
<b>MSc in Nursing</b>			
First Year		\$21,076.50	
Upper Year		\$21,076.50	
<b>Graduate Diploma</b>			
Diploma in Nuclear Technology	\$15,196.46	\$16,716.10	10.0%
Diploma in Nuclear Design Engineering	\$15,196.46	\$16,716.10	10.0%
Diploma in Engineering Management	\$15,196.46	\$16,716.10	10.0%

### Credit Based (per 3-credit course)

			Rate of Increase
	2019-2020	2020-2021	19/20 to 20/21
<b>MEd, MA in Education</b>			
All Years	\$2,016.97	\$2,057.31	2.0%
<b>Graduate Diploma</b>			
Education & Digital Technology	\$2,016.97	\$2,057.31	2.0%
Work Disability Prevention	\$2,016.97	\$2,057.31	2.0%
<b>MITS</b>			
First Year	\$3,130.60	\$3,287.12	5.0%
Upper Year	\$3,130.60	\$3,287.12	5.0%

English for Academic Purposes (EAP) Program

			Rate of Increase
	2019-2020	2020-2021	19/20 to 20/21
All Levels	\$2,918.00	\$3,005.54	3.0%

## BOARD REPORT

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**SESSION:**

Public ☒  
Non-Public ☐

**ACTION REQUESTED:**

Decision ☒  
Discussion/Direction ☐  
Information ☐

**TO:** Board of Governors

**DATE:** February 27, 2020

**FROM:** Audit & Finance Committee

**SUBJECT:** 2020-2021 Ancillary Fees

---

**COMMITTEE/BOARD MANDATE:**

The committee is responsible for overseeing the financial affairs of the university including reviewing and recommending approval of the tuition fees and ancillary fees. We are seeking the Board's approval of the proposed 2020-21 ancillary fees, as presented.

**BACKGROUND/CONTEXT & RATIONALE:**

Provincial policy requires that a negotiated Compulsory Ancillary Fees protocol exists between the Board of Governors of each university and their student association. The Ancillary Fees Committee consists of three students and three administrative representatives. Under the terms of the current Ontario Tech University protocol, signed June 2018, the Board of Governors is required to approve the ancillary fees by the spring of each year. Fees under the Bank of Canada, Consumer Price Index average of 12 months do not require Board approval. This year's CPI is 2.2%.

As we have the highest ancillary fees in the province, we have been watching this rate carefully over the past few years and recommend adjustments with this in mind. These higher fees are based on decisions made with students to include items that other institutions may not have at this time for example: the Durham Transit fee that gives students the ability to ride the bus at 25% of the cost of a normal fare; two capital projects (~\$270 funded through student referendum) and our dedication to providing Technology Enhanced Learning Environment to our students rather than having them go out and buy the materials independently. After a number of years with no increases or staggered increases we will be increasing almost all fees the inflationary rate. A key factor in this decision aligns with the freeze to domestic tuition.

**RESOURCES REQUIRED:**

N/A

**IMPLICATIONS:**

Altering the fees will alter our ability to provide specific services.

**ALIGNMENT WITH MISSION, VISION, VALUES & STRATEGIC PLAN:**

The fees recommended will allow Ontario Tech to continue to provide high quality undergraduate and graduate services and experiences to its students.

**ALTERNATIVES CONSIDERED:**

Each fee change was reviewed by the Ancillary fee Committee.

**CONSULTATION:**

A request for fees was sent out to all unit leads and Ontario Tech Student Union in December. The committee met once and had two additional electronic meetings to evaluate and decide on changes.

Please note in addition to below there is a referendum taking place related to Faculty specific society fees as part of the winter student elections. If the population votes in favour the new fee will be added.

Additionally, the Ontario Tech Student Union is in discussions with the Health & Dental provider. If a new agreement is signed before June the new fees will be updated for fall.

**COMPLIANCE WITH POLICY/LEGISLATION:**

The increases are compliant with provincial policy and Ontario Tech's ancillary fee protocol.

**NEXT STEPS:**

1. Upon obtaining the Board's approval, the university will update ancillary fees within Ontario Tech's student information system and website.

**MOTION FOR CONSIDERATION:**

*That pursuant to the recommendation of the Audit and Finance Committee, the Board of Governors hereby approves the 2020-21 ancillary fees, as presented.*

## Compulsory Ancillary Fees

<b>Flat Fees. FT and PT students.</b>	<b>2019-20</b>	<b>2020-21</b>	<b>% Inc</b>
Career Readiness	68.64	70.14	2.19%
Health Services (general)	26.22	26.80	2.20%
Mental Health Services	65.42	66.86	2.20%
Health and Wellness	14.96	15.28	2.14%
Sport and Recreation	79.18	80.92	2.20%
Campus Access	74.70	76.34	2.20%
Campus Open Access	33.08	33.80	2.18%
Campus Safety	9.64	9.84	2.07%
Infrastructure Enhancements	116.74	119.30	2.19%
Student ID	18.74	19.14	2.13%
Study and Activity Spaces	34.02	34.76	2.18%
<b>Charged to FT each term</b>	<b>2019-20</b>	<b>2020-21</b>	<b>% Inc</b>
U-Pass	278.00	283.50	1.98%
<b>Flat Fees Paid half Fall and half Winter. FT and PT students.</b>	<b>2019-20</b>	<b>2020-21</b>	<b>% Inc</b>
Community and Social Programming	10.64	10.86	2.07%
Wellness and Support Services	11.20	11.44	2.14%
Student Representation and Leadership	8.90	9.10	2.20%
World University Services of Canada	2.70	2.76	2.20%
Campus Clubs	4.80	4.90	2.08%
Student Society Fee Education/SSH	3.28	3.34	1.83%
Student Society Fee FBIT	13.28	13.56	2.11%
Student Society Fee FEAS/FESNS	18.28	18.68	2.20%
Student Society Fee Science		15.00	
Student Society Fee Health Sciences		10.00	
Legal Protection Program		28.00	
<b>Flat Fees Paid half Fall and half Winter. FT and PT students.</b>	<b>2019-20</b>	<b>2020-21</b>	<b>% Inc</b>
Campus Life and Events	11.18	11.42	2.15%
Student Engagement	67.34	68.82	2.20%
Grad proportion	67.34	68.82	2.20%
Student Learning	115.92	118.46	2.19%
Convocation	6.62	6.77	2.20%
Printer Services	26.20	26.78	2.20%
Instructional Resource	115.22	117.74	2.19%
Georgian Engagement Services	200.33	204.74	2.20%
Technology-enriched Learning FEAS	231.00	236.08	2.20%
Technology-enriched Learning FESNS	221.00	225.86	2.20%
Technology-enriched Learning FSCI	180.13	184.08	2.19%
Technology-enriched Learning FHSc	157.86	161.32	2.19%
Technology-enriched Learning FBIT Non-Gaming	151.07	154.38	2.19%

Technology-enriched Learning FBIT -Gaming	478.00	488.52	2.20%
Technology-enriched Learning FSSH	130.69	133.56	2.20%
Technology-enriched Learning FEDU	194.88	224.10	14.99%
Technology-enriched Learning Undeclared	154.00	157.38	2.19%
<b>Flat Fees Paid half Fall and half Winter. FT only</b>	<b>2019-20</b>	<b>2020-21</b>	<b>% Inc</b>
Benefit Plan Coordination	23.86	24.38	2.20%
USU Building	98.89	101.06	2.19%
Campus Recreation and Wellness Centre	174.12	176.04	1.10%
Varsity Sports	77.20	78.90	2.20%
Intramural Sports	10.54	10.76	2.09%
<b>Flat Fees Paid once per yr. (Fall or as admitted). FT only.</b>	<b>2019-20</b>	<b>2020-21</b>	<b>% Inc</b>
Health & Dental - Fall	250.32	250.32	0.00%
Health & Dental - Winter	201.70	201.70	0.00%
Health & Dental -Summer	153.08	153.08	0.00%
International Health Insurance - Fall	672.00	686.78	2.20%
International Health Insurance - Winter	448.00	457.86	2.20%
International Health Insurance - Summer	224.00	228.93	2.20%
<b>Flat Fees Paid once per yr. (Fall or as admitted). FT and PT students.</b>	<b>2019-20</b>	<b>2020-21</b>	<b>% Inc</b>
Nursing Mask fee	10.00	10.00	0.00%
Nursing Levey for CNSA	10.00	10.00	0.00%
Nursing Association Membership with RNAO and NSO	16.00	16.00	0.00%
Graduate Diploma in Accounting	250.00	250.00	0.00%

<b>Flat Fees Paid at time of Course Registration</b>	<b>2019-20</b>	<b>2020-21</b>	<b>% Inc</b>
Internship/Coop	610.80	624.24	2.20%
Business - INFR 2421U	10.00	10.00	0.00%
Medical Laboratory Fee - MLSC 1010U	60.00	60.00	0.00%
Medical Laboratory Mask Fee - MLSC 4400U	20.00	20.00	0.00%
Nursing Lab Supply Fee - NURS 1003U	50.00	50.00	0.00%
Nursing Lab Supply Fee - NURS 2810U	30.00	30.00	0.00%
Nursing Lab Supply Fee - NURS 2820U	50.00	50.00	0.00%
Kinesiology Lab Supply Fee - HLSC 3476U	20.00	20.00	0.00%
Kinesiology Lab Supply Fee - HLSC 3475U	10.00	10.00	0.00%
<b>Flat Fee Paid Per Term (4 Terms)</b>	<b>2019-20</b>	<b>2020-21</b>	<b>% Inc</b>
Education Placement Fee	75.00	76.66	2.20%

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**Appendix A: 2019-20 Comparison (sorted by total tuition & ancillary)**

<b>UG Engineering</b>	Tuition Fees	Total Ancillary	Tuition plus Ancillary Fees
Toronto	\$14,180	\$1,684	\$15,864
Waterloo	\$13,970	\$1,145	\$15,115
McMaster	\$12,446	\$1,451	\$13,897
Western	\$12,294	\$1,468	\$13,762
Queen's	\$11,915	\$1,329	\$13,243
Guelph	\$11,286	\$1,520	\$12,806
Carleton	\$10,522	\$1,233	\$11,755
Windsor	\$9,509	\$1,129	\$11,678
Ontario Tech	\$9,390	\$1,854	\$11,244
Ryerson	\$10,189	\$974	\$11,163
Ottawa	\$9,421	\$1,248	\$10,670
Laurentian	\$8,069	\$1,392	\$9,461
Lakehead	\$7,702	\$1,254	\$8,956
Mean			\$12,337
Median			\$12,010



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## BACKGROUND MEMORANDUM

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**TO:** BOARD OF GOVERNORS  
**FROM:** CHERYL FOY  
**SUBJECT:** BACKGROUND ON ANCILLARY FEES  
**DATE:** MAY 3, 2017

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**Operating Funds Distribution Manual:** The Ontario government publishes a manual called the Operating Funds Distribution Manual ("Manual"). The Manual governs the distribution of government operating grants to Ontario Universities. It sets out the funding formula, specific types of grants, which institutions are eligible, which programs are eligible, enrolment reporting requirements and contains special provisions relating to tuition and other fees.

**Ancillary Fees:** The Manual restricts the conditions under which ancillary or additional fees may be imposed upon students and defines a compulsory ancillary fee as "a fee imposed or administered by a given institution or one of its constituent parts or its federated or affiliated institutions, in addition to regular tuition fees, which a student is required to pay in order to enroll in, or successfully complete, any credit course" (s. 5.2).

Tuition-related compulsory ancillary fees (those are fees "levied to cover the costs of items normally paid for out of operating or capital revenue") are prohibited (s 5.2).

A non-tuition-related compulsory ancillary fee is a fee which is "levied in order to cover the costs of items which are not normally paid for out of operating or capital revenue".

Compulsory ancillary fees must meet certain criteria in order to be valid. They must:

1. Be non-tuition-related;
2. Be approved by the Board of Governors;
3. Be announced prior to collection through the institution's calendar and/or published fee schedule in sufficient detail to make it clear what they are for.

Compulsory ancillary fees are frozen at 1993-1994 levels and can only be increased through the implementation of a protocol which has been agreed to by representatives of an institution's administration and by student government representatives. The protocol must meet certain procedural and content requirements primarily related to having student government involvement to establish and approve the protocol and to provide the means by which students will be involved in decisions to increase the existing compulsory non-tuition-related ancillary fees or introduce new ones. (See s. 5.2 and Appendix 12).

Examples of compulsory non-tuition-related ancillary fees include:

- a. Health insurance fees;
- b. Student activity fees;
- c. Athletic fees;
- d. Transportation/parking fees;
- e. Housing placement fees;

Fees which are likely exempt from the application of s. 5.2 include:

- a. Field trip fees;
- b. Fees for learning material or clothing;
- c. Fees for material used in the production of items which become the property of the student;
- d. Fees for material or services where the institution acts as a broker with a vendor for the student.

### **Compulsory Ancillary Fee Protocol**

The university and the Student Union (with the approval of the Board of Governors) entered into a protocol governing the setting and imposition of non-tuition-related ancillary fees. This protocol provides for the establishment of a Committee composed of the university Registrar, two representatives of the university administration, and three students (two delegates of the Student Union (one undergrad and one grad student), and one of whom is an elected student member of the Board of Governors). The Committee reviews, considers and recommends ancillary fees to the Board of Governors through the Audit & Finance Committee. Ancillary fee increases or new ancillary fees must be approved by a majority of the Committee members. Quorum requires four members present including no less than two student members.

*\*The provincial government directive that allowed students to opt-out of certain student fees is currently before the courts.*

## BOARD REPORT

---

**SESSION:**

Public  
Non-Public

☒  
☐**ACTION REQUESTED:**

Decision  
Discussion/Direction  
Information

☒  
☐  
☐**TO:**

Board of Governors

**DATE:**

February 27, 2020

**FROM:**

Audit & Finance Committee

**SUBJECT:**

Amendments to the Statement of Investment Policies (SIP)

---

**COMMITTEE MANDATE:**

- As set out in the committee's Terms of Reference, the committee's responsibilities include reviewing the SIP on an annual basis and making appropriate recommendations to the Board of Governors.
- We are seeking the Board's approval to update the SIP to allow for investments in Direct Real Estate Equity: commercial investment grade income-producing real estate.

**BACKGROUND/CONTEXT & RATIONALE:**

- We are making the recommendation pursuant to the recommendation of the Investment Committee and at the recommendation of the university's Investment Manager, PH&N.
- We are also recommending several editorial changes to the SIP to reflect the university's rebrand.

**IMPLICATIONS:**

- Adding this allocation would help increase portfolio income and reduce overall portfolio volatility and correlations to the broader markets, both of which would be beneficial to the university, especially in this late stage of the economic cycle.
- Not accepting this recommendation does not have major implications beyond slightly higher volatility exposure and potentially higher drawdowns during periods of market stress.

**COMPLIANCE WITH POLICY/LEGISLATION:**

- The addition of this form of investment would also require a revision to the university's Asset Class Management Strategy.

**MOTION FOR CONSIDERATION:**

*That pursuant to the recommendation of the Audit and Finance Committee, the Board of Governors hereby approves the proposed amendments to the Statement of Investment Policies, as presented.*

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**SUPPORTING REFERENCE MATERIALS:**

- Blacklined Statement of Investment Policies



Classification	LCG 1128
Framework Category	Legal, Compliance and Governance
Approving Authority	Board of Governors
Policy Owner	Chief Financial Officer
Approval Date	February 28, 2019
Review Date	June 2020
Supersedes	June 2016 Statement of Investment Policies, June 27, 2018

## Statement of Investment Policies

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## 1.0 Purpose

The purpose of this Statement of Investment Policies (“SIP”) is to define the management structure governing the investment of non-expendable (endowed) ~~U~~university funds, and to outline the principal objectives and rules by which assets will be managed. The assets will be managed in accordance with this Statement and all applicable legal requirements. Any investment manager (“Manager”) or any other agents or advisor providing services in connection with assets shall accept and adhere to this Statement.

## 2.0 RESPONSIBILITIES

### 2.1 Board of Governors

The Board of Governors (“the Board”) of ~~UOIT~~the university has responsibility and decision-making authority for these assets. The Board has the responsibility to govern these assets and has chosen to appoint members of the Audit and Finance Committee to sit on the Investment Committee.

As part of its fiduciary responsibilities, the Board will:

- appoint members of the Investment Committee in consultation with the Audit and Finance Committee;
- receive the Audit and Finance Committee’s recommendations with respect to ~~Statement of Investment Policies~~the SIP and approve or amend the ~~Statement~~SIP as appropriate;
- review all other recommendations and reports of the Audit and Finance Committee with respect to the Fund and the selection, engagement or dismissal of professional investment managers, custodians and advisors, and take appropriate action.

### 2.2 Audit & Finance Committee

As part of its fiduciary responsibilities, the Audit and Finance Committee will:

- receive the Investment Committee’s recommendations with respect to ~~the SIP~~Statement of Investment Policies and make recommendations to the Board for the selection, engagement or dismissal of professional investment managers, custodians and advisors, as appropriate;
- review all other recommendations and reports of the Investment Committee, including recommendations with respect to the investments within the Fund, and recommendations to amend the Asset Class Management Strategy and approve such recommendations and receive such reports.

### 2.3 Investment Committee

The Investment Committee (the Committee”) consists of a minimum of three (3) external governors.

The Committee may delegate some of its responsibilities to agents or advisors. In particular, the services of a custodian (the “Custodian”) and of one or more investment managers (the “Manager”) may be retained.

The Investment Committee will have an active role to:

- formulate recommendations to the Audit and Finance Committee regarding the investments in the Fund;
- maintain an understanding of legal and regulatory requirements and constraints applicable to these assets;
- review ~~this Statement of Investment Policies~~ the SIP and the Asset Class Management Strategy, on an annual basis, and make appropriate recommendations to the Audit and Finance Committee;
- provide regular reports to the Audit and Finance Committee;
- formulate recommendations to the Audit and Finance Committee regarding the selection, engagement or dismissal of professional investment managers, custodians and advisors.
- oversee the Fund and the activities of the Manager, including the Manager’s compliance with their mandate and the investment performance of assets
- ensure that the Manager is apprised of any amendments to their mandate; and
- inform the Manager of any significant cash flows.

### 2.4 Investment Manager(s)

The Manager is responsible for:

- Selecting securities within the asset classes assigned to them, subject to applicable legislation and the constraints set out in this Statement;
- Providing the Committee with quarterly reports of portfolio holdings and a review of investment performance and future strategy and recommending appropriate changes to the investment portfolio; (see Section 7 on “Reporting and Monitoring”);

- Attending meetings of the Committee at least once per year to review performance and to discuss proposed investment strategies;
- Informing the Committee promptly of any investments which fall outside the investment constraints contained in this Statement and what actions will be taken to remedy this situation; and
- Advising the Committee of any elements of this Statement that could prevent attainment of the objectives.

### 3.0 PORTFOLIO OBJECTIVES

#### 3.1 Investment Policy

The Investment Policy outlines ~~UOIT's~~ the university's investment objectives and risk guidelines. Investment objectives are defined in the context of Total Return which is defined as the sum of income and capital gains from investments.

#### 3.2 Investment Objectives

The overall investment objective is to obtain the best possible total return on investments that is commensurate with the degree of risk that ~~UOIT~~ the university is willing to assume in obtaining such return. In general, ~~UOIT~~ the university's investment decisions balance the following objectives:

- generate stable annual income for the funds' designated purpose;
- preserve the value of the capital;
- protect the value of the funds against inflation; and
- maintain liquidity and ease of access to funds when needed

Stable annual incomes are an essential part of the disbursement process, and facilitate the forecast of spendable income each year. The investment object for non-expendable (endowment) funds is to generate a total return that is sufficient to meet obligations for specific purposes by balancing present spending needs with expected future requirements. The total return objective must take into consideration the preservation of endowment capital, and the specific purpose obligations according to donor wishes.

All endowment funds are to be accumulated and invested in a diversified segregated or pooled fund of Canadian and foreign equities and fixed income securities. These funds must be structured to optimize return efficiency such that the return potential is maximized within the organization's risk tolerance guidelines. The Manager is expected to advise the Committee in the event that the pooled fund exhibits, or may exhibit, any significant departure from this Statement.

### 4.0 GENERAL GUIDELINES

The University uses the investment pool method, except that in those instances where funds are precluded under agreement or contract from being pooled for investment purposes. The acquisition of specific investment instruments outside of authorized investment pools, requires the approval of the Chief Financial Officer and one of either President or VP External Relations.

All securities shall be registered in the University Of Ontario Institute Of Technology's name; or in the name of a financial institution that is eligible to receive investments under the University Of Ontario Institute Of Technology's Investment Policy.

The University may or may not directly or internally manage any portion of its endowed funds.

External investment managers and/or advisors shall be selected from well-established and financially sound organizations which have a proven record in managing funds with characteristics similar to those of the University.

The University shall maintain separate funds in the general ledger for endowment fund donations. Within these funds, the University shall maintain accurate and separate accounts for all restricted funds.

Investment income, capital gains and losses on the sale of equities and securities, and the amortization of premiums and discounts on fixed term securities earned on endowment funds accrue to the benefit of the endowment accounts and are distributed to capital preservation, stabilization and distribution accounts annually.

## 5.0 AUTHORIZED INVESTMENTS

### 5.1 Investment Criteria

Outlined below are the general investment criteria as understood by the Committee. The list of permitted investments includes:

(a) Short-term instruments:

- Cash;
- Demand or term deposits;
- Short-term notes;
- Treasury bills;
- Bankers acceptances;
- Commercial paper; and
- Investment certificates issued by banks, insurance companies and trust companies.

(b) Fixed income instruments:

- Bonds;

- Debentures (convertible and non-convertible); and
- Mortgages and other asset-backed securities.

(c) Canadian equities:

- Common and preferred stocks;
- Income trusts; and
- Rights and warrants.

(d) Foreign equities:

- Common and preferred stocks;
- Rights and warrants; and
- American Depository Receipts and Global Depository Receipts.

(e) Alternative investments:

- Direct Real Estate Equity: commercial investment grade income-producing real estate

(fe) Pool funds, closed-end investments companies and other structured vehicles in any or all of the above permitted investment categories are allowed.

## 5.2 Derivatives

The Fund may use derivatives, such as options, futures and forward contracts, for hedging purposes, to protect against losses from changes in interest rates and market indices; and for non-hedging purposes, as a substitute for direct investment.

~~Up to 15% of the Fund may be invested in strategies that use derivatives to engage in short selling.~~

## 5.3 Pooled Funds

With the approval of the Committee, the Manager may hold any part of the portfolio in one or more pooled or co-mingled funds managed by the Manager, provided that such pooled funds are expected to be operated within constraints reasonably similar to those described in this mandate. It is recognized by the Committee that complete adherence to this Statement may not be entirely possible; however, the Manager is expected to advise the Committee in the event that the pooled fund exhibits, or may exhibit, any significant departure from this Statement.

## 5.4 Responsible Investing

The Board has a fiduciary obligation to invest the Fund in the best interests and for the benefit of the University.

The Board recognizes that environment, social, and governance (ESG) factors may have an impact on corporate performance over the long term, although the impact can vary by industry. Best practices suggest that incorporating ESG factors in the investment process is prudent and aligned with the University's social commitment.

Given the fact that the University uses the investment pool method, it is not practical for the Committee to directly engage individual companies on ESG related issues, either through dialogue or by filing shareholder resolutions. Subject to its primary fiduciary responsibility of acting in the best interests of the University and its stakeholders, and within the limits faced by an investor in externally managed pooled funds, the Committee will incorporate ESG factors into its investment process through the following methods:

**(a) Manager Selection and Reporting**

The integration of ESG factors in the investment process will be a criterion in the selection, management and assessment of the Manager.

The Committee will require the Manager to provide regular and annual reporting on the incorporation of formal ESG factors in the management of their portfolios.

**(b) Engagement**

Since the University does not directly invest in companies, proxy voting is delegated to the Manager. The Committee will encourage the Manager to incorporate into their proxy voting guidelines policies that encourage issuers to increase transparency of their ESG policies, procedures and other activities, and also to bring to the Committee's attention any significant exposure through the Fund to a particular company, industry or nation that is facing a material ESG issue.

## **6.0 RISK GUIDELINES**

All investment of assets must be made within the risk guidelines established in this Statement. Prior to recommending changes in investments, the Manager must certify to the Committee that such changes are within the risk guidelines. For the purposes of interpreting these guidelines, it is noted that all allocations are based on market values and all references to ratings reflect a rating at the time of purchase, reviewed at regular intervals thereafter. In the event that the portfolio is, at any time, not in compliance with either the ranges or ratings profile established in this Statement, such non-compliance will be addressed within a reasonable time after the Manager or Committee has identified such non-compliance.

## 6.1 Asset Mix and Ranges

Table 6.1

Asset Class	Range
Cash & Short Term	0 - 10%
Fixed Income	20 - 50%
Canadian Equities	<del>15-40</del> - 30%
Global Equities	25 - 45%
<u>Alternatives</u>	<u>0 - 20.0%</u>

Investment of assets must be within the asset classes and ranges established in Table 6.1. A more detailed breakdown of asset classes, strategic targets, ranges, and benchmarks is maintained in the university's Asset Class Management Strategy.

## 6.2 Cash and Cash Equivalents

Cash and cash equivalents must have a rating of at least R1, using the rating of the Dominion Bond Rating Service ("DBRS") or equivalent.

## 6.3 Fixed Income

(a) Maximum holdings of the fixed income portfolio by credit rating are:

Credit Quality	Maximum in Bond <sup>1</sup>	Minimum in Bond <sup>1</sup>	Maximum Position in a Single Issuer
Government of Canada <sup>2</sup>	100%	n/a	no limit
Provincial Governments <sup>2</sup>	60%	0%	40 %
Municipals	25%	0%	10%
Corporates	75 %	0%	10%
AAA <sup>3</sup>	100%	0%	10%
AA <sup>3</sup>	80%	0%	5%
A <sup>3</sup>	50%	0%	5%
BBB	15%	0%	5 %
BB and less	20 %	0%	2 %

<sup>1</sup> Percentage of portfolio at market value; <sup>2</sup> Includes government-guaranteed issues; <sup>3</sup> Does not apply to Government of Canada or Provincial issues

(b) Maximum holdings of the fixed income portfolio, other than Canadian denominated bonds as illustrated in 6.3 (a), by asset type:

- 20% for asset-backed securities;
  - 60% for mortgages or mortgage funds;
  - 20% for bonds denominated for payment in non-Canadian currency;
- and

- 10% for real return bonds.

- (c) All debt ratings refer to the ratings of Dominion Bond Rating Service (DBRS), Standard & Poor's or Moody's.

#### 6.4 Equities

- (a) No one equity holding shall represent more than 15% of the market value of the assets of a single pooled fund.
- (b) There will be a minimum of 30 stocks in each equity (pooled fund) portfolio.
- (c) No more than 5% of the market value of an equity portfolio (pooled fund) may be invested in companies with a market capitalization of less than \$100 million at the time of purchase
- (d) Illiquid assets are restricted to 10% of the net assets of the Fund.
- (e) Emerging market holdings will not exceed 10% of the total portfolio value.
- (f) Foreign equity holdings can be currency hedged to a maximum of 50%

#### 6.5 Alternative Assets

- (a) Illiquid assets shall not constitute more than 15% of the total portfolio.
- (b) Alternative investment solutions have the potential to enhance fixed income returns, reduce equity risk, reduce portfolio volatility and improve portfolio efficiency. They typically require a longer investment horizon, are less liquid, and when considered in isolation may be deemed more risky than other securities. The associated risks, fees and expenses are detailed in a document called an Offering Memorandum which the manager is responsible for providing to the Investment Committee prior to any such investment being made in the portfolio.

### 7.0 PERFORMANCE EXPECTATIONS

#### 7.1 Portfolio Returns

The portfolio is expected to earn a pre-fee rate of return in excess of the benchmark return over the most recent four-year rolling period. Return objectives include realized and unrealized capital gains or losses plus income from all sources. Returns will be measured quarterly, and calculated as time-weighted rates of return. The composition of the benchmark is developed from the asset mix outlined in this Statement and more specifically described in the Asset Class Management Procedures, Appendix A.

In order to meet the ~~U~~university's disbursement requirements, investments need to earn a minimum level of income, measured over a four year rolling market cycle. The minimum recommended level is defined as the sum of the following items:

Minimum disbursement requirement	3.5%
Investment management fees	0.5%
Capital preservation amount	<u>2.0%</u>
Minimum Rate of Return	<u>6.0%</u>

Note: The disbursement requirement and capital preservation amounts will be reviewed, and updated as required.

## 8.0 REPORTING & MONITORING

### 8.1 Investment Reports

Each quarter, the Manager will provide a written investment report containing the following information:

- portfolio holdings at the end of the quarter;
- portfolio transactions during the quarter;
- rates of return for the portfolio with comparisons with relevant indexes or benchmarks; Compliance report;

### 8.2 Monitoring and Recommendations

At the discretion of the Committee as required, the Manager will meet with the Committee regarding:

- the rate of return achieved by the Manager;
- the Manager's recommendations for changes in the portfolio;
- future strategies and other issues as requested.

The agreement with the Manager or any Custodian will be reviewed by the committee on a four year cycle. This review could include a Request for Proposal for these services.

### 8.3 Annual Review

It is the intention of ~~UOIT~~the university to ensure that this policy is continually appropriate to the university's needs and responsive to changing economic and investment conditions. Therefore, the Committee shall present the ~~Statement of Investment Policies~~SIP to the Audit and Finance Committee, and through that Committee to the Board, along with any recommendations for changes, at least annually.

## **9.0 STANDARD OF CARE**

The Manager is expected to comply, at all times and in all respects, with the code of Ethics and Standards of Professional Conduct as promulgated by the CFA Institute.

The Manager will manage the assets with the care, diligence and skill that an investment Manager of ordinary prudence would use in dealing with all clients. The Manager will also use all relevant knowledge and skill that it possesses or ought to possess as a prudent Investment Manager.

The Manager will manage the assets in accordance with this Statement and will verify compliance with this Statement when making any recommendations with respect to changes in investment strategy or investment of assets.

The Manager will, at least once annually, provide a letter to the Committee confirming the Manager's familiarity with this Statement. The Manager will, from time to time, recommend changes to the SIP to ensure that the SIP remains relevant and reflective of the University's investment objectives over time.

## **10.0 CONFLICT OF INTEREST**

All fiduciaries shall, in accordance with the UOIT-university's Act and By-laws and policies on conflict of interest, disclose the particulars of any actual or potential conflicts of interest with respect to the Fund. This shall be done promptly in writing to the Chair of the Investment Committee. The Chair will, in turn, table the matter at the next Board meeting. It is expected that no fiduciary shall incur any personal gain because of their fiduciary position. This excludes normal fees and expenses incurred in fulfilling their responsibilities if documented and approved by the Board.

## BOARD REPORT

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**SESSION:**

Public  
Non-Public

☒  
☐**ACTION REQUESTED:**

Decision  
Consultation  
Information

☒  
☐  
☐

**TO:** Board of Governors

**DATE:** February 27, 2020

**FROM:** Audit & Finance Committee

**SUBJECT:** Animal Care Committee (ACC) Policy Instruments and Terms of Reference

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**COMMITTEE MANDATE:**

- Under the University's Act, section 9 (1), the Board of Governors has the power: "to establish academic, research, service and institutional policies and plans and to control the manner in which they are implemented". The university's Policy Framework is a key institutional policy that delegates the Board's power, establishing categories of policy instruments with distinct approval pathways.
- Under the Policy Framework, the Board of Governors is the approval authority for this policy and A&F is the approval authority for the related procedures.
- Under the University's Act and consistent with the requirements of the Canadian Council on Animal Care Policies (CCAC) the Board of Governors has the power to approve the terms of reference for the Animal Care Committee.
- We are seeking the Board's approval of the Policy on the Care and Use of Animals in Research and Teaching and Animal Care Terms of Reference (TOR).

**BACKGROUND/CONTEXT AND RATIONALE**

- The Policy on the Care and Use of Animals in Research was approved by the Board of Governors on January 2013. The policy was revised in response to the ACC's recent compliance audit by the CCAC on May 30, 2018.
- In addition, the ACC's terms of reference and the ACC's administrative processes on Review and Approval of Animal Use Protocols & Process for Reconsideration or Appeal of Decisions of the ACC were revised in response to the recommendations proposed by the CCAC's audit report received on June 28, 2018. It is important to note that previous versions of the terms of reference and the administrative procedures were reviewed and approved internally with the

ACC and did not undergo a formal review under the Ontario Tech policy framework.

## **CONSULTATION PROCESS:**

### **List of Consultation Dates:**

- Animal Care Committee, February 14, 2018, May 23, 2018, February 6, 2019
- Policy Advisory Committee, June 6, 2018, June 21, 2018
- Academic Council, June 25, 2019
- Administrative Leadership Team, September 10, 2019
- Research Board, October 1, 2019

### **Comments received and response:**

#### **All Instruments**

- Clarify the terms “major modification and minor modification” using existing definitions in all instruments.
- ACC reviewed and confirmed that all comments from CCAC audit have been addressed.

#### **Terms of Reference**

- Clarify that VPRI shall appoint Vice-Chair.

#### **ACC procedure 002:**

- Section 8.1 should be linked to 7.1 and use consistent language. A review by an external body will be helpful to resolve disagreement and allow the ACC and PI to continue to work closely together.
- Clarifications on what situations can be reconsidered or appealed, what is a major or minor modification.

## **IMPLICATIONS:**

- In order to demonstrate the University’s compliance with the Animals for Research Act and CCAC Audit results, the University’s Animal Care policies, procedures and terms of reference have been reviewed and revised.

## **COMPLIANCE WITH POLICY/LEGISLATION:**

- Animals for Research Act (OMAFRA, Province of Ontario)
- Canadian Council on Animal Care (CCAC) - Good Animal Practice (GAP)
- Occupational Health and Safety Act (R.S.O. 1990) and regulations
- Health of Animals Act
- Containment Standards for Facilities Handling Aquatic Animal Pathogens
- National Aquatic Animal Health Program (co-delivered by DFO and CFIA)
- Canadian Association for Laboratory Animal Medicine (CALAM)
- Canadian Association for Laboratory Animal Science (CALAS)
- Canadian Veterinary Medical Association (CVMA)
- Tri-Agency (Memorandum of Understanding (MOU) on the Roles and Responsibilities in the Management of Federal Grants and Awards)
- Canadian Food Inspection Agency and Fish Pathogens (CFIA)

- Department of Fisheries and Oceans (DFO)
- Any other regulatory body that guides in the care and use of specific animals.

**MOTION FOR CONSIDERATION:**

*That pursuant to the recommendation of the Audit and Finance Committee, the Board of Governors hereby approves the Policy on the Care and Use of Animals in Research and Teaching and the Animal Care Committee Terms of Reference, as presented.*

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**SUPPORTING REFERENCE MATERIALS:**

- Ontario Tech Animal Care Committee:
  - Terms of Reference
  - Policy on the Care and Use of Animals in Research and Teaching

Classification Number	LCG 1121
Framework Category	Legal, Compliance and Governance
Approving Authority	Board of Governors
Policy Owner	VP Research
Approval Date	DRAFT AMENDMENTS FOR REVIEW
Review Date	
Supersedes	

## POLICY ON THE CARE AND USE OF ANIMALS IN RESEARCH AND TEACHING

### PURPOSE

1. This policy sets out the standards, requirements and responsibilities that apply to activities involving animals for research, teaching and testing purposes at the University of Ontario Institute of Technology (Ontario Tech).

### DEFINITIONS

2. For the purposes of this Policy the following definitions apply:

**“Animal Care Committee” (ACC)** oversee the ethical treatment of experimental animals used in research, teaching and testing at the University. The ACC strives to meet or exceed the expectations of the Canadian Council on Animal Care (CCAC) and requirements of the Ontario Animals for Research Act.

**“Animal Utilization Protocol (AUP)”** is the application form which animal users are required to complete and submit to the ACC for review. The AUP form is intended to provide the ACC with information about activities in individual laboratories and classrooms. This information is required for the ACC to meet its legal and ethical responsibilities.

**“Canadian Council on Animal Care (CCAC)”** is a national peer review agency responsible for setting and maintaining standards for ethical use and care of experiment animals used in research, teaching and testing in Canada. Compliance is monitored through its assessment program.

**“Ontario Animals for Research Act”** all experiment animals used in research, teaching and regulatory testing in Ontario fall under the auspices of the Ontario Animals for Research Act and compliance is overseen by the Chief Veterinary Inspector of the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA).

**“Major modification”** are substantive issues which in the opinion of the committee, constitute as ethical, scientific or regulatory issues that are barriers to approval and must be satisfactorily addressed prior to issuing study approval major modifications required. To name a few, these issues can relate to technique, study design and/or animal welfare.

**“Minor modification”** are less substantive issues that require resolution or clarification, but are not immediate barriers to approval.

**“Replacement, reduction and refinement (3R’s)”** stand for replacement, reduction and refinement. The 3 R’s are accepted ethical principles for experimental animal use and care in research. Replacement refers to the method to avoid or replace the use of animals where an animal would have been used. Reduction refers to a strategy that will result in fewer animals being used for research. Refinement refers to modification of husbandry or experimental procedures to minimize pain and distress of animals used for research.

**“University”** means the University of Ontario Institute of Technology (Ontario Tech).

**“University Member”** means any individual who is:

- Employed by the University;
- Registered as a student, in accordance with the academic regulations of the University;
- Holding an appointment with the University, including paid, unpaid and/or honorific appointments; and/or
- Otherwise, subject to University policies by virtue of the requirements of a specific Policy and/or the terms of an agreement or contract.

## SCOPE AND AUTHORITY

3. This Policy applies to all research, teaching or other programs or activities involving the care and use of animals or animal tissues that is:
  - 3.1. Conducted by any individual or group affiliated with the University;
  - 3.2. Undertaken under the auspices of or in affiliation with the University, or in University owned facilities, or using University equipment, or resources.
4. Individual researchers and teachers, consultant veterinarian(s), and animal care personnel are responsible for conducting research and teaching activities in compliance with this policy. Researchers and teachers are also responsible for educating students on the rationale for and application of this policy, and for ensuring that student activities carried out under their supervision are approved in compliance with this policy.
5. The Vice-President Research & Innovation (VPRI), working in collaboration with the senior administrative team, Deans, and the Animal Care Committee (ACC), is responsible for ensuring that the University’s responsibilities in this area are met, that appropriate animal care and use operations are in place, and that all activities are conducted appropriately and in accordance with institutional and legislated policies and regulations.
6. The Vice-President Research & Innovation (VPRI), or successor thereof, is the Policy Owner and is responsible for overseeing the implementation, administration and interpretation of this Policy.

## POLICY

The university is committed to the ethical care and use of animals for research, teaching and testing purposes when such activity promises to contribute to the understanding of fundamental biological principles or to the development of knowledge with a reasonable

expectation of benefit for humans or animals (Canadian Council on Animal Care policy statement).

In doing so, the University will be guided by the three tenets of replacement, reduction and refinement (3R's) in animal use, in order to minimize the harm to animals. To this end, the University, through the VPRI, will coordinate efforts to ensure that appropriate animal care and use operations are in place and are in compliance with the Ontario Animals for Research Act and its associated regulations, the Canadian Council on Animal Care (CCAC) policies and guidelines, and all other applicable standards and regulations set out in Section 4.

## **7. University Animal Care Committee**

- 7.1.** The University ACC shall oversee all research, teaching and testing conducted at the University involving the care and use of animals ensuring compliance with institutional and regulatory standards. The committee is responsible for coordinating, reviewing and approving the activities and procedures relating to the care of animals, the standards of care and facilities for animals, the training and qualifications of individuals involved in the care of animals, and the procedures for the prevention of unnecessary pain.
- 7.2.** The committee shall report to the VPRI, and be comprised of researchers and teachers experienced in animal care, as well as staff, students and community members who have not been involved in animal use for research, teaching or testing. The committee will also work in collaboration with animal users, veterinarians and animal care staff to oversee the ethical and appropriate use of animals.
- 7.3.** Decisions of the University Animal Care Committee may be appealed to the VPRI in accordance with the process for appeal of a decision of the ACC (002 SOP: Process for Reconsideration or Appeal of Decisions of the ACC)

## **8. Activities Involving Animal Use**

- 8.1.** All activities involving the use of animals for research, teaching and testing purposes shall be subject to ethical review, scientific merit, pedagogical review and approval by the University ACC. Researchers and teachers wishing to engage in activities involving animal use must receive written approval from the committee prior to the commencement of their activities. Animals shall not be used for research, teaching or testing purposes until all requirements outlined in this policy, as well as the most current federal and provincial legislation and applicable standards, guidelines, and regulations have been met.
- 8.2.** Approved activities involving animal use protocols shall be subject to ongoing monitoring by the University ACC, under the Administrative procedure 004: Post Approval Monitoring Program, to ensure that they remain appropriate and continue to meet institutional and legislated standards.
- 8.3.** Animals used for research, teaching and testing purposes shall be cared for according to current veterinary standards.

## **9. Training on Animal Care and Use**

- 9.1. All persons who care for and use animals for research, teaching or testing purposes must be trained under the auspices of the University Animal Care Committee in the protocols appropriate to the animal species being used, and must demonstrate competence ensuring maximum benefit to the animals.

**10. Non-Compliance**

- 10.1. The University ACC may stop any action or activity involving the care and use of animals that fails to comply with the approved animal use protocol, federal and provincial regulatory requirements, and/or institutional policies and procedures.

**11. Crisis Management**

- 11.1. The University ACC shall develop and regularly review a comprehensive crisis management program for the animal facilities and for the animal care and use program in conjunction with the general campus emergency response plan.

**MONITORING AND REVIEW**

12. This policy will be reviewed as necessary and at least every three (3) years (unless another timeframe is required for compliance purposes). The University ACC or successor thereof, is responsible to monitor and review this policy.

**RELEVANT LEGISLATION**

13. All activities involving the care and use of animals shall adhere to the requirements of this policy, as well as the most current federal and provincial legislation and all applicable standards, guidelines and regulations set out by the following bodies:
- Animals for Research Act (OMAFRA, Province of Ontario)
  - Canadian Council on Animal Care (CCAC) – Good Animal Practice (GAP)
  - Occupational Health and Safety Act (R.S.O. 1990) and regulations
  - Health of Animals Act
  - Containment Standards for Facilities Handling Aquatic Animal Pathogens
  - National Aquatic Animal Health Program (co-delivered by DFO and CFIA)
  - Canadian Association for Laboratory Animal Medicine (CALAM)
  - Canadian Association for Laboratory Animal Science (CALAS)
  - Canadian Veterinary Medical Association (CVMA)
  - Tri-Agency (Memorandum of Understanding (MOU) on the Roles and Responsibilities in the Management of Federal Grants and Awards)
  - Canadian Food Inspection Agency and Fish Pathogens (CFIA)
  - Department of Fisheries and Oceans (DFO)
  - Any other regulatory body that guides in the care and use of specific animals.

**RELATED POLICIES, PROCEDURES & DOCUMENTS**

14. Post Approval Monitoring Program and Related documents (Administrative procedure 004: University Post Approval Monitoring Program)

Process for Appeal of Decisions of the ACC (Administrative procedure 002: Process for Appeal of Decisions of the ACC)

University Animal Care Committee Terms of Reference

Purchasing Policy and Procedures

University Emergency Preparedness Plan and Animal Care and Use Crisis Management Plan

Requirements for Working with Animals

Biosafety Manual

Radiation Safety Manual

Integrity in Research and Scholarship

Animal Use Protocol Form

Annual Renewal Request Form

Incident Report Form

Pedagogical Merit

Peer Review Form

Amendment Request Form

Competency Assessment Form: Aquatics Lab

Competency Assessment Form: Amphibian Lab

Item	Appendix A – Terms of Reference
Parent Policy	Policy on the Care and Use of Animals in Research
Approval Authority	Board of Governors
Policy Owner	VP Research
Approval Date	DRAFT AMENDMENTS
Review Date	
Supersedes	

## UNIVERSITY ANIMAL CARE COMMITTEE: TERMS OF REFERENCE

The University of Ontario Institute of Technology (Ontario Tech) has a responsibility to ensure that effective control is exercised in the care and use of experimental animals. All animals (live, non-human vertebrates) are protected by the Animals for Research Act of Ontario and its associated regulations. In addition to this, provincial legislation, the Tri-Agency Agreement on the Administration of Agency Grants and Awards by Research Institutions requires the University to maintain a valid Certificate of Good Animal Practice from the Canadian Council on Animal Care (CCAC).

### 1. Definitions

**“Canadian Council on Animal Care (CCAC)”** is a national peer review agency responsible setting and maintaining standards for ethical use and care of experiment animals used in research, teaching and testing in Canada.

**“University”** means the University of Ontario Institute of Technology (Ontario Tech).

### 2. Purpose

- 2.1. The Animal Care Committee (ACC) oversees all research, teaching and testing with animals. The ACC ensures that the 3R's (replacement, reduction, and refinement) are considered for any activity involving the care and use of experimental animals and that these principles are upheld to minimize the number of animals used at the University.
- 2.2. The ACC is established by the University and responsible for the coordination, ethical review and approval for all proposed uses of animals in research (including field studies), testing and teaching at the University. The ACC shall establish internal policies and procedures to ensure compliance with legislation and the Canadian Council on Animal Care (CCAC) policies and guidelines. The operation of the ACC is governed by the following Terms of Reference.

### 3. Authority

- 3.1. The ACC reports directly to the Vice-President Research & Innovation (VPRI). The ACC, on behalf of the VPRI has the authority to:
  - a) stop any objectionable procedure that causes unnecessary distress or pain to the animal;
  - b) stop immediately any animal use that deviates from the approved protocol or non-approved procedure(s);
  - c) determine corrective action on breaches of compliance with approved animal use protocols and Standard Operating Procedures (SOPs). The VPRI will be informed when breaches cannot be corrected by the ACC and will determine sanctions that will be taken;
  - d) humanely euthanize an animal if pain or distress caused to the animal cannot be alleviated;

- e) conduct post approval monitoring of all research and teaching activities involving animals; and,
- f) have ongoing access to all areas where animals are held or used.

**3.2.** The ACC delegates to the consultant veterinarian(s) the authority to:

- a) treat, remove from a study or humanely euthanize an animal according to the veterinarian's professional judgment; and,
- b) proceed independently with any necessary emergency measures, whether or not the animal user and ACC Chair are available.

**3.3.** The consultant veterinarian(s), before exercising authority, must attempt to contact the ACC Chair and the animal user whose animal is in question before beginning any treatment that has not previously been agreed upon. The consultant veterinarian(s) will send a written report to the animal user and to the ACC following any such event.

#### **4. Safeguards and Non-compliance**

- 4.1.** Collegial working relationships must always be protected and promoted, but it is necessary to have in place safeguards to ensure any difficulties experienced with any aspect of animal care or use can be effectively identified and addressed. For serious non-compliance or threats to the health and safety of personnel or welfare of animals, the ACC Chair and ACC must promptly address these issues. Reports of non-compliance may come from the general community at large. Individuals raising such concerns must express their concerns in writing to the ACC Chair. Verbal concerns can be accepted when non-compliance situations require prompt attention; however, written documentation must follow post event. The ACC Chair will address the issues, through communications with the animal user(s), meetings and site visits in accordance with the University Policy on the Care and Use of Animals in Research and Teaching and associated procedures. The ACC, consultant veterinarian(s) and ACC Coordinator will work with the animal user(s) to ensure a resolution. All communications surrounding the event(s) will be documented in the ACC's Post Approval Monitoring reports.
- 4.2.** Non-compliance concerns that cannot be corrected or resolved with the ACC will be referred to the VPRI, who will inform all members of the animal care and use program about sanctions that will be taken by the administration. If the VPRI, has a real or perceived conflict of interest, the University President will determine sanctions.

#### **5. Membership and Term**

- 5.1.** The ACC is appointed by, and is responsible to the VPRI. ACC members will be appointed for terms of four (4) years and normally renewable only up to a maximum of eight (8) consecutive years of service. This maximum can be waived by the ACC if necessary in order to have appropriate animal user representation. This does not apply to ACC members who must be part of the ACC because of their role within the institution (e.g. ex officio members).
- 5.2.** The VPRI shall appoint a ACC Chair and ACC Vice-Chair from the complement of the ACC committee. The ACC Chair shall not be directly involved in the management of the animal care facilities, nor be the consultant veterinarian for the University, nor be involved in the preparation of a significant number of the protocols to be reviewed by the ACC in order to avoid potential conflicts of interest.
- 5.3.** The complement of the committee will include:
  - a) a minimum of two (2) scientists and/or teachers experienced in animal care and use, who may or may not be actively using animals during their term on the ACC;

- b) consultant veterinarian(s), experienced in care and use of animals used and housed at the University;
- c) an institutional member whose normal activities, past or present, do not depend on or involve animal use for research, teaching or testing;
- d) at least one (1) person representing community interests and concerns who has had no affiliation with the institution, and who has not been involved in animal use for research, teaching or testing; community representation must be ensured for all ACC activities throughout the year and included on all protocol review subcommittees;
- e) technical staff representation preferably an animal research technician;
- f) at least one student representative (graduate and/or undergraduate);
- g) the ACC coordinator (University Research Ethics Officer) who is responsible for the coordination of all animal care related activities and providing support to the ACC;
- h) a representative of the senior administration reporting to the VPRI (Director, Office of Research Services); and,
- i) a representative for occupational health & safety and biosafety.

## **6. Responsibility**

### **6.1. The ACC's responsibilities include but is not limited to:**

- a) ensure policies and guidelines are established in accordance to CCAC, provincial legislation and institutional standards to ensure appropriate care and use of animals at the University;
- b) ensure that written ACC approval is obtained prior to animal use or acquiring animals for research, teaching or testing projects. ACC approval must also be obtained prior to breeding or holding of animals for research, teaching or testing projects;
- c) ensure that ACC approval of a written animal use protocol is obtained prior to breeding, research, teaching, production or testing (including field studies) involving animals. For other animal based activities within the institution, the ACC will work with the individuals responsible for the activities to ensure appropriate procedures for animal care and use;
- d) require the completion of an animal use protocol by the animal user and ensure that the protocol includes the nature of all procedures to be used on the animal, the number and type of animals to be used and the anticipated level of discomfort or distress that the animal will likely experience. In addition, other key sections identified in the CCAC guidelines on Terms of Reference for Animal Care Committees must be included in the animal use protocol;
- e) review all animal use projects to ensure compliance with the University policies, CCAC guidelines, and applicable regulatory requirements at a full committee meeting;
- f) Confirm that each research project has undergone an independent peer review and has been found to have scientific merit, prior to issuing ACC approval. For non-peer reviewed projects, the ACC Administrative Procedure 003 Peer Review Process must be followed;
- g) review, propose modifications, reject or approve any amendments to an approved animal use protocol. ACC approval is required prior to implementation of any changes. Any major changes to an approved protocol will require submission of a new protocol to the ACC. A major change includes the following: considerable increase in the number of animals, change of species, addition of more invasive procedures and use of entirely new procedures compared to the original approved procedures. The ACC can deem changes as major at their discretion;

- h) review and approve annual renewals prior to study expiry. All renewals must be reviewed and approved by a scientist, consultant veterinarian(s) and community member and decisions will be reported back to the full ACC. A new submission will be required after a maximum of 3 consecutive renewals;
- i) document all ACC discussions and decisions in the committee minutes;
- j) participate in continuing education and training for the matters relating to animal use in research;
- k) ensure appropriate veterinary care is available commensurate with current veterinary standards, and consistent with the Standards of Veterinary Care as defined by the Canadian Association for Laboratory Animals Medicine (CALAM/ACMAL).
- l) promptly notify the CCAC Secretariat and the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) of any program changes;
- m) submit and complete the CCAC and OMAFRA Animal Use Data Form before the yearly deadline;
- n) establish a crisis management plan for animal care and use facilities; and
- o) implement the Post-Approval Monitoring (PAM) program and ensure established procedures are in place.

## **7. Research Involving Multiple Institutions**

For off-site research, researchers are also responsible for obtaining the necessary ethics approval from any ACC or authorities that oversee research at the other institutions. An ethics review and approval or equivalent is required at each institution responsible for carrying out the research under its auspices regardless of where the research is conducted or led prior to study commencement

## **8. Meetings, Monitoring Visits and Inspections**

- 8.1.** The ACC will meet at least twice per year or more frequently as is necessary to fulfil their Terms of Reference and be satisfied that all animal use within their jurisdiction complies with institutional, municipal, federal and provincial regulations, and CCAC policies and guidelines. Meeting minutes will detail all ACC discussions, decisions, modifications to protocols, site and inspection visits, that will be forwarded to the VPRI.
- 8.2.** All ACC members will complete a general site visit to all facilities where animals are used, in order to better understand the work being conducted within the institution. The general site visit, by all members of the ACC, will occur once a year and can be completed individually or as a group.
- 8.3.** The Post Approval Monitoring Committee will have scheduled visits, which will be held on average every 6 months on a date mutually agreeable to by all parties concerned including the consultant veterinarian and animal users.
- 8.4.** At the discretion of the ACC, monitoring visits and inspections to the animal facilities can increase in frequency.

## **9. Quorum and Decisions**

- 9.1.** A quorum at ACC meetings shall be a simple majority of the committee members and shall include at least one community representative as well as the consultant veterinarian(s). Decisions are made by consensus.
- 9.2.** All delegated reviews must be approved by the ACC Chair/Vice-Chair, the consultant veterinarian(s) and community member. The final approval will be issued by the ACC.

## **10. Training and Education**

- 10.1.** Training opportunities are required for new ACC committee members to provide an understanding of the institutional animal care and use program, animal user facilities, institutional policies and procedures, CCAC guidelines and OMAFRA regulatory requirements.
- 10.2.** All ACC members should complete the CCAC's Modules on the Core Topics of the Laboratory Animal/Teaching Stream of the CCAC Recommended Syllabus. The University will also provide ongoing training and education for ACC members.
- 10.3.** All persons who care for and use animals for research, teaching or testing purposes, and the consultant veterinarian(s) must receive training under the auspices of the University Animal Care Committee in the protocols appropriate to the animal species being used. They must demonstrate competence ensuring maximum benefit to the animals. This would include, continuing education in their field; (scientists/study directors, post-doctoral fellows, graduate students and research technicians)

## **11. Terms of Reference Review**

- 11.1.** The ACC Terms of Reference, standard operating procedures and policies will be reviewed as necessary, and at least every three years (unless another timeframe is required for compliance purposes). The ACC and Office of Research Services are responsible to monitor and review these terms.

## **12. Policies with Specific Reference to ACC Terms of Reference**

CCAC Policy Statement for: Senior Administrators Responsible for Animal Care & Use Programs, 2008

CCAC policy statement on: terms of reference for animal care committees, 2006

CCAC Assessment Report: University of Ontario Institute of Technology, April 4, 2012

## **13. Other Policies Procedures & Guidelines**

CCAC policy statement on: scientific merit and ethical review of animal-based research, 2013

CCAC training modules on: Institutional Animal User Training Program

CCAC guidelines on: choosing an appropriate endpoint in experiments using animals for research, teaching and testing, 1998

CCAC guidelines on: animal use protocol review, 1997

CCAC policy statement on: ethics of animal investigation, 1989

University Animal Care and Use of Animals in Research and Teaching, 2013

University 004 Administrative Procedure: University Post Approval Monitoring Program

University 002 Administrative Procedure: Process for Reconsideration or Appeal of Decisions of the ACC



## BOARD OF GOVERNORS' 113<sup>th</sup> REGULAR MEETING

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Minutes of the Public Session of Thursday, November 28, 2019

1:00 p.m. to 2:50 p.m.

55 Bond Street, DTB 524

### GOVERNORS IN ATTENDANCE:

Doug Allingham, Board Chair

Nigel Allen, Chair of Audit & Finance Committee

Stephanie Chow, Chair of Investment Committee

Francis Garwe, Chair of Governance, Nominations & Human Resources Committee

Thorsten Koseck, Chair of Strategy & Planning Committee

Kevin Chan

Owen Davis

Laura Elliott

Ferdinand Jones

Steven Murphy, President

Mark Neville

Dietmar Reiner

Maria Saros

Trevin Stratton

Jim Wilson

Lynne Zucker (*via videoconference*)

### REGRETS:

Noreen Taylor, Chancellor

Liqun Cao

Lisa Edgar

Kori Kingsbury

Dale MacMillan

### BOARD SECRETARY:

Becky Dinwoodie, *Assistant University Secretary*

### STAFF:

Cheryl Foy, *University Secretary & General Counsel*

Andrew Gallagher, *Interim Chief Financial Officer*

Barb Hamilton, *Assistant to the University Secretary & General Counsel*

Krista Hester, *Assistant to the Provost & VP Academic*

Lori Livingston, *Provost & VP Academic*

Brad MacIsaac, *Assistant Vice-President, Planning and Analysis, and Registrar*

Pamela Onsiong, *Acting Chief Financial Officer*

Susan McGovern, *VP External Relations & Advancement*

## **1. Call to Order**

The Chair called the meeting to order at 1:02 p.m.

## **2. Agenda**

*Upon a motion duly made by T. Koseck and seconded by N. Allen, the Agenda was approved as presented.*

## **3. Conflict of Interest Declaration**

There was none.

## **4. Chair's Remarks**

The Chair welcomed everyone to the first Board meeting of the year. He also welcomed Owen Davis, the student governor, to his first meeting of the Board as a whole. The Chair commented that the year is off to an exciting start. The committees are busy and already advancing significant projects for the university. He thanked those governors who attended campus activities and engaged with the students over the past few months. The Chair reported on the events he attended, particularly the transportation forum. He continues to meet with the President on a weekly basis.

The Chair encouraged all Board members to engage in the discussions, keeping in mind their role of oversight and not operations. He discussed his Board priorities, which include succession planning and student engagement. He is hopeful that there will also be more community events in Ottawa and Toronto, hopefully supported by governors. The Board will continue to have discussions with Durham College (DC) about fostering a collaborative relationship. He has already met with DC Board Chair, who agrees that it is important to strengthen the relationship between the institutions.

F. Garwe reported that he attended the Campus Cup. It was his first time at the event and he got a sense of the healthy campus rivalry. F. Garwe also discussed his attendance at the mini Pow Wow. He noted the event was well attended by elementary students and members of the local indigenous communities. The key message was the connection shared among the institutions, indigenous communities and community partners.

## **5. President's Report**

The President started by thanking P. Onsiong for stepping in as the acting CFO for the past several months; she made the transition seamless. He thanked her on behalf of the senior leadership team for all of her contributions. He confirmed that P. Onsiong would continue to be a key member of the finance team. The President introduced Andy Gallagher, the new acting CFO, and provided an overview of A. Gallagher's background.

The President also thanked the governors for attending campus events. He noted great attendance at the university's sporting events (e.g. campus cup, basketball games, etc.) The athletes and their friends and families are using the games as a gathering place. It is great to see the athletes supporting one another. This is creating a positive energy and community on campus. He gave special thanks to O. Davis and the Student Union (SU) for all of the work they are doing. They are helping to create a holistic community. The President noted a tremendous energy on campus – it is a moment in time when faculty, staff, and students feel that things are moving in the right direction and are starting to dream big.

The President acknowledged the Provost for revamping the integrated planning process by focusing on units' top priorities. He also reported that the rebrand continues to be well received internally and externally. F. Garwe shared that the SU is reaching out to local community partners and expressed his thanks.

### **5.1 Strategic Mandate Agreement 3**

The President provided an update on the SMA3. The university is treating it as an economic exercise and is remaining focused on the strategic priorities. The bilateral dialogue is ongoing. He discussed the strategy of metrics not using a student head count.

### **5.2 Strategic Discussion: Durham & the Future of Energy**

The President introduced the strategic discussion. He noted that the biggest area of faculty strength at the university is energy. The university will be embarking on an initiative to fill the gap in Canada with respect to a national energy strategy. If the goal is to become carbon neutral by 2030, a strategy is required to get there. The average citizen is not aware of where their energy comes from. The university needs to play a role in educating people and serving as neutral arbiters of science.

A national energy consortium would:

- assess the optimal mix of energy;
- develop energy tech ideas – energy sectors tend to work in silos; companies coming together with researchers to consider new technologies
- equip governments with the tools to consider energy options/solutions; and
- bring people together around energy – energy discussion should not be at odds with climate action.

The initiative is in the early stages and would be a great example of “tech with a conscience”. The President confirmed that any university/think tank could participate in the initiative but Ontario Tech would lead it. This could have a profound effect on the university's reputation. The President responded to questions.

A comment was made that the initiative aligns well with the strength of Durham Region as an energy leader with two nuclear plants. There was a discussion regarding what role, if any, colleges would play.

There was a discussion regarding whether the university has its own sustainability plan. The President reminded the Board that the university campus has one of the biggest geothermal

fields under Polonsky Commons. A member commented that it would be helpful to prioritize getting information out there about the university's sustainability efforts. It would also be helpful to show potential energy partners the university's sustainability plan. It is important to develop a PR strategy on sustainability.

(P. Bignell arrived at 1:44 p.m.)

There was also discussion regarding who the university's main competitors are in the energy field. University of Calgary is best known for its work on energy, which is primarily focused on policy. There are few competitors in the energy tech space. Further, nuclear energy is uncommon at other institutions, which makes the university unique. The university is already attracting individuals interested in solving energy issues (e.g. autonomous vehicles).

From a federal perspective, there might be money allocated to this area of research in light of the climate crisis. The initiative would also involve the provincial governments in order to ensure it is a truly national effort.

## **6. Academic Council (AC)**

The President delivered the AC report on F. Jones' behalf. The work of Academic Council and its committees was well underway. He highlighted the Terms of Reference for the Steering Committee (formerly Curriculum & Program Review Committee) and Graduate Studies Committee that were included on the Consent Agenda for approval. He informed the Board that they were being updated to reflect the new By-laws and to be more consistent. Further, they were previously part of the Academic Council Handbook and, upon approval by the Board, will be standalone documents. As Council's work on governance continues, the Board will see additional committee Terms of Reference being recommended for approval.

AC hosted its first Colleagues Exchange of the year in October, which focused on Digital Badges. It was a very informative and engaging session. Several governors also participated. He reminded the Board that at the AGM, the Board was provided with a draft of the university's updated Institutional Quality Assurance Process (IQAP) Policy & Procedures for consultation. He was pleased to report that AC approved it at the October meeting. AC also confirmed the eligibility for graduation of those students who have fulfilled all degree requirements at the end of the Summer and Fall Terms of 2019 and recommended the conferral of degrees by the Chancellor.

The President noted that the Governance and Nominations Committee of AC has taken on a leadership role and, with C. Foy's leadership, continues to implement good governance practices. The Chair noted the importance of the continued evolution of governance of AC.

## **7. Co-Populous Report**

The Chair thanked J. Wilson for his continued commitment as co-populous. J. Wilson reported on recent activities at DC. DC held an Open House on November 2, which included an interesting new activity called "Ask a Governor", in which J. Wilson participated. He reported on the successful varsity teams Durham Lords celebrated national and provincial championships for rugby and baseball. He remarked that it is important to continue to engage with the college and perhaps sustainability would be a good topic for collaboration. He also noted that the Chair of

the DC Board confirmed his commitment to continue to have positive relations with the university's Board.

## **Committee Reports**

### **8. Audit & Finance Committee (A&F) Report**

N. Allen thanked P. Onsiong for her ongoing great work.

#### **Finance**

##### **8.1 Second Quarter Financial Reports**

N. Allen reviewed a few of the key aspects of the second quarter financial reports, including:

- on the asset side, there is \$12M construction in progress (new building, MGP, new basketball change rooms);
- the university paid \$6.7M in debt over last 12 months;
- net deficit at end of second quarter (typical because of relatively higher start up costs);
- revenue fairly flat year over year;
- on expenses side, there has been increase in salary and benefits (\$2.2M annual salary increases for staff and faculty over past 12 mos.); and
- \$8.7M deficit, largely due to increase in salary and benefits.

The year-end operating forecast shows a slight surplus of \$1.0M against the approved budget, with an additional \$15.0M to be spent on the new building from prior year internally restricted reserves. There is an anticipated surplus of \$1.4M on a GAAP basis at the end of the year. N. Allen noted that the committee goes through the financials and asks questions about variances, which are answered to the committee's satisfaction.

##### **8.2 Budget Assumptions, Targets & Outcomes**

B. MacIsaac reviewed the 2020-2021 budget assumptions, focusing on enrolment. He discussed the increased targets for international enrolment and advised that the university is engaging external recruiters for several countries. He also discussed the proposed increases for international tuition. They are also assuming that the \$12.9M subject to performance funding will be received in its entirety.

#### **Budget Rollover**

P. Onsiong presented the draft operating budget, which was included in the meeting material. She reviewed the one-time-only asks and advised that they are examining whether there are any capital projects/deferred maintenance that can be delayed by a year. She discussed other possible reductions that could be implemented in order to achieve a balanced budget.

L. Livingston discussed the university's approach to the deficit. She reminded the Board that the university took a 2-year budget cut approach last year. This approach differed from that of many other institutions that decided to fund the government's tuition reduction by dipping into their reserves. L. Livingston advised that they are concerned about morale and did not ask the unit leaders to go through the same budget reduction exercise again.

It was decided to roll the unit budgets over for the next year and ask that units cut their professional development and travel expenses. She clarified that these reductions would not affect money in faculty contracts. They are continuing to work on finding funds to balance the budget. L. Livingston advised that there are 42 vacant positions and filling those positions will be done on a strategic basis. There was a discussion regarding the risk of keeping positions vacant.

## **Project Updates**

### **8.3 ACE Enhancement Project**

N. Allen reported that the committee also received an update on the status of the ACE Enhancement project. The building extension stage of the project is complete. Although there was a slight delay due to union strikes, it did not have a negative impact on the project timing or the other activities running in the facility. The integration phase of the moving ground plane has commenced. The committee also received an overview of the history of the project. Funding for the project was initially requested many years ago. The long gap between when the funding request was submitted to FedDev and when it was approved has caused inflationary and systems cost increases. In February 2019, management noted to A&F a forecasted increase. Now that most quotes are finalized, the committee is recommending an increase of \$575,000 for the project, which includes a \$215,000 contingency.

*Upon a motion duly made by N. Allen and seconded by T. Koseck, the Board of Governors approved the following motion, as presented:*

*WHEREAS the university's ACE Enhancement Project (AEP) is being funded through FedDev Ontario (up to \$9.465M), a provincial grant (\$1.5M), a contribution from Magna (\$1M), and the remainder from the institution unless other gifts are received;*

*WHEREAS the AEP is being conducted in two stages and the first stage of modifications of the ACE building to accommodate the installation of the moving ground plane (MGP) is complete;*

*WHEREAS the second stage of the AEP has begun, which involves the integration of the MGP into ACE's current technical systems and is targeted for completion by March 31, 2020;*

*WHEREAS on November 29, 2018, the Board of Governors approved the award of the ACE Building modification contract in an amount not to exceed \$4.1M and multiple MGP integration contracts in a sum not to exceed \$10.4M;*

*WHEREAS on February 20, 2019 A&F was presented with an information update that the forecast costs to completion are \$14.86M, which have increased \$360K from last report. The increase was based on initial quotes received for MGP integration component, where inflation, tariffs, and obsolete controls on MGP have increased costs;*

*WHEREAS all contract quotes are now complete; however, there is no additional contingency in the budget;*

*AND WHEREAS the recommendation of management is to establish a two percent reserve or \$215,000;*

*AND WHEREAS on November 20, 2019, the Audit and Finance Committee accepted management's recommendation and recommends increasing the sum of the multiple MGP integration contracts by \$575,000 to a total of \$10.975M;*

NOW THEREFORE, pursuant to the recommendation of the Audit and Finance Committee, the Board of Governors hereby:

- approves increasing the sum of the multiple MGP integration contracts by \$575,000 to a total of \$10.975M; and
- authorizes and directs the President and/or the Chief Financial Officer, for and in the name of the university, to execute and deliver (under the corporate seal or otherwise) all such other documents and do all such other acts as may be necessary or desirable to give effect to this resolution.

## **Risk, Compliance & Policy**

### **8.4 Accessibility Policy**

N. Allen referred the Board to the policy documents included in the meeting material. Organizations are required to submit accessibility compliance reports under the Accessibility for Ontarians with Disabilities Act (AODA), which is a self-assessment of the organization's status with all provincial accessibility requirements. The Office of the University Secretary and General Counsel (USGC) is currently working towards completing the 2019 AODA Compliance Report that is due on or before December 31, 2019. At the A&F Committee meeting in November, the committee reviewed and recommended the proposed amendments to the Accessibility Policy and approved the related Procedures for Accommodating Employees with Disabilities and updated Procedures for Accommodating Students with Disabilities. C. Foy responded to questions from the Board.

There was a discussion regarding enforcement of the AODA. C. Foy clarified that while the policy is about compliance, it also forms part of the university's broader equity, diversity, and inclusion work. A concern was expressed about expending a large amount of effort on compliance with no follow up by the AODA Office.

*Upon a motion duly made by N. Allen and seconded by K. Chan, pursuant to the recommendation of the Audit and Finance Committee, the Board of Governors approved the updated Accessibility Policy, as presented.*

### **8.5 PCI Compliance**

#### **(a) Information Security Policy**

#### **(b) PCI Sustainability Policy**

N. Allen reported that the PCI DSS was established in 2006 to protect the major global credit card transaction processors from financial exposure due to merchants' security practices.

PCI DSS sets stringent standards for how credit card information is received, processed and stored. The credit card consortia focused on merchants with the heaviest volumes first, and is now turning its attention to the lightest merchant category – the category that includes the university. In 2016, DC and the university jointly launched a project to secure PCI DSS compliance. DC and the university will be positioned to apply for certification of compliance in January 2020 - the target date for achieving compliance is August 2020, which is when our agreement with transaction acquirer Chase Paymentech expires.

The university's assessor, MNP, has reviewed the draft policies and procedures and has indicated that they are sufficient to meet requirements for certification.

At the committee meeting, the PCI Sustainability Procedures were approved.

*Upon a motion duly made by N. Allen and seconded by T. Stratton, pursuant to the recommendation of the Audit and Finance Committee, the Board of Governors approved the Information Security Policy and PCI Sustainability Policy, as presented.*

## **9. Investment Committee Report**

### **9.1 Quarterly Report**

S. Chow delivered the Investment Committee report. She informed the Board that as of September 30, the value of the university's investment portfolio was \$27M and cash account was \$432,000. The portfolio's performance was a bit behind benchmark for the last quarter due to the market neutral funds.

(F. Jones arrived at 2:34 p.m.)

## **10. Governance Nominations & Human Resources Committee (GNHR)**

F. Garwe delivered the GNHR report. He reported that at the committee's first meeting of the year, they reviewed and recommended editorial amendments to the GNHR Terms of Reference, which are included in the consent agenda for approval. The university continues to make good progress on the implementation of the new by-laws. The most substantial impact of the new by-laws has been the formation of the AC Governance & Nominations Committee. GNHR also discussed Board engagement, which included reviewing the proposed Board PD work plan for 2019-2020. As already mentioned, the Board was invited to attend the Colleagues Exchange on Digital Badges. F. Garwe was pleased that several governors participated in the discussion. He also reported that the USGC will be developing a committee practices assessment and the goal will be to implement it this year. F. Garwe also reported on the presentation on Student Mental Health given by Olivia Petrie, AVP of Student Life, which was followed by a lengthy, engaged discussion.

In an effort to minimize governors' travel time, as well as minimize expenses, we have transitioned to conducting committee meetings by videoconference only this year. The university's staff will continue to meet in ERC 3023 in order to present to the committees. After the next series of committee meetings, GNHR will be soliciting the Board's feedback on the transition.

## **11. Strategy & Planning Committee (S&P) Report**

T. Koseck delivered the S&P report. The committee reviewed and recommended the proposed editorial amendments to its Terms of Reference, which are included in the consent agenda for approval. The committee also reviewed the Strategic Risk Annual Report and is pleased with the progress that has been made on the identification and mitigation of strategic risks over the past year. S&P also received an update on the status of the SMA3.

The topic of strategic discussion at the committee's first meeting was also Durham and the Future of Energy. The committee had a very enthusiastic and engaging discussion. As part of the committee's oversight of planning, they received an Enrolment & Optional Ancillary Fees Model update. The university's enrolment on day 10 was up a bit from last year. Approximately 5% of the university's students opted out of ancillary fees. There will be an update on the recent legal developments with respect to ancillary fees during the non-public session.

S&P also received an update on the Integrated Plan process. The Provost and VP Research have asked units to identify their top 3-5 priorities over the next 3-5 years, which should align with the five key strategic pillars. After identifying their top priorities, they will then set out an action plan for the next 18 months. It is a 5-year rolling plan approach - a rolling plan allows units to respond year over year. They will also be asking the unit leads to evaluate their progress against the plan.

T. Koseck advised that the committee also started its annual Board Retreat planning and set the retreat dates for the evening of May 27 and morning of May 28.

## **12. Consent Agenda:**

*Upon a motion duly made by T. Koseck and seconded by L. Elliott, the Consent Agenda was approved as presented.*

### **12.1 Steering Committee (formerly Curriculum & Program Review Committee) Terms of Reference**

### **12.2 Graduate Studies Committee Terms of Reference**

### **12.3 GNHR Terms of Reference**

### **12.4 S&P Terms of Reference**

### **12.5 Investment Terms of Reference**

### **12.6 Minutes of Public Session of Board Meeting of June 26, 2019**

### **12.7 Minutes of Public Session of A&F Meeting of June 10, 2019**

### **12.8 Minutes of Public Session of GNHR Meeting of May 16, 2019**

### **12.9 Minutes of Public Session of S&P Meeting of April 1, 2019**

### **12.10 Minutes of Public Session of Investment Meeting of August 22, 2019**

## **13. Information Items (also available on the Board portal):**

### **A&F**

### **13.1 Compliance, Risk and Policy Update**

### **13.2 Freedom of Expression Annual Report**

### **13.3 HEQCO Freedom of Speech on Campus Report 2019**

### **13.4 New Building Project**

### **13.5 Campus Recreation & Wellness Centre Expansion**

### **GNHR**

### **13.6 Policy Against Violence, Harassment and Discrimination in the Workplace 2018-2019 Review Report**

### **13.7 Board PD 2019-2020**

### **S&P**

### **13.8 Strategic Risk Annual Report**

#### **14. Other Business**

#### **15. Adjournment**

*Upon a motion duly made by S. Chow and seconded by T. Koseck, the public session adjourned at 2:46 p.m.*

Becky Dinwoodie, Secretary

DRAFT



**BOARD OF GOVERNORS**  
**AUDIT & FINANCE COMMITTEE**

**MINUTES OF THE MEETING OF NOVEMBER 20, 2019**  
**PUBLIC SESSION**  
**2:00 p.m. – 3:50 p.m., ERC 3023**

**Attendees:** Nigel Allen (Chair), Stephanie Chow (*via teleconference*), Steven Murphy, Dietmar Reiner

**Staff:** Becky Dinwoodie, Cheryl Foy, Les Jacobs (*via teleconference*), Lori Livingston, Brad MacIsaac, Pamela Onsiong

**Regrets:** Doug Allingham, Dale MacMillan

**Guests:** Chelsea Bauer (FA), Bobbi-Jean White and Reagan Travers (KPMG)

**PUBLIC SESSION**

**1. Call to Order**

The Chair called the meeting to order at 2:00 p.m.

**2. Agenda**

S. Chow requested the addition of a non-public Investment Committee update as agenda item 17.

*Upon a motion duly made by D. Reiner and seconded by S. Murphy, the Agenda was approved as amended.*

**3. Conflict of Interest Declaration**

There was none.

**4. Chair's Remarks**

The Chair welcomed everyone to the first official committee meeting of the 2019-2020 Board year. He noted that the committee meetings this year would be held by videoconference and the Board meetings would be held in person. The Governance, Nominations and Human Resources Committee will be seeking governors' feedback on the transition to videoconference meetings later in the year. He welcomed guests to the meeting.

## 5. President's Remarks

The President shared that it has been a great kick off to the academic year. The community returned to a newly branded campus, which has been positively received by the internal and external communities. Sticky campus initiatives are in full swing. The President gave a special mention to the university's women's lacrosse team, who hosted the OUA Championships and played extremely well. The games were well attended by faculty, staff and students. He also noted several governors attended the annual Campus Cup soccer match with Durham College. The basketball seasons are also underway. Despite the youth of the teams, they are playing competitively.

The President discussed his recent attendance at the Ontario Economic Summit, where he had the opportunity to speak with the new Minister of Colleges and Universities. He also reported on his recent trip to Dublin, where he focused on strengthening partnerships and looking to capitalizing on the university's work in the energy sector.

## 6. Finance

### 6.1 Second Quarter Financial Reports

P. Onsiong reviewed the second quarter financial reports. Several of the highlights included:

- net addition of \$22m in capital assets (Moving Ground Plane \$5.1m, new building \$5.3m, basketball change rooms \$1.3m, \$4.5m major equipment and FF&E, \$3.8m building and lab renovations and net \$2.0m computer equipment and laptops);
- accounts payable and accrued liabilities increased \$3.3m due to timing of recording and payment of invoices (\$1.8m in trade payables including construction invoices, \$0.7m of student ancillary fees billed to students on behalf of third parties, and other immaterial variances);
- paid down \$6.7m debt over last 12 months; and
- net deficit of \$8.7m at end of second quarter – typical because of relatively higher start up costs and due to increase in salary and benefits.

P. Onsiong explained that the university's financial metrics appear less favourable than in prior years because the university is using capital reserves for building and the tension between revenue and expenses. There was a discussion as to by increasing international student enrolment, the ratios would improve. P. Onsiong also reviewed the 2019-2020 operating forecast summary. She advised that the forecast surplus on a generally accepted accounting principle basis, after adjusting for non cash transactions and for items that are not included in the budget, is \$1.3m. P. Onsiong and B. MacIsaac responded to questions from the committee. The Chair thanked P. Onsiong for the through notes in the financial statements.

### 6.2 2019-2020 Enrolment

B. MacIsaac provided an enrolment update. On day 10, the university had a total of 10,500 students (about 50 higher than last year). He discussed the students' ability to opt out of ancillary fees. By day 10, about 5% of the university's students opted out of the specified ancillary fees. Other institutions are experiencing rates of approximately

20-30% of students opting out. There is only a small difference between the number of undergraduate and graduate students opting out. The university worked closely with the Student Union (SU) to develop a strategy relating to the ancillary fees. B. MacIsaac responded to questions. The committee discussed whether any contingency had been planned for a possible increase in students opting out. B. MacIsaac advised that they are using a 25% opt out rate for planning purposes. He also advised that the SU has been actively promoting the initiatives being provided by the SU and student societies.

### **6.3 Budget Assumptions, Targets & Outcomes**

B. MacIsaac reminded the committee of the implementation of 2- year budgeting process. He reviewed the key 2020-21 budget assumptions, which were set out in the accompanying presentation included in the meeting material. He advised that the university has retained student recruitment agencies in China and India. The committee discussed the targets set for international students. B. MacIsaac confirmed that the targets were pressure tested. There was also a discussion about how a decrease in enrolment would affect planning for the new building. P. Onsiong presented the draft high-level operating budget for 2020-2021. The goal is to achieve a balanced budget to present in April. The university is exploring options for savings and potential reductions. L. Livingston discussed the fiscal constraints. The university community is aware that we are working within a constrained fiscal environment. Budget holders were already asked to implement a 2-year budget cut strategy. There is concern about morale. One possibility will be to reduce professional development and travel expenses by 50% across the board (including senior administrators).

(L. Jacobs joined at 2:55 p.m.)

There was a discussion regarding strategic hiring. When the university introduces a new program, it is initially implemented with existing resources and then needs are re-evaluated. The university is not hiring in anticipation of demand.

## **7. Investment Committee Oversight**

### **7.1 Quarterly Report**

S. Chow delivered the quarterly investment report. She advised that the portfolio is currently valued at \$27m and the cash account is at \$432,000. The portfolio's performance was slightly behind benchmark for the quarter. She reported that there was a turn around in the Market Neutral Fund's performance in September and October.

## **8. Project Updates**

### **8.1 New Building**

B. MacIsaac provided a progress update on the new building project. Those attending the meeting in person would have noticed the crane is now onsite. The next noticeable milestone will be in January, when the first floor pillars will be up.

## 8.2 ACE Enhancement

B. MacIsaac reported that the building extension stage of the project was complete. There was only a slight delay due to union strikes; however, there was no negative impact on project timing or the work of ACE. The work on the integration of the moving ground plane (MGP) is underway. B. MacIsaac provided an overview of the history of the MGP project, which started in 2011-2012. The initial funding requests were made many years ago, which resulted in a gap between the time the project was submitted for FedDev funding and when it was approved. B. MacIsaac explained the forecasted increase of the project cost. In addition to an increase of \$575,000 for the project, a contingency of \$215,000 (2% of the total of the project) was also requested. B. MacIsaac responded to questions from the committee. The committee discussed the forecasted cost overrun, as well as the reasons for the change in projected project cost.

(O. Petrie joined at 3:00 p.m.)

*Upon a motion duly made by N. Allen and seconded by D. Reiner, the Audit and Finance Committee approved the following motion:*

*WHEREAS the university's ACE Enhancement Project (AEP) is being funded through FedDev Ontario (up to \$9.465M), a provincial grant (\$1.5M), a contribution from Magna (\$1M), and the remainder from the institution unless other gifts are received;*

*WHEREAS the AEP is being conducted in two stages and the first stage of modifications of the ACE building to accommodate the installation of the moving ground plane (MGP) is complete;*

*WHEREAS the second stage of the AEP has begun, which involves the integration of the MGP into ACE's current technical systems and is targeted for completion by March 31, 2020;*

*WHEREAS on November 29, 2018, the Board of Governors approved the award of the ACE Building modification contract in an amount not to exceed \$4.1M and multiple MGP integration contracts in a sum not to exceed \$10.4M;*

*WHEREAS on February 20, 2019 A&F was presented with an information update that the forecast costs to completion are \$14.86M, which have increased \$360K from last report. The increase was based on initial quotes received for MGP Integration component, where inflation, tariffs, and obsolete controls on MGP have increased costs;*

*WHEREAS all contract quotes are now complete; however, there is no additional contingency in the budget;*

*AND WHEREAS the recommendation of management is to establish a two percent reserve or \$215,000;*

*NOW THEREFORE, pursuant to the recommendation of management, the Audit and Finance Committee hereby recommends:*

- that the Board of Governors approves increasing the sum of the multiple MGP integration contracts by \$575,000 to a total of \$10.975M; and*

- *that the Board of Governors authorizes and directs the President and/or the Chief Financial Officer, for and in the name of the university, to execute and deliver (under the corporate seal or otherwise) all such other documents and do all such other acts as may be necessary or desirable to give effect to this resolution."*

(P. Bignell joined at 3:11 p.m.)

### **8.3 Campus Recreation & Wellness Centre Expansion (CRWC)**

B. MacIsaac provided an update on the CRWC project, which was included in the meeting material. The project was completed on time for the inaugural basketball home games. B. MacIsaac clarified the change orders.

### **8.4 AVIN**

L. Jacobs delivered an update on the AVIN project. He discussed the university's contributions to the project to date. The university has brought in more industry contributions than anticipated. C. Foy provided further background to the AVIN project, which is a multi-year agreement and the contributions of Spark and Durham College were anticipated to be smaller than the university's.

(L. Jacobs exited at 3:27 p.m.)

## **9. Risk, Compliance & Policy**

### **9.1 Risk, Compliance & Policy Update**

C. Foy delivered a risk, compliance and policy update. She reported on the addition of a compliance officer to the team and was pleased to advise good progress is being made. She advised that there are many low hanging fruit and the focus is on research compliance, and human rights. The goal is to complete a compliance manual this year. There was a discussion regarding trade compliance (controlled goods) and copyright compliance. They will also be examining the health and safety framework.

C. Foy provided a risk management update. They are four years into the risk program and there is good activity happening. The Risk Director has been meeting with risk owners to update the university's risk registers. The Director is reporting that the tone at the top is very positive and there is a high level of engagement and greater understanding of risk. The university continues to fill policy gaps.

### **9.2 Freedom of Expression Annual Report**

L. Livingston presented the university's first annual Freedom of Expression report. She highlighted that the university received no complaints related to the implementation of the policy. She also discussed the recent release of the HEQCO Report and advised that HEQCO will provide institutions with a reporting template next year.

## Policy

### 9.3 AODA Policy Instruments:

#### (a) Accessibility Policy

C. Foy presented the draft policy for the committee's consideration. The policy and related procedures are coming forward as a result of the university's compliance work and will form part of the university's AODA reporting. The university will be re-establishing the accessibility working group. C. Foy reviewed the consultation process, as well as the numerous ways that feedback on the policy documents may be provided.

*Upon a motion duly made by D. Reiner and seconded by S. Chow, the Audit and Finance Committee recommended the Accessibility Policy, as presented, for approval by the Board of Governors.*

#### (b) Procedures for Accommodating Employees with Disabilities

#### (c) Procedures for Accommodating Students with Disabilities

*Upon a motion duly made by D. Reiner and seconded by S. Chow, the Audit and Finance Committee approved the Procedures for Accommodating Employees with Disabilities and Procedures for Accommodating Students with Disabilities, as presented.*

#### (d) Procedure for Use of Service Animals

O. Petrie presented the procedure for approval. She explained that the procedure formalizes the university's practices with respect to service animals and provides guidance with respect to processes for service animals on campus.

*Upon a motion duly made by D. Reiner and seconded by S. Chow, the Audit and Finance Committee approved the Procedure for the Use of a Service Animal by Students with Disabilities, as presented.*

### 9.4 Payment Card Industry (PCI) Compliance Policy Instruments

(C. Bauer and O. Petrie left at 3:36 p.m.)

P. Bignell provided the background to the proposed PCI policy documents. The IT Team has been working with the Compliance Officer to develop the compliance program. He responded to questions from the committee.

#### (a) Information Security Policy

#### (b) PCI Sustainability Policy

*Upon a motion duly made by N. Allen and seconded by S. Chow, the Audit and Finance Committee recommended the Information Security Policy and PCI Sustainability Policy, as presented, for approval by the Board of Governors.*

**(c) PCI Sustainability Procedure**

*Upon a motion duly made by D. Reiner and seconded by S. Chow, the Audit and Finance Committee approved the PCI Sustainability Procedures, as presented.*

(R.Travers arrived at 3:47 p.m.)

**10. Consent Agenda:**

*Upon a motion duly made by D. Reiner and seconded by S. Chow, the Consent Agenda was approved as presented.*

**10.1 Terms of Reference Review**

**10.2 Minutes of Public Session of Meeting of June 10, 2019**

**11. Other Business**

**12. Adjournment**

*Upon a motion duly made by D. Reiner, the public session adjourned at 3:58 p.m.*

Becky Dinwoodie, Secretary

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Public Session Minutes of the Meeting of Thursday, October 10, 2019  
2:00 p.m. to 3:25 p.m.  
Videoconference and ERC 3023

**Members:** Francis Garwe (Chair) (*videoconference*), Laura Elliott (*videoconference*), Kori Kingsbury (*videoconference*), Steven Murphy, Maria Saros (*videoconference*), Trevin Stratton (*videoconference*)

**Staff:** Jamie Bruno, Becky Dinwoodie, Cheryl Foy, Monica Jain, Lori Livingston, Olivia Petrie, Andrew Sunstrum (*videoconference*)

**Regrets:** Doug Allingham, Lisa Edgar

## 1. Call to Order

The Chair called the meeting to order at 2:04 p.m.

## 2. Agenda

*Upon a motion duly made by K. Kingsbury and seconded by L. Elliott, the Agenda was approved as presented.*

## 3. Conflict of Interest Declaration

There were none.

## 4. Chair's Remarks

The Chair welcomed everyone to the first GNHR meeting of the Board year after what he hoped was an enjoyable summer. The Chair reported that he received positive feedback on the new brand over the summer. He also welcomed M. Saros to the committee. As a result of feedback provided during the annual assessment last year, the committee will be allocating more time during meetings for strategic discussions. Upon reviewing today's agenda, the committee is already off to a good start. The Chair encouraged committee members to ask questions.

## 5. President's Remarks

The President also welcomed everyone to the new academic year. He reported on his recent attendance at the Universities Canada (UC): Building Reconciliation Forum held at Algoma University, which he described as an incredibly powerful event. It served as a reminder that the university must continue to think about ways to be a driver of reconciliation.

The President also discussed the positive reception of the university's new brand during the Forum, since it was the first UC meeting since the rebranding. He received unanimously positive sentiments from institutions across Canada.

The President remarked that it has been a fantastic start to the year fueled by great energy. The new brand is being rolled out across the campus, as well as by the varsity teams. The university's inaugural basketball teams played their first exhibition games last week, which were well attended. Varsity athletics are playing a big role in the university community coming together. The President noted that governors attended several start-up events. The sense of community shows that the university family is here for students in good times, as well as bad.

The President shared that the new Provost and VP Research have hit the ground running, including working on updating the integrated academic and strategic research plans. The President commented on the remarkably positive feeling of start-up.

The Chair encouraged committee members to attend next year's Campus Cup event.

## 6. Governance:

### 6.1 GNHR Terms of Reference Review

C. Foy reviewed the proposed amendments to the Terms of Reference, which were mostly housekeeping changes.

*Upon a motion duly made by T. Stratton and seconded by L. Elliott, the Governance, Nominations and Human Resources Committee (GNHR) recommended the proposed amendments to the GNHR Terms of Reference, as presented, for approval by the Board of Governors.*

### 6.2 By-laws Implementation Update

C. Foy advised that good progress continues to be made on the implementation of the new by-laws. The most substantive impact has been the establishment of Academic Council's Governance & Nominations Committee. She reminded GNHR that the Board has identified strengthening the relationship with Academic Council as a priority, which is reflected in the implementation plan. She responded to questions from the committee. She clarified that the use of Francis & Francis' Democratic Rules of Order is not new but was implemented last year.

### **6.3 Board Engagement:**

#### **(a) Board PD 2019-2020**

C. Foy reviewed the proposed Board PD work plan. She discussed the upcoming Colleagues Exchange, an Academic Council strategic discussion that the Board has been invited to attend. She confirmed that the Colleagues Exchange material will be made available to governors who are unable to attend.

#### **(b) Annual Committee Practices Assessment Development**

C. Foy discussed the annual Board assessment process and advised that a committee practices assessment is going to be developed. The goal will be to implement the committee assessment this year.

#### **(c) Board Portal Implementation Update**

B. Dinwoodie provided the committee with an update on the implementation of the OnBoard portal. Overall, governors have provided positive feedback on the new portal. L. Elliott commented that she likes that all Board related information can be found in one spot.

### **6.4 Policy:**

#### **(a) Proposed Procedures to Investigate & Respond to Allegations of Violence, Sexual Violence, Harassment & Discrimination by Governors & Senior Leaders**

C. Foy introduced the proposal to develop procedures specifically for governors and senior leaders of the university. She sought the committee's feedback on whether such a set of procedures are necessary and, if so, what approach should be taken.

C. Foy reviewed how such a complaint would be handled under the university's current procedures, which contemplate that this type of complaint would be made to a person in authority or HR. If the complaint involved a person in HR, it would be reported to the General Counsel (GC). The next step would be for HR or GC to decide on interim measures.

The proposed reporting process for senior leaders and governors would be that the President should receive complaints against members of the senior leadership team (SLT) and the Board Chair should receive complaints that implicate a governor or President. GNHR was asked to consider whether a member of the SLT should be automatically put on leave in the event of an allegation. A committee member asked how other universities would handle a similar situation. C. Foy responded that she would benchmark the policies of other institutions.

C. Foy advised that recommendation from the Navigator panel members was that when managing situations, it is better for the person against whom a complaint is made to have automatic leave because it is standard practice. If the decision to put an individual on leave is discretionary, it could put the individual against whom the complaint was made

in a worse light as it involves a degree of judgment. It is important to consider the reputational impact.

The committee members supported implementing a consistent approach of automatic leave, which acknowledges the need to conduct a preliminary investigation. The expectation would be that General Counsel would be involved in advising the President, Board Chair, or GNHR Chair on handling a complaint.

**(b) Policy Against Violence, Harassment and Discrimination in the Workplace 2018-2019 Review Report**

J. Bruno provided background to the annual compliance review. He advised that Student Life has been involved in the feedback process. He advised that the results of the review would be reported back in January. J. Bruno discussed the addition of Andrew Sunstrum to the team, detailing his role and responsibilities.

**6.5 Strategic Discussion: Student Mental Health**

O. Petrie and M. Jain delivered a presentation on the university's approach to student mental health. They responded to questions from the committee. In response to a question about whether the university partners with other institutions, M. Jain advised that the university is able to mobilize supports to help the community through Ontario Shores and other local agencies. Further, faculty members are conducting research regarding collaborating on mental health. The committee was also informed that there is a broad network of colleagues across the sector who collaborate to ensure issues are responded to in a consistent manner across institutions. O. Petrie advised that the university has a relationship with the residence and when there is an incident, the residence brings in an advisor to help support students.

**7. Consent Agenda:**

*Upon a motion duly made by K. Kingsbury and seconded by M. Saros, the consent agenda was approved as presented.*

**(a) Minutes of the Meeting of May 16, 2019**

**8. Other Business**

**9. Adjournment**

*There being no other business, upon a motion duly made by L. Elliott, the meeting adjourned at 3:27 p.m.*

Becky Dinwoodie, Secretary



BOARD OF GOVERNORS  
Strategy & Planning Committee (S&P)

Minutes of the Public Meeting of  
Thursday, October 24, 2019  
2:00 p.m. to 3:55 p.m., ERC 3023

**Attendees:** Thorsten Koseck (Chair), Doug Allingham, Liquan Cao (*videoconference*), Kevin Chan (*videoconference*), Owen Davis, Steven Murphy, Jim Wilson (*videoconference*), Lynne Zucker (*videoconference*)

**Staff:** Becky Dinwoodie, Cheryl Foy (*videoconference*), Lori Livingston, Brad MacIsaac, Pamela Onsiong, Susan McGovern (*videoconference*)

**Guests:** Christine McLaughlin (Ontario Tech Faculty Association)

1. Call to Order

The Chair called the meeting to order at 2:07 p.m.

2. Agenda

*Upon a motion duly made by D. Allingham and seconded by O. Davis, the Agenda was approved as presented.*

3. Conflict of Interest Declaration

There were none.

4. Minutes of Public Session of Meeting of April 1, 2019

*Upon a motion duly made by O. Davis and seconded by L. Zucker, the Minutes were approved as presented.*

## 5. Chair's Remarks

The Chair welcomed everyone to the first committee meeting of the 2019-2020 Board year. The Chair introduced the new student governor, O. Davis, to the committee and welcomed him to his first committee meeting.

## 6. President's Remarks

The President reported it has been an incredibly exciting start to the year. The new brand has been received extremely well by the university's internal and external communities. He commented on the high level of student engagement in orientation, including the Student Union's activities under O. Davis' leadership. The President also discussed the opening of The Hive Café, which will be helpful in determining what students are looking for in terms of food.

(J. Wilson and L. Cao joined at 2:16 p.m.)

### Tech in Education

The university must be able to connect our students' online experience with the magic that happens on campus. While examining how to incorporate tech in education is not new to the sector, the key is differentiating ourselves. How to leverage strengths between institutions will be seen in years to come, as well as an "open tent" philosophy to learning and intellectual property.

### SMA3

The President remarked that the new performance-based funding of SMA3 will bring significant change to the sector. He reviewed the 10 KPIs that will be used to determine 60% of the university's funding. The university is currently in the process of negotiating the metrics with the provincial government and had their first meeting with the Minister earlier that week. The province requested a first draft of the SMA3 by the end of the year. The President will continue to keep the Board updated on the status of the negotiations.

### Strategic Priorities

The President provided an update on the progress being made on the university's strategic priorities. He noted that the university is becoming known for our automotive work, beyond electric and autonomous vehicles. It is also becoming known for our work in energy, which is significant given there are two nuclear reactors located in Durham Region.

The Chair commented that it is great to hear that the sticky campus initiatives are working and shared his recent experience attending his university reunion. The Chair also commented on the university's work relating to autonomous vehicles.

There was also a brief discussion regarding a start-up company in Toronto working on battery storage and the partnership opportunity it could present. The President asked L. Cao to send the name of the company to him.

## **7. Strategy**

### **7.1 S&P Terms of Reference Review**

B. Dinwoodie reviewed the proposed editorial amendments to the S&P Terms of Reference. A suggestion was made to change to add “at least once every 2 years” to the sentence “The Committee shall engage in broad strategic planning by reviewing and making recommendations to the Board on the following”.

*Upon a motion duly made by K. Chan and seconded by L. Zucker, the Strategy & Planning Committee (S&P) recommended the proposed amendments to the S&P Terms of Reference, as amended, for approval by the Board of Governors.*

### **7.2 Strategic Risk Annual Report**

C. Foy provided an update on the development of the strategic risk report, which was also set out in a report included in the meeting material. She discussed the progress that has been made on identifying and mitigating strategic risks. This year, the Risk Management Team will develop a process map of Operational Risks to Strategic Risks, as well as map strategic risks to the university’s strategic pillars. C. Foy asked the committee for their feedback on the proposed plan.

In response to a question regarding when the university might have a final strategic risk document in place that could be reviewed annually, C. Foy advised that the goal is to have the list of strategic risks finalized and mapped to the strategic pillars by the end of the year. The committee was supportive of this approach.

### **7.3 Strategic Mandate Agreement 3**

S. Murphy and L. Livingston provided an update on the status of the SMA3. There was a discussion regarding the level of transparency in negotiations with other institutions. S. Murphy commented that the implementation of the SMA3 will materially change the sector. The university is focused on minimizing the unintended consequences of the metrics. One of the goals of SMA3 is to make public institutions accountable for the funding received.

### **7.4 Strategic Discussion: Durham & Future of Energy**

S. Murphy introduced the strategic discussion topic. He advised that the concept of energy spans the vast majority of the university’s Faculties. Ontario Tech has built a name for itself in the auto sector. Society needs to become more informed as we move from a fossil fuel energy system to greener energy system and scientific evidence will

be helpful. The university is well positioned to be a leader in technological advances in energy, as well as on the policy side. How many Ontarians/Canadians know where their energy comes from? The source of energy varies greatly by region/province. It will be helpful to have a scientific perspective on the totality of the energy grid. This is a niche area in which the university has a lot of expertise and faculty are excited about working across silos to tackle energy issues. This is a natural fit and can be a defining characteristic of the university (“tech with a conscience”).

S. Murphy led the committee’s discussion. The committee considered whether there was any way to narrow the focus given the magnitude of the undertaking. It will be important to balance being visionary with being practical. There are quick wins to be had in sharing best in class technologies, as sectors tend to operate in silos. The objective of the initiative will not be to solve Canada’s entire energy problem but to be available to conduct independent assessments of energy and energy-related problems. It is also important to ensure that people know that we alone are not developing the solution. S. Murphy clarified that the university would not develop energy policies, but would provide the scientific support for governments to make decisions. The university should be perceived as being neutral.

There was a discussion regarding how the initiative could be used to develop a solution to provide energy to northern indigenous communities. There was also a discussion regarding the space required for autonomous vehicles.

The committee expressed support for the initiative. S. Murphy clarified that the work would not be accomplished alone – the university would partner with other think tanks. It will be integral to ensure that institutions are not duplicating efforts (e.g. working with University of Calgary, which is focused on the policy side). S. Murphy shared that he has had good discussions with recently retired CEOs in one of the areas. He acknowledged that it is a complicated solution and it will take more than just industry to develop it. The initiative would look for open-minded individuals who can reflect on the shortcomings of their industry. A member suggested that the advisory group include national leaders to ensure it is a truly national effort.

Once the university establishes credibility for energy expertise, that expertise can be extended to related transportation issues. It will be important to focus on the outcome we want to achieve. S. Murphy also shared the types of work integrated learning opportunities that would come out of such an initiative.

## **8. Planning**

### **8.1 Enrolment & Optional Ancillary Fees Model**

B. MacIsaac provided the committee with an update on the university’s Day 10 numbers, which was just under 10,500 students and a bit higher than last year. With respect to the optional ancillary fees, approximately 5% of the university’s students opted out, which is quite low compared to some other institutions (20/25%). The

committee discussed the strategy of educating students on the value of the student services supported by ancillary fees. B. MacIsaac confirmed that the five optional fees all related to the Student Union and totaled approximately \$31.12 of \$1500 in ancillary fees. He also advised that there was only a small difference in the percentage of undergraduates opting out (4.9%) versus graduates (5.3%). The student clubs are feeling it the most and had to decrease funding to clubs from \$750 to \$500. In order for a student to belong to a club, they must have paid the related ancillary fees. The university will continue to monitor the opt out rates. There was a suggestion made to reduce the length of the opt out period.

D. Allingham congratulated the team on the approach taken to the optional ancillary fees model.

## 8.2 Integrated Plan – Process

L. Livingston updated the committee on the development of the university's integrated plan. She shared her experience during the interview process for the Provost role and how it shaped her development of the integrated plan process. She is working with Les Jacobs on the integrated plan. They have asked each unit leader to identify their top 3-5 priorities over the next 3-5 years. The priorities should align with the 5 key strategic pillars. Once their priorities are identified, they must set out an action plan for the next 18 months. L. Livingston confirmed it is a 5-year rolling plan approach, which allows for flexibility. Unit leads are also being asked to evaluate their progress against the plan. The change in the integrated plan process has been well received, so far.

L. Livingston reviewed the broad consultation with Faculty Councils, as well as regular updates to Academic Council. There will also be several Town Hall sessions. The final draft of the Integrated Academic Plan will go to Academic Council for approval in the new year.

Last year's integrated plan was 202 pages and the goal for this year is to settle on a 20-30-page plan, as well as an executive summary.

A member commented that the evaluation component is a great development, as it is important to review what was accomplished and it provides a sense of accountability.

## 8.3 Integrated Operational Planning (pre-budget)

B. MacIsaac, P. Onsiong and L. Livingston presented the budget and planning update, which was included in the meeting material. B. MacIsaac discussed the university's strategy for increasing international enrolment. He explained the rationale for the international strategy. He confirmed that the university is using external recruiters for China and India. In response to a question about the "pre-approved asks", B. MacIsaac clarified that these are "one-time only asks" that have not yet been approved.

B. MacIsaac also explained the concept of “delayed hires”. L. Livingston explained that since there is no money in the budget to support new asks, it would not be productive to have people use their time and energy to prepare requests for new asks. The university is focusing budget cuts in areas where they would be least felt by the remaining staff and faculty. L. Livingston used the CAUBO conference as an example of reduction in professional development spending; historically, 12 representatives attended the conference whereas now will have only 1 person attend and report back to the others.

L. Livingston reinforced that the university is employing a strategy in an effort to not further demoralize staff and faculty. The university is also examining opportunities for revenue generating. There was a discussion about the effect of adding the moving ground plane to ACE and how it will increase revenues. ACE must first get through the downtime of the integration process. The Continuous Learning department is also conducting market research to develop additional revenue generating opportunities.

#### **8.4 Board Retreat Planning**

C. Foy discussed the timing of the spring retreat and suggested that the Board schedule the retreat for a similar time as last year - evening of May 27 and morning of May 28.

(C. McLaughlin left at 4:14 p.m.)

C. Foy reviewed the topics that were considered by S&P last year. The committee supported the topics of student mental health and the energy initiative. There is potential to engage an outside speaker for the student mental health topic. S. Murphy suggested approaching mental health from a different perspective by examining macro trends instead of an “inside the bubble” discussion. B. Dinwoodie will canvass the Board’s availability for the proposed May dates.

#### **9. Other Business**

#### **10. Adjournment**

*There being no other business, upon a motion duly made the meeting adjourned at 4:15 p.m.*

Becky Dinwoodie, Secretary



**BOARD OF GOVERNORS**  
**Investment Committee**

**Minutes of the Public Session of the Meeting of November 20, 2019**  
**11:30 a.m. – 11:55 a.m.**  
**Videoconference**  
**North Campus, ERC 3023**

**Members:** Stephanie Chow (Chair) (videoconference), Thorsten Koseck (videoconference), Ferdinand Jones, Steven Murphy, Mark Neville

**Staff:** Becky Dinwoodie, Cheryl Foy, Pamela Onsiong

**Guests:** Leila Fiouzi & Connor Glassco (PH&N)

**Regrets:** Doug Allingham, Maria Saros

**1. Call to Order**

The Chair called the meeting to order at 11:30 a.m.

**2. Agenda**

*Upon a motion duly made by T. Koseck and seconded by F. Jones, the Agenda was approved as presented.*

**3. Conflict of Interest Declaration**

There was none.

**4. Chair's Remarks**

The Chair welcomed the committee to the first meeting of the new year. She encouraged everyone to engage in the meeting.

**5. Investment Review**

**a. Second Quarter Investment Review**

L. Fiouzi reviewed the report on the portfolio's second quarter performance. The portfolio is valued at just over \$27M and the cash account is at \$432,000 as of the end of September. The portfolio saw a return of 1.2% for the last quarter, which was .13 less than the benchmark. This was due to the performance of the market neutral fund. L. Fiouzi reminded the committee that it is important to evaluate the active management performance over a 3-5 year period. PH&N has added value over that

period as the portfolio performed .65% higher than benchmark over the past 3 years. L. Fiouzi reviewed the university's portfolio asset mix as at September 30, 2019. She highlighted the allocation of Canadian and global equities. There is good diversification in global equities.

**6. Consent Agenda:**

*Upon a motion duly made by M. Neville and seconded by F. Jones, the Consent Agenda was approved as presented.*

6.1 Terms of Reference Review

6.2 Minutes of Public Session of Meeting of August 22, 2019

**7. Other Business**

**8. Adjournment**

*There being no other business, upon a motion duly made by S. Murphy, the public session adjourned at 11:42 a.m.*

Becky Dinwoodie, Secretary



## BOARD REPORT

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### SESSION:

Public  
Non-Public

☒  
☐

### ACTION REQUESTED:

Decision  
Discussion/Direction  
Information

☐  
☐  
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TO: Board of Governors

DATE: February 27, 2020

FROM: Cheryl Foy, University Secretary and General Counsel

SUBJECT: Compliance and Policy Update

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### COMMITTEE/BOARD MANDATE:

- The Audit and Finance Committee is responsible for overseeing risk management, and other internal systems and control functions at the university. This oversight includes receiving regular reports from management on areas of significant risk to the university including regulatory matters, as well as policy development and approvals at the university, in accordance with the Policy Framework.

### BACKGROUND/CONTEXT & RATIONALE:

- The purpose of this Report is to provide the Committee with an update on the status of compliance, risk and policy development activity being undertaken by the Secretariat.

#### *Compliance Update*

- The Secretariat will be collaborating with Human Resources to develop training for university employees. The approach will encompass training modules for new employees, annual refresher training, as well as methods for tracking compliance with training requirements. We are working on identifying compliance training gaps in the areas the Secretariat supports and advises on. Our primary focus for this year will be in Privacy and Records Management, which have been identified both as a priority for Organizational Development and for advancing Information Security which will support other ongoing compliance initiatives.

#### *Privacy Update*

- Each year the University must submit a Statistical Report documenting all requests for access to general records and records containing personal information. A summary of the statistical report is below:

Category	Calendar year 2018	Calendar year 2019
Breaches investigated	11	16
Requests for personal information	11	9
Requests for general information	3	3
Requests resolved informally	3	9
3 <sup>rd</sup> party notifications	2	1

- The report considers the University's compliance obligations under the Freedom of Information and Protection of Privacy Act. There was one instance of non-compliance with legislated timelines identified in the Statistical Report. In one case, the statutory timeline was exceeded by one day.

### ***Policy Update***

- The Secretariat is working on two key policy initiatives scheduled for implementation by June 2020:
  - Amendments to the Technology Use Policy will update the existing policy (last updated in May 2012). The amendments will bring additional clarity to acceptable and unacceptable use of technology, and to users' expectation of privacy when using Information Technology Resources. A draft has been reviewed by Senior Leadership Team and the Policy Advisory Committee and will be reviewed at the February Academic Council. We anticipate bringing the draft to Audit and Finance Committee at the April 15 meeting for consultation.
  - A new Code of Ethical Conduct Policy will promote standards of ethical conduct and integrity, and provide additional direction to employees in areas of conflict of interest, compliance, confidentiality and the acceptance of gifts. A draft is being finalized for consultation with the Policy Advisory Committee (March), Academic Council (April), Administrative Leadership Team (April). We anticipate bringing the draft to Audit and Finance Committee by the June 17 meeting.
- The Secretariat is also working on a policy initiative to support the Trade Compliance priority for this year:
  - The Controlled Goods Policy will provide a framework for compliance with Canada's Controlled Goods Program and ensure the structure is in place to undertake research using goods identified in the Defense Production Act and Controlled Goods Regulation. A draft is being finalized for consultation with the Policy Advisory Committee (March), Academic Council (March), Administrative Leadership Team (May). We anticipate bringing the draft to Audit and Finance Committee at the April 15 meeting for consultation.

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### **SUPPORTING REFERENCE MATERIALS:**

- IPC Statistical Report Draft



The Year-End Statistical Report  
for the  
Information and Privacy Commissioner of Ontario

**Statistical Report of  
University of Ontario Institute of Technology  
for the Reporting Year 2019**

**for**

*Freedom of Information and Protection of Privacy Act*

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## Section 1: Identification

<b>1.1</b>	Organization Name	University of Ontario Institute of Technology
	Head of Institution Name & Title	Steven Murphy, President and Vice-Chancellor
	Head of Institution E-mail Address	president@ontariotechu.ca
	Management Contact Name & Title	Cheryl Foy, University Secretary & General Counsel
	Management Contact E-mail Address	cheryl.foy@ontariotechu.ca
	Primary Contact Name & Title	Cheryl Foy, University Secretary & General Counsel
	Primary Contact Email Address	cheryl.foy@ontariotechu.ca
	Primary Contact Phone Number	9057213174
	Primary Contact Fax Number	9057213076
	Primary Contact Mailing Address 1	Office of the Board of Governors
	Primary Contact Mailing Address 2	Ontario Tech University
	Primary Contact Mailing Address 3	2000 Simcoe Street North
	Primary Contact City	Oshawa
	Primary Contact Postal Code	L1G0C5
<b>1.2</b>	Your institution is:	University

## Section 2: Inconsistent Use of Personal Information

<b>2.1</b>	Whenever your institution uses or discloses personal information in a way that differs from the way the information is normally used or disclosed (an inconsistent use), you must attach a record or notice of the inconsistent use to the affected information.	0
------------	--	---

### Your institution received:

- ☐ No formal written requests for access or correction
- ☒ Formal written requests for access to records

## Section 2: Inconsistent Use of Personal Information

- ☐ Requests for correction of records of personal information only

## Section 3: Number of Requests Received and Completed

Enter the number of requests that fall into each category.

- 3.1** New Requests received during the reporting year
- 3.2** Total number of requests completed during the reporting year

Personal Information	General Records
10	4
9	3

## Section 4: Source of Requests

Enter the number of requests you completed from each source.

- 4.1** Individual/Public
- 4.2** Individual by Agent
- 4.3** Business
- 4.4** Academic/Researcher
- 4.5** Association/Group
- 4.6** Media
- 4.7** Government (all levels)
- 4.8** Other
- 4.9** Total requests (Add Boxes 4.1 to 4.8 = 4.9)

Personal Information	General Records
9	3
0	0
0	0
0	0
0	0
0	0
0	0
0	0
9	3

BOX 4.9 must equal BOX 3.2

## Section 5: Time to Completion

How long did your institution take to complete all requests for information? Enter the number of requests into the appropriate category. How many requests were completed in:

- 5.1** 30 days or less
- 5.2** 31 - 60 days
- 5.3** 61 - 90 days
- 5.4** 91 days or longer
- 5.5** Total requests (Add Boxes 5.1 to 5.4 = 5.5)

Personal Information	General Records
7	0
1	1
0	2
1	0
9	3

BOX 5.5 must equal BOX 3.2

In the following charts, please indicate the number of requests completed, within the statutory time limit and in excess of the statutory time limit, under each of the four different situations:

NO notices issued;

BOTH a Notice of Extension (s.27(1)) and a Notice to Affected Person (s.28(1)) issued;

ONLY a Notice of Extension (s.27(1)) issued;

ONLY a Notice to Affected Person (s.28(1)) issued.

Please note that the four different situations are mutually exclusive and the number of requests completed in each situation should add up to the total number of requests completed in Section 3.2. (Add Boxes 6.3 + 6.6 + 6.9 + 6.12 = BOX 6.13 and BOX 6.13 must equal BOX 3.2)

#### A. No Notices Issued

	Personal Information	General Records
<b>6.1</b> Number of requests completed within the statutory time limit (30 days) where neither a Notice of Extension (s.27(1)) nor a Notice to Affected Person (s.28(1)) were issued.	7	0
<b>6.2</b> Number of requests completed in excess of the statutory time limit (30 days) where neither a Notice of Extension (s.27(1)) nor a Notice to Affected Person (s.28(1)) were issued.	1	0
<b>6.3</b> Total requests (Add Boxes 6.1 + 6.2 = 6.3)	8	0

#### B. Both a Notice of Extension (s.27(1)) and a Notice to Affected Person (s.28(1)) Issued

	Personal Information	General Records
<b>6.4</b> Number of requests completed within the time limits permitted under both the Notice of Extension (s.27(1)) and a Notice to Affected Person (s.28(1)).	0	0
<b>6.5</b> Number of requests completed in excess of the time limit permitted by the Notice of Extension (s.27(1)) and the time limit permitted by the Notice to Affected Person (s.28(1)).	0	0
<b>6.6</b> Total requests (Add Boxes 6.4 + 6.5 = 6.6)	0	0

#### C. Only a Notice of Extension (s.27(1)) Issued

	Personal Information	General Records
<b>6.7</b> Number of requests completed within the time limits permitted under both the Notice of Extension (s.27(1)).	1	0
<b>6.8</b> Number of requests completed in excess of the time limit permitted by the Notice of Extension (s.27(1)).	0	0
<b>6.9</b> Total requests (Add Boxes 6.7 + 6.8 = 6.9)	1	0

#### D. Only a Notice to Affected Person (s.28(1)) Issued

	Personal Information	General Records
<b>6.10</b> Number of requests completed within the time limits permitted under both the Notice to Affected Person (s.28(1)).	0	3
<b>6.11</b> Number of requests completed in excess of the time limit permitted by the Notice to Affected Person (s.28(1)).	0	0
<b>6.12</b> Total requests (Add Boxes 6.10 + 6.11 = 6.12)	0	3

#### E. Total Completed Requests (sections A to D)

Personal Information	General Records
----------------------	-----------------

## Section 6: Compliance with the Act

**6.13** Total requests (Add Boxes 6.3 + 6.6 + 6.9 + 6.12 = 6.13)

9

3

BOX 6.13 must equal BOX 3.2

### Section 6a: Contributing Factors

Please outline any factors which may have contributed to your institution not meeting the statutory time limit. If you anticipate circumstances that will improve your ability to comply with the Act in the future, please provide details in the space below.

There has been a high volume of requests for Student Accessibility Services files this year where the requests were for documents originally provided by the student and the students needed the documents faster than the 30 days provided by FIPPA. The requirement for review by the Privacy Office before release, as well as a review by a health practitioner due to the content of the records delayed release in many of the files compared to the needs of the requesters.

To better accommodate requesters, we reviewed our process for access to personal information in their own Student Accessibility Services files to determine whether informal access could be provided. We have established a process that will allow requesters to submit an informal request for any materials that they originally submitted to the file. This process will ensure timely access to required information without any request fee.

However, in one case after the informal process was established, a requester followed the formal process, rather than the informal process, and the statutory time limit was exceeded by one day.

### Section 7: Disposition of Requests

What course of action was taken with each of the completed requests? Enter the number of requests into the appropriate category.

- 7.1** All information disclosed
- 7.2** Information disclosed in part
- 7.3** No information disclosed
- 7.4** No responsive records exists
- 7.5** Request withdrawn, abandoned or non-jurisdictional
- 7.6** Total requests (Add Boxes 7.1 to 7.5 = 7.6)

**Personal Information** **General Records**

8	0
1	3
0	0
0	0
0	0
9	3

BOX 7.6 must be greater than or equal to BOX 3.2

### Section 8: Exemptions & Exclusions Applied

For the Total Requests with Exemptions/Exclusions/Frivolous or Vexatious Requests, how many times did your institution apply each of the following? (More than one exemption may be applied to each request)

- 8.1** Section 12 - Cabinet Records
- 8.2** Section 13 - Advice to Government
- 8.3** Section 14 - Law Enforcement<sup>1</sup>
- 8.4** Section 14(3) - Refusal to Confirm or Deny

**Personal Information** **General Records**

0	0
0	3
0	0
0	0

## Section 8: Exemptions & Exclusions Applied

<b>8.5</b>	Section 14.1 - Civil Remedies Act, 2001
<b>8.6</b>	Section 14.2 - Prohibiting Profiting from Recounting Crimes Act, 2002
<b>8.7</b>	Section 15 - Relations with Other Governments
<b>8.8</b>	Section 16 - Defence
<b>8.9</b>	Section 17 - Third Party Information
<b>8.10</b>	Section 18 - Economic and Other Interests of Ontario
<b>8.11</b>	Section 18.1 - Information with Respect to Closed Meetings
<b>8.12</b>	Section 19 - Solicitor-Client Privilege
<b>8.13</b>	Section 20 - Danger to Safety or Health
<b>8.14</b>	Section 21 - Personal Privacy(Third Party) <sup>2</sup>
<b>8.15</b>	Section 21(5) - Refusal to Confirm or Deny
<b>8.16</b>	Section 21.1 - Species at risk
<b>8.17</b>	Section 22 - Information soon to be published
<b>8.18</b>	Section 27.1 - Frivolous or Vexatious
<b>8.19</b>	Section 49 - Personal Information(Requester)
<b>8.20</b>	Section 65 - Act Does Not Apply <sup>3</sup>
<b>8.21</b>	Section 65(6) - Labour Relations & Employment Related Records and Appointment and Placement Related Records
<b>8.22</b>	Section 67 - Other Acts
<b>8.23</b>	PHIPA Section 8(1) Applies
<b>8.24</b>	Total Exemptions & Exclusions Add Boxes 8.1 to 8.23 = 8.24

0	0
0	0
0	0
0	0
0	1
0	1
0	0
1	0
0	0
0	3
0	0
0	0
0	0
0	0
1	0
1	0
1	0
0	0
0	0
4	8

<sup>1</sup> not including Section 14(3)

<sup>2</sup> not including Section 21(5)

<sup>3</sup> not including Section 65(6)

## Section 9: Fees

Did your institution collect fees related to request for access to records?

	Personal Information	General Records	Total
<b>9.1</b>	Number of REQUESTS where fees other than application fees were collected	0	0
<b>9.2.1</b>	Total dollar amount of application fees collected	\$45.00	\$15.00
<b>9.2.2</b>	Total dollar amount of additional fees collected	\$0.00	\$0.00
<b>9.2.3</b>	Total dollar amount of fees collected (Add Boxes 9.2.1 + 9.2.2 = 9.2.3)	\$45.00	\$15.00
<b>9.3</b>	Total dollar amount of fees waived	\$0.00	\$0.00

## Section 10: Reasons for Additional Fee Collection

Enter the number of REQUESTS for which your institution collected fees other than application fees that apply to each

	Personal Information	General Records	Total
<b>10.1</b> Search time	0	0	0
<b>10.2</b> Reproduction	0	0	0
<b>10.3</b> Preparation	0	0	0
<b>10.4</b> Shipping	0	0	0
<b>10.5</b> Computer costs	0	0	0
<b>10.6</b> Invoice costs(and other as permitted by regulation)	0	0	0
<b>10.7</b> Total (Add Boxes 10.1 to 10.6 = 10.7)	0	0	0

## Section 11: Correction and Statements of Disagreement

Did your institution receive any requests to correct personal information?

- 11.1** Number of correction requests received
- 11.2** Correction requests carried forward from the previous year
- 11.3** Correction requests carried over to next year
- 11.4** Total Corrections Completed [(11.1 + 11.2) - 11.3 = 11.4]

## Personal Information

0
0
0
0

BOX 11.4 must  
equal BOX 11.9

What course of action did your institution take regarding the requests that were received to correct personal information?

- 11.5** Correction(s) made in whole
- 11.6** Correction(s) made in part
- 11.7** Correction refused
- 11.8** Correction requests withdrawn by requester
- 11.9** Total requests (Add Boxes 11.5 to 11.8 = 11.9)

## Personal Information

0
0
0
0
0

BOX 11.9 must  
equal BOX 11.4

In cases where correction requests were denied, in part or in full, were any statements of disagreement attached to the affected personal information?

- 11.10** Number of statements of disagreement attached:

## Personal Information

0
---

If your institution received any requests to correct personal information, the Act requires that you send any person(s) or body who had access to the information in the previous year notification of either the correction or the statement of disagreement. Enter the number of notifications sent, if applicable.

## Personal Information

- 11.11** Number of notifications sent:

0
---



This report is for your records only and should not be faxed or mailed to the Information and Privacy Commissioner of Ontario in lieu of online submission. Faxed or mailed copies of this report will NOT be accepted. Please submit your report online at: <https://statistics.ipc.on.ca>.

**Thank You for your cooperation!**

**Declaration:**

I, Cheryl Foy, University Secretary & General Counsel, confirm that all the information provided in this report, furnished by me to the Information and Privacy Commissioner of Ontario, is true, accurate and complete in all respects.

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*Signature*

---

*Date*

# New Building Project



## January Project Update 7 February 2020



# New Building Update

## This Period Achievements (7 February 2020)

- Site Plan Application – Approval received from the city
- 95% Foundation works achieved
- Slab on grade 60% completed
- Lower level staircases walls, elevator shaft & columns in progress
- 1<sup>st</sup> floor level slab form commence at the east side
- Waterproofing and foundation drain on going
- Chiller Pump skids delivered to site
- Excavation works continues as the footing works progresses
- Backfilling works on going
- Construction dewatering continues
- Sub trades procurement on-going
- Project Submittals and RFI on going

# New Building Update

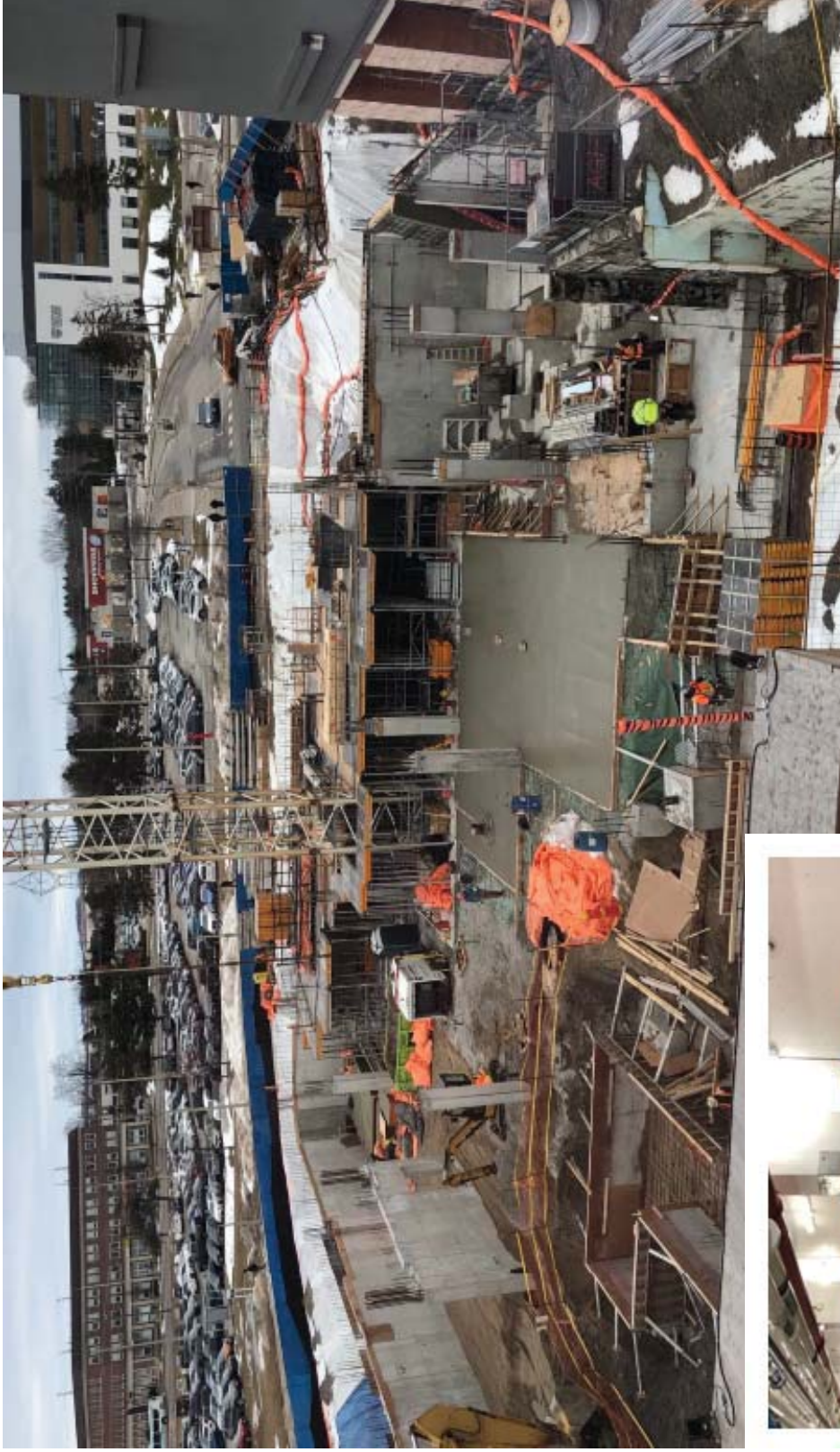


Photo taken 6 Feb 2020



# Forecast Schedule

## New Building (Next period)

- Excavation works completion
- Foundation works completion
- Slab on grade completion
- Site de-watering termination
- Waterproofing and insulation continues
- 1<sup>st</sup> floor slab forming to continue
- Revisit baseline construction schedule
- Continue Submittals review and approvals
- Continue RFI responses
- Continue Sub-trades and suppliers procurement
- Deliveries of mechanical equipment to site
- Branding and signage design standards and confirmation
- Building permit approval

**Site Safety:**

- Nothing to report this period

**Change Orders:**

- Nothing to report this period

**Procurement Summary:**

- Polished Concrete awarded to BNE Contractor at \$78K
- Roofing awarded to Semple Gooder at \$353K
- Metal Panels awarded to Ritz at \$925K
- Masonry, Floor Grilles, and Thermal insulation packages under evaluation
- 25 out of 43 sub-trades bid packages awarded with \$555K savings to date

**Financial Summary:**

- Total committed amount to date \$43.9M
- Total project expense to date \$8.3M
- Breakdown of Sources and Uses of funds next slide

# A&F Roll up Financial Summary as of 7 February 2020

PROJECT FINANCIAL SUMMARY REPORT FOR MONTH ENDING				JANUARY 2020		
Sources of Funds - Cash flow						
Description	Total Funding	Committed To date	Actual YTD Jan 2020	Jan 2020	Required Funding till Completion	See Notes
Ontario Tech			\$ -		\$ -	
SIF			\$ -		\$ -	
Advancement			\$ -		\$ -	
Totals	\$ -	\$ -	\$ -	\$ -	\$ 48,000,000	
Uses of Funds - Cash flow						
Description	Total Budget	Committed To date	Actual YTD Jan 2020	Jan 2020	Estimate at Completion	
GMP Contract	\$ 39,996,403	\$ 40,089,472	\$ 5,342,474	\$ 1,239,812	\$ 40,089,472	1
FF&E	\$ 3,246,505	\$ -	\$ -	\$ -	\$ 3,246,505	
Soft Cost	\$ 1,940,732	\$ 1,548,959	\$ 920,663	\$ 18,581	\$ 1,802,735	
Portable Relocation	\$ 1,738,512	\$ 1,720,897	\$ 1,478,780	\$ -	\$ 2,329,835	2
New Parking (50% sharing)	\$ 327,848	\$ 327,848	\$ 632,978	\$ 59,359	\$ 331,191	3
Contingencies	\$ 750,000	\$ 296,056.70	\$ 101,347	\$ -	\$ 200,262.26	4
U5 U/G service and shutdown		\$ 48,764	\$ 48,764	\$ -	\$ 48,764	
UL Sanitary pipe Relocation		\$ 17,787	\$ 17,787	\$ -	\$ 17,787	
U5 City compliances		\$ 25,218	\$ 25,218	\$ -	\$ 25,218	
F5 Compliances		\$ 9,579	\$ 9,579	\$ -	\$ 9,579	5
U5 Accessibility		\$ 5,677	\$ -	\$ -	\$ 5,677	
U5 Footing & Ramp		\$ 95,963	\$ -	\$ -	\$ 95,963	
A5 Dewatering		\$ 93,069	\$ -	\$ -	\$ 93,069	1
Totals	\$ 48,000,000	\$ 43,983,233	\$ 8,374,895	\$ 1,317,752	\$ 48,000,000	
Notes:						
1. Estimate at completion impacted by dewatering						
2. Increased by U5 changes and the 2021 forecast U5 demolition cost						
3. Construction cost for the F5 parking lot extension is equally shared with the College						
4. To date remaining amount from contingency basket						
5. Full amount for F5 compliances						

# ACE Enhancement Project



## January Monthly Report 7 February 2020

## Progress Update (7 February 2020) :

### Moving Ground Plane (MGP) Integration into CWT

- CWT integration engineering at 95%
- MGP control engineering progressing
- Boundary layer removal system engineering completed
- Acoustic treatment engineering completed
- Acoustic treatment material on fabrication
- Cooling system engineering on going
- Cooling tower design on going
- CWT shutdown 20 Jan – 9 Feb works on going
- Boundary layer steel & duct works CWT on going
- Acoustic preparatory works at CWT on going
- Air compressors and vacuum delivered to site
- Cameras installed at CWT
- 5<sup>th</sup> floor client office renovation contract awarded



# Forecast Schedule

## Moving Ground Plane (MGP) Integration into CWT

- CWT integration engineering completion
- MGP control engineering completion
- Aerodynamics enhancement engineering completion
- Acoustic treatment material delivery completion
- Cooling system engineering completion
- Cooling tower design completion
- Boundary layer steel & duct works modification completion
- Acoustic preparatory works at CWT continue next shutdown
- Cooling system procurement process
- Works at CWT to continue in the next shutdown end March 2020
- 5<sup>th</sup> floor client office renovation works commence

**Integrated commissioning still on track completion by 30 September 2020**

### **Site Safety:**

- Nothing to report – no incident this period

### **Change Orders:**

- Nothing to report this period

### **Procurement Summary:**

- Removal & cleaning of floor plates for honeycomb mesh awarded to Western Mechanical Electrical Millwright Services Ltd. At \$22.8K
- 5<sup>th</sup> floor renovation works awarded to J.W. Contracting at \$62.9K

### **Financial Summary:**

- FedDev funding received this period \$2.748M
- Total Funding received to date \$9.077M
- Total Actual Cash Flow to date \$6.787M
- Committed Funding to date \$12.565M
- Forecast project cost at completion \$14.86M
- Cash flow Breakdown of Sources and Uses of funds next slide.





## BOARD REPORT

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### SESSION:

Public ☒  
Non-Public ☐

### ACTION REQUESTED:

Decision ☐  
Discussion/Direction ☐  
Information ☒

Financial Impact ☐ Yes ☒ No      Included in Budget ☐ Yes ☒ No

TO: Board of Governors

DATE: February 27, 2020

PRESENTED BY: Andy Gallagher

SUBJECT: Ontario Tech Credit Rating 2019

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### COMMITTEE/BOARD MANDATE:

- The Audit and Finance Committee is responsible for overseeing the financial affairs of the University with respect to all auditing, financial reporting and internal systems and control functions, budget approvals, risk management, and other internal and external audit functions and activities at the university.
- This report provides an update on Ontario Tech credit ratings, which were issued in December 2019 (DBRS) and October 2019 (Moody's).

### BACKGROUND/CONTEXT & RATIONALE:

- Ontario Tech has issued debt (debentures) initially valued at \$220M. Covenants in the First Supplemental Indenture Agreement require annual credit ratings from two credit rating agencies. The University uses Dominion Bond Rating Services (DBRS) and Moody's Investor Service.
- Reviews with both agencies are conducted annually.
- Moody's has confirmed our Credit Rating at A1 - Stable.
- DBRS has confirmed our Credit Rating as A (low) - Stable
- Although Ontario Tech ratings have trended positively over the past five years, our credit rating remains at the low end of the range in our sector. This is due to high debt levels which are a consequence of the Provincial choice to have Ontario Tech fund its own initial infrastructure costs.
- In reaffirming their ratings, both rating agencies acknowledged Ontario Tech's positive operating results while highlighting the pressures on Tuition Fees and government funding.

**IMPLICATIONS:**

- Credit ratings assess a debtor's ability to pay back debt by making timely interest payments and the likelihood of default. It affects the interest rate that a security pays out, with higher ratings leading to lower interest rates. A credit rating also facilitates the trading of securities on a secondary market. For Ontario Tech, an improved credit rating would result in lower borrowing costs on future debts.
- Rating reports, and Credit Opinions for Moody's and DBRS are attached, along with an historical summary of Ontario Tech credit ratings.

**NEXT STEPS:**

- Continue working with DBRS and Moody's to provide information, highlight Ontario Tech's operational improvements, and to ensure our credit rating accurately reflects the university's fiscal position.

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**SUPPORTING REFERENCE MATERIALS:**

- Moody's Credit Opinion
- DBRS Rating Report
- DBRS Credit Rating History

## CREDIT OPINION

29 October 2019

### Update

✓ Rate this Research

#### RATINGS

University of Ontario Institute of Technology

Domicile	Ontario, Canada
Long Term Rating	A1
Type	Senior Unsecured - Dom Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

#### Contacts

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#### CLIENT SERVICES

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Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

## University of Ontario Institute of Technology (UOIT) (Canada)

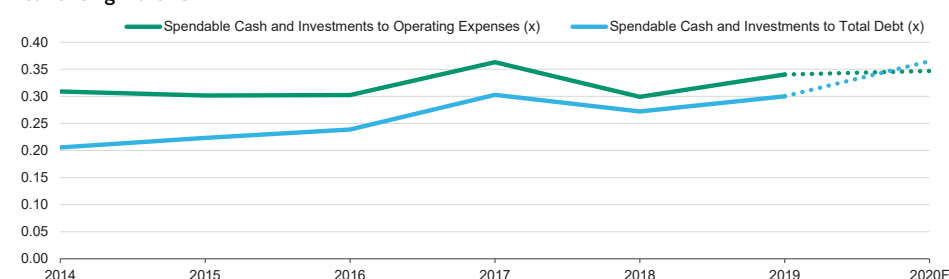
### Update to credit analysis

#### Summary

The credit profile of the [University of Ontario Institute of Technology](#) (A1 stable) (UOIT) reflects strong operating cash flows and solid levels of liquidity from cash, investments and reserve growth. UOIT receives a CAD 13.5 million annual debt service subsidy from the [Province of Ontario](#) (Aa3 stable) which alleviates financial pressure and contributes to the strong cash flow and declining debt burden despite elevated debt levels. The credit profile also reflects UOIT's small size, with physical capacity constraints on its campus, which limits its ability to increase revenues through enrolment growth. Credit pressures also arise from revenue challenges from a 10% tuition fee cut for domestic students for 2019/20 and a freeze for 2020/21 mandated by the province, and a declining university age population in the province.

Exhibit 1

#### Ability to generate strong cash flows has led to improving leverage ratios



Source: Moody's Investors Service, UOIT

#### Credit strengths

- » Ability to generate strong operating cash flows despite challenges
- » Solid levels of liquidity from cash, investments and reserve growth
- » Declining debt burden given forecast of limited upcoming debt issuances

#### Credit challenges

- » Revenue constraints from mandated tuition fee cuts and declining demographics
- » Limited capacity to expand physical infrastructure
- » Weaker research profile and fundraising capacity than peers

## Rating Outlook

The stable outlook reflects our opinion that the university will be able to maintain stable levels of cash and reserves that cushion its debt levels, along with manageable operating pressures.

## Factors That Could Lead to an Upgrade

A significant improvement in the university's liquidity profile, as measured by spendable cash and investments, or an ability to maintain strong liquidity metrics if debt was required to expand capital, could put upward pressure on the rating.

## Factors That Could Lead to a Downgrade

A significant weakening in operating results with consistent operating deficits, or a decline in liquidity as a result of weaker enrolment levels or a deterioration in expenditure controls would put downward pressure on the rating.

## Key Indicators

University of Ontario Institute of Technology  
Year Ending March 31

Key Indicators	2015	2016	2017	2018	2019
Operating Revenue (CAD '000) [1]	177,789	179,564	187,460	198,043	196,317
Annual Change in Operating Revenue (%)	4.0	1.0	4.4	5.6	(0.9)
Operating Cash Flow Margin (%)	23.5	21.3	23.0	23.3	18.6
Total Cash and Investments (CAD '000)	53,660	62,862	80,936	77,876	88,970
Spendable Cash and Investments to Operating Expenses (x)	0.30	0.30	0.36	0.30	0.34
Total Debt to Cash Flow (x)	5.8	6.1	5.1	4.5	5.5

[1] Revenue net of scholarship expenses

Source: Moody's, UOIT

## Detailed Credit Considerations

The credit profile of UOIT, as expressed in its A1 stable rating, combines (1) a baseline credit assessment (BCA) of a3, and (2) a very high likelihood of extraordinary support coming from the Province of Ontario in the event that the university faced acute liquidity stress.

### Baseline Credit Assessment

#### Ability to Generate Strong Operating Cash Flows Despite Challenges

UOIT continues to generate strong operating cash flows from solid revenues despite some weakening in 2018/19. Given the strength of management to overcome pressures, we expect that operating cash flows relative to adjusted operating revenues over the next 1-2 years will fall within a range similar to what we have observed over the last five years, which ranged between 18% and 24% between 2014/15 and 2018/19.

Although cash flows are constrained by provincial restrictions on tuition growth and by capacity constraints at the university, UOIT retains some flexibility to control expenditures, including lower operating expenses and lower capital expenditures through cutbacks in IT and equipment costs. The development of a non-tenure eligible teaching track stream for academic staff and a defined contribution pension plan support this flexibility. As a result, continued emphasis on expenditure growth will mitigate a low growth environment for revenues.

The ability to generate meaningful cash flow is supported by annual debt service subsidies from the Province of Ontario. In 2012 the university signed an agreement with the province guaranteeing an annual debt service subsidy of CAD 13.5 million, which it receives in equal semi-annual instalments. While this transfer is earmarked specifically for debt service of the university's 2004 debenture, this amount is included in our calculation of operating revenues for the university. Even when excluding the debt service subsidy from operating revenue, operating cash flow margins would remain strong and in line with highly rated Canadian university peers.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moodys.com](http://www.moodys.com) for the most updated credit rating action information and rating history.

**Solid levels of liquidity from cash, investments and reserve growth**

UOIT's liquidity profile improved significantly over the past five years, with continued improvement in cash and liquid investment levels expected over the next 1-2 years, driven by rising portfolio investments including budgeted contributions to reserves. At March 31, 2019, total cash and investments stood at CAD 89 million, up 14% over the previous year's level. In 2017 and 2018 UOIT was able to finance its CAD 18 million share of the cost to construct the Software and Informatics Research Centre from its cash reserves, highlighting the importance of available reserves to support important capital projects. In our view the liquidity portfolio including reserves will continue to support the university's efforts in making moderate, internally financed investments in campus infrastructure.

Spendable cash and investments represented 0.33x total expenditures and also 0.33x debt at March 31, 2019. Of the university's total cash and investments, only about one third is permanently restricted, which continues to high liquidity of its cash and investments. The level of liquidity provides a safety level to investors, and also provides the university with flexibility to make moderate investments in support of its operations.

**Declining debt burden given forecast of limited upcoming debt issuances**

We expect that the university's debt burden will continue to decline over the next two years given the amortizing nature of its existing debenture and a lack of expected new debt issuances. UOIT's debt service is largely secured by a CAD 13.5 million annual grant from the province which allows UOIT to service a relatively large debt obligation while alleviating the debt burden of the university. As a result, debt affordability remains strong, with total debt to cash flow at 5.5x and debt burden (debt to operating revenue) at 1.03x in 2018/19. Nevertheless, the debt burden remains higher than the majority of Moody's rated Canadian universities.

The university's growing cash and investment balances also provide a cushion against the high leverage position, with spendable cash and investments covering 0.33x total debt at March 31, 2019. Given our expectation of growing cash reserves and falling debt levels, we expect continued improved in this metric.

**Revenue constraints from mandated tuition fee cuts and declining demographics**

Operating challenges arise in part from a provincially mandated 10% reduction in domestic student tuition fees in 2019/20 for all Ontario universities, which the university estimates results in a CAD 9 million shortfall for the year, followed by a freeze in these tuition levels for the 2020/21 academic year as the province is seeking ways to improve tuition affordability.

This replaces the expiring tuition framework which allowed for domestic undergraduate tuition to rise a maximum 3% on average across all programs, with no program to exceed 5%. In addition, starting in 2020/21 provincial operating funding will transition from enrolment alone to a new model that includes base funding for enrolment, funding based on 10 performance metrics, and other grants. The performance metrics will determine 25% of the funding in 2020/21, rising to 60% by 2024/25.

Additional pressures arise from a sustained period of decline in the university entrance age population in Ontario, with the decline expected to continue over the next 3-5 years. We expect that the decline will be partly mitigated by solid enrolment demand and improving liquidity levels.

**Limited capacity to expand physical infrastructure**

The university's ability to increase revenues is also constrained by physical capacity limitations given limited available space to expand significantly. Major expansion through adjacent lands would require significant cash reserves. Although limited reserves have historically enabled moderate campus investments, the university has limited available reserves to fund major new capital acquisitions or expansions without new debt issuances or substantial new government capital grants. Since we do not expect the university to issue new debt in the near future, the likelihood of material campus expansion over the next 2-3 years is low.

With capacity constraints already limiting the university's ability to capitalize on strong demand, the constraints on tuition growth further support our expectation that the university's revenues will grow more slowly than in recent years.

**Weaker research profile and fundraising capacity than peers**

UOIT is a small and relatively young university. This in part constrains its research profile including its ability to secure large long-term research grants primarily from the federal government. In fact, externally funded research grants in 2018/19 remained flat year-over-year at CAD 10.4 million. Nevertheless UOIT has partnered with several large corporations in the region for in-kind research collaborations, which, although they do not contribute to revenues, could enhance the university's research profile.

UOIT's relatively young stage of development also limits its ability to raise significant fundraising revenue, as it does not yet have a large alumni and donor pool to draw donations from. The university initiated its first official fundraising campaign in 2017, and as a result we expect to see some growth in restricted reserves and donation revenues.

### Extraordinary Support Considerations

Moody's assigns a high likelihood that the Province of Ontario would act to prevent a default by the university. The high support level reflects a perceived risk to the province's reputation as regulator of the university sector if UOIT or any Ontario university were to default. In addition, Durham College of Applied Arts and Technology provides a guarantee to UOIT's 2004 senior unsecured debenture. As colleges in Ontario face stronger regulation than universities, and therefore are closer to the province, the guarantee provides for a stronger level of extraordinary support for UOIT, if the university were to face acute liquidity pressure, than other universities in the province.

### ESG Considerations

#### How Environmental, Social and Governance Risks Inform Our Credit Analysis of UOIT

Moody's takes into account of the impact of environmental (E), social (S) and governance (G) factors when assessing sub-sovereign issuers' economic and financial strength. In the case of UOIT, we assess the materiality of ESG to the credit profile as follows:

Environmental considerations are not material to UOIT's credit profile. The university owns land and owns / operates buildings which may be subject to environmental risks (e.g. asbestos in older buildings or clean-up following construction), but these risks are small and the university proactively manages them through its facilities maintenance.

Social considerations are material to UOIT's credit profile. We assess social risk as moderate given developments in public policy on education, in particular Ontario's objective of promoting improvements in tuition affordability through mandated provincial tuition fee cuts which have created manageable revenue pressures for the university. Over the next 3-5 years, a decline in the university entrance-age population in Ontario will be partly mitigated by solid enrolment demand and improving liquidity levels.

Governance considerations are also material to UOIT's credit profile. We assess governance risk as low given a strong institutional framework and prudent financial planning which includes annual balanced budgets and 5-year strategic plans. Each faculty is responsible for developing its own budget and adhering to self-imposed revenue and expense targets. Oversight is strong from the Academic Council and Board of Governors.

Further details are provided in the "Detailed credit considerations" section above. Our approach to ESG is explained in our cross-sector methodology [General Principles for Assessing Environmental, Social and Governance Risks](#).

## Rating methodology and scorecard factors

The assigned BCA of a3 is two notches lower than the scorecard indicated outcome of a1, reflecting the combination of a high debt load which limits future debt issuances, the university's small size relative to Ontario peers and capacity constraints for expansion which limit future growth. For details of our rating approach, please refer to the [Higher Education](#) (May 2019) and [Government-Related Issuers](#) (June 2018) methodologies.

Exhibit B

UOIT

Rating Factors	Value	Score
<b>Factor 1: Market Profile (30%)</b>		
Scope of Operations (Operating Revenue) (\$000)	155,491	A1
Reputation and Pricing Power (Annual Change in Operating Revenue) (%)	2.9	Baa2
Strategic Positioning	A	A
<b>Factor 2: Operating Performance (25%)</b>		
Operating Results (Operating Cash Flow Margin) (%)	18.0	Aa1
Revenue Diversity (Maximum Single Contribution) (%)	47.3	Aa3
<b>Factor 3: Wealth &amp; Liquidity (25%)</b>		
Total Wealth (Total Cash & Investments) (\$000)	66,577	A2
Operating Reserve (Spendable Cash & Investments to Operating Expenses) (x)	0.3	A1
Liquidity (Monthly Days Cash on Hand)	135	A1
<b>Factor 4: Leverage (20%)</b>		
Financial Leverage (Spendable Cash & Investments to Total Debt) (x)	0.3	A2
Debt Affordability (Total Debt to Cash Flow) (x)	5.5	Aa1
Scorecard-Indicated Outcome		a1
Assigned BCA		a3

Data is based on most recent fiscal year available. Debt may include pro forma data for new debt issued or proposed to be issued after the close of the fiscal year. For non-US issuers, nominal figures are in US dollars, consistent with the Higher Education Methodology.

Source: Moody's Investors Service

## Ratings

Exhibit B

Category	Moody's Rating
UNIVERSITY OF ONTARIO INSTITUTE OF TECHNOLOGY	
Outlook	Stable
Bkd Senior Unsecured Dom Curr	A1

Source: Moody's Investors Service

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## RATING REPORT

# University of Ontario Institute of Technology (Ontario Tech University)

## Ratings

Debt	Rating Action	Rating	Trend
Issuer Rating	Confirmed	A (low)	Stable
Series A Senior Unsecured Debentures	Confirmed	A (low)	Stable

## Rating Update

DBRS Limited (DBRS Morningstar) confirmed the University of Ontario Institute of Technology's (the University or Ontario Tech) Issuer Rating and Series A Senior Unsecured Debentures rating at A (low). Both trends are Stable. The University's credit profile has improved in recent years with a series of positive operating results, balance sheet improvement, and debt reduction, which suggests a positive rating action may be warranted in the near term. At this time, however, DBRS Morningstar has maintained a Stable trend because of uncertainty about the future adequacy of government funding and tuition fees.

The University continues to report positive results with a surplus of \$6.9 million for the year ended March 31, 2019, equivalent to 3.2% of revenue. As in past years, the result exceeded budget expectations, because of lower-than-expected spending and unused contingencies.

The University tabled a balanced budget for 2019–20 which required \$5.6 million in cost reductions to offset the impact of the provincially mandated 10% reduction in tuition fees for domestic students and various inflationary cost pressures. The budget includes \$3.5 million for contingencies and reserves. At mid-year, the University is tracking slightly ahead of plan with positive revenue and expense variances.

Ontario Tech has yet to produce its 2020–21 financial plan, but initial indications suggest that it will aim to present a balanced budget

again. With constrained revenue growth, the University's strategy appears likely to centre on spending restraint, stronger international enrolment, and higher tuition fees for international students.

The University's debt burden remains the highest among DBRS Morningstar-rated Ontario universities at \$22,731 per full-time equivalent (FTE) student, although the circumstances surrounding Ontario Tech's debt burden remain unique in the Ontario context. The Province of Ontario (Ontario or the Province; rated AA (low) by DBRS Morningstar) supports a large share of the University's annual debt-servicing costs through a restricted debt-servicing grant. While the legal obligations rest with the University, this arrangement effectively results in only one-third of its total debt being serviced through its general operations (e.g., unrestricted operating grants, tuition revenue, etc.). Ontario Tech's debt burden will fall steadily over the medium term, because much of the debt is in the form of amortizing debentures and the University does not intend to incur any new indebtedness in the near to medium term. DBRS Morningstar projects that Ontario Tech's debt burden will fall below \$20,000 per FTE in 2021–22.

DBRS Morningstar could change the trend to Positive at the time of its next review if the outlook for operating results and debt reduction remains positive and the uncertainty related to the funding framework is resolved without adverse impacts. Alternatively, DBRS Morningstar could lower the rating if there is a sustained deterioration in operating outlook and a materially higher debt burden.

## Financial Information

	For the year ended March 31				
	2019	2018	2017	2016	2015
Operating result (\$ millions)	6.9	15.4	12.6	2.9	8.2
Surplus-to-revenue (five-year average)	4.5%	5.0%	5.2%	4.3%	6.1%
Debt per FTE (\$)	22,731	23,410	24,738	26,288	27,474
Expendable resources to debt	17%	14%	9%	6%	3%
Interest coverage	2.5	3.1	2.8	2.4	2.5

## Issuer Description

Ontario Tech is located in Oshawa, Ontario, and provides career-oriented university programs and transitional programs to enable college graduates to complete university degrees. The University was established in 2002 and has an enrolment of about 9,000 FTEs. Ontario Tech has developed a strong reputation for its Science, Technology, Engineering, and Mathematics (STEM) programming and industry partnerships.

## Rating Considerations

### Strengths

#### 1. Provincial support

Universities are stable institutions and a critical component of the public sector. Access to high-quality post-secondary education remains a priority for the Province of Ontario (the Province of Ontario; rated AA (low) with a Stable trend by DBRS Morningstar). As such, universities in Ontario and across Canada benefit from stable and consistent revenue sources. Government grants and tuition fees account for about 80% to 85% of revenue for Ontario Tech.

#### 2. Established reputation

Ontario Tech has grown rapidly since its establishment in the early 2000s and has developed a strong reputation in several high-demand, engineering- and technology-related fields. The University ranks reasonably well in Canada for a new and small university and is well-established in the Durham Region (Oshawa). Ontario Tech's name recognition remains limited outside the Greater Toronto Area (GTA) but is improving with a growing alumni base and improved rankings.

#### 3. Effective financial management practices

Financial management practices have improved significantly over the past seven years. The University has developed effective budget and planning processes, improved internal and external reporting, and made more effective and efficient use of its financial management systems.

#### 4. Defined contribution pension plan

Ontario Tech has a defined contribution pension plan, which alleviates the risk of meeting future benefit payments for retired employees. Defined benefit plans are the norm for Canadian universities.

### Challenges

#### 1. Limited control of revenue

Canadian universities have limited control over their main revenue sources — tuition fees and government grants. The Province imposed a 10% reduction on tuition fees for domestic students in regulated programs for 2019–20, while effectively limiting domestic enrolment growth and freezing operating grants. The changes to the tuition fee framework are estimated to have adversely affected Ontario Tech's revenue by \$9 million in 2019–20.

#### 2. Cost pressures

Underlying cost pressures are somewhat detached from the University's revenue drivers. Canadian universities' expense bases are largely fixed and growing in the form of tenured faculty, unionized support staff, externally mandated student aid requirements, and large infrastructure footprints. In recent years, inherent cost pressures such as negotiated wage settlements, competitive salaries for top researchers, and increasing benefit costs have outpaced provincially controlled revenue growth for many DBRS Morningstar-rated universities. As with other Universities, these factors have compelled Ontario Tech to undertake adjustments. Ontario Tech has less operational flexibility to adjust to the constrained operating environment than larger, more established universities. The University is small and relatively new, and it faces some capacity constraints. While institutional practices and labour groups are not as ingrained at Ontario Tech as at other institutions, providing the University with a degree of flexibility, the potential for significant new budget efficiencies from changes to labour practices or program rationalization appears limited.

#### 3. Limited balance sheet flexibility

Ontario Tech incurred losses for several years after its establishment in 2002, resulting in an accumulated deficit and negative net-asset position. Over the last seven years, the University has generated positive operating results, enabling it to reduce debt and establish reserves. The net assets have risen strongly and are now positive. Nevertheless, as a relatively new and small institution that has operated primarily in a constrained funding environment, Ontario Tech's balance sheet has limited financial flexibility compared with most other DBRS Morningstar-rated universities.

#### 4. Significant debt burden

Ontario Tech has the highest debt burden among DBRS-rated Ontario universities at \$22,731 per FTE; however, the debt burden and its funding are unique among Ontario universities because the amortizing debentures, issued when the University was established, are largely serviced by restricted debt-servicing grants from the Province. Effectively, Ontario Tech services one-third of its total debt with general operations (e.g., unrestricted operating grants, tuition fees, etc.).

## 2018–19 Operating Results

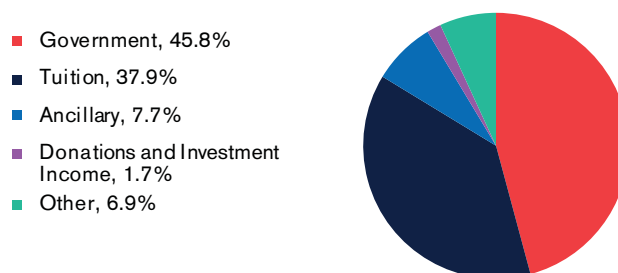
Ontario Tech reported a surplus of \$6.9 million for the year ended March 31, 2019, equivalent to 3.2% of total revenue. The result was weaker than the prior year's \$15.4 million, although the 2018 result included several one-time or non-recurring items.

The University's 2018–19 budget was based on a modest decline in total enrolment (-71 FTEs or -0.8%). The University raised tuition fees for domestic students to the extent permitted by the provincial tuition framework (3.0% on average) and by a similar amount, on average, for international students. With stable operating grant funding, Ontario Tech had projected total revenue to be flat year-over-year, while expense growth was forecast to be much larger. Nevertheless, the budget remained balanced and included \$3.5 million in budget contingencies and capital reserves.

As in prior years, the actual result exceeded expectations because of conservative budgeting practices. Total enrolment declined by 19 FTEs year-over-year but exceeded the budget forecast by 52 FTEs. More striking, domestic enrolment was again better than expected, while international enrolment declined because of the withdrawal of a significant number of Saudi Arabian students following Canada's diplomatic dispute with the Kingdom of Saudi Arabia in August 2019. Taken together, the changes in enrolment had a net negative impact of \$1.4 million against the University's budget.

Total revenue declined modestly to \$211.6 million (-0.3%). Government grants (+3.2%) and tuition/other student fees

**Exhibit 1: 2018-19 Revenue by Source**



(+1.1%) were modestly higher but offset by a more pronounced decline in other revenue.

Total expense rose moderately to \$204.7 million (+3.8%), driven largely by growth in compensation costs (+8.9%) and student aid (+8.7%). Nevertheless, expense growth was more modest than expected reflecting considerable compensation savings resulting from open faculty and administrative positions, as well as electricity cost savings and unused reserves/contingencies.

The positive result contributed to moderate growth in net assets (+\$7.7 million). Over the past five years, the University's net asset position has improved considerably through its efforts to strengthen its balance sheet. While still weaker than many Ontario universities, net assets have risen to \$85.8 million—an increase of 160.2% over the past five years.

## Operating Outlook

### 2019–20 Budget

The University uses an incremental budget model and prepares its budget on a modified cash basis. The budget's scope differs somewhat from that of the audited financial statements, but variances between bottom-line results are generally modest. The University tabled a balanced budget for the 2019–20 fiscal year. The budget plan includes \$3.5 million in reserves and contingencies for the 2019–20 fiscal year.

Ontario Tech's financial planning was adversely affected by the Province's requirement that all universities and colleges reduce tuition fees by 10% for domestic students in 2019–20 and subsequently freeze tuition fees in 2020–21. The impact on the University was estimated to be \$9.0 million in 2019–20 and \$12.0 million in 2020–21. With flat operating grants and inherent wage and operating expense pressures, Ontario Tech's response was threefold, with: (1) stronger international enrolment, (2) more pronounced tuition fee increases for international students, and (3) budget reductions. Many Ontario universities took a similar approach.

The University planned for enrolment to rise by 160 FTEs to 9,013 with growth in both domestic and international enrolment. The University also increased tuition fees for new international student by 10% and for continuing students by 5%. Taken together with reduced tuition fee revenue for domestic students, total tuition fee revenue was projected to decline by about \$4.0 million. With some modest growth in government grants (nursing and graduate spaces) and other income sources, Ontario Tech projected a modest decline in operating revenue (-1.8%).

To present a balanced budget, Ontario Tech was required to identify \$5.6 million in savings to offset the revenue reductions, spending on university priorities, negotiated compensation increases, and other inflationary pressures. The budget reductions affected both academic and non-academic units but were designed to have a limited impact on classroom activities.

The University prepared a mid-year forecast in September 2019. With positive revenue and expense variances, the update projects

## Operating Outlook (CONTINUED)

a modest surplus of \$1.0 million on an operating budget basis against the approved operating budget.

### Medium-Term Outlook

Ontario Tech is progressing through a period of significant change. In addition to the changes in provincial policy, the University's strategy has shifted considerably under the leadership of its new President, Steven Murphy.

The Province is progressing through a multi-year deficit reduction exercise which will weigh on growth in operating funding while also changing the accountability and funding frameworks for Ontario universities.

- Accountability Framework:** Universities in Ontario operate under Strategic Mandate Agreements (SMAs) which are effectively accountability agreements that they enter with the Government of Ontario in exchange for ongoing operating funding. Universities are now negotiating the next iteration of their SMAs (SMA3) with the Province, which will cover a five-year period and include 10 or 11 performance metrics. The Province has signalled that it will increase the portion of performance-based funding to about 60% by 2025 from about 10% currently. Initial indications suggest the new SMAs will be completed in spring 2020.
- Enrolment Funding:** The SMAs provide for stable total funding for Ontario universities provided they remain within a defined domestic enrolment corridor based on 2016–17 enrolment levels. With the current SMA set to expire at the end of the 2019–20 academic year, the universities will negotiate new enrolment target once their SMA3s are complete. At this time, it remains unclear whether the Province will increase the enrolment corridors or provide additional operating funding.
- Tuition Fee Framework:** Ontario mandated that all universities and colleges reduce tuition fees by 10% for domestic students in 2019–20 and subsequently freeze tuition fees for 2020–21; however, the Province has yet to provide meaningful guidance for tuition fees for domestic students after 2020–21. Within the sector, Chief Financial Officers generally expect that the Province will provide universities with modest flexibility to increase tuition fees after 2020–21.

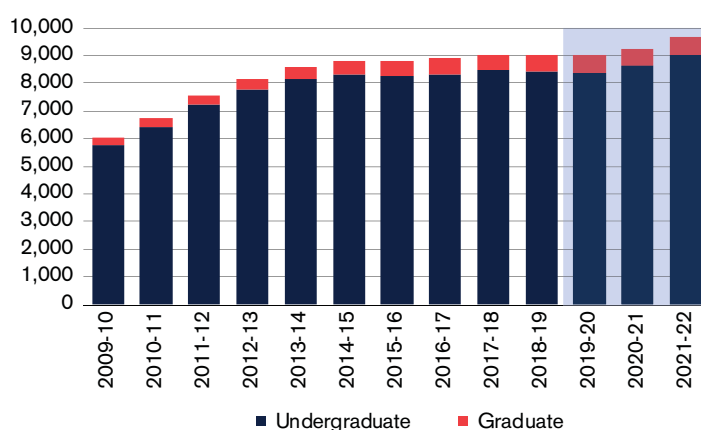
In this policy environment, revenue growth will be constrained over the next two years requiring ongoing expenditure restraint and an increased focus on enrolment growth.

Ontario Tech's new President has also begun to roll out his vision for the University, which places greater emphasis on the student experience and creating a sticky campus (campus being a place to visit and spend time beyond classes/labs), reiterates and increases the focus on technology and entrepreneurship, and commits greater effort to build the University's profile. Ontario Tech's profile has improved over the past decade but remains relatively

weak compared with larger and more established universities in Ontario. The University has limited visibility outside the GTA.

The University rebranded itself Ontario Tech University earlier in 2019 and has begun to make changes to the campus to improve its attractiveness as a destination for students. Changes include the addition of new facilities, more student-oriented spaces, and new community-oriented events (e.g., varsity basketball). The University is now constructing a showcase building to replace several portable buildings and is exploring opportunities to improve food offerings on campus.

**Exhibit 2: Enrolment (FTEs)**



Ontario Tech also envisions stronger enrolment growth. Previously, the University had planned for enrolment to gradually rise from about 9,000 FTEs to somewhere between 11,000 and 12,000 FTEs over a decade, with much of the growth occurring in the later years. Now, it is planning for more aggressive enrolment growth, targeting upwards of 15,000 FTEs in the 10-year period, subject to capital funding to expand physical capacity. The pace of enrolment growth and mix of students will depend, in part, on the forthcoming policy decisions by the Province. Ontario Tech is also planning for much stronger international enrolment growth and has contracted agencies in India and China to support this effort. The University is tentatively planning for international intake to rise to 240 FTEs in 2020–21 and upward of 400 FTEs in subsequent years.

International students currently make up just 6% of the student population, although the University expects this share to rise to about 15% over the next five to six years with current intake growth rates. This level is comparable to many other DBRS Morningstar-rated universities, and well below the highs seen at some universities and colleges. Like most universities, Ontario Tech hopes to diversify the program mix for international students but expects most to continue to enter computer science and engineering programs in the near to medium term.

## Operating Outlook (CONTINUED)

As with other universities, labour costs are Ontario Tech's largest expense, accounting for more than half of total expenses. Compensation costs have steadily risen over the last five years with underlying growth in the University's workforce and negotiated compensation increases. Labour relations at Ontario Tech are constructive and there is little risk of a work stoppage in the

near term. The University has signed collective agreements (that expire in 2021) with its faculty and sessional instructors, providing modest salary and wage increases. The University is now negotiating an initial collective agreement for its administrative staff with Ontario Public Service Employees Union (OPSEU).

## Capital Plan

With the completion of the Software and Informatics Research Centre (SIRC) in late 2017, capital investment declined to \$16.4 million in 2018–19. The four-storey SIRC building houses 16 research labs, four classrooms, a variety of student spaces, and the Registrar's offices. The University received \$13.0 million in federal and provincial support and funded its share of the construction costs by drawing down capital reserves. The project was completed ahead of schedule and \$2.0 million under budget.

The University has several other capital projects now underway or recently completed as it seeks to increase research and academic capacity and improve the student experience:

- **Varsity Changerooms:** The University established varsity basketball in fall 2019 in keeping with its efforts to create a sticky campus and improve the student experience. Ontario Tech constructed varsity changerooms at a cost of \$2.0 million. The project was completed in October 2019.
- **Automotive Centre of Excellence (ACE) Enhancement Project:** The ACE is one of the world's largest and most sophisticated wind tunnels, capable of simulating extreme weather conditions. In 2016, the University bought a state-of-the-art moving ground plane (MGP), one of only 14 worldwide. The MGP is "a giant belt that acts as a road moving under a vehicle, simulating the aerodynamic forces against moving vehicles, and measuring physical characteristics in real-world conditions."<sup>1</sup> Ontario Tech secured the necessary \$11.0 million in funding to install and integrate the MGP into the ACE. Installation and integration of the MGP commenced in November 2018 and it is expected to be operational by October 2020.

- **General Academic and Student Building:** Ontario Tech has begun the construction of a five-storey academic building which will house the student union as well as classroom and research space. The new building is to be a showcase on the main campus and will replace some of the portables currently in use, providing a modest amount of new teaching capacity. The new building will also include better-quality spaces for students to congregate, study, and engage. The total control budget is \$48 million, including \$750,000 in contingencies, which will be largely funded by the University with contributions from the student union, fundraising and philanthropy, and possibly the federal government. Occupancy is planned for June 2021. The University does not currently envision debt financing.

Ontario Tech does not have any other projects contemplated after the new academic building is complete, although over the medium to long term, the University may require additional capacity to sustain its planned enrolment growth. There are options to extend several of the existing facilities if additional space is necessary.

Ontario Tech's deferred maintenance (DM) needs are limited because most buildings were built in the 2000s. As of September 2019, the University had estimated deferred maintenance of \$34.7 million and an overall facilities condition index of 0.08, which compares favourably with the provincial average of 0.17. Ontario Tech allocates \$1.0 million annually to DM spending, funded by the Province's Facility Renewal Program, and another \$0.5 million to DM reserves.

1. University of Ontario Institute of Technology, "Province and industry partners rally to drive automotive innovation" (2018).

## Debt and Liquidity

Ontario Tech's total debt was \$202.4 million at March 31, 2019. On a per-student basis, this equates to \$22,731 per FTE and is the highest among DBRS Morningstar-rated universities. The University's debt comprises \$164.3 million in amortizing debentures, \$37.6 million in capital leases, and \$0.4 million in other long-term debt. Ontario Tech's debt is largely amortizing and is falling by about \$6.0 million annually.

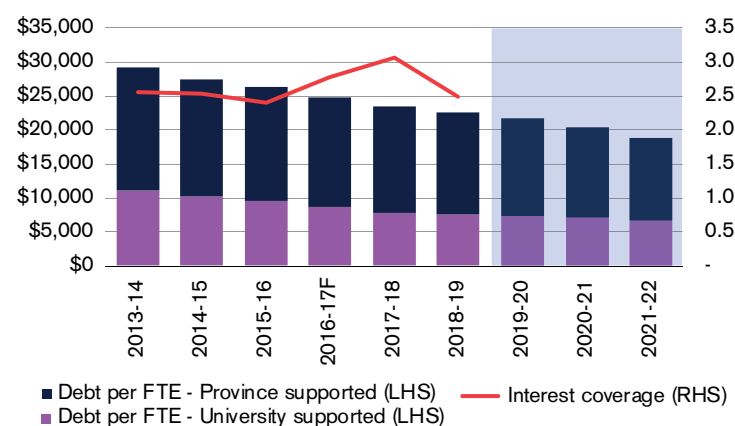
Ontario Tech's debt burden is significant and unusual in the Ontario context, reflecting a policy decision made by the Province when the University was established in the early 2000s. The Province provided Ontario Tech with relatively modest upfront capital grants while the University funded much of the initial infrastructure with debt that was to be supported by Provincial operating grants. At first, the debt servicing grant was targeted at 15% of the annual operating grant, but it was later converted to a flat \$13.5 million annual restricted grant aimed at ensuring the University's financial sustainability and mitigating the risk of default. The grant covers about 80% of the annual \$16.5 million requirement for principal and interest. While the legal obligation rests with the University and the grants flow through Ontario Tech, the Province is effectively servicing 80% of the debentures. Excluding the portion of the debt effectively serviced by the Province would yield a debt burden of \$68.0 million or \$7,400 per FTE.

DBRS Morningstar continues to view Ontario Tech's debt burden as elevated among Ontario universities, but acknowledges the unique circumstances surrounding the debt. The Province has provided the University with assurances that the restricted grant will continue until the debentures are fully repaid in 2034, although the payments are subject to conditions and require annual legislative approval. Nevertheless, DBRS Morningstar is confident that the Province will continue to provide the grants until the debt is retired because of the importance of post-secondary education to the provincial government, the political consequences resulting from the failure of a publicly funded and regionally important university as well as the grant's relatively small size in the broader provincial budget. A material reduction in the grant would challenge the University's finances and put downward pressure on the credit profile.

The University's debt-servicing costs are relatively high, given the elevated debt burden, but have been tracking lower as the debt burden declines. Total interest costs now represent about 6.8% of total expense, down from nearly 13% a decade ago. Interest coverage has remained relatively stable in recent years, ranging between 2.5 times (x) and 3.1x. DBRS Morningstar expects interest coverage to remain reasonably stable in the coming years, albeit lower than at most DBRS Morningstar-rated universities.

The University's balance sheet has improved significantly over the last eight years with the ongoing effort to improve operating

**Exhibit 3: Debt Per FTE and Interest Coverage**



results and financial management practices. Ontario Tech's net assets have risen with the accumulation of reserves and debt has declined steadily. Nevertheless, and consistent with the rating, the University's balance sheet exhibits less flexibility than most other DBRS Morningstar-rated universities. Expendable resources comprise a subset of net assets, including unrestricted net assets, most internally restricted net assets, and internally restricted endowments. DBRS Morningstar estimates Ontario Tech's expendable resources to be \$35.0 million or 17.3% of total debt outstanding at March 31, 2019. DBRS Morningstar expects the University's expendable resources to remain relatively low, but to rise gradually over the medium term with positive operating results and as the University sets aside capital reserves for future projects. With declining debt, this should push the expendable resources-to-debt ratio higher.

The University's efforts to address debt and financial management practices have also improved its liquidity. Cash and short-term investments have risen in recent years and Ontario Tech has repaid balances on its credit facilities. The University previously had a \$5.0 million credit facility with IBM which was recently closed. The University maintains a \$17.0 million operating bank line with a major Canadian bank but has not drawn on the facility for several years.

Unlike most DBRS Morningstar-rated universities, Ontario Tech does not have a defined benefit pension plan, which alleviates longer-term funding risks. The University does not report any long-term obligations associated with employee future benefits.

### Outlook

The University does not plan to incur additional indebtedness in the near to medium term. Consequently, the University's debt burden will continue to decline with the amortization of the existing debentures and term loans. With stronger enrolment growth, DBRS Morningstar projects the debt-to-FTE ratio to fall below \$20,000 in 2021-22.

## Durham College Guarantee

Durham College of Applied Arts and Technology (DC) unconditionally and irrevocably guarantees the punctual performance of all obligations related to the Debentures, plus all accrued interest starting on the date that payment is demanded. The language of the guarantee is comprehensive and consistent with DBRS Morningstar criteria requirements. The guarantee requires DC to pay all present and future amounts due and unpaid in respect of the Debentures immediately after written demand by the Trustee. Material conditions precedent to demand payment are (1) Ontario Tech's failure to promptly pay an instalment of principal and interest and (2) the occurrence of any event of default (with DC formally notified about such event) that is continuing and has not been waived. If either condition is met, the Trustee shall not be required to exhaust all remedies against Ontario Tech before demanding payment from DC. While DC is

an agent of the Province, the guarantee is limited to the assets held by DC with no recourse to the Province. DC was established in 1967 and is the seventh-largest college in Ontario, providing career-focused programs to more than 13,000 full-time students and many part-time, continuing education, and online students through campuses in Oshawa and Whitby and smaller satellite sites in Pickering and Uxbridge. DC consistently reports positive operating results, although its balance sheet demonstrates limited financial flexibility despite its modest amount of debt.

The DC guarantee was important at the time of DBRS Morningstar's initial rating of Ontario Tech in 2004; however, since that time, the guarantee's importance has diminished as the University gained scale.

## University Funding in Ontario

Ontario universities generally have three key sources of revenue for their core teaching and research activities: (1) government grants, (2) student fees, and (3) donations and investment income. For Ontario Tech, these accounted for approximately 84% of total revenues in 2018–19.

Provincial government funding remains one of the primary sources of revenue for universities across the country, although its relative importance is under pressure in most provinces because of strained provincial finances and competing priorities. Over time, this has led to a gradual shift in the relative shares of revenue provided by operating grants and tuition. The share of university operations funded by operating grants has declined, while that funded by tuition fees has increased.

### Government Funding (Provincial and Federal; 46%)

Government funding includes operating grants, research grants and contracts as well as capital grants. Operating grants are the most important and stable revenue source.

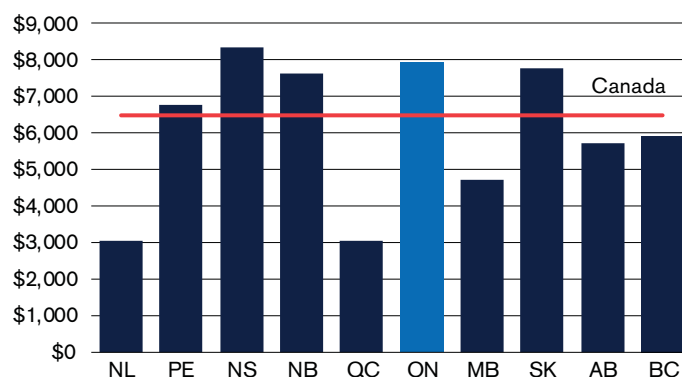
In 2017–18, the previous provincial government introduced a new funding model for Ontario universities in which a large share of funding was enrolment-based but the financial incentive to increase domestic undergraduate enrolment was reduced and universities facing enrolment declines would be provided with downside protection. Under this model, funding was expected to be relatively stable for all Ontario universities over a three-year period (from 2017–18 to 2019–20); however, the direction of fiscal policy under the current government is one of constraint.

The Province has started negotiations with universities to ascertain enrolment corridors and funding targets under the next iteration of the SMA3. Although DBRS Morningstar does not

expect funding levels or the allocation formula to change beyond expectations, the medium-term outlook remains uncertain.

Government grants for research and capital projects are another important source of funding. The federal government typically provides 65% to 75% of all public research funding, whereas the Province provides the bulk of capital funding.

**Exhibit 4: 2019–20 Average Undergraduate Tuition Fees**



### Student Fees (38%)

On January 17, 2019, the Province announced a revised tuition fee framework for regulated domestic programs at Ontario universities and colleges. Ontario universities are required to reduce tuition fees for domestic funding (eligible programs by 10% in 2019–20) and to maintain domestic funding-eligible program tuition fees at this level for the 2020–21 academic year. For most DBRS Morningstar-rated universities, the tuition-fee reduction results in a total revenue loss between 3% and 5%. Institutions are expected to absorb revenue losses within their budgets and are required to comply with the policy or risk losing core

## University Funding in Ontario (CONTINUED)

operating funding. International student fees are not regulated by the Province.

### Donation and Investment Income (2%)

Unrestricted donations and investment income recognized on the statement of operations typically represent about 1% to 2% of the University's revenue. Endowed contributions and investment income earned by the externally restricted endowments are recognized as changes in net assets and are not captured on the statement of operations until they are spent, at which point they are recorded as revenue.

As a relatively new university with a small alumni base, fund-raising efforts are modest. Ontario Tech focuses on the local community and companies in the region that have a stake in the University. Ontario Tech's endowment rose to \$21.8 million, which equates to \$2,453 per FTE. This is relatively low in comparison with other DBRS Morningstar-rated universities.

The University has an eight-year, \$50 million fundraising campaign underway. To date, the University has raised \$13.7 million in pledges and donations.

### Statement of Financial Position

DBRS Morningstar-adjusted; CAD thousands

(\$ thousands)	As at March 31				
<b>Assets</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>
Cash and short-term investments	62,161	52,195	56,796	42,479	33,683
Receivables	15,901	15,705	13,777	12,894	13,772
Inventories & prepaid expenses	2,300	1,861	1,862	1,856	1,881
Long-term investments	26,809	25,682	29,633	30,968	36,435
Capital assets	392,097	399,588	399,940	397,511	414,786
<b>Total Assets</b>	<b>499,268</b>	<b>495,030</b>	<b>502,007</b>	<b>485,708</b>	<b>500,557</b>
<b>Liabilities and Net Assets</b>					
<b>Liabilities</b>					
Payables and accrued liabilities	29,614	25,821	34,634	24,195	25,263
Deferred revenue	20,300	19,580	20,879	20,358	20,777
Long term debt	164,820	170,744	181,891	192,479	202,434
Capital lease obligations	37,596	38,167	38,673	39,090	39,118
Deferred capital contributions	161,099	162,549	164,582	162,286	170,093
<b>Total liabilities</b>	<b>413,430</b>	<b>416,861</b>	<b>440,658</b>	<b>438,408</b>	<b>457,685</b>
<b>Net Assets</b>					
Unrestricted net assets	3,264	(1,296)	(10,744)	(22,161)	(22,572)
Internally restricted net assets	31,786	29,811	31,574	36,293	29,813
Equity in capital assets	28,946	28,613	20,902	14,996	19,404
Endowment – externally restricted	21,843	21,040	19,617	18,172	16,227
<b>Total Net Assets</b>	<b>85,839</b>	<b>78,169</b>	<b>61,349</b>	<b>47,300</b>	<b>42,872</b>
<b>Total Liabilities and Net Assets</b>	<b>499,268</b>	<b>495,030</b>	<b>502,007</b>	<b>485,708</b>	<b>500,557</b>
<b>Commitments &amp; Other Obligations</b>					
Operating lease obligations	11,915	13,634	14,733	16,662	18,529

## Statement of Operations

DBRS Morningstar-adjusted; CAD thousands

(\$ thousands)	For the year ended March 31				
<b>Revenue</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>
Student tuition fees	80,152	78,266	74,818	69,730	66,978
Other student fees	12,546	13,466	13,774	14,558	15,643
Government operating grants	63,768	61,786	60,150	59,192	59,027
Research grants	10,444	10,467	9,640	9,172	9,228
Debenture grant	13,500	13,500	13,500	13,500	13,500
Unrestricted donations	1,573	1,934	1,090	702	1,472
Interest income	1,520	1,166	865	1,026	678
Amortization of deferred capital contributions	9,238	9,036	8,796	8,705	8,818
Ancillary operations	3,734	3,600	3,993	3,725	3,800
Other revenue	15,136	19,107	15,791	10,903	13,050
<b>Total Revenue</b>	<b>211,610</b>	<b>212,328</b>	<b>202,417</b>	<b>191,213</b>	<b>192,193</b>
<b>Expense</b>					
Salaries and benefits	106,246	97,530	96,519	94,207	88,796
Student aid, financial assistance and awards	12,479	11,478			
Supplies and expenses	31,081	31,608	36,581	36,022	35,537
Amortization of capital assets	23,676	23,730	24,859	26,191	26,745
Interest expense	13,862	14,317	14,823	15,285	15,767
Other expenses	17,398	18,268	17,031	16,621	17,149
<b>Total Expense</b>	<b>204,743</b>	<b>196,931</b>	<b>189,813</b>	<b>188,326</b>	<b>183,994</b>
<b>Excess of revenue over expense</b>	<b>6,867</b>	<b>15,396</b>	<b>12,604</b>	<b>2,886</b>	<b>8,200</b>
<b>Gross Capital Expenditures</b>	<b>16,351</b>	<b>25,139</b>	<b>28,176</b>	<b>9,350</b>	<b>13,501</b>

## Calculation of Free Cash Flow

DBRS Morningstar-adjusted; CAD thousands

(\$ thousands)	For the year ended March 31				
	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>
Consolidated operating balance as reported	6,867	15,396	12,604	2,886	8,200
Amortization	23,676	23,730	24,859	26,191	26,745
Other non-cash adjustments	(9,981)	(9,502)	(10,932)	(7,742)	(10,622)
<b>Cash Flow from Operations</b>	<b>20,563</b>	<b>29,624</b>	<b>26,531</b>	<b>21,335</b>	<b>24,322</b>
Change in working capital	3,878	(12,039)	10,071	(585)	(3,482)
<b>Operating Cash Flow after Working Capital</b>	<b>24,441</b>	<b>17,586</b>	<b>36,601</b>	<b>20,750</b>	<b>20,841</b>
Net capital expenditures <sup>1</sup>	(8,562)	(18,136)	(17,083)	(8,452)	(12,658)
<b>Free Cash Flow</b>	<b>15,879</b>	<b>(550)</b>	<b>19,518</b>	<b>12,298</b>	<b>8,182</b>

1. Gross capital expenditures less restricted contributions for capital purposes received during the year.

## Summary Statistics

DBRS Morningstar-adjusted; CAD thousands

	For the year ended March 31				
	2019	2018	2017	2016	2015
<b>Total Enrolment (FTEs)</b>	<b>8,905</b>	<b>8,924</b>	<b>8,916</b>	<b>8,809</b>	<b>8,792</b>
Undergraduate	94%	94%	94%	94%	95%
Graduate	6%	6%	6%	6%	5%
Annual change (%)	-0.2%	0.1%	1.2%	0.2%	2.5%
<b>Total Enrolment (headcount)</b>					
Domestic	9,711	9,618	9,483	9,254	9,316
International	637	655	671	691	689
Total staff (headcount)	2,069	1,915	1,847	1,416	1,377
Academic Staff	1,169	854	826	834	836
<b>Operating Results</b>					
Surplus (deficit) (\$ millions)	6.9	15.4	12.6	2.9	8.2
Share of Revenue	3.2%	7.3%	6.2%	1.5%	4.3%
Share of revenue (5-year average)	4.5%	5.0%	5.2%	4.3%	6.1%
<b>Revenue Mix</b>					
Government	45.8%	44.6%	45%	47%	47%
Tuition	37.9%	36.9%	37%	36%	35%
Ancillary	7.7%	8.0%	9%	10%	10%
Donations and Investment Income	1.7%	1.6%	2%	0%	2%
Other	6.9%	8.9%	7%	6%	6%
<b>Debt and Liquidity</b>					
Total debt, including capital leases (\$ millions)	202.4	208.9	220.6	231.6	241.6
Per FTE student (\$)	22,731	23,410	24,738	26,288	27,474
Interest costs as share of total expense	6.8%	7.3%	7.8%	8.1%	8.6%
Interest coverage ratio (times)	2.5	3.1	2.8	2.4	2.5
Expendable resources (\$ millions)	35.0	28.5	20.8	14.1	7.2
Share of long-term debt	17.3%	13.6%	9.4%	6.1%	3.0%
<b>Endowment Funds</b>					
Total endowment funds (\$ millions)	21.8	21.0	19.6	18.2	16.2
Per FTE student (\$)	2,453	2,358	2,200	2,063	1,846
Annual change	3.8%	7.3%	8.0%	12.0%	7.6%

## Rating History

	Current	2018	2017	2016	2015	2014
Issuer Rating	A (low)	A (low)	A (low)	BBB (high)	BBB (high)	BBB (high)
Series A Senior Unsecured Debentures	A (low)	A (low)	A (low)	BBB (high)	BBB (high)	BBB (high)

## Related Research

- *Rating Public Universities*, May 2019.

## Previous Report

- University of Ontario Institute of Technology, Rating Report, December 10, 2018.

### Notes:

All figures are in Canadian dollars unless otherwise noted.

For the definition of Issuer Rating, please refer to Rating Definitions under Rating Policy on [www.dbrs.com](http://www.dbrs.com).

Generally, Issuer Ratings apply to all senior unsecured obligations of an applicable issuer, except when an issuer has a significant or unique level of secured debt.

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**DBRS Credit Rating - Ontario Tech**

<b>Year</b>	<b>Rating</b>	<b>Trend</b>
2004	BBB (high)	Stable
2005	BBB (high)	Stable
2006	BBB (high)	Stable
2007	BBB (high)	Stable
2008	BBB (high)	Stable
2009	BBB (high)	Stable
2010	BBB (high)	Stable
2011	BBB (high)	Stable
2012	BBB (high)	Stable
2013	BBB (high)	Stable
2014	BBB (high)	Stable
2016	BBB (high)	Stable
2017	A (low)	Stable
2018	A (low)	Stable
2019	A (low)	Stable

**Moody's Credit Rating - Ontario Tech**

<b>Year</b>	<b>Rating</b>	<b>Trend</b>
2004	A3	Stable
2005	A3	Stable
2006	A3	Stable
2007	A3	Stable
2008	A3	Stable
2009	A3	Stable
2010	Baa1	Negative
2011	Baa1	Positive
2012	A2	Stable
2013	A2	Stable
2014	A2	Stable
2016	A2	Stable
2017	A2	Positive
2018	A1	Stable
2019	A1	Stable



## BOARD REPORT

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### SESSION:

Public  
Non-Public

☒  
☐

### ACTION REQUESTED:

Decision  
Discussion/Direction  
Information

☐  
☐  
☒

**TO:** Board of Governors

**DATE:** February 27, 2020

**FROM:** Cheryl Foy, University Secretary & General Counsel

**SUBJECT:** By-laws Implementation Plan Update

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### COMMITTEE MANDATE:

In accordance with its Terms of Reference, GNHR is responsible for advising the Board of Governors on its governance structure and processes, which includes reviewing the university's By-laws and recommending revisions when appropriate.

### BACKGROUND:

As part of the committee's responsibilities, a By-law Review Working Group was established in May 2015. Pursuant to the recommendations of the Working Group and GNHR, the Board approved updated By-law No. 1 and new By-law No. 2 in October 2017, which came into effect on September 1, 2018.

At the GNHR meeting in November 2017, the committee reviewed and endorsed the proposed 3-year Governance Plan for the Board. One of the governance priorities identified for both the Board and Academic Council was the implementation of the updated By-laws. Accordingly, a By-law Implementation Plan was developed to guide the process and was presented to GNHR in February 2018.

### UPDATE:

Much progress has been made against the By-laws Implementation Plan. Most significantly, the establishment of a new Academic Council Governance and Nominations Committee (GNC), when the Board of Governors approved its Terms of Reference in June

2018. The GNC is responsible for overseeing the implementation of By-law No. 2; accordingly, the By-law Implementation Plan has been used to develop the GNC's annual work plan. The GNC has made good progress in reviewing the Terms of Reference of Academic Council's standing committees. The Board has approved updated Terms of Reference for the following Academic Council committees:

- Undergraduate Studies (formerly Curriculum & Program Review)
- Graduate Studies
- Steering (formerly Academic Council Executive)

The Board also approved of the dissolution of the Admissions and Scholarships Committee.

The implementation of the new By-laws is providing a solid foundation for good governance processes and is working to strengthen bicameral governance.

**NEXT STEPS:**

We will continue to update GNHR on the progress being made on the By-laws Implementation Plan.

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**SUPPORTING REFERENCE MATERIALS:**

- By-laws Implementation Plan Update

## BY-LAWS IMPLEMENTATION PLAN – BY-LAW No. 1

Article	Actions Required	Lead	Target Date	Status
Definitions - "Administrative Staff"	<ul style="list-style-type: none"> <li>Review of policy instruments to update term "non-academic staff" to "administrative staff"</li> </ul>	Office of University Secretary & General Counsel (USGC)	2020	<b>in progress</b>
	<ul style="list-style-type: none"> <li>Definition broadened to include part-time continuing employees</li> <li>Update Board Election Procedures, if required</li> </ul>	USGC	Fall 2018	<b>COMPLETE</b>
3.3(c)	<ul style="list-style-type: none"> <li>Reduce number of elected student governors from 2 to 1 – open to undergraduate &amp; graduate students</li> <li>implement change in Spring 2018 election</li> </ul>	USGC	Spring 2018	<b>COMPLETE</b>
	<ul style="list-style-type: none"> <li>Update Board Election Procedures, if required</li> </ul>	USGC	Fall 2018	n/a
4.2 – 4.6	<ul style="list-style-type: none"> <li>Board "Conflict of Interest" provisions</li> <li>Include in governor orientation</li> </ul>	USGC	Fall 2018	<b>COMPLETE</b>
6.11	<ul style="list-style-type: none"> <li>Rules of Order changed to <i>Democratic Rules of Order</i> by Francis &amp; Francis</li> <li>Distribute copies to the Board during orientation</li> </ul>	USGC	Fall 2018	<b>new edition released May 2019 - distribute as required</b>

## BY-LAWS IMPLEMENTATION PLAN – BY-LAW No. 2

Academic Council – Immediate Priority				Status
	Lead	Target Date		
<ul style="list-style-type: none"> <li>Discussion regarding establishment of a governance committee/working group of Academic Council (AC)</li> </ul>	USGC	Summer 2018		COMPLETE - Terms of Reference approved June 2018
<ul style="list-style-type: none"> <li>Solicit nominations for Academic Council's Governance &amp; Nominations Committee (GNC)</li> </ul>	USGC	Summer 2018		COMPLETE

Actions Required				Status
Article	Lead	Target Date		
1.1(a)(ii)	AC (GNC)	Summer 2018	<ul style="list-style-type: none"> <li>Develop procedure for selection of Vice-Chair For AC</li> </ul>	IN PROGRESS – drafted & consultation complete – to be presented to GNC for approval Jan 2020
1.1(a)(iii)	AC (GNC)	Summer 2018	<ul style="list-style-type: none"> <li>Develop procedure for selecting temporary Chair for AC</li> </ul>	n/a (AC decided separate Vice-Chair & temporary Chair positions unnecessary)
1.1(a)(iv)	AC (GNC)	Fall 2019	<ul style="list-style-type: none"> <li>Review of appointment process &amp; committee appointment procedures to be completed together with the review of AC committees' terms of reference</li> </ul>	IN PROGRESS

Article	Actions Required	Lead	Target Date	Status
2.3	<ul style="list-style-type: none"> <li>• Increase in elected faculty &amp; student membership of Academic Council</li> <li>• Include additional positions in 2018 Spring Election</li> </ul>	USGC	Spring 2018	COMPLETE
2.4	<ul style="list-style-type: none"> <li>• Review &amp; update Academic Council Election procedures</li> </ul>	USGC	Spring 2020	On work plan for 2019-2020
5.1	<ul style="list-style-type: none"> <li>• Develop procedure for selecting Academic Council liaison with the Board</li> </ul>	AC	Summer 2018	IN PROGRESS – drafted & consultation complete – to be presented to GNC for approval Jan 2020 – Ferdinand Jones appointed as liaison Sept 2019

## BY-LAWS IMPLEMENTATION PLAN - PARKING LOT

Issue	Actions Required	Lead	Target Date
AC Committees	<ul style="list-style-type: none"> <li>Review Terms of Reference &amp; appointment procedures:               <ul style="list-style-type: none"> <li>Academic Council Executive - <b>COMPLETE</b></li> <li>Admissions &amp; Scholarships - <b>COMPLETE</b></li> <li>Academic Appeals – <b>on work plan 2019-2020</b></li> <li>Curriculum &amp; Program Review - <b>COMPLETE</b></li> <li>Governance &amp; Nominations – <b>IN PROGRESS</b></li> <li>Graduate Studies - <b>COMPLETE</b></li> <li>Honorary Degrees - <b>IN PROGRESS</b></li> <li>Research Board – <b>on work plan 2019-2020</b></li> </ul> </li> </ul>	GNC	<b>ONGOING</b>
Faculty Councils (FC)	<ul style="list-style-type: none"> <li>Review Terms of Reference</li> </ul>	GNC	2020-2021
	<ul style="list-style-type: none"> <li>Review meeting processes</li> </ul>	GNC	2020-2021
	<ul style="list-style-type: none"> <li>Review communication between FC &amp; AC</li> </ul>	GNC	2020-2021
Outdated Academic Council Handbook	<ul style="list-style-type: none"> <li>Review &amp; update Academic Council Handbook</li> <li>Consider eliminating Academic Council Handbook &amp; replacing with Terms of Reference, Policies &amp; Procedures</li> </ul>	AC/GNC	<b>IN PROGRESS</b> 2020-2021

# Presentation to Board of Governors: Women for STEM Update

# BRAVE FUTURE

Presented by: Susan McGovern, Vice-President,  
External Relations and Administration

# Women for STEM – 3 Pillars

**Pillars:** The program has a fundraising goal of \$2 million to create entrance and scholarship opportunities for the next ten years.

**Mentorship:** Each cohort of 20 women entering their first year of university will be paired with a mentor. The mentorship program will also provide a variety of opportunities for students to network with their mentors, and attend workshops and guest speakers, throughout their university experience.

**Recognition and Promotion:** This pillar is meant to celebrate the achievements and promote the success of the women in STEM from across our campus and community.



# Women for STEM Council

**Chair, Lisa McBride**  
VP, Stakeholder Relations

 **Natalie Hovey**  
VP, Finance and Information Management  
Lakeridge Health

**Marie Albis-Marimpietri**  
Strategic Planning Manager  
BMO

 **Farzia Khan**  
Strategic Planning Manager  
BMO

**Jill**  
Director, Medical Affairs  
Pharmaceuticals

 **Judy Marshall**  
GTS Canada, Delivery Partner Executive  
IBM Canada

**Armstrong**  
President and Funeral Director  
Long Funeral Homes

 **Marguerite O'Neal**  
President  
Marguerite O'Neal Consulting

**Chan**  
Agile Coach

 **Rekha Rao-Mayya**  
Country Manager, System Integrator/Global Account  
Microsoft

**Giesbrecht**  
Vice-President Human Resources,  
Safety & Environment

 **Nancy Shaw**  
CEO  
Oshawa Chamber of Commerce

# Women for STEM Fundraising Update

ate: \$564,000 (includes BoG matching of \$158,000)  
date: \$326,000

2019-2020: \$100,000 (20 scholarships of \$5,000)

## bursement for 2020-2021:

\$100,000 (20 scholarships of \$5,000)  
\$40,000 (20 scholarships of \$2,000)

## bursement for 2021-2022:

ear: \$100,000 (20 scholarships of \$5,000)  
\$80,000 (40 scholarships of \$2,000)

## bursement for 2022-2023:

1<sup>th</sup> year: \$100,000 (20 scholarships of \$5,000)  
\$120,000 (60 scholarships of \$2,000)



# Mentorship and Event Update

## STEM Inaugural Meeting with Mentors

, 2020 – 5:30 to 7 p.m., Dixon-Alger Fireside Reading Room  
for scholarship recipients to meet and network with their mentors

## STEM Annual Summit (October 15, 2020)

peaker: Kevin Peesker, President of Microsoft Canada  
members are invited to attend





# Questions about **campa** contact

**Susan McGovern**

Vice-President, External Relations  
905.721.8668, ext. 3135  
[susan.mcgovern@ontariotechu](mailto:susan.mcgovern@ontariotechu).

# PI DAY OF GIVING

**Pi Day is March 14; March 14 = 3.14; 3.14 =  $\pi$ ,  $\pi$  = Pi.**

Pi is a mathematical constant and a significant number to our STEM-focused university. This is why we chose March 14 as our giving day. Like the value of Pi, at our university, the possibilities are endless.

## **Pi Day of Giving 2020: March 14**

In 2018, Ontario Tech University launched its first Pi Day of Giving and thanks to the leadership of the Board, SLT and all of our Deans the day has been established as a new tradition, bringing together our faculty, staff and students to celebrate the infinite possibilities of our university and bring awareness to Ontario Tech U.

This year's goal is to raise \$75,000 for our university with a focus on scholarships and the new university centre currently under construction. We hope you will join us in creating infinite possibilities for our students.

## **Pi Day of Giving 2020: Saturday, March 14**

### **The Goals**

1. Raise \$75,000 for our university, with a focus on scholarships and the new university centre.
2. Increase social media awareness of the university and get **#OntarioTechPiDay** trending on Pi Day (March 14).
3. Secure \$35,000 in sponsorship (\$10,000 secured at Jan. 1).
4. Raise awareness of the university within the local community through increased social media presence, community skate event at the Campus Ice Centre on March 14, and community movie matinee at the Regent Theatre on March 15.

### **Your Role**

1. On Saturday, March 14, make your Pi Day of Giving donation.
2. Have a bit of fun and join SLT on March 11 and serve pie to students.
3. Encourage your network to spread the word—tag the university's channels with **#OntarioTechPiDay**.

### **Get Social**

1. Consider making your profiles (Facebook, Twitter, Instagram, LinkedIn) public from March 2 to 17.
2. If you do not wish to make your profile public, consider making your posts public. This will not affect the security of your account. It will help boost the university's impact, allow others outside of your network to see it and allow others to share in a way that is easily trackable by the university.
3. Tag the university and use **#OntarioTechPiDay** and/or **#OntarioTechgives**.

### **Pie Event – Wednesday, March 11**

Please see schedule of locations, full service times and assigned SLT/Dean for all locations below. If you are in the vicinity, please feel free to stop by one of the pie tables and join in the fun!

<b>Building/ Location</b>	<b>Faculty/ Department</b>	<b>Time</b>	<b>Assigned SLT Member</b>	<b>Dean/Senior Staff Member</b>
SIRC Lobby	Registrar's Office	10:30 to 11:30 a.m.		Joe Stokes
DTA 2 <sup>nd</sup> Floor Atrium	FSSH	10:30 to 11:30 a.m.	Steven Murphy	
DTB Main Lobby	FSSH	10:30 to 11:30 a.m.	Cheryl Foy	Peter Stoett
EDU Main Lobby	FEEd	11:30 a.m. to 12:30 p.m.	Lori Livingston	Robin Kay
UA West Atrium	FSC/FHS	Noon to 1 p.m.	Steven Murphy	Greg Crawford Bernadette Murphy
Library	Library	Noon to 1 p.m.	Andrew Gallagher Susan McGovern	Catherine Davidson
UB Atrium	FBIT Grad Studies	1:30 p.m. to 2:30 p.m.	Susan McGovern	Langis Roy
ENG Lobby	FEAS	1:30 p.m. to 2:30 p.m.	Les Jacobs	Tarlochan Sidhu
ERC Atrium	FESNS	1:30 p.m. to 2:30 p.m.	Jamie Bruno	Akira Tokuhiko

### **Community Skate at the Campus Ice Centre – Saturday, March 14**

Ontario Tech will be hosting a community skate event from noon to 2 p.m. at the Campus Ice Centre. There will be opportunities for guests to donate to the university's Pi Day of Giving.

### **Movie Matinee at the Regent Theatre – Sunday, March 15**

Ontario Tech will be hosting a free showing of Frozen 2 at the Regent Theatre. Doors open at 1:30 p.m. and the movie will begin at 2 p.m. Free refreshments will be provided and there will be opportunities for guests to donate to the university's Pi Day of Giving.

**Thank you!**

**No matter which way you slice it,  
your support will help make our third annual Pi Day of Giving a success.  
Like the value of Pi, at our university the possibilities for our students are endless!  
Let's show the world what we can do together!**

Presentation to Board of Governors:  
Pi Day Update

# BRAVE FUTURE

Presented by: Susan McGovern, Vice-President,  
External Relations and Administration

# Pi Day of Giving 2020

## Fundraising & Engagement Opportunities

### Campus Pie Parties (Wednesday, March 11)

Locations, 10:30 a.m. to 2:30 p.m.

### Ice Skating at the Campus Ice Centre (Saturday, March 14)

2 p.m.

### Movie Screening at the Regent Theatre (Sunday, March 15)

Doors open at 1:30 p.m., movie begins at 2 p.m.

Prizes include: Meridian Credit Union - \$10,000; Johnson  
Orchards - approximately \$5,000 gift-in-kind)



# Schedule for On-Campus Pie Parties, March

	Faculty/ Department	Time	Assigned SLT Member	Dean/Senior Staff
	FSSH	10:30 to 11:30 a.m.	Steven Murphy	
	FSSH	10:30 to 11:30 a.m.	Cheryl Foy	Peter Stoett
	FEd	11:30 a.m. to 12:30 p.m.	Lori Livingston	Robin Kay
	FEAS	1:30 p.m. to 2:30 p.m.	Les Jacobs	Tarlochan Sidhu
	FESNS	1:30 p.m. to 2:30 p.m.	Jamie Bruno	Akira Tokuhiro
	FSC/FHS	Noon to 1 p.m.	Steven Murphy	Greg Crawford Bernadette Murphy
	FBIT Grad Studies	1:30 p.m. to 2:30 p.m.	Susan McGovern	Langis Roy
	Library	Noon to 1 p.m.	Andrew Gallagher Susan McGovern	Catherine Davidson
	Registrar's Office	10:30 to 11:30 a.m.		Joe Stokes





# Questions about **campa** contact

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