University of Windsor

NOTICE OF MEETING

**There will be a meeting of the Senate
on Friday, November 11, 2022, at 2:30pm
Location: Room 203 Anthony P. Toldo Health and Education Centre**

AGENDA

Land Acknowledgement

1 Approval of Agenda (Unstarring agenda items)

2 Minutes of the meeting of October 7, 2022 Approval
S221007M

3 Business arising from the minutes

4 Outstanding Business/Action Items
*4.1 Board of Governors In-Course Medals – Fall 2022 **Robert Gordon**-Approval
S221111-4.1

5 Reports/New Business
5.1 Program Development Committee
5.1.1 Bachelor of Information Technology – New Program **Lionel Walsh**-Approval
Proposal (Form A) and New Course Proposals (Form D) S221111-5.1.1

*5.1.2 Master of Engineering Management Program – Clarification **Lionel Walsh**-Information
S221111-5.1.2

*5.1.3 Program/Course Changes **Lionel Walsh**-Approval
(a) Computer Science – Minor Program Changes (Form C) S221111-5.1.3a

5.2 Academic Policy Committee **Isabelle Barrette-Ng**

5.3 Senate Governance Committee
*5.3.1 Senate Standing Committee Membership **Rob Gordon-**Approval
S221111-5.3.1

*5.3.2 Proposed Revisions to Bylaw 18 – Schedule A **Jess Dixon-**Approval
S221111-5.3.2

5.3.3 Proposed Revisions to Bylaw 31 and Student Code of Conduct **Jess Dixon-**Approval
S221111-5.3.3

5.3.4 Bylaw 2 Revision – Virtual Attendance Provisions for **Jess Dixon-**Approval
Committees of Senate S221111-5.3.4

5.3.5 External Reviewers' Report on the Operational Review of the **Rob Gordon-**Information
Office of the Registrar S221111-5.3.5

5.4   **Senate Student Caucus**   **Dave Andrews**

5.5   **Report from the Student Presidents**   **UWSA/GSS/OPUS**-Information

5.6   **Report of the Academic Colleague**   **Philip Dutton**-Information
                                                                                                                                 S221111-5.6

5.7   **Report of the President**   **Robert Gordon-**Information
      5.7.1   **Strategic Planning**   Discussion

5.8   **Report of the Provost**   **Patti Weir**-Information
                                                                                                                                 S221111-5.8

      5.8.1   **Enrolment Management Update**   **Chris Busch-**Information
                                                                                                                                 S221111-5.8.1

5.9   **Report of Vice-President, Equity, Diversity, and Inclusion**   **Clinton Beckford**-Information
                                                                                                                                 S221111-5.9

5.10   **Report of Vice-President, Research, and Innovation**   **Chris Houser-**Information
                                                                                                                                 S221111-5.10

6   **Question Period/Other Business**

7   **Adjournment**

Please carefully review the 'starred' (*) agenda items. As per the June 3, 2004 Senate meeting, 'starred' items will not be discussed during a scheduled meeting unless a member specifically requests that a 'starred' agenda item be 'unstarred', and therefore open for discussion/debate. This can be done any time before (by forwarding the request to the secretary) or during the meeting. By the end of the meeting, agenda items which remain 'starred' (*) will be deemed approved or received.

University of Windsor
Senate

*4.1:   **Board of Governors In-Course Medals – Fall 2022**

Item for: **Approval**

MOTION: That Senate approve the list of candidates receiving Board of Governors in-course medals.

BOARD OF GOVERNORS IN-COURSE MEDALS 2022

FACULTY	NAME
FAHSS - Social Science	Sara E Chiarcos
FAHSS - Arts	Katia Tiana Scandale
Business Administration	Robert Gregory
Education	Kathryn Elizabeth Harris
Engineering	Gian Mario Favero
Human Kinetics	Olivia Lynne Meloche
Law - J.D.	Laila Azizi
Law - Dual J.D.	Alexandra Zemin Ing
Nursing	Sylwia Borawski
Science	Jennifer Erin Noble

University of Windsor
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5.1.1   **Bachelor of Information Technology – New Program Proposal (Form A)**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the Bachelor of Information Technology (BIT) new program proposal, which includes the stand-alone 4-year program, the degree completion pathways, and new course proposals (COMP-2087, COMP-2547, COMP-3037, COMP-3067, and COMP-3250) be approved in accordance with the program/course change forms. ^

^Subject to approval of the expenditures required.

Rationale/Approvals:
- This program has been approved by the School of Computer Science Council (September 24, 2021), the Science Program Development Committee (SPDC) (as delegated by the Faculty of Science Coordinating Council) (October 19, 2021), and the Provost (September 14, 2022), and the Program Development Committee (October 21, 2022). The program has been reviewed by the Office of Co-operative Education and Workplace Partnerships.
- There will be three pathways to the Bachelor of IT degree:1) College to University Degree Completion; 2) College to University Degree Completion (for 3 year CAAT program at St. Clair College); and; 3) Four Year Direct entry pathway.
- The direct entry into the four-year program will be delayed for now and we will only admit students through the degree completion pathways initially.
- Once the viability of the program has been firmly established, the four-year direct entry pathway will be made available to prospective students (expected to be in 2-3 years). This pathway will be available with and without co-op.
- According to the Quality Assurance Framework 2.9.1, "*After a new program is approved to commence, the program will begin within 36 months of that date of approval; otherwise, the approval will lapse.*"
- See attached for new program proposal.
- Supporting documentation for the new courses can be accessed by contacting the University Secretariat at ext. 3325, or through the October 21, 2022 Combined Program Development Committee PDF meeting file posted on the PDC website at: https://www.uwindsor.ca/secretariat/377/pdc-agendas-and-minutes-draft. To access this particular item, go to item 5.1.1.

PROGRAM DEVELOPMENT COMMITTEE
PROPOSAL BRIEF FOR NEW PROGRAMS
FORM A

A. Basic Program Information

Faculty(ies)	Science
Department(s)/School(s)	Computer Science
Name of Program as it Will Appear on the Diploma (*e.g.*, Bachelor of Arts Honours Psychology with thesis)	Bachelor of Information Technology (BIT)
Proposed Year of Offering* [Fall, Winter, Spring]: **(subject to timely and clear submission)*	Fall 2023
Mode of Delivery:	Classroom
Planned steady-state Student Enrolment (per section B.4.2)	150
Normal Duration for Completion:	There are three pathways to achieving the Bachelor of IT degree: 1. '2+2' College-to-University Degree Completion Pathway 2. College-to-University Degree Completion Pathway for 3-year CAAT Programs at St. Clair College 3. 4-year Direct Entry Pathway Degree completion pathways: 2 years (full time) following the completion of a recognized two- year College of Applied Arts and Technology (CAAT) diploma or equivalent in *Web Development and Internet Applications and Computer Systems Technician* 3-4 terms following the completion of a recognized three-year College of Applied Arts and Technology (CAAT) Advanced Diploma or equivalent in *Computer Systems Technology-Networking and Mobile Applications Development from St. Clair College*
Will the program run on a cost-recovery basis?	No

B. Overall Program Plan

B.1 Objectives of the Program/Summary of Proposal (QAF section 2.1.1; Ministry section 4)

Relevance and Importance: Information technology involves the development, maintenance and use of systems, software, and networks for processing and distributing data. Often these professionals are employed in information technology consulting firms, various public and private sectors, or may be self-employed (Ministry of Labour, Training and Skill Development, n.d). Information and Communication Technology contributes a significant amount to direct and indirect job creation, billions of dollars in revenues and to the Canadian GDP (Information Technology Association of Canada, n.d).

Technology advances are causing global economic growth that is straining Canada's ability to meet the demand for workers with information and technology skills (Information Technology Association of Canada, n.d). The widespread growth in technology and vast array of sectors who require computer and information

technology professionals suggests that the employment of these individuals is projected to grow significantly worldwide. Within Canada, similar trends exist whereby there are consistent projected job opportunities, job vacancies, and an average-to-above-average outlook for occupations that fall within the information technology sector (see Table 9 in Section B.4.1). Beyond the promising outlook for employment, strengths in mobile application development, natural language processing (e.g., Python), scientific computing, and computer graphics were some of the most needed skills described by employers in 2019 (Petrone, 2019) and are expected to continue being in demand (see Appendix C for employer letters of support which also support the need for these skills). As such, the University of Windsor is proposing a new program, **Bachelor of Information Technology (BIT)** that will cater to the growing need for individuals with expertise in programming, data management systems, software development, and web and mobile applications. For several years the School of Computer Science has offered a minor and certificate in Applied IT and the success and interest in this program suggests that it makes sense that we also offer a companion undergraduate program.

"Information Technology and computer science are all disciplines within the same realm of study. However, each specialty focuses on specific aspects of the field, and careers within the three areas vary greatly." (King University Online 2017). The IT focus of the proposed degree distinguishes it from existing CS degrees offered by the School of Computer Science. The School of Computer Science at the University of Windsor already offers a minor and certificate in Applied IT. By offering a formalized degree program in Information Technology (IT) using primarily existing resources, we believe this new program will attract students who specifically want a degree in IT, thus enhancing the overall enrolment within the School of Computer Science at the University of Windsor. This program will be attractive to college graduates given the opportunity to earn two credentials (e.g., diploma and degree) in a four-year time span. Many of the existing college-to-university degree completion pathways require students to complete more than two years to earn their degree. Compared to computer science undergraduate programs, there are fewer undergraduate programs in IT; therefore, the proposed program will address a gap in curricula, particularly given the projected needs of computer and information technology professionals. The School of Computer Science already has garnered support from a variety of sources including from St. Clair College. employers, and professional associations (see Appendix C), illustrating strong interest in this program.

Aim and Impact:
The proposed **Bachelor of IT** degree offers a unique degree structure that currently is structured to function as a degree completion pathway for two-and-three-year college programs. Specifically, College of Applied Arts and Technology (CAAT) graduates from *Web Development and Internet Applications* or *Computer Systems Technician* may be admitted to this program and complete their Bachelor of IT in two years (i.e., 20 courses or 60 credits), assuming full-time enrolment. Students from the following three-year CAAT Advanced Diplomas at **St. Clair College** *Computer Systems Technology-Networking and Mobile Applications Development* may also be admitted to this program and complete their Bachelor of IT after completing 15 courses at the University of Windsor (see section C.1 Admission Requirements for more information on admission). All students in these college-to-degree pathways will complete the same core required courses (except where duplication in course content exists) at the University of Windsor as students in the four-year degree pathway (see C.2. Program Curriculum Structure/Program of Study). In offering this built-in college-to-university degree completion pathway we are offering a comprehensive and transparent credit transfer pathway to support students in their transfer between postsecondary institutions or programs, while ensuing minimal duplication of previous learning.

Please note: The direct entry into the four-year program will be delayed for now and we will only admit students through the degree completion pathways initially. Once the viability of the program has been established, the four- year direct entry pathway will be made available to prospective students (expected to

be in 2-3 years). This pathway will be available with and without co-op. We believe both options will be of interest to students and have provided evidence of this throughout this application.

This program was intentionally designed to prepare students for careers in computer and information technology. This was accomplished through a detailed review of similar existing programs. As such, this program includes computer science, mathematics, statistics, and business courses which are representative of the field. Students who complete this program will have an understanding of basic hardware concepts and in-depth knowledge of software, programming, mobile applications, and networks. An added benefit of this program is the future opportunity to earn a specialization in various areas such as data analytics and cyber-security, as well as the opportunity to complete an internship through an elective course. This would permit work integrated learning and allow students to connect theoretical knowledge with the practical application of this knowledge and permit critical networking opportunities. Please see section 'C.4 Learning Outcomes' for a detailed description of the knowledge, skills, and abilities students will have gained upon successful completion of the degree program. Graduates of this program are well-prepared to seek professional certification in Information Technology Certificate Professional (ITCP), Associate Information Technology Professional (AITP), and/or Information Systems professional (ISP).

Consistency with Institutional Goals: The **Bachelor of IT** program aligns with 'Engineering, Science, and Computing' (point three within program areas of expansion) within the SMA by offering new science programming. The School of the Computer Science already teaches many of the courses needed to offer a program in information technology, including a minor and certificate in Applied IT. Creating this new program will permit growth and increased enrolment within an existing program area of expansion in the SMA by leveraging existing resources and faculty expertise.

Beyond contributing to this area of expansion, this new program will equip students with skills that companies have identified are in demand (e.g., UX design, mobile application development, customer services systems; Petrone, 2019) and significantly enhance employment opportunities, in a field with growing need for trained individuals (see Table 9 and Table 10 and Figures 1-10 for employment projections in B.4.1). As such, this program contributes to the University of Windsor's commitment to providing learning experiences that will prepare students for life after graduation and aligns with institutional initiatives focusing on enhancing the employability of STEM students through activities that integrate organizational, leadership, communication, and interpersonal skills with the transfer of scientific knowledge. This program will contribute to the University of Windsor's mission, goals and objectives through improving the student learning experience in the area of career preparation and innovations in teaching and learning excellence, through the provision of high impact learning experiences.

Offering degree completion pathways allows the School of Computer Science to maintain competitive with other institutions that have transfer/articulation agreements in place and provides accessible and transparent opportunities for movement between postsecondary institutions, thus aligning with the Ontario Government's "Policy Statement for Ontario's Credit Transfer System" (Ontario MTCU, 2011). This new program also facilitates partnership building with colleges and expands the University of Windsor's college-university pathway development. It also facilitates partnership building with colleges which is identified as a priority in the SMA and expands the University of Windsor's college-university pathway development, thus increasing overall enrolment.

B.2 Program Content (QAF Section 2.1.4)

The program content is designed to provide students with a solid foundation in applied computing and IT, as well as exposure to important topics in related areas such as business and economics. Students will gain sought after skills in key areas, including programming, web applications and data analytics that will prepare

them to make technical contributions in a business environment. The program consists of:

a) Traditional lecture-based CS courses, which will cover the fundamental concepts and most important developments in the current state of Information Technology and include courses in computer science in relevant topics such as information security for IT, data analytics, social media marketing, etc.

b) A 4xxx level project course, which will allow students an opportunity to integrate and apply the knowledge from previous courses to implement solutions for specific IT tasks.

c) Courses from related areas such as business, economics and statistics, which will complement the students' technical knowledge to provide a broader perspective and insight into the business environment and equip students with foundational knowledge needed to be successful to work within IT. Across institutions offering programs in Information Technology (or similar programs), it is standard practice for the curriculum to consist of combination of computer science and business courses. In fact, some Information Technology (or related) programs are offered in business schools.

d) Elective courses, which will develop breadth of knowledge and help provide a comprehensive program in Information Technology.

The BIT program requires the introduction of 5 new courses, in addition to courses already offered by the School of Computer Science. These new courses have been developed specifically and packaged with the existing courses to give students a comprehensive knowledge of IT topics and industry best practices. The course numbers and titles for the proposed new courses are given below. (Please see Appendix E for full course descriptions)

The new courses are:
1. **COMP 2087**: 'Programming for Beginners II'
2. **COMP 2547**: 'Applied Algorithms and Data Structures'
3. **COMP 3037**: 'Information Security for IT'
4. **COMP 3067**: 'Applied Databases'
5. **COMP 3250**: 'Data Analytics I'

The program facilitates multiple pathways and initially students will be admitted only to the degree-completion pathways. It is expected that a **four-year direct entry pathway** (with and without co-op) will be made available to students in 2-3 years.

There are three pathways to achieving the Bachelor of IT degree:
1. **Pathway 1: '2+2' College-to-University Degree Completion Pathway**
2. **Pathway 2: College-to-University Degree Completion Pathway for 3-year CAAT Programs at St. Clair College**
3. **Pathway 3: 4-year Direct Entry Pathway**

The Program's course content for each Pathway is briefly explained below. The specific course content and requirements are provided in detail in **Section C.2 Program Curriculum Structure**.

Pathway 1 has <u>2 options</u>:
Option 1) : for students from *Web Development and Internet Applications and*
Option 2) : for students from *Computer Systems Technician*

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The program content for the 2+2 College to University Degree Completion Pathway **_Option 1_** is:

    a) 9 traditional lecture-based CS courses (7 required + 2 electives)

    b) 1 6-credit project course at the 4xxx level (This course counts as 2 courses)

    c) 6 required courses from complementary areas such as business, economics and statistics

    d) 3 elective courses from any area of study

The program content for the 2+2 College to University Degree Completion Pathway **_Option 2_** is:

    a) 11 traditional lecture-based CS courses (9 required + 2 elective)

    b) 1 6-credit project course at the 4xxx level (This course counts as 2 courses)

    c) 6 required courses from complementary areas such as business, economics and statistics

    d) 1 elective courses from any area of study

Pathway 2 has **2 options**:

    Option 1) : for students from *Computer Systems Technology – Networking* at St. Clair College *and*

    Option 2) : for students from *Mobile Application Development* at St. Clair College

However, the program content for the College-to-University Degree Completion Pathway for 3-year CAAT Programs

Programs at St. Clair College is the same for both options and is:

    a) 7 required traditional lecture-based CS courses

    b) 1 6-credit project course at the 4xxx level (This course counts as 2 courses)

    c) 6 required courses from complementary areas such as business, economics and statistics

The program content for the **4-year Direct Entry Pathway** is:

    a) 13 traditional lecture-based CS courses (13 required + 2 elective)

    b) 1 6-credit project course at the 4xxx level (This course counts as 2 courses)

    c) 6 required courses from complementary areas such as business, economics and statistics

    d) 17 elective courses. 3 of these courses must be from Arts/Languages and Social Sciences (at least 1 from each area) and the rest can be from any area of study

B.2.1 Unique or Innovative Curriculum, Program Delivery, or Assessment Practices (QAF Section 2.1.4) Program delivery:

This program is unique, in part, because it is designed to support multiple pathways, including 2 **degree completion pathways and a direct-entry pathway.** The program will also foster a diverse learning opportunity as students will arrive from the *Web Development and Internet Applications, Computer Systems Technician, Computer Systems Technology-Networking, and Mobile Applications Development* CAAT programs and be integrated with other college students as well as UWindsor students in the BIT program allowing for multidisciplinary information sharing and varied perspectives. As part of the delivery of this program, students also have the option to complete an internship as an elective course.

Program Delivery, Innovative Curriculum and Assessment Practices for:

1. '2+2' College-to-University Degree Completion Pathway

The 2+2 degree completion pathway was intentionally designed based upon the analysis of CAAT program standards set forth by the Ministry of College and Universities (MCU) and will benefit students by recognizing the value of career-oriented educational experiences learned at colleges, while complementing these applied experiences with scientific knowledge, theories, and principles gained through university courses. This was conducted to ensure minimal duplication in learning and that CAAT graduates would be prepared to meet the program learning outcomes. Program standards apply to all similar programs of instruction offered by publicly funded colleges across the province. The development

of program standards by the Ministry first started in the 1990s to bring more consistency to college programming, broaden the skills of college graduates to include essential employability skills and provide accountability for the quality and relevance of college programs (MCU, 2017). Thus, by mapping these program standards against our curriculum and utilizing the information to develop a degree completion pathway, rather than targeting specific programs at specific CAATs, we are able to widen our recruitment scope to any CAAT program in Ontario that falls under these standards. In addition to working within the program standard framework set forth by MCU, these institutions are required to follow a rigorous quality review process at a program level basis on a regular frequency. Additionally, this pathway will streamline and harmonize the student experience by ensuring college course content is not duplicated and offering a transparent and consistent pathway to earning a university degree.

In most jurisdictions, the cost to the government and the student of a degree achieved through two years at the college followed by two year at the university is lower than a four-year university program (Trick, 2013.). As a result, our college-to-degree completion pathway allows students to gain applied educational experiences at the college, while also saving money compared to completing four years of full-time study at a university. There are also cost saving associated with ensuring minimal duplicated learning between the college and university. Moreover, our model will be an attractive option to students as articulation agreements often require students to complete more than two years at their institution.

2. College-to-University Degree Completion Pathway for 3-year CAAT Programs at St. Clair College

This pathway(Pathway 2) was specifically designed to facilitate degree completion for students graduating from St. Clair College with an advanced diploma in either *Computer Systems Technology-Networking* or *Mobile Applications Development* diploma. The program delivery highlights are similar to those for Pathway 1; however, these students can get 5 *additional* course credits (compared to Pathway 1) and need to take only 15 courses at the University for graduation.

3. 4-year Direct Entry Pathway
It is anticipated that in the future this program will include a 4-year direct entry option (Pathway 3). This will be of interest to students who want to pursue an IT degree from high school. The combination of courses included in this program and the flexibility offered through the 14 electives will allow a unique opportunity for students to earn various specializations such as in: data analytics and cyber-security, as additional elective courses are introduced. Since this is a 4-year program, it can be offered with a co-op option. We note that the co-op is available ONLY for the direct-entry pathway (Pathway 3) and is not available for the degree completion pathways.

Curriculum Innovation:
The curriculum within this program was intentionally designed to prepare students for careers in IT and upon graduation, students will be prepared to seek certification by Canada's Association of Information Technology Professionals (CIPS).

Another unique characteristic of this program is that all students (including those in the degree completion pathways) may choose to complete an internship course (SCIE-3990) as an elective course within the Faculty of Science. This will permit work integrated learning, allowing students to connect theoretical knowledge with the practical application of this knowledge, and may foster collaborative relationships with industry partners and networking opportunities for students.

B.2.2 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material

The University of Windsor is committed to building and sustaining stronger, more meaningful inclusive partnerships with Indigenous students, scholars, and communities. Indigenization of curriculum takes place in a larger context, including a requirement to respond to the four Calls to Action in education of the [Truth and Reconciliation Report](#) (2015) (page 1), the unique legal requirements of the [Constitution Act 1982](#) (Sections 25, 35), the provincial legal requirements of the [Ontario Human Rights Code](#), 1990, and provincial legislation [Bill Pr36](#) (1967).

*In revising this program, **how** has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum?*

Please consider these prompt questions and [additional Resources](#) including disciplinary examples:
- *What **process** has your department/Faculty used to consider Indigenization?*
- ***How** have you considered the importance or relevance to the course/program?*
- *How has your department or faculty approached raising awareness for Indigenous knowledges in your area?*
- *What do the [TRC](#) and [University Principles](#) documents suggest relevant to your course?*
- *What have other similar courses/programs done that might be relevant to your course/program?*
- *In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?*
- *What is your awareness of the history or background to approaches you are considering, such as the land acknowledgement? How have you developed your awareness?*
- *Which [literatures](#), sources, or Indigenous Knowledge Holders have you consulted? (Please confirm you have permission to share any names, it may be helpful to have the person confirm the text if you will be submitting their name)*
- *Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?*
- *Have you included the information in the other relevant areas in the PDC form such as learning outcomes and/or in the syllabus where appropriate?*

The School of Computer Science recognizes the importance of engaging and collaborating with the Indigenous community in developing and implementing a suitable curriculum. The School works closely with the Faculty of Science that has recently recruited an expert in Indigenous-centred relationships who is a recognized Knowledge-Keeper in their community with the aim to build and develop new and innovative initiatives to further Indigenous-focused research co-production and lifelong learning. The Indigenous Knowledge Keeper will provide counsel to the Office of the Dean to create further space for Indigenous knowledge and partnerships in the Faculty of Science and across the University of Windsor. The Indigenous Knowledge Keeper will support the creation of an Indigenized space for Indigenous students, community members and allies to engage, learn and create.

The School of Computer Science has taken the following steps toward this goal:
 a) A land acknowledgment statement is now included in the course syllabus template for every computer science (COMP-XXXX) course.
 b) The School is actively reaching out to Indigenous students and encouraging them to participate in the decision-making process, e.g., as student members in the curriculum committee and program representatives.
 c) The School has plans to work with the Knowledge Keeper to help reach out to the local Indigenous community and their IT and digitization department in order to seek their input and engage them, e.g., through membership in advisory committees, collaboration on research and student projects which are

relevant to this program.

d) The School encourages instructors to include topics/discussions about indigenous issues where applicable. This for instance, includes course topics on Indigenous knowledge included in the ethics course required by this program and course projects related to IT/digitization relevant to local Indigenous cases brought out by the local community.

e) The School is looking forward to engaging with an expert in Indigenous-centred relationships within the Faculty of Science to develop relevant aspects of its curriculum further.

B.3 Program Name and Degree Designation/Nomenclature (QAF Section 2.1.1; MINISTRY section 1)

The proposed name, **Bachelor of Information Technology,** emphasizes the business-oriented focus of this program. The name and degree designation are consistent with other institutions who offer degree programs in the area and is appropriate to serve as both a four year degree pathway and degree completion pathway. The degree name aligns with the program content.

B.4   DEMAND FOR THE NEW PROGRAM
B.4.1 Student and Market Demand (MINISTRY section 5)

A multifaceted approach relying on primary and secondary data sources was used to conduct the market assessment for the proposed degree program. This permitted triangulation of data sources and the conclusion that there is quantitative evidence of student and market demand for a new degree program in IT.

While this program will initially function as only a degree completion pathway, a four-year direct entry pathway is expected be made available to prospective students in 2-3 years. As such, we have presented data below that provides support for both the degree completion pathway and for a future direct entry pathway.

Primary data on student demand and interest for the program was collected through surveys. Specifically, prospective undergraduate students (primarily high school students) were surveyed about their interests in an IT program. To expand our sample and enhance the generalizability of our results, we also surveyed current students enrolled in Computer Science as well as those who have completed courses in IT at the University of Windsor about their interests in an IT program. Applicant data at other institutions was reviewed to gain insights into the quantity of applicants and the number of applicants who were offered admittance into programs that offer information technology programming. Lastly, employment data was gathered from Canadian and American labour market sources to determine the market demand for information technologists.

Student Survey
Twenty-eight future undergraduate students completed our survey which contained questions about a range of new science programming (beyond just IT). Students who expressed initial interest in IT were prompted with the following question: If a new program in Information Technology were to be offered, would you be interested in applying to this program? Three future undergraduate students responded, 'definitely yes' and three future undergraduates students responded 'probably yes'. Therefore, 6 of 28 (~21%) future undergraduate students indicating they would 'definitely' or 'probably' be interested in an IT program. These are promising figures,
particularly when combined with the interest expressed by current undergraduate students. To gain a more in- depth understanding of student interest, we conducted a second survey with computer science undergraduate students as well as undergraduate students who have completed courses in the Applied IT certificate at the University of Windsor as these individuals are more representative of the population who would be interested in a future IT degree program. 133 undergraduate students completed this survey. When asked "Please rate your level of interest in Applied Information Technology," 81% of students expressed high-to-moderate interest.

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Undergraduate students were also asked: "If a new program in Applied Information Technology were to be offered, would you be interested in applying to this program" and nearly 50% of students indicated that they would 'definitely' or 'probably' be interested in applying to this program. Below is a summary of students' responses by question type.

Please rate your level of interest in Applied Information Technology

Rating	Number of Students
High	60 (45%)
Moderate	48 (36%)
Low	16 (12%)
None	9 (6.7%)

If a new program in Applied Information Technology were to be offered, would you be interested in applying to this program

Response	Number of Students
Definitely yes	21 (15.8%)
Probably yes	44 (33%)
Maybe	40 (30%)
Probably not	14 (10.5%)
Definitely not	14 (10.5%)

Program and Course Enrolment Data

The Office of Institutional Analysis at the University of Windsor provided available enrolment data for information technology (or related) programs from other institutions. There are eight universities that offer similar IT-related programs; however, these data are not always reported under the "Computer/information technology administration and management" four-digit CIP code (CIP 11.10). In the Fall 2019, Carleton and York reported new student undergraduate intakes under this code. Specifically, there were 47 students (45 FT, 2 PT) and 91 (81 FT, 10 PT), students enrolled under this code. Table 1 includes a history of program enrolment for Carleton. York's total program enrolment can be found in Table 2. Table 3 includes first year undergraduate intake for the remaining institutions where data were available. Course enrolment data at the University of Windsor suggest interest among students for the courses that comprise the Bachelor of IT degree (see Table 4) and graduate rates for the Certificate in Applied IT can be found in Table 5. Tuition comparisons can be found in Table 6.

According to OUAC IT program admissions, there are several programs that offer IT or similar programs. There were 4862 applications in total and only 2694 offers (see Table 7). There are more students applying to these programs than admitted; therefore, we believe there will be interest from students for a 4-year direct entry pathway into the BIT program and that this pathway will help address this surplus of students. The location of these applicants can be found in Table 8.

Table 1. Historical Carleton First Year Enrolment Across IT-Related Programs*

	2017/ 18	2016/ 17	2015/ 16	2014/ 15	2014/ 15	2012/ 13	2011/ 12	2010/ 11	2009/ 10	2008/ 09	2007/ 08
Total	169	151	166	139	129	106	115	97	97	116	77
Undergraduate	169	151	166	139	129	106	115	97	97	116	77
Bachelors	169	151	166	139	129	106	115	97	97	116	77

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*Note: Carleton offers multiple IT-related programs and therefore this enrolment information is by degree and aggregates the year one enrolments for all four programs into one data point.

Table 2. York University Total Program Enrolment

	2019/20	2018/19	2017/18	2016/17	2015/16	2014/15	2013/14	2012/13
Undergraduate Student Headcount	921	813	696	570	483	429	418	362

Table 3. 2019 Fall First Year Intake for IT Programs

Institution	Program	Total Number of Students
Toronto Metropolitan Univeristy	Business Technology Mgt 2 year FT	21
	Business Technology Mgt 4 year FT	467
UOIT	Networking and Information Technology Security	116
	Technology Management (IT)	38
	Technology Management (Commerce)	19
Wilfred Laurier	Business Technology Management	71

Table 4. University of Windsor Course Enrolment Data for Core Courses within the Proposed Degree Program

Course	Student Enrolment Units (SEU) for 2018-2019 Academic year	SEU for 2017-2018 Academic year	SEU for 2016-2017 Academic year
COMP 1000	363	295	273
COMP 1047	1,180	1092	966
COMP 2057	685	616	547
COMP 2067	150	122	103
COMP 2087	--	--	--
COMP 2097	686	703	658
COMP 2547	--	--	--
COMP 2707	93	72	52
COMP 3037	--	--	--
COMP 3057	143	122	123
COMP 3067	--	--	--
COMP 3077	27	19	16
COMP 3250	--	--	--
COMP 4990	92	84	77
STAT 2910	689	654	563
ECON 1100	1,011	920	904
MKTG 1310	460	415	548
MSCI 1000	341	331	317
STEN 1000	669	727	739
MGMT 2400	329	405	405s

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> *These data were gathered from the Office of Institutional Analysis at the University of Windsor. Semester enrolment units (SEUs) are the numbers of students taking a course times the course value. Bolded courses are new courses and therefore have no current enrolment data available.
>
> **** Course numbers in bold are new courses to be developed for the proposed program (details given in Appendix E).**

Table 5. Graduation Rates for Certificate in Applied IT

Completion Term	Number of Students
2020	7
2019	5
2018	7
2017	3
2016	2

Table 6. Bachelor of Information Technology Tuition Comparison

Institution	Program*	Degree Awarded	Tuition (2020-21) - Year 1	
			Domestic	International
UOIT	Networking and Information Technology Security	Bachelor of Information technology (Honours)	$ 9,031.18	$ 27,940.34
UOIT	Technology Management (IT)	Bachelor of Information technology (Honours)	$ 9,031.18	$ 27,940.34
UOIT	Technology management (Commerce)	Bachelor of Commerce (Honours)	$ 8,088.28	$ 26,763.52
Toronto Metropolitan University	Business Technology Management	Bachelor of Commerce	$ 9,481.10	$ 33,298.47
Wilfred Laurier	Business Technology Management	Bachelor of Business Technology Management	$ 9,624.80	$ 19,158.00
Carleton	Information Resource Management B.I.T	Bachelor of Information Technology	$ 9,080.57	$ 36,156.57
Carleton	Interactive Multimedia and Design B.I.T	Bachelor of Information Technology	$ 9,080.57	$ 36,156.57
Carleton	Network Technology B.I.T	Bachelor of Information Technology	$ 9,080.57	$ 36,156.57
Carleton	Optical Systems and Sensors B.I.T	Bachelor of Information Technology	$ 9,080.57	$ 36,156.57
York University	Information Technology	Bachelor of Arts	$ 8,647.20	$ 33,617.70

York University	Information Technology	Bachelor of Commerce	$ 8,647.20	$ 33,617.70
Waterloo	Information Technology Management	Bachelor of Mathematics	$ 8,544.00	$ 41,850.00
University of Toronto (Scarborough)	Management and Information Technology	Bachelor of Business Administration	$ 6,100.00	$ 57,020.00
Trent University	Information Systems	Bachelor of Arts	$ 6,118.48	$ 22,454.15
Trent University	Information Systems	Bachelor of Arts (Honours)	$ 6,118.48	$ 22,454.15
Trent University	Information Systems	Bachelor of Science	$ 6,118.48	$ 22,454.15
Trent University	Information Systems	Bachelor of Science (Honours)	$ 6,118.48	$ 22,454.15

*These data were gathered from the Office of Institutional Analysis at the University of Windsor.

Table 7. Summary of Applicants, Offers, and Registrations by University

	Applications	Offers	Confirmed Offers	Registered
Full Time	**4676**	**2637**	**819**	**686**
Carleton-Information Resource Management	137	63	29	23
Carleton-IT-Network Tech	191	86	39	33
Ottawa-Mgmt Information Systems	261	160	37	34
Toronto Metropolitan Univeristy -Business Technology Management	2803	1415	421	407
Trent-Computing & Information System	195	155	34	19
UOIT-Networking & Info Tech Security	402	305	101	71
York-Information Tech (BA, BCOM)	687	453	158	99
Part Time	**186**	**57**	**19**	**8**
Carleton-IT-Network Tech	5	1	0	0
Ottawa-Mgmt Information Systems	20	4	3	1
Toronto Metropolitan Univeristy -Business Technology Management	93	24	4	3
Trent-Computing & Information System	10	9	2	0
UOIT-IT - Ntwk & Info Tech Sec	22	7	3	1
UOIT-Networking & Info Tech Security	9	0	0	0
York-Information Tech (BA, BCOM)	27	12	7	3
Grand Total	**4862**	**2694**	**838**	**694**

Table 8. Applicant Residency

County of	Carleton-Information Resource Manage	Carleton-IT-Netwrk	Ottawa-Mgmt Information Systems	Toronto Metropolitan Univerist y -	Trent-Computing & Information tion	UOIT-IT - Ntwk & Info Tech	UOIT-Networking & Info Tech Sec	York-Information Tech (BA,	Grand Total

Residence	ment	Tech		Business Technology Management	System	Sec		BCOM)	
Metro Toronto	6	17	20	1048	38	5	114	250	1498
Peel Reg Mun	3	16	12	671	28		47	162	939
York Reg Mun	3	10	18	546	17		72	123	789
Not in Ontario	36	33	116	223	65	5	57	106	641
Ottawa Carleton	65	88	80	33	9		3	2	280
Durham Reg Mun	2	4	3	78	11	6	74	12	190
Halton Reg Mun	3	4	3	143	3	1	10	22	189
Hamilton/ Wen twh	4	3	11	41	6		9	13	87
Waterloo	2		2	21	5		2	6	38
Simcoe	1	1	1	11	2		3	4	23
Middlesex	1	1	2	13		2	2	1	22
Niagara	1	2	2	10			2		17
Frontenac			4	5	2	1	2	2	16
Leeds & Grenvill	3	4	1	1	1		1		11
Wellington			1	6	2			1	10
Essex				5			1	4	10
Storm/Dund/G len	2	2		1		1	3		9
Peterborough				2	5			2	9
Hastings			1	4	2		1		8
Dufferin	1	2		2	1		1	1	8
Lanark		3	1	1	1				6
Thunder Bay Reg			1	5					6
Elgin	1	1		1	1		2		6
Victoria			1		3		1		5
Northumberrla				4		1			5

nd									
Haldimand/ No rfk	1	1		2			1		5
Oxford		1		2	1		1		5
Huron				3			1		4
Brant				2			1	1	4
Sudbury Reg Mun		1	1	1					3
Algoma	1			1				1	3
Kent				1	1			1	3
Perth				1	1				2
Nipissing				2					2
Lennox & Addngtn				1					1
Prescott & Russl		1							1
Timiskamin g				1					1
Prince Edward				1					1
Cochrane	1								1
Grey				1					1
Renfrew				1					1
Lambton		1							1
Muskoka				1					1
Grand Total	**137**	**196**	**281**	**2896**	**205**	**22**	**411**	**714**	**4862**

Labour Market:
Information technology involves the development, maintenance and use of systems, software, and networks for processing and distributing data. Individuals working in this sector are often employed in information technology consulting firms, various public and private sectors, or may be self-employed (Ministry of Labour, Training and Skill Development, n.d). The widespread need for information technologists speaks to the potential for careers available in a number of fields. To assess labour market trends, secondary data from government sources were used.

According to results from the CAAT survey, the top three occupations for graduates of the *Web Development and Internet Applications* program are web designs and developers (NOC 2175[1]; 31%), computer programmers and interactive media developers (NOC 2174; 18%), and graphic designers and illustrators (NOC 5241; 6%). The top three occupations for graduates of the *Computer Systems Technician* program are user support technicians (NOC 2282; 19%), computer network technicians (NOC 2281; 15%), and Information systems analysts and consultants

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[1] The National Occupational Classification (NOC) is a nationally recognized and standardized system that

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assigns a four-digit code and job description to every occupation in the Canadian labour market.

(NOC 2171; 6%). These occupations as well as others in the field of information technology would be potential employment opportunities for students completing the Bachelor of IT program.

The employment of computer and information technology occupations is projected to grow by 11% from 2019 to 2029 within the United States-faster than the average for all occupations (See Figure 1-10; U.S. Department of Labor, 2020). Within Ontario, labour market information and statistics suggests that there are current and projected job opportunities in many of the sectors related to information technology (Ministry of Labour, Training and Skills Development, n.d.; see Table 9 for examples). The vast majority of these positions require a university degree or the completion of a college program, have low unemployment rates, and have a stable job outlook. Most notable, across job sectors, there are vacancies and projected job openings illustrating promising opportunities for employment following the completion of an IT degree. Therefore, there is evidence of market demand for students graduating with an IT degree. Please see Table 9 for examples of potential job profiles and employment statistics within Ontario and Table 10 for regional statistics for these job profiles from Workforce Windsor Essex.

As part of our analysis of the labour market, we examined current job postings in information technology (and related fields). This search was done on July 17th, 2020. The Government of Canada job bank listed 1,242 available jobs (236 in Ontario) for information technology-related positions (e.g., information systems analysts and consultants, computer network technicians, etc.; Government of Canada, 2020).

In 2014, Toronto Metropolitan Univeristy University launched Canada's Big Data Consortium as a means to connect industry, government, and academia to address issues related to big data and analytics. The Consortium led the first national multi-sector study on Canada's big data and analytics talent gap. This report indicated that there is a higher demand for talent in information technology that is not yet addressed by existing curriculum. Similarly, LinkedIn data indicates that because of the rise of the digital world, strengths in mobile application development, natural language processing (e.g., Python), scientific computing, and computer graphics are some of the most needed skills by employers in 2019 (Petrone, 2019). The design of the curriculum within this program as well as the college-to-university pathway will support students in their pursuit to become information technologists but also other types of careers.

Table 9. Ontario Employment statistics

Job profile	Median income	Projected number of job openings (2017-2021)	Job outlook (2017-2021)^	Annual Number of job postings (2018)	Number of job vacancies	Unemployment rate
Information systems analysts and consultants	$82,224	15,001-20,000	Above average	10,652	1,814	3.4[+]
Computer and information systems managers	$108,297	9,001-10,000	Above average	4,264	939	2.7%[+]
Computer programmers and interactive media	$81,405	10,001-15,000	Above average	1,141	2,328	3.6[+]

developers						
Computer network technician	$68,714	4,001-5,000	Above average	2,544	318	3.5[+]
Information systems testing technician	$68,657	1,001-2,000	Average	2,618	Data on job vacancies suspended due to Covid 19	5.3[+]
Graphic designers and illustrators	$46,661	2,001-3,000	Average	1,180	542	5.3[+]

Note: These data were gathered from the Ministry of Training, Colleges and Universities Ontario's labour market website for the aforementioned job profiles; Job posting data on this site is extracted by Burning Glass Technologies, Labour Insight™.

^Job outlook ratings can tell you how future demand for this job is expected to compare with other jobs across Ontario.

*indicates this occupation was assessed as part of a broader group of similar occupations due to sample size restrictions.

[+]Unemployment rate is below the National unemployment rate (5.5% as of June 2019) within Canada:
Computer and information systems managers:
https://www.iaccess.gov.on.ca/labourmarket/jobProfile/jobProfileFullView.xhtml?nocCode=0213
Computer programmers and interactive media developers:
https://www.iaccess.gov.on.ca/labourmarket/jobProfile/jobProfileFullView.xhtml?nocCode=2174
Graphic designers and illustrators:
https://www.iaccess.gov.on.ca/labourmarket/jobProfile/jobProfileFullView.xhtml?nocCode=5241

Table 10. Windsor Essex Employment statistics

Job profile	Regional Employers	Active Job Posts	Total Job Posts
Information systems analysts and consultants	59	5	114
Computer and information systems managers	61	2	115
Computer programmers and interactive media developers	29	3	59
Computer network technician	65	5	146
Information systems testing technician	12	0	17
Graphic designers and illustrators	27	3	49

Note: These data were gathered from the Workforce Windsor Essex.

Figure 1:

Summary

Quick Facts: Computer and Information Research Scientists	
2019 Median Pay	$122,840 per year $59.06 per hour
Typical Entry-Level Education	Master's degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2019	32,700
Job Outlook, 2019-29	15% (Much faster than average)
Employment Change, 2019-29	5,000

Figure 2:

Summary

Quick Facts: Computer Network Architects	
2019 Median Pay	$112,690 per year $54.18 per hour
Typical Entry-Level Education	Bachelor's degree
Work Experience in a Related Occupation	5 years or more
On-the-job Training	None
Number of Jobs, 2019	160,100
Job Outlook, 2019-29	5% (Faster than average)
Employment Change, 2019-29	8,000

Figure 3:

Summary

Quick Facts: Computer Programmers	
2019 Median Pay	$86,550 per year $41.61 per hour
Typical Entry-Level Education	Bachelor's degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2019	213,900
Job Outlook, 2019-29	-9% (Decline)
Employment Change, 2019-29	-20,100

Figure 4:

Summary

Quick Facts: Computer Systems Analysts	
2019 Median Pay	$90,920 per year $43.71 per hour
Typical Entry-Level Education	Bachelor's degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2019	632,400
Job Outlook, 2019-29	7% (Faster than average)
Employment Change, 2019-29	46,600

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Figure 5:

Summary

Quick Facts: Computer Support Specialists	
2019 Median Pay	$54,760 per year $26.33 per hour
Typical Entry-Level Education	See How to Become One
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2019	882,300
Job Outlook, 2019-29	8% (Much faster than average)
Employment Change, 2019-29	67,300

Figure 6:

Summary

Quick Facts: Database Administrators	
2019 Median Pay	$93,750 per year $45.07 per hour
Typical Entry-Level Education	Bachelor's degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2019	132,500
Job Outlook, 2019-29	10% (Much faster than average)
Employment Change, 2019-29	12,800

Figure 7:

Summary

Quick Facts: Information Security Analysts	
2019 Median Pay	$99,730 per year $47.95 per hour
Typical Entry-Level Education	Bachelor's degree
Work Experience in a Related Occupation	Less than 5 years
On-the-job Training	None
Number of Jobs, 2019	131,000
Job Outlook, 2019-29	31% (Much faster than average)
Employment Change, 2019-29	40,900

Figure 8:

Summary

Quick Facts: Network and Computer Systems Administrators	
2019 Median Pay	$83,510 per year $40.15 per hour
Typical Entry-Level Education	Bachelor's degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2019	373,900
Job Outlook, 2019-29	4% (As fast as average)
Employment Change, 2019-29	16,000

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Figure 9:

Summary

Quick Facts: Software Developers	
2019 Median Pay	$107,510 per year $51.69 per hour
Typical Entry-Level Education	Bachelor's degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2019	1,469,200
Job Outlook, 2019-29	22% (Much faster than average)
Employment Change, 2019-29	316,000

Figure 10:

Summary

Quick Facts: Web Developers	
2019 Median Pay	$73,760 per year $35.46 per hour
Typical Entry-Level Education	Associate's degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2019	174,300
Job Outlook, 2019-29	8% (Much faster than average)
Employment Change, 2019-29	14,000

Student demand: There is a large pool of CAAT graduates from *Web Development and Internet Applications, Computer Systems Technician, Mobile Applications Development, and Computer Systems Technology-Networking* to recruit from (see Table 11 for graduate rates). Research suggests that that the number of students seeking a baccalaureate education will increase from 50,000 to 104,000 from 2009 to 2025 (Trick, 2013) and each year 55,000 students switch institutions, and 40% of these students move from a college to a university (Brown, 2016). In particular, St. Clair College located in Windsor is expected to be one of the primary sources of students for this program. The Department Head within the School of Computer Science has discussed this degree completion pathway with St. Clair College and has received their support. St. Clair College will help advertise and promote this program to their students as well as advise students on how to successfully transfer into this new stream (see Appendix C for the letter of support). Upon approval of this program, additional recruitment efforts (e.g., site visits) will take place at other CAATs offering these diploma and advanced diploma programs in order to achieve the projected steady for this program.

Table 11. Number of graduates of full-time postsecondary college programs in Internet Applications and Web Development

Program	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Web Development and Internet Applications	63	93	65	74	74
Computer Systems Technician	663	727	831	950	1064
Computer Systems Technology	521	494	488	548	535

Mobile Applications	-	-	-	-	22

Data source: Ministry of Training, Colleges and Universities. (2018). Labour Market. Retrieved from
https://www.app.tcu.gov.on.ca/eng/labourmarket/employmentprofiles/compare.asp
*Note: these data reflect all students enrolled in these programs, not just those at St. Clair College.

In summary, the curriculum offered by the proposed Bachelor of IT degree aligns well with similar programs and prepares students for careers in computer and information technology. Furthermore, there is strong interest among students for this type of degree program from current computer science students as well as prospective students. We believe that in the future there will also be a market for a four-year direct entry pathway in addition to the degree completion pathways that are currently being proposed. Within Canada and the United States, there is growing need for individuals with skills in information technology and related fields. As such, this program will prepare students for a wide range of job opportunities that require in-depth understanding of the development, maintenance and use of systems, software, and networks for processing and distributing data complemented by knowledge of business. Based upon the review of market demand and student interest, the proposed degree program will help to address a current gap for trained individuals in the labour market.

B.4.1.1 Percentage of Domestic and International Students (Ministry section 5)

The percentages of domestic and international students enrolling into the program are likely to be similar to those enrolled in any of the undergraduate Computer Science programs at the University of Windsor. That is, we expect most of the students to be non-visa students.

B.4.2 Estimated Enrolments (QAF section 2.1.9; Ministry section 5; Senate Co-op Policy)

Projected enrolment levels for the first five years of operation. (If the program is in operation, use actual and projected data.)	First Year of Operation	Second Year of Operation	Third Year of Operation	Fourth Year of Operation	Fifth Year of Operation (Steady-state enrolment overall)
In the regular program (non-co-op) *In the co-op/experiential learning stream (if applicable)* *For co-op option: projected number of international students enrolled in the co-op stream*	60	135	150	150	150

Yr 1: intake (60 domestic)
Yr 2: intake (60 domestic & 15 international) + flow through (60) = 135
Yr 3: intake (60 domestic & 15 international) + flow through (60+15)
= 150 Yr 4: onwards: steady state. same as Yr3

B.4.3 Collaborative Program (QAF section 1.6)

If this is a collaborative program with another college/university, identify partners and describe institutional arrangements for reporting eligible enrolments for funding purposes.
N/A

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Societal Need (Ministry section 6)

> *Describe the tools and methodology used to assess societal need.*
>
> *Elaborate on the*
> *1) dimensions of (e.g., socio-cultural, economic, scientific, or technological),*
> *2) geographic scope of (e.g., local, regional, provincial, or national), and*
> *3) anticipated duration of, and trends in,*
> *societal need for graduates of the new program*
>
> *Evidence of societal need for the program will typically include a review of relevant industry and provincial survey and statistical data, as well as a review of the proposed program by relevant experts in the field.*

Societal Need for the Bachelor of IT:
Technology advances are causing global economic growth that is straining Canada's ability to meet the demand for workers with information and technology skills (Information Technology Association of Canada, n.d.). A report from the Information and Communications Technology Council predicted that by 2019 there would be 182,000 unfilled jobs and 31% of employers surveyed expressed difficulty or delays in filling information and communication technology positions (as cited by Information Technology Association of Canada, n.d.). The Information Technology Association of Canada provided an industry snapshot. Although now dated, (there are no updated figures available),
at the time when this summary was created, there were 1 million direct and indirect jobs in information and communication technology, $159.9 billion in revenues, and 69.5 billion to the Canadian GDP.

Today, the societal need for information technology (and related) professionals exceeds the current supply. As detailed in the Labour Market analysis section above (B.4.1), the careers in computer and information technology are expected to grow by 11% over the next ten years-far faster than the average for other occupations in the United States (U.S. Department of Labor, 2020). Similar trends are present in Canada, whereby there are notable job vacancies and projected job openings (Ministry of Labour, Training and Skills Development, n.d.). The BIT program is designed to help fill this need by offering curriculum that will prepare students for career in information technology.

For information on anticipated labour and student market demand trends can be found in section B. 4.1.

The School of Computer Science has gathered letters of support from employers and professional associations who they have longstanding relationships with from other computer-science related programs (see Appendix C). These supports provide further
 evidence for the need of highly trained IT personnel in the workforce.

Societal Need for Degree Completion Pathway within the Bachelor of IT:
Increasing the rate of college to university transfers has been a priority within Ontario (e.g., Kerr, McCloy, & Liu, 2010; Ontario MTCU, 2011). The Ontario government has committed to providing comprehensive and transparent credit transfer pathways to support students in their transfer between postsecondary institutions or programs. As part of this commitment the Ontario MTCU (2011) released a policy statement regarding credit transfer and encouraged institutions to develop transfer systems that support qualified students to move between postsecondary intuitions or programs:

> Ontario will have a comprehensive, transparent and consistently applied
> credit transfer system that will improve student pathways and mobility,

support student success and make Ontario a postsecondary education destination of choice. The credit transfer system will assist qualified students to move between postsecondary institutions or programs without repeating prior, relevant learning (Ontario MTCU, 2011).

This new program functions as a college-to-degree completion pathway which aligns with the provincial call for visible credit transfers between colleges and universities by assisting qualified students to move between postsecondary intuitions or program without repeating prior learning (Ontario MTCU, 2011). Institutionally, building partnerships with colleges is noted as a priority within the 2017-2020 SMA. This new program will significantly enhance these partnerships by further engaging with college students. Most importantly, this program has been intentionally designed to offer college students a transparent way to earn a university degree by ensuring clear and consistently applied credit transfer. In doing so, the University of Windsor is streamlining and harmonizing the student experience for CAAT graduates wishing to earn a university degree.

An added benefit of the built-in degree completion pathways within the proposed Bachelor of IT is that it provides students an opportunity to earn two credentials within approximately a four-year time period and facilitates potential cost savings by eliminating credit duplication across institutions. Cost projections also suggest '2+2' pathways offer a less expensive route to earning a university degree compared to students pursuing a four-year direct entry into university (Trick, 2013). Furthermore, for some students, the transition period in college also offers an important time for students to develop study skills and familiarity with a subject area. This degree completion pathway responds to the demand for hybrid higher education in Ontario. For example, each year 55,000 students switch institutions, and 40% of these students move from a college to a university (Brown, 2016) and the number of students seeking a baccalaureate education will increase from 50,000 to 104,000 from 2009 to 2025 (Trick, 2013). Beyond these added benefits, the degree completion pathway also provides an opportunity for students to pursue post-graduate education (e.g., graduate degrees) which they would have been otherwise ineligible for following the completion of the CAAT diploma.

B.4.3.1 Societal Need – Letters, Surveys, Statistics

• *The development of this proposal included consideration of comments or letters solicited from potential employers regarding the need for graduates of the proposed program within their organization and field of endeavour.*	__X_ Yes	___No, explain below
• *The development of this proposal included consideration of comments or letters solicited from relevant professional societies or associations about the need for graduates of the proposed program.*	_X_Yes	___ No, explain below
• *The development of this proposal included a review of industry employment surveys for evidence of societal need (indicating numbers of positions in the field, numbers of anticipated new positions in the field, number of positions in the field current being advertised, etc.)?*	_X_Yes	___ No, explain below
• *The development of this proposal included a review of statistical evidence of the number of Ontario students leaving the province to study the field elsewhere in Canada or abroad?*	___Yes	_X No, explain below

If yes, append letters, survey or statistics to proposal.

If no, explain:

Statistical evidence of the number of Ontario students leaving the province to study the field are not readily available. However, some institutional enrolment data can be found in B.4.1. These data suggest there are more applicants than those admitted into programs which speaks to the potential for the BIT program to successfully recruit students.

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Duplication (Ministry section 7)

List similar programs offered by other institutions in the Ontario university system. Resources to identify similar programs offered in Ontario include www.electronicinfo.ca, www.electronicinfo.ca/einfo.php, and www.oraweb.aucc.ca/showdcu.html. Also, list similars program in the geographically contiguous area, e.g., Michigan/Detroit.

Computer science degree programs are available at most Ontario universities; however, there are comparatively fewer institutions that offer Information Technology (or related) degrees. Of these programs that exist, there is mix of programs with a sole focus on Information Technology and others that have a focus on business technology management. Institutions within Ontario offering these programs have been noted below:

Institution	Program*	Degree Awarded	Other
UOIT	Networking and Information Technology Security	Bachelor of Information technology (Honours)	
UOIT	Technology Management (IT)	Bachelor of Information technology (Honours)	
UOIT	Technology management (Commerce)	Bachelor of Commerce (Honours)	BComm Technology Management major Technology Management minor
Toronto Metropolitan Univeristy University	Business Technology Management	Bachelor of Commerce	
Wilfred Laurier	Business Technology Management	Bachelor of Business Technology Management	
Carleton	Information Resource Management B.I.T	Bachelor of Information Technology	
	Interactive Multimedia and Design B.I.T	Bachelor of Information Technology	
	Network Technology B.I.T	Bachelor of Information Technology	
	Optical Systems and Sensors B.I.T	Bachelor of Information Technology	
University of Ottawa	Business Technology Management	Bachelor of Commerce	
York University	Information Technology	Bachelor of Arts Bachelor of Commerce	
Waterloo	Information Technology Management	Bachelor of Mathematics	

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University of Toronto (Scarborough)	Management and Information Technology	Bachelor of Business Administration	
Trent University	Information Systems	Bachelor of Arts Bachelor of Arts (Honours) Bachelor of Science Bachelor of Science (Honours)	
Centennial College	Computer Communication Networks	Bachelor of Information Technology (Honours)	
Seneca College	Informatics and Security	Bachelor of Technology (Honours)	
Seneca	Business Technology Management	Bachelor of Commerce (Honours)	

*Programs are hyperlinked

Within Michigan, the following institutions offer information technology (or related) programming, include though are not limited to:

- Oakland University Bachelor of Science Degree in Information Technology
- Central Michigan Information Technology major
- Ferris State University Computer Information Technology
- Lawrence Technological University Bachelor of Science in Information Technology
- Wayne State Bachelor of Science in Information Technology

The relatively small number of Ontario programs in this field, combined with the growing demand for individuals with skills in information technology in Canada and student interest within this field speaks to the potential for the Bachelor of IT program to successfully attract students. Further, the proposed program is unique in that it housed in
the School of Computer Science where students will acquire a more sophisticated background in computer science compared to the vast majority of arts and commerce programs.

CAAT Programs:

Within Ontario, the following CAATs offer a diploma in *Web Development and Internet Applications, Computer Systems Technician, Mobile Applications Development*, and/or *Computer Systems Technology-Networking*

- St. Clair College
- Algonquin College
- Canadore
- Centennial
- Durham
- Fanshawe College
- George Brown
- Georgian
- La Cite
- Mohawk
- Niagara
- Sheridan

College Transfer:

Within Ontario there are a number of diploma-to-degree pathways as well as transfer and articulation agreements between universities and colleges. Some of the institutions that offer transfer credit for students enrolled in *Web Development and Internet Applications*, *Computer Systems Technician, Mobile Applications Development*, or *Computer Systems Technology-Networking* include, though are not limited to*:

- Nipissing University
- Lakehead University
- York University
- University of Guelph

Additional transfer pathways exist for similar CAAT diplopia programs. Despite the possible similarities that exist in these degree completion pathways, it is important for the School of Computer Science to offer comparable pathways for college students in order to stay competitive with other institutions' programming. Furthermore, we believe our degree completion pathways will be more appealing to students as it allows them to earn their diploma and degree within four years (assuming full time study) compared to other institutions whose pathways require longer for students to earn their degree.

*Note: for a comprehensive list of all transfer options, please see: https://www.ontransfer.ca/index_en.php

B.4.3.2 Demonstrate that Societal Need and Student Demand Justify Duplication (Ministry section 7)

If the proposed program is similar to others in the system, demonstrate that societal need and student demand justify the duplication. Identify innovative and distinguishing features of proposed program in comparison to similar programs.

The proposed program is like other institutional programming. We believe our program will be attractive to students for the following reasons:

- Unlike most of the existing IT programs, the proposed program is housed in the School of Computer Science where students will acquire a more sophisticated and comprehensive background in computer science which will make them attractive candidates for computer and information technology related positions.
- The program is designed to facilitate a '2+2' college-to-university degree completion pathway.
- Opportunity to complete an internship (by choosing to enrol in the internship course offered through the Faculty of Science) that is available to all students in all pathways.
- Curriculum was designed to develop the necessary technical skills that prepare students to seek professional certification in Information Technology Certificate Professional (ITCP), Associate Information Technology Professional (AITP), and/or Information Systems professional (ISP).
- Potential for high-demand specializations (e.g., in data analytics and cyber-security) as part of future curriculum development initiatives being examined within the School of Computer Science.
- Special features of the city (i.e., inexpensive housing, easy access to train/car/plane transportation, next to international border; neighbour city of metropolitan Detroit).

As reported in B.4.1 and B.4.4, we anticipate student interest to be high for this program. Lastly, labour data illustrates that there continues to be a growing need for computer science and information technology professionals. Therefore, we believe there is societal need for this program.

B.5 RESOURCES

B.5.1 Resources Available

B.5.1.1 Available Faculty and Staff Resources (QAF sections 2.1.7, 2.1.8, 2.1.9 and 2.1.10)

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the proposed program. Please do not name specific individuals in this section.

The School of Computer Science is committed to supporting this new degree program. The School of Computer Science already offers a minor and certificate in Applied IT further illustrating that there is a strong commitment and sufficient faculty expertise to deliver an undergraduate program in Information Technology. Complete details of each professor's research fields, publications, awards and achievements can be found in their attached CV's, Appendix A.

The average teaching load for faculty members in the School of Computer Science includes four courses. All but five courses within the proposed program are currently being offered on a regular basis so there is active commitment to support the proposed program. The BIT program houses all the Computer Science courses that were part of the Certificate of Applied IT (CAIT) and were also offered as service courses for other departments across the university. These courses were commonly taught by sessional instructors due to lack of faculty resources. As the BIT enrolment grows it will be necessary to hire full-time faculty to teach and maintain these courses along with the newly introduced courses.. The Dean of Science has approved funding for 3 faculty positions , along with lab technician and part-time secretary positions in support of the BIT program.

This program includes a small number of required courses from other departments in the Faculty of Science (i.e., Department of Mathematics and Statistics and Economics), four courses from the Odette School of Business, three elective courses from FAHSS (any course), and 13 elective courses from any area of study. Given that these courses are already taught on a regular basis there is sufficient faculty expertise and we have received a letter of support from the Head of Department for Mathematics and Statistics, Head of Economics, and the Dean of Business confirming that students in this program will have access to the required business courses (see Appendix D).

Administrative tracking will be provided within the UWinsite system. UWinsite is the University's campus-wide enterprise resource planning (ERP) system, which is used to support tracking of student engagement and learning. The Undergraduate Counselors and the Department Head will advise students interested in this degree program.

B.5.1.1a Faculty Members Involved in the Delivery of the Program

Faculty Name and Rank (alphabetical)	Program Affiliation: indicate faculty affiliation to the EXISTING program(s)	Program Affiliation: indicate faculty affiliation to the NEW program
Category 1*: Tenured Professors teaching exclusively in the AAU offering the program		

Dr. Imran Ahmad, Associate Professor, School of Computer Science	Computer Science	Computer Science
Dr. Scott Goodwin, Professor, School of Computer Science	Computer Science	Computer Science
Dr. Arunita Jaekel, Professor, School of Computer Science	Computer Science	Computer Science
Dr. Ziad Kobti, Professor, Director, School of Computer Science	Computer Science	Computer Science
Dr. Saeed Samet, Associate Professor, School of Computer Science	Computer Science	Computer Science
Category 2: Tenure-track Professors teaching exclusively in this AAU		
Dr. Hossein Fani, Assistant Professor, School of Computer Science	Computer Science	Computer Science
Dr. Pooya Moradian Zadeh, Assistant Professor, School of Computer Science	Computer Science	Computer Science
Dr. Sherif Saad Ahmed, Assistant Professor, School of Computer Science	Computer Science	Computer Science
Category 3: Ancillary Academic Staff such as Learning Specialists Positions		
Mr. Ali Abdulhussein, Learning Specialist, AAS II, Odette School of Business	Odette School of Business	Odette School of Business
Category 4: Limited-term Appointments teaching exclusively in this AAU		
Dr. Chenyang Xu, Assistant Professor, Department of Economics	Economics	Economics
Category 5: Tenure or tenure-track or LTA professors involved in teaching and/or supervision in other AAUs, in addition to being a member of this AAU		
Dr. Mohamed Belalia, Assistant Professor, Department of Mathematics and Statistics	Mathematics and Statistics	Mathematics and Statistics
Dr. Yash Aneja, Professor, Odette School of Business	Odette School of Business	Odette School of Business
Dr. Martha Reavley, Professor, Odette School of Business	Odette School of Business	Odette School of Business
Dr. Karen Robson, Assistant Professor, Odette School of Business	Odette School of Business	Odette School of Business

B.5.1.1b Faculty Expertise Available and Committed to Supporting the New Program

The School of Computer Science already offers a minor and certificate in Applied IT, illustrating that there is a strong commitment and sufficient faculty expertise to deliver an undergraduate program in IT. Faculty members who will teach courses in this program are considered experts in the subjects that are central to this program and are well connected with industry professionals. These expert faculty have active research program and publish in high quality peer-reviewed journals. Complete details of each professor's research

fields, publications, awards and achievements can be found in their attached CV's, Appendix A.

Below is a brief description of the *key* faculty members involved in this program who will teach the majority of courses in the program:

Dr. Imran Ahmad primarily works in Multimedia Systems. His research interests are in image retrieval systems, especially involving content-based image retrieval. On the application side, he works in the areas of 3D modeling and both 2D and 3D animation. He has been involved in teaching both graduate and undergraduate levels.

Dr. Arunita Jaekel works in the area of network design and optimization. Her research interests include design of fault tolerant networks and secure communication strategies for vehicular and wireless networks. She has been involved in teaching a variety of courses in both graduate and undergraduate levels.

Dr. Ziad Kobti is a Professor and current Director of the School of Computer Science. Dr. Kobti has taught a large number and variety of undergraduate and graduate courses since 2001. Dr. Kobti was the recipient of several teaching awards including the Alumni Award for Distinguished Contributions to University Teaching. Dr. Kobti leads his own NSERC funded research program in theoretical and evolutionary computation as well a principal investigator on a number of present and past collaborative industry projects funded by various government agencies. He is the past president of the Canadian Artificial Intelligence Association.

Dr. Hossein Fani has worked in the broad area of Social Network Analytics with special attention to content-based and temporal user community detection. His research concerns user community detection, user interest modeling, social network analysis, text mining, information retrieval, and machine learning. He has been involved in teaching both graduate and undergraduate levels.

Dr. Scott Goodwin is a Professor in the School of Computer Science. His primary interest is in Artificial Intelligence for Computer Games.

Dr. Pooya Moradian Zadeh is an assistant professor in the School of Computer Science. His research interests focus on data analytics and the modeling and optimization of complex social systems such as healthcare using computational intelligence and social network analysis techniques. He has also led several software development teams successfully in data analytics, applied AI, and health informatics. He is the recipient of the 2020 Roger Thibert Teaching Excellence Award and the 2019 Student Engagement Award for excellence in teaching achievements and educational leadership from the faculty of science at the University of Windsor.

Dr. Saeed Samet is an associate professor at the School of Computer Science since 2017. He teaches var undergraduate and graduate courses since 2012. His research interests are in the security/privacy of data analytics and Big Data, as well as health informatics. Along with the graduate and undergraduate students under his supervision, he has developed secure health applications for web and mobile environment, as well as using Blockchain technology in terms of data privacy and scalability.

Dr. Sherif Saad is an assistant professor with the school of computer science. His research interests include cybersecurity, software engineering and applied machine learning.

B.5.1.1c Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the New Program

Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the proposed program.

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All but 5 of the required courses in the proposed degree program have been and will continue to be part of the regular course offerings of the School of Computer Science, Department of Mathematics and Statistic, Department of Economics, and Odette School of Business.

Most COMPxxx0 courses are offered by tenured and tenure track professors. Exceptions occur at times in the multi-section year one courses with high enrolments and broad audiences. In some cases, qualified sessional instructors are engaged to deliver a course, if needed. Most COMPxxx7 courses are offered by sessional instructors and should be supported by more permanent teaching resources in the long term.

In addition to the existing expertise within the department, the Dean of Science has approved funding for 3 additional faculty positions in support of the BIT program.

B.5.1.1 d Other Available Resources (Ministry sections 3 and 4)

Most of the courses within the proposed degree program are offered on a regular basis and can accommodate the projected number of new students from this degree program. All other courses from departments within the Faculty of Science can also accommodate the enrolment growth associated with this new program. The Odette School of Business has been consulted and they are in support of this new program and have guaranteed students in the program reserved seating in MKTG 1310, MSCI 1000, STEN 1000, MGMT 2400 (see Appendix D for their letter of support). The Department of Mathematics and Statistics and Department of Economics have also expressed their support (appendix D).

To accommodate the growth in enrolment that is anticipated from this program, we are requesting additional support including one part-time secretary (20 hours/week), technical support staff (20 hours/week), one lab space with PC support for 30 students (shared with other courses), annual PC upgrade budget for the maintenance and increase of hardware/software licences and online resources (e.g., LinkedIn learning) to accommodate the increased number of students, and potentially more tutors should need arise based upon the increase in enrolment. Additional GAs/TAs at a ratio of one GA/TA (140 hours) for every 30 students will be required for the eight new courses, with additional GAs/TAs potentially being need as enrolment in these courses scales up.

The Co-operative Education and Workplace Partnerships office at the University of Windsor will be tasked to support the co-op program, including providing administrative support to help facilitate the admissions process and placements for students. The co-op option will be available only for students in the 4-year direct entry pathway (Pathway 3). Student intake in this pathway is expected to begin about 2-3 years after the program starts.

B.5.1.2 Resource Implications for Other Campus Units (Ministry sections 3 and 4)

The vast majority of required courses are offered through the School of Computer Science. There are a small number of courses (2 courses) offered from other departments within the Faculty of Science (i.e., Department of Mathematics and Statistics and Economics). These courses have the capacity to accommodate students from the new degree program without additional resource expenditure. Four required courses will be completed within the Odette School of Business. The Odette School of Business has been consulted and they are in support of this new program (see Appendix D for letters of support).

Three courses from FAHSS; however, students have considerable flexibility in the courses they choose to complete so reliance is minimal.

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This program will rely on the Co-operative Education and Workplace Partnerships office at the University of Windsor to help support co-op. The co-op option will be available only for students in the 4-year direct entry pathway (Pathway 3). Student intake in this pathway is expected to begin about 2-3 years after the program starts.

The program does not require equipment or facilities from other campus units nor maintenance/upgrading of any resources from other campus units.

B.5.1.3   Anticipated New Resources (QAF sections 2.1.7, 2.1.8 and 2.1.9; Ministry section 4)
*List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the proposed program.*
N/A

B.5.1.4   Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)
Describe all opportunities for <u>internal reallocation of resources and cost savings</u> identified and pursued by the area/department in preparing this proposal. (e.g., streamlining existing programs and courses, deleting courses, etc.)
N/A

B.5.1.5 a Additional Resources Required – Resources Requested (QAF section 2.1.7 and 2.1.9)

*Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the proposed program.*

Faculty:	Three faculty positions will be needed to meet the increased teaching needs for this program and have been approved by the Dean of Science.
Staff:	One part-time (20 hours/week) secretary Technical support staff (20 hours/week)
GA/TAs:	A ratio of one GA/TA (140 hours) for every 30 students will be required for the eight new courses

B.5.1.5b Additional Institutional Resources and Services Required by all Affected Areas or Departments
*Describe all **additional institutional resources and services** required by <u>all affected</u> areas or departments to run the proposed program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance.*

Library Resources and Services:	N/A
Teaching and Learning Support:	N/A
Student Support Services:	Additional CS tutors should need arise because of the increase in enrolment
Space and Facilities:	
Equipment (and Maintenance):	Annual PC update budget for the maintenance and increase of hardware/software licences and online resources (e.g., LinkedIn learning) to accommodate the increased number of students; estimated cost $25,000 every year.

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C. Program Details

C.1 Admission Requirements (QAF section
2.1.2) General Admission Requirements:
1. '2+2' College-to-University Degree Completion Pathway
- 40 courses (120 credits); 60 credits earned from the University of Windsor; 60 credits earned from a recognized two-year CAAT program.

1. Graduates of a two-year Ontario College Diploma from *Web Development and Internet Applications or Computer Systems Technician* from a qualifying Ontario or equivalent College of Applied Arts and Technology (CAAT), with a cumulative average of a least a B (3.0) are eligible for admission to Bachelor of Information Technology degree program offered by the School of Computer Science at the University of Windsor under the provisions of this agreement. The Dean of Science or their designate has the authority to admit students from qualifying colleges in equivalent diploma programs within Canada pending that they meet all other admission requirements.

2. In addition to the appropriate two-year Diploma and grade point average, applicants to the Bachelor of Information Technology are required to have successfully completed 1 of MDM4U, MHF4U, or MCV4U or the equivalent course. Students who have not completed this course or its equivalents will be required to complete the equivalent course within the UWindsor Prep Program.

3. Students are required to complete twenty (20) courses at the University of Windsor in fulfillment of the requirements of the Bachelor of Information Technology.

Recognized programs include:
- *Web Development and Internet Applications* (MCU Code 50513)
- *Computer Systems Technician* (MCU Code 50505)
- Any program from a qualifying Ontario CAAT or other Canadian College deemed equivalent by the Dean of Science or their designate.

2. College-to-University Degree Completion Pathway for 3-year CAAT Programs at St. Clair College
- 40 courses (120 credits); 45 credits earned from the University of Windsor; 75 credits earned from a recognized three-year CAAT program.

1. Graduates of a three-year Ontario College Advanced Diploma from *Computer Systems Technology Networking* and *Mobile Applications Development* from St. Clair College, with a cumulative average of a least a B (3.0) are eligible for admission to Bachelor of Information Technology degree program offered by the School of Computer Science at the University of Windsor under the provisions of this agreement. The Dean of Science or their designate has the authority to admit students from qualifying colleges in equivalent diploma programs within Canada pending that they meet all other admission requirements.

2. In addition to the appropriate three-year Advanced Diploma and grade point average, applicants to the Bachelor of Information Technology are required to have successfully completed 1 of MDM4U, MHF4U, or MCV4U or the equivalent course. Students who have not completed this course or its equivalents will be required to complete the equivalent course within the UWindsor Prep Program.

3. Students are required to complete fifteen (15) courses at the University of Windsor in fulfillment of the requirements of the Bachelor of Information Technology.

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Recognized programs include:
- *Computer Systems Technology-Networking* at St. Clair College
- *Mobile Applications Development* at St. Clair College

3. 4-year Direct Entry Pathway
- ENG4U, and 1 of MDM4U, MHF4U, or MCV4U. A minimum grade of 70% average in at least one of the stated math courses is also required.

C.1.1 Admission Requirements and Attainment of Learning Outcomes (QAF section 2.1.2)
Demonstrate that admission requirements are sufficient to prepare students for successful attainment of the intended learning outcomes (degree level expectations) established for completion of the program.

The curriculum within this program has been scaffolded to ensure students' progress from introductory to mastery of the program learning outcomes. The required grade 12 math courses and minimum grade of 70% in one of the stated math courses will ensure students are prepared to be successful in all first-year mathematics and statistics courses and math-intensive computer science courses. These first-year courses will serve as the foundation for the upper year computer science courses. The requirement of grade 12 English will ensure students are prepared for writing intensive courses that they may complete as part of their electives or arts and humanities courses. These admission requirements are consistent with the requirements for Information Technology program offered at other institutions.

Admission requirements for the degree completion pathway ensure that students entering the Bachelor of IT meet an equivalent basis of admission. Generally, students transferring from the college will complete the same core courses as those students required for direct entry (excluding courses that are deemed equivalent to the material covered in the CAAT programs and where the degree program permits choice). Essentially, the college courses will fulfill the elective requirements for the Bachelor of IT. As such, students will be prepared to successfully meet the intended learning outcomes for this program. Additionally, prior research suggests that students transferring from college to university are satisfied with their academic preparation (Decock, McCloy, Liu, & Hu, 2011).

C.2 Program Curriculum Structure/Program of Study (QAF sections 2.1.4 and 2.1.10)

The proposed BIT program has 3 possible pathways as follows:
1. **'2+2' College-to-University Degree Completion Pathway**
2. **College-to-University Degree Completion Pathway for 3-year CAAT Programs at St. Clair College**
3. **4-year Direct Entry Pathway**

Initially, students will only be admitted through Pathways 1 and 2, and **there will be no admissions through the 4-year direct entry route (i.e. Pathway 3). However, it is anticipated that a four-year direct entry pathway will be made available to prospective students in the future. We expect this to occur 2-3 years after the program starts. This direct-entry pathway will be available with and without co-op** We believe both pathways will be of interest to students and have provided evidence of this throughout this application

Pathway 1: '2+2' College-to-University Degree Completion Pathway Option 1: for students from *Web Development and Internet Applications*

Courses to complete at the University of Windsor (Total 20)
(a) COMP 1000, COMP 2067, **COMP 2087**, COMP 2097, **COMP 2547**, **COMP 3037**, **COMP 3250**, COMP 4990 (6 credit course).
(b) 2 additional CS courses at the 2xxx – 4xxx level*

(c) ECON 1100 and STAT 2910
(d) MKTG 1310, MSCI 1000, STEN 1000, MGMT 2400
(e) 3 courses from any area of study*.

*The following courses cannot be used to fulfill the degree completion pathway requirements: COMP 1047, COMP 2057, COMP 2707, COMP 3057, COMP 3067 and COMP 3077. The topics in these courses are expected to be covered in courses taken for the CAAT programs.

Courses in categories (a) and (b) are used to calculate the major average.

Pathway 1: '2+2' College-to-University Degree Completion Pathway Option 2: for students from
Computer Systems Technician

Courses to complete at the University of Windsor (Total 20)
　　　(a) COMP 1000, COMP2057, COMP2067, **COMP 2087**, COMP 2097, **COMP 2547**, COMP 2707, COMP 3077, **COMP 3250**, COMP 4990 (6 credit course).
　　　(b) 2 additional CS courses at the 2xxx – 4xxx level**
　　　(c) ECON 1100 and STAT 2910
　　　(d) MKTG 1310, MSCI 1000, STEN 1000, MGMT 2400
　　　(e) 1 course from any area of study**.

**The following courses cannot be used to fulfill the degree completion pathway requirements: COMP 1047, COMP 3037, COMP 3057, and COMP 3067. The topics in these courses are expected to be covered in courses taken for the CAAT programs.

Courses in categories (a) and (b) are used to calculate the major average.

Pathway 2: College-to-University Degree Completion Pathway Option 1: for students from *Computer Systems Technology – Networking* **at St. Clair College**

Courses to complete at the University of Windsor (Total 15)
　　　(a) COMP 1000, COMP2067, **COMP 2087**, COMP 2097, **COMP 2547**, COMP 3077, **COMP 3250**, COMP 4990 (6 credit course).
　　　(b) ECON 1100 and STAT 2910
　　　(c) MKTG 1310, MSCI 1000, STEN 1000, MGMT 2400

Courses in category (a) are used to calculate the major average.

Pathway 2: College-to-University Degree Completion Pathway Option 2: for students from *Mobile Application Development* **at St. Clair College**

Courses to complete at the University of Windsor (Total 15)
　　　(a) COMP 1000, COMP2067, **COMP 2087**, COMP 2097, **COMP 2547**, **COMP 3037**, **COMP 3250**, COMP 4990 (6 credit course).
　　　(b) ECON 1100 and STAT 2910
　　　(c) MKTG 1310, MSCI 1000, STEN 1000, MGMT 2400

Courses in category (a) are used to calculate the major average.

Pathway 3: Direct Entry Pathway Degree Structure (with and without co-op)
Total courses:
40 (120 credits)

Degree requirements:

(a) COMP 1000, COMP 1047, COMP 2057, COMP2067, **COMP 2087** COMP 2097, **COMP 2547**, COMP 2707, **COMP 3037,** COMP 3057, **COMP 3067**, COMP 3077, **COMP 3250,** COMP 4990 (6 credit course).
(b) 2 additional CS courses at the 2xxx – 4xxx level
(c) ECON 1100 and STAT 2910
(d) 3 courses from Arts/Languages and Social Sciences (at least 1 from each area)
(e) MKTG 1310, MSCI 1000, STEN 1000, MGMT 2400 (**NOTE**: *These are the only business courses they can take without needing extra prereqs. Also, these will be needed for any other business courses they might want to take, e.g. for completing a minor in business.*)
(f) 14 other courses from any area of study
- Taking ACCT 1510, ACCT 2550, FINA 2700 will meet requirements for minor in Business.

Students in the co-op stream will also be required to complete COMP-2980, COMP-3980 and COMP-4970, which correspond to the required work term placements.

Courses in categories (a) and (b) are used to calculate the major average.

Description of thesis option (if applicable): N/A

Provide requirements for the Co-op/Experiential Learning Component AND a description of how the program requirements differ for students who complete the experiential learning option and those who opt not to (if applicable). *[If the co-op/experiential learning component is new (not part of the existing stand-alone program), a PDC Form B is required]***:**

At this time, this program will not have a direct entry (four-year) route. However, a four-year direct entry pathway is expected to be made available to prospective students in 2-3 years. This pathway will be available with and without co-op. As such, we have described the structure of co-op below.

Co-op: Student who are enrolled in the four-year degree completion pathway may choose to complete their Bachelor of IT with or without co-op. There is no difference in program requirements for students who complete co-op or not. Co-op gives students the opportunity to exercise their academic knowledge and skills and learn from work-integrated practice. It does not change the (academic) program requirements. We note that the co-op option is available *only* for students in Pathway 3. We do not expect any student admissions through this pathway until 2-3 years after the program starts.

Internship: Students may choose to complete an internship course (SCIE-3990) as an elective.

Explain how credit will be awarded for the experiential learning component (length of component, credit weighting, etc.):

Co-op: Students completing the Bachelor of IT must successfully complete at least three paid work experiences interspersed throughout the four-year Honours program. Student enrol in three co-op work term placements

where they are required to complete a minimum of 420 hours/term. Students register for each co-op work term and these are offered on a pass/fail basis.

Internship: Students will participate a 12-week work placement, complete bi-weekly assignments, and write a final internship report on their experience. This course is graded on a pass/fail basis where the pass level is set at 70%. To pass students must complete 108 hours (~9 hours/week over 12 weeks) at their placement, complete and submit the bi-weekly assignments and final internship report (detailed below), and receive a pass on their final evaluation from their employer. Students will earn three credits for competing this internship. Since there is no set class time, assignments are submitted via Blackboard. Specific details and weighting of the assignments can be seen in 'guidelines for experiential learning reports'.

Guidelines for experiential learning/co-op work term reports:

Co-op: The co-op work term reports will be administered by the Co-op office at the university level with detailed guidelines. As in the other co-op-enabled Computer Science programmes, the work term reports are categorized into junior, intermediate, and senior levels. Junior and Intermediate assignments are reflective in nature and are evaluated by the Co-op Education and Workplace Partnerships office. Senior level work term assignments are technical in nature and are evaluated by a faculty member of the School of Computer Science. All employers are requested to submit an on-line final evaluation of workplace performance at the end of the work term.

Internship:
As part of the course, students will submit the following documents to the course instructor. These documents are also considered assignments within the course:
1) Internship Learning Goals Document and Safety Checklist (worth 4%)
2) Mid-term Performance Appraisal (worth 15%)
3) Bi-Weekly Assignments (weekly time logs, along with a written reflection, the topic of which will be posted on Blackboard) (worth 4% each; 16% total)
4) Final Performance Appraisal (mid-term and final Employer Performance Appraisal) (worth 35%)
5) Final Reflective Report (meaningful and deep reflection on internship experience which will contain: job description, knowledge gained, skills learned, attitudes/values, learning outcomes) (worth 30%)

General length of experiential learning/co-op work term:

Co-op: Students enrol in three co-op work term placements where they are required to complete a minimum of 420 hours/term. The work term courses include: COMP-2980/COMP-3980/COMP-4970/COMP-4980.

Internship:

The internship is a 12-week work placement, where students complete 108 hours (~9 hours/week over 12 weeks) at their placement. Of the 9 hours/week students devote to their placement, six of these hours must be spent working at the placement, with their internship supervisor (or designate), or on placement related duties, and the remaining three hours can be spent on completing assignments, research, or preparations for the course and/or placement.
The internship course will be completed over one academic semester. Due to the experiential nature of the course, there is no set class time and all assignments are submitted via Blackboard.

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Is the completion of the experiential learning/co-op component a requirement of the program?

Students in the four-year degree completion pathway may choose to complete the Bachelor of IT with or without co-op. Co-op is not a requirement of the four-year program.

The internship is not a requirement of the program.

C.3.1   For Graduate Program ONLY (QAF sections 2.1.3 and 3; Senate Co-op Policy)

C.3.1.1   Normal Duration for Completion

Provide a clear rationale for program length that ensures that the program requirements can be reasonably completed within the proposed time period.

N/A

C.3.1.2   Program Research Requirements

For research-focused graduate programs, provide a clear indication of the nature and suitability of the major research requirements for completion of the degree.

N/A

C.3.1.3   Fields in a Graduate Program (optional)

Where fields are contemplated, provide the following information:
The master's program comprises the following fields: ...[list, as applicable]
The PhD program comprises the following fields: ...[list, as applicable]

N/A

C.3.2   For All Program Proposals

C.3.2.1   Standing Required for Continuation in Program

A cumulative average of 60% and a major average of 70%.

For Co-op: A cumulative average of 60% and a major average of 65%.

C.3.2.2   Standing Required for Graduation

A cumulative average of 60% and a major average of 70%.

For Co-op: A cumulative average of 60% and a major average of 70%.

C.3.2.3   Suggested Program Sequencing
        '2+2' College-to-University Degree Completion Pathway (2 options)
        College-to-University Degree Completion Pathway for 3-year CAAT Programs at St. Clair College
        4-year Direct Entry Pathway

Pathway 1: '2+2' College-to-University Degree Completion Pathway Option 1: for students from *Web Development and Internet Applications*

First Year: ten courses, including COMP 1000, COMP 2067, COMP 2087, COMP 2097, ECON 1100, MKTG 1310, MSCI 1000, STEN 1000.
Second Year: ten courses, including COMP 2547, COMP 3037, COMP 3250, COMP 4990, MGMT 2400, and STAT-2910

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Pathway 1: '2+2' College-to-University Degree Completion Pathway Option 2: for students from *Computer Systems Technician*

First Year: ten courses, including COMP 1000, COMP 2057, COMP 2067, COMP 2087, COMP 2097, COMP 2707, ECON
1100, MKTG 1310, MSCI 1000, STEN 1000.
Second Year: ten courses, including COMP 2547, COMP 3077, COMP 3250, COMP 4990, MGMT 2400, and STAT-2910

Pathway 2: College-to-University Degree Completion Pathway Option 1: for students from *Computer Systems Technology – Networking* (3-year CAAT program from SCC)

Tentative Course Sequence (may vary depending on course offering schedule)
First Year: ten courses COMP 1000, COMP 2067, COMP 2087, COMP 2097, COMP 4990A, ECON 1100, MKTG 1310, MSCI 1000, STEN 1000, and STAT-2910.
Second Year: five courses COMP 2547, COMP 3077, COMP 3250, COMP 4990B, MGMT 2400,

Pathway 2: College-to-University Degree Completion Pathway Option 2: for students from *Mobile Application Development* (3-year CAAT program from SCC)

Tentative Course Sequence (may vary depending on course offering schedule)
First Year: ten courses COMP 1000, COMP 2067, COMP 2087, COMP 2097, COMP 4990A, ECON 1100, MKTG 1310, MSCI 1000, STEN 1000, and STAT-2910.
Second Year: five courses, including COMP 2547, COMP 3037, COMP 3250, COMP 4990B, MGMT 2400

Pathway 3: Direct Entry Degree Structure

First Year: ten courses, including COMP 1000, COMP 1047, ECON 1100, MKTG 1310, MSCI 1000, STEN 1000.
Second Year: ten courses, including COMP 2057, COMP 2067, COMP 2087, COMP 2097, COMP 2547, COMP 2707, MGMT 2400, and STAT-2910
Third Year: ten courses, including COMP 3037, COMP 3057, COMP 3067, COMP 3077, COMP 3250.
Fourth Year: ten courses, including COMP 4990 (a 6.0 credit hour course).

C.4   LEARNING OUTCOMES (Degree Level Expectations) (QAF section 2.1.1, 2.1.3, and 2.1.6)

Program Learning Outcomes (Degree Level Expectations) *This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.* At the end of this program, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate A UWindsor graduate will have the ability to demonstrate:	COU-approved Undergraduate Degree Level Expectations

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A. Integrate and utilize concepts and techniques of computer science, including but not limited to: programming, computing concepts and data structures, database management, networks, and web development (also relevant to D). Explain the underlying technologies, including hardware and software and the development life cycle of computer systems, the Internet, social media and mobile applications. Construct and assess algorithms and programs in light of industry-standard programming practices. For Co-op: Solve computational problems in industry settings.	A. the acquisition, application and integration of knowledge	1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge
B. Solve real-world IT problems using top-down approaches and relevant research (also relevant to C, D, H and I). Research and review project-related business and management issues and policies.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)	1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits Knowledge
C. Design and construct well-structured, user-friendly, and accessible web sites and complex web-based data management systems (also relevant to H). Implement and maintain business applications that involve data retrieval using DBMS.	C. critical thinking and problem-solving skills	1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge
D. See items in sections A and B above.	D. literacy and numeracy skills	4. Communication Skills 5. Awareness of Limits of Knowledge
E. Adhere to ethical standards, privacy and intellectual property rights when developing solutions to programming problems. Respond to end-user needs by using best programming practices and creating program documentation and manuals.	E. responsible behaviour to self, others and society	5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity
F. Communicate technical subject matters to general audiences effectively, in written and/or oral form. For Co-op: Receive, incorporate, and act on feedback in professional settings.	F. interpersonal and communications skills	4. Communication Skills 6. Autonomy and Professional Capacity

G. Interact constructively with others to solve practical problems and design functional web sites.	G. teamwork, and personal and group leadership skills	4. Communication Skills 6. Autonomy and Professional Capacity
H. See items in sections B and C above.	H. creativity and aesthetic appreciation	2. Knowledge of Methodologies 3. Application of Knowledge 6. Autonomy and Professional Capacity
I. Revise and expand solutions of IT problems to include new hardware and software developments Identify trends, new techniques, and developments in information technology, social media applications, and mobile technology.	I. the ability and desire for continuous learning	6. Autonomy and Professional Capacity

C.4.1 Program Structure and Regulations Ensure Learning Outcomes Can be Met

Describe how the program's structure and regulations ensure that its specified learning outcomes can be met by successful students.

Through the completion of the Bachelor of IT, students will graduate with skills to integrate and utilize concepts and techniques of computer science, solve IT problems, and design accessible websites and documents.
The School of Computer Science will ensure that program requirements are being met and students are achieving the learning outcomes.

Course specific assessments will be used to evaluate students' mastery of the program learning outcomes. These assessments may include, though are not limited to: examinations (e.g., tests, quizzes, and midterms), assignments, and lab exercises. The structure of the degree program is scaffolded to ensure students can meet the learning outcomes as well as progress from 'introduction' to 'mastery'. There will also be many opportunities for students to practice and reinforce these skills through their elective courses.

Within Appendix F are the curriculum maps for the Bachelor of IT with and without co-op. Generally, within the first- and second-year courses, students will be introduced the key concepts that underly the program learning outcomes. These concepts are re-reintroduced and reinforced through continued development in multiple upper-year courses. Student mastery of the program learning outcomes in COMP-3057, COMP-3077, COMP-3250, COMP-4990, and COMP-4970 (for co-op) through repeated experiences with sufficient depth and breadth of both the theory and practice. Elective courses provide students will additional opportunities to introduce, reinforce, and potentially master the program learning outcomes. Regardless of the specific electives chosen, students will progress from 'introduction' to 'mastery' of the learning outcomes.

The Bachelor of IT 4-year direct entry pathway includes flexibility (through electives) that helps to facilitate the degree completion pathways. In most cases, the CAAT programs fulfill these elective courses. While the three recognized CAAT programs are different, they have certain common elements within their Ministry Program Standards that have been captured in the Bachelor of IT learning outcomes. Curriculum maps were not made for each degree completion pathway given that these pathways are minor derivatives of the four-year degree program (i.e., in cases where students do not complete a specific course at UWindsor this is because the content was covered through the CAAT program). The Table in Section D. Monitoring and Evaluation includes a detailed breakdown of how course specific assessments align with the program learning outcomes.

C.4.2 Impact of Experiential Learning Component on Attainment of Learning Outcomes

For programs with an experiential learning or co-op component: describe how the experiential learning/co-op component changes the emphasis or the means of achieving the intended learning outcomes for the program.

Experiential learning opportunities are intended to ensure students integrate learning from multiple on-campus opportunities in applied settings and that they master the program learning outcomes.

Only students admitted through Pathway 3 – Direct Entry will have a co-op option (discussed in detail in Section E). However, all students in the program have the option of taking the Science Internship course (SCIE 3990). This course is typically one semester in length and may be taken as an elective. The internships may or may not be paid. The course will provide students with hands-on work experience where they can demonstrate connections between their academic learning and the information technology industry. Emphasis will be placed on students' capacity to analyze, solve problems, and reflecting on outcomes in real time. There are some learning outcomes that are only relevant to students in the co-op program. Through their placements, students will achieve these specific learning outcomes.

C.4.3 Mode of Delivery (QAF section 2.1.5)

Demonstrate that the proposed modes of delivery are appropriate to meet the program learning outcomes. Discuss online vs. face-to-face (e.g., lecture, seminar, tutorial, lab) modes of delivery, as well as specialized approaches intended to facilitate the acquisition of specific skills, knowledge, and attitudes.

The program consists of required computer science courses as well as related business courses that will provide them with the required technical knowledge, and associated problem solving, communication and interpersonal skills. Courses primarily rely on face-to-face offerings and delivery may vary according to instructor. Approaches may include, though are not limited to: standard lectures with active learning techniques embedded (e.g., problem-based learning, case studies), tutorials, and laboratories. Generally, the computer science courses will consist of lectures, and will be augmented by hands-on training in a computer lab. Students will be given assignments and projects where they have to apply their knowledge to analyze a problem and develop appropriate solutions, together with other team members, and communicate the results.

Student Workload

Expected Workload per 3.0 Course Credit/Week	Average Time *per week* the Student is Expected to Devote to Each Component Over the Course of the Program
Lectures	3
Tutorials	0-1.5
Practical experience	
Service or experiential learning	Internship 9 hours/week for students who complete the internship course as an elective Co-operative Education work terms are 420 hours each with three terms required for graduation
Independent study	2-3
Reading and work for assessment, including meeting classmates for group work/project assignments (essays, papers, projects, laboratory work, etc.)	2-3
Studying for tests/examinations	1

Other: *[specify]*	

Compare the student workload for this program with other similar programs in the AAU:
All of the courses in the proposed degree program are comparable to those within the Honours Computer Science and the workload is consistent with the level of efforts required in any of the programs in Computer Science.

D. MONITORING AND EVALUATION (QAF section 2.1.6)

Describe and explain the appropriateness of the proposed methods of assessing student achievement given the intended learning outcomes and degree level expectations.

Student achievement in the program will be evaluated using course-embedded assessments that are linked to both course learning outcomes and program learning outcomes. Planned assessment activities are intended to focus on achievement of knowledge and skills in actuarial Science (e.g., mathematical and statistical theories, risk management, solving complex applied problems etc.). These assessments are designed to evaluate the development of learning throughout the program. Ultimately through course-based assessments students will have progressed from introduction to mastery of program learning outcomes. Key courses for mastery include COMP-3057, COMP-3077, COMP-3250, COMP-4990, and COMP-4970 (for co-op)

Curriculum mapping was undertaken to ensure assessments were sufficiently measuring students' ability to meet the intended learning outcomes. These planned assessment activities are intended to focus on achievement of knowledge, skills, and methods in economics. This is consistent with the stream learning outcomes. examinations (e.g., quizzes, midterms, final exams), assignments of various formats related to course content (e.g., data analysis, characterization of economic equilibrium and its stability, etc.) papers (e.g., research papers), and presentations. Following the completion of curriculum mapping, it is evident that assessments adequately align with, and measure students' achievement of the program learning outcomes (see Appendix F for copies of the curriculum maps).

For an overview of assessment methods that may be used to evaluate students' achievement of the learning outcomes please see Table 12. Alignment of assessments and learning outcomes. Here you will see the connections between course assessments and program learning outcomes

The academic advisor within the School of Computer Science will be responsible for overseeing that requirements are being met as well as how student progress through the program. As questions arise students can consult the academic advisor.

Table 12. Alignment of assessments & learning outcomes

Courses	Assessments*	Alignment with Program Learning Outcomes (PLO)^	Sequence
COMP-1000	Examinations, lab assignments	PLO1, PLO3, PLO14	Y1
COMP-1047	Examinations, assignments	PLO1, PLO2, PLO5, PLO15	Y1
COMP-2057	Examinations, assignments	PLO1, PLO2, PLO5, PLO7, PLO8, PLO10, PLO11, PLO13, PLO14, PLO15	Y2
COMP-2067	Examinations, assignments, practice question sets	PLO1, PLO2, PLO3, PLO5, PLO9, PLO10, PLO11	Y2
COMP-2087	Examinations, assignments, practice question sets	PLO1, PLO3, PLO5, PLO9, PLO10, PLO11	Y2

COMP-2097	Examinations, modules, discussion boards, group project	PLO2, PLO6, PLO9, PLO13, PLO15	Y2
COMP-2547	Examinations, lab assignments	PLO1, PLO2, PLO3, PLO10	Y2
COMP-2707	Examinations, lab assignments, project	PLO1, PLO2, PLO5, PLO7, PLO11, PLO13, PLO15	Y2
COMP-3037	Examinations, assignments, project	PLO1, PLO3, PLO5, PLO9, PLO10, PLO11, PLO14, PLO15	Y3
COMP-3057	Examinations, assignments	PLO9, PLO11	Y3
COMP-3067	Examinations, assignments, reports	PLO1, PLO8, PLO11	Y3
COMP-3077	Assignments, group projects	PLO1, PLO2, PLO3, PLO5, PLO6, PLO7, PLO8, PLO9, PLO10, PLO11, PLO13, PLO15	Y3
COMP-3250	Examinations, assignments, reports	PLO1, PLO3, PLO5, PLO9, PLO11, PLO14, PLO15	
COMP-4990	Assignments, project, reports, presentations	PLO1, PLO2, PLO3, PLO5, PLO6, PLO7, PLO8, PLO9, PLO10, PLO11, PLO13, PLO14, PLO15	
COMP-2980	Co-op term	PLO1, PLO3, PLO4, PLO5, PLO6, PLO8, PLO9, PLO10, PLO11, PLO13, PLO14, PLO5	Y2
COMP-3980	Co-op term	PLO1, PLO3, PLO4, PLO5, PLO6, PLO8, PLO9, PLO10, PLO11, PLO13, PLO14, PLO5	Y3
COMP-4970	Co-op term	PLO1, PLO3, PLO4, PLO5, PLO6, PLO8, PLO9, PLO10, PLO11, PLO13, PLO14, PLO5	Y4
ECON-1100	Examinations	PLO6	Y1
STAT-2910	Examinations	PLO1	Y2
MKTG-1310	Examinations, projects	PLO6, PLO11	Y1
MSCI-1000	Examinations, assignments	PLO6, PLO7, PLO8	Y1
STEN-1000	Examinations, team project	PLO6, PLO9, PLO11, PLO13	Y1
MGMT-2400	Examinations, assignments, team projects, team evaluation	PLO6, PLO13	Y2

Note: Students are required to take several elective courses. These were not included in the curriculum map or Table 12 given the variety of courses students are able to choose from. However, regardless of the elective chosen, they will provide additional opportunities for reinforcement and mastery of the stream learning outcomes.

*This is not a comprehensive list of assessments as there may be additional assessments used within courses that test students' achievement of certificate LOs.

^Learning outcome numbering aligns with the Bachelor of IT with co-op curriculum map

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D.1 Plan for Documenting And Demonstrating Student Performance Consistent with Learning Outcomes

Describe the plan for documenting and demonstrating student performance level and demonstrate its consistency with the stated learning outcomes and degree level expectations.

As the program evolves student success will be tracked through consultation, student feedback, and grade achievement data. Each course instructor will be responsible for determining and assigning grades in the courses assessment activities and for a student's overall course performance. Student performance will be documented by comparison with similar-level students in the same course or within other graduate programs within our department.

Records will be kept, with the help of the graduates, of the ability of the graduates to find relevant employment on completion of the degree. Other indicators of the quality of the program will be used including input, flow through, and output metrics (e.g., admission indicators, retention, GPA, etc.), post-graduation activities, employment status, satisfaction surveys, and employer satisfaction surveys.

E.   EXPERIENTIAL LEARNING/CO-OP COMPONENT ONLY (Senate Co-op Policy)
[Complete this section ONLY if the proposed program includes an experiential learning or co-op component involving paid or unpaid placements.]

E.1 Experiential Learning Component and Nature of Experience

Describe the experiential learning component and the nature of the experience (field placement, required professional practice, service-learning, internship, etc.)

At this time, this program will not have a 4-year direct entry route (Pathway 3). However, upon the availability of sufficient resources, a four-year direct entry pathway is expected to be made available to prospective students in 2-3 years. This pathway will be available with and without co-op. As such, we have described the structure of co- op below.

Co-op:
Students may choose to complete the Bachelor of IT with co-op. All co-op positions must be full-time, paid, related to the information technology or a similar field and approved by the University. Students who apply and are accepted into the Co-operative Education Program must successfully complete at least three paid work experiences interspersed throughout the four-year Honours program. The process of securing a co-op position is competitive.

Co-op students will apply for work opportunities as advertised by Co-operative Education and Workplace Partnerships using an Internet-based software program and employers will make interview and hiring decisions.

YEAR 1:
- Fall: Study
- Winter: Study
- Summ

er: Off YEAR 2:
- Fall: Study
- Winter: Study
- Summer:

Work YEAR 3:
- Fall: Study
- Winter: Work

- Summer:
Study
YEAR 4:
- Fall: Work
- Winter: Study
- Summer:
Work* YEAR 5:
- Fall: Study

Note: The fourth work term is optional

Each work term must be a minimum of 12 weeks at 35 hours a week (420 hours) or more ideally 16 weeks at 35 to 40 hrs/week.

Direct Admission High School Requirements:
- ENG4U, and 1 of MDM4U, MHF4U, or MCV4U. A minimum 70% average of math courses is also required.

Year 2 Application Requirements:
- Year 1 cumulative average of 60%, major average of 65% and no more than one outstanding grade below 50%.

Continuation Requirement :
- Stay in good standing. To maintain eligibility for the co-op option, students must be registered in a full-time course load (a minimum of four courses) during study semesters.
- Students will need to apply for admission to the co-op stream in fall of second year since the first work term is scheduled for the summer following second year. Students who wish to enter the co-op stream later than this point will need to follow the established processes for appealing for late admission and meet the established criteria.

Internship:
Please note, the internship course is not a degree requirement and students can choose to complete it as one of their electives. The internship course consists of a 12-week work placement within a related field. Students would complete a total of 108 hours at their placement (~9 hours/week for 12 weeks). Of the nine hours devoted to their placement, six of these hours must be spent working at the placement, with their internship supervisor (or designate), or on placement related duties, and the remaining three hours can be spent on completing assignments, research, or preparations for the course and/or placement.

E.2 Knowledge and Skills Brought to the Workplace
Provide a description of the knowledge and skills that students will be bringing to the workplace/placement based on the curriculum.

Students the Bachelor of IT will bring a range of skills to their co-op or internship placement. This includes technical and scientific knowledge as well as interpersonal skills (e.g., teamwork, collaboration, etc.). Through completing course courses in this program as well as progressing through the learning outcomes, students will gain an in-depth understanding on topics related to programming, information security, data analytics, cloud computing, mobile technology, website design, cyber ethics, web data management, business etc. This foundational knowledge will ensure students are well equipped to complete the tasks assigned by their co-op or internship supervisor. These experiences will ensure students have adequate technical skills which they can apply to the information technology (and related) industry. Many of courses in this program have research components, written assessments, oral assignments (e.g., research paper, presentation) and require students

to work collaboratively. Therefore, students will develop skills related to communication, critical thinking, problem solving, and the ability to collaborate with others. These skills can be directly translated and used during their co-op or internship placement.

E.3 Evidence of Availability of

Placements Co-op:

Currently co-op opportunities exist for computer science students. This is facilitated through the Co-operative Education and Workplace Partnerships office. They will assist with placement development. Co-op students will apply for work opportunities as advertised by Co-operative Education and Workplace Partnerships using an Internet- based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Co-operative Education and Workplace Partnerships office.

We anticipate there being a number of available placements given the well-established co-op programs in computer science and business.

Types of suitable positions include: Programmer, Web Developer, Database Administrator, IT Support/Helpdesk

Internship:

The co-op option is not available for students in the degree-completion pathways (Pathways 1&2). However, the Faculty of Science offers a 12-week internship course (SCIE-3990) that all BIT students can take as an elective. The internship course is not required and therefore we anticipate requiring only a small number of placements each year. The Faculty of Science has an experiential learning specialist (Ms. Michelle Bondy) who will help develop internship opportunities for students. Ms. Michelle Bondy teaches (SCIE-3990) and will facilitate and coordinate the development of placements for students in BIT. This will include liaising with employers and industry representatives to coordinate placements. Previous students in computer science have completed internship placements at large tech companies such as Google and IBM, various tech startups such as FetchMoto, conducting research with a professor, and working with Public Affairs on web development. Through other experiential learning courses within Science (i.e., Service Learning) students mentored local FIRST Robotic Teams, organized the Canadian Undergraduate Computer Science Conference in 2018, and multiple community organizations to develop apps/websites. As such, these represent possible companies and organizations where students can complete internships given the pre-existing relationship with the Faculty of Science.

E.4 Mechanism for Supervision of Placements (QAF section 2.1.9)

Describe the mechanism that will be established for the supervision of experiential learning placements.

Co-op: During each work term, a Coordinator from Co-op Education and Workplace Partnerships is responsible for coaching and guiding the student. The Coordinator will reach out to the student and the employer either by e-mail, phone or in-person to complete an evaluation approximately mid-way through the four-month work term. In addition, students must complete assignments during each placement. Junior and Intermediate assignments are reflective in nature and are evaluated by the Co-op Education and Workplace Partnerships office. Senior level work term assignments are technical in nature and are evaluated by a faculty member of the School of Computer Science. All employers are requested to submit an on-line final evaluation of workplace performance at the end of the work term.

Internships:

The internship course instructor will supervise students' progression through the course and attainment of

course learning outcomes. Placement supervisors will be established and documented in the internship application form. Placement supervisors will complete a safety orientation checklist with students prior to commencing the internship. Students are required to create learning goals in collaboration with their placement supervisor. These will be documented as part of the course requirements. Weekly time logs will be maintained by the student and confirmed by the placement supervisor. There will be a mid-term and final performance appraisal completed by the supervisor and sent to the course instructor.

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BIT DEGREE CURRICULUM MAP

BIT (without Co-op)

Courses to Program Outcomes: Bachelor of Information Technology (all courses)

Course	A D PLO 1	A PLO 2	A PLO 3	B C D H I PLO 4	B PLO 5	C H PLO 6	C PLO 7	E PLO 8	E PLO 9	F PLO 10	G PLO 11	I PLO 12	I PLO 13
COMP-1000	I		I									I	
COMP-1047	I	I		I									I
COMP-2057	I	I		I		I	I		I	I	I	I	I
COMP-2067	I	I	I	I				I	I	I			
COMP-2087	R		R	R				I	R	I			
COMP-2097		R			I			I			I		I
COMP-2547	R	R	R						R				
COMP-2707	R	R		R		R				R	R		R
COMP-3037	R		R	R				R	R	R		R	R
COMP-3057								M		R			
COMP-3067	R					R				R			
COMP-3077	M	M	M	R	R	M	M	M	M	R	R		R
COMP-3250	M		M	M				R		R		R	R
COMP-4990	M	M	M	M	M	M	M	M	M	M	M	M	M
ECON-1100					I								
STAT-2910	I												
MKTG-1310					I					I			
MSCI-1000					I	I	I						
STEN-1000					I			I		I	I		
MGMT-2400					I						I		

Legends

Courses

COMP-1000	Key Concepts in Computer Science
COMP-1047	Computer Concepts for End-Users
COMP-2057	Introduction to the Internet
COMP-2067	Programming for Beginners
COMP-2087	Programming for Beginners II
COMP-2097	Social Media and Mobile Technology for End Users
COMP-2547	Applied Algorithms and Data Structures
COMP-2707	Advanced Web Design, Construction, and Deployment
COMP-3037	Information Security for IT

COMP-3057	Cyber-Ethics	
COMP-3067	Applied Databases	
COMP-3077	Web-Based Data Management	
COMP-3250	Data Analytics I	
COMP-4990	Project Management: Techniques and Tools	
ECON-1100	Introduction to Economics I	
STAT-2910	Statistics for the Sciences	
MKTG-1310	Principles of Marketing	
MSCI-1000	Introduction to Business Data Analysis using Spreadsheets	
STEN-1000	Introduction to Business	
MGMT-2400	Management and Organizational Life	

Program Learning Outcomes (PLOs)

PLO 1	Integrate and utilize concepts and techniques of computer science, including but not limited to: programming, computing concepts and data structures, database management, networks, and web development (also relevant to D).
PLO 2	Explain the underlying technologies, including hardware and software and the development life cycle of computer systems, the Internet, social media and mobile applications.
PLO 3	Construct and assess algorithms and programs in light of industry-standard programming practices.
PLO 4	Solve real-world IT problems using top-down approaches and relevant research (also relevant to C, D, H and I).
PLO 5	Research and review project-related business and management issues and policies.
PLO 6	Design and construct well-structured, user-friendly, and accessible web sites and complex web-based data management systems (also relevant to H).
PLO 7	Implement and maintain business applications that involve data retrieval using DBMS.
PLO 8	Adhere to ethical standards, privacy and intellectual property rights when developing solutions to programming problems.
PLO 9	Respond to end-user needs by using best programming practices and creating program documentation and manuals.
PLO 10	Communicate technical subject matters to general audiences effectively, in written and/or oral form.
PLO 11	Interact constructively with others to solve practical problems and design functional web sites.
PLO 12	Revise and expand solutions of IT problems to include new hardware and software developments
PLO 13	Identify trends, new techniques, and developments in information technology, social media applications, and mobile technology.

Cell Values

I	Introduction
R	Reinforcement
M	Mastery
^{A}	(superscript) assessments indicated
^{H}	(superscript) high-impact assessments indicated

University Graduate Attributes

A	the acquisition, application and integration of knowledge
B	research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C	critical thinking and problem-solving skills
D	literacy and numeracy skills
E	responsible behaviour to self, others and society
F	interpersonal and communications skills
G	teamwork, and personal and group leadership skills
H	creativity and aesthetic appreciation
I	the ability and desire for continuous learning

BIT (with Co-op)

Courses to Program Outcomes: Bachelor of Information Technology with Co-op (all courses)

Course	A D PLO 1	A PLO 2	A PLO 3	A PLO 4	B C D H I PLO 5	B PLO 6	C H PLO 7	C PLO 8	E PLO 9	E PLO 10	F PLO 11	F PLO 12	G PLO 13	I PLO 14	I PLO 15
COMP-1000	I		I											I	
COMP-1047	I	I			I										I
COMP-2057	I	I			I		I	I		I	I		I	I	I
COMP-2067	I	I	I		I				I	I	I				
COMP-2087	R		R		R				I	R	I				
COMP-2097		R				I			I				I		I
COMP-2547	R	R	R							R					
COMP-2707	R	R			R		R				R		R		R
COMP-3037	R		R		R			R	R	R				R	R
COMP-3057								M		R					
COMP-3067	R						R			R					
COMP-3077	M	M	M		R	R	M	M	M	M	R		R		R
COMP-3250	M		M		M				R		R			R	R
COMP-4990	M	M	M		M	M	M	M	M	M	M		M	M	M
COMP-2980	I		I	I	I	I		I	I	I	I	I	I	I	
COMP-3980	R		R	R	R			R	R	R	R	R	R	I	
COMP-4970	M		M	M	M			M	M	M	M	M	M	M	R
ECON-1100					I										
STAT-2910	I														
MKTG-1310						I						I			
MSCI-1000						I	I	I							
STEN-1000						I			I		I		I		
MGMT-2400						I							I		

Legends

Courses

COMP-1000	Key Concepts in Computer Science
COMP-1047	Computer Concepts for End-Users
COMP-2057	Introduction to the Internet
COMP-2067	Programming for Beginners
COMP-2087	Programming for Beginners II
COMP-2097	Social Media and Mobile Technology for End Users

COMP-2547	Applied Algorithms and Data Structures
COMP-2707	Advanced Web Design, Construction, and Deployment
COMP-3037	Information Security for IT
COMP-3057	Cyber-Ethics
COMP-3067	Applied Databases
COMP-3077	Web-Based Data Management
COMP-3250	Data Analytics I
COMP-4990	Project Management: Techniques and Tools
COMP-2980	Co-op Work Term I
COMP-3980	Co-op Work Term II
COMP-4970	Co-op Work Term III
ECON-1100	Introduction to Economics I
STAT-2910	Statistics for the Sciences
MKTG-1310	Principles of Marketing
MSCI-1000	Introduction to Business Data Analysis using Spreadsheets
STEN-1000	Introduction to Business
MGMT-2400	Management and Organizational Life

Program Learning Outcomes (PLOs)

PLO 1	Integrate and utilize concepts and techniques of computer science, including but not limited to: programming, computing concepts and data structures, database management, networks, and web development
PLO 2	Explain the underlying technologies, including hardware and software and the development life cycle of computer systems, the Internet, social media and mobile applications.
PLO 3	Construct and assess algorithms and programs in light of industry-standard programming practices.
PLO 4	For Co-op: Solve computational problems in industry settings.
PLO 5	Solve real-world IT problems using top-down approaches and relevant research
PLO 6	Research and review project-related business and management issues and policies.
PLO 7	Design and construct well-structured, user-friendly, and accessible web sites and complex web-based data management systems
PLO 8	Implement and maintain business applications that involve data retrieval using DBMS.
PLO 9	Adhere to ethical standards, privacy and intellectual property rights when developing solutions to programming problems.
PLO 10	Respond to end-user needs by using best programming practices and creating program documentation and manuals.
PLO 11	Communicate technical subject matters to general audiences effectively, in written and/or oral form.
PLO 12	For Co-op: Receive, incorporate, and act on feedback in professional settings.
PLO 13	Interact constructively with others to solve practical problems and design functional web sites.
PLO 14	Revise and expand solutions of IT problems to include new hardware and software developments
PLO 15	Identify trends, new techniques, and developments in information technology, social media applications, and mobile technology.

Cell Values

I	Introduction
R	Reinforcement
M	Mastery
$\blacksquare^A$	(superscript) assessments indicated
$\blacksquare^H$	(superscript) high-impact assessments indicated

ST. CLAIR COLLEGE
ZEKELMAN
SCHOOL OF BUSINESS
& INFORMATION TECHNOLOGY

November 5, 2020

401 Sunset Ave.,
Windsor, Ontario
N9B 3P4

Attention: Dr. Ziad Kobti
Director, School of Computer Science

Dear Ziad,

Proposed Honours Bachelor of Applied Information Technology (with coop option)

Further to our discussion on the University of Windsor's proposed new Bachelor of Applied Information Technology (with coop option) we at the Zekelman School of Business and Information Technology are very much in favour of the launch of this degree. We look forward to sending our students from a number of programs to complete their degree in this program. These students would be coming from our Web Development and Internet Applications Diploma program, Mobile Applications Development Advanced Diploma program and our Computer Systems Technician – Networking Diploma program.

The prospect of doing two years at St. Clair College and two years at the University of Windsor resulting in a four year Honours Bachelor of Applied Information Technology degree will be a attractive pathway to many students.

We look forward to recommending this new degree to our students.

Yours Truly,

Jim Marsh, L.L. B., MBA, MA
Dean, Zekelman School of Business and Information Technology

2000 Talbot Road W. | Windsor, ON N9A 6S4 | 519-972-2727 | **stclaircollege.ca**

PROGRAM DEVELOPMENT COMMITTEE
PROPOSAL BRIEF FOR NEW PROGRAMS
FORM A

Hiram Walker & Sons Limited
Pernod Ricard

2072 Riverside Drive
Windsor, Ontario
N8Y 4S5

To Whom It May Concern:

Hiram Walker & Sons Limited and Pernod Ricard has worked closely and in partnership with the University of Windsor for decades to provide a talent pipeline for our diverse range of hiring needs. Applied Computing and IT support is an area of growth in every operation including at Pernod and I am writing in support of the newly proposed Bachelor of Applied Information Technology program.

Hiram Walker & Sons Limited and Pernod Ricard look to recruit current and post-graduate students with both Python and full-stack web development technology skillsets including real-life experience with RESTful APIs, microservices, and Cloud architecture. Additionally, we require students who are well-versed in data management and data warehousing (coming in with practical and intermediate-level SQL/ETL experience). We require students who have a broad range of solution-focused skills in the IT realm. This program appears to build that foundation and we would be excited to see outcomes from students who were interested in applying to our roles with this background.

We look forward to a continued partnership with the University of Windsor for years to come.

If you have any questions please don't hesitate to reach out.

Regards,

Dante Pecile
IT Director, Solutions Architecture & BI
Pernod Ricard North America
dante.pecile@pernod-ricard.com
519-567-6836

PROGRAM DEVELOPMENT COMMITTEE
PROPOSAL BRIEF FOR NEW PROGRAMS
FORM A

GEOTAB.

To Whom It May Concern:

Geotab has worked closely and in partnership with the University of Windsor to provide a talent pipeline for our diverse range of hiring needs ranging from Business to technical positions in IT, Engineering and Software. Applied Computing and IT support is an area of growth in every operation including, especially in a growing technology company such as Geotab and I am writing in support of the newly proposed Bachelor of Applied Information Technology program, as we have had major success working with the University of Windsor with other Masters programs.

Geotab looks to recruit post-graduate students with all sorts of technology skill sets which include but are not limited to Python, Java, C#, SQL, Javascript and more. We require students who have a broad range of solution-focused skills, and smart people with a keen passion for technology. This program appears to build that foundation and everything that would support the growth that students need in order to get their careers started, but also one that would be incredibly beneficial form employers to take on great talent, and we are in full support of this program.

We look forward to a continued partnership with the University of Windsor for years to come.

WE·tech
ALLIANCE

JOYCE ENTREPRENEURSHIP CENTRE
2455 WYANDOTTE ST. W. | WINDSOR, ON N9B 0C1
LOCATED INSIDE EPICENTRE, 2ND FLOOR

To:

Date: February 18, 2021

Re: Letter of Support: Bachelor of Applied IT (BAIT) Honours Program (University of Windsor Proposal)

To Whom It May Concern,

As President and CEO of WEtech Alliance in Windsor, Ontario, I am writing to confirm our support of the University of Windsor's School of Computer Science Bachelor of Applied IT (BAIT) Honours Program.

Data and information are the primary assets in all organizations. The new BAIT program will provide graduates with extensive programming experience in high-level languages such as Python as well as full-stack web development technologies. Graduates of this program will develop skills and knowledge in the latest business data analytics strategies, database management and fundamental principles of networking and security.

With an exponentially growing global and local community around data science, machine learning, AI, web development and more, this program will provide the needed language skills to open graduates up to in-demand career opportunities.

WEtech Alliance continues to value our partnership with University of Windsor's School of Computer Science, and supports their proposal to build a world-class and in-demand academic program to support and power not only our local, but national tech community.

Sincerely,

Warmest Regards,

Yvonne Pilon
President and CEO, WEtech Alliance
(P) 519-997-2857
(C) 519-819-8251
(E) ypilon@wetech-alliance.com

WETECH-ALLIANCE.COM

CREATE • INNOVATE • *ACCELERATE*
WE CAN HELP

PROGRAM DEVELOPMENT COMMITTEE
PROPOSAL BRIEF FOR NEW PROGRAMS
FORM A

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The following appendices are filed in the University Secretariat:
Appendix A: Budget Summary Sheet
Appendix B: Faculty CVs

*5.1.2:   **Master of Engineering Management Program – Clarification**

Item for: **Information**

Forwarded by: **Program Development Committee**

Background:
In May 2022 a new course was added to the Master of Engineering Management program.

However, at that time it was not clear in the proposal that the new course GENG-8060 would be replacing ELEC-8900 (Section 40) Technology Entrepreneurship as a non-core course elective in the Master of Engineering Management Program, though it was the intent on closer review. This has been rectified.

Master of Engineering Management Program
[…]
Non-core Courses
Students select 1 non-core course from each of the following course groups: C. Non-core Engineering Courses
Choose One:
INDE-8390. Work Organization: Analysis and Design
INDE-8420. Supply Chain Management and Logistics
ENVE-8500. Sustainability: Principles and Practice
ELEC-8900 (2). Electronic Commerce
~~ELEC-8900 (40). Technology Entrepreneurship~~ **GENG 8060: Strategic Entrepreneurial Management**

University of Windsor
Senate

*5.1.3a: **Computer Science – Minor Program Changes (Form C)**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the degree requirements for the Bachelor of Computer Science (Honours), Bachelor of Computer Science (Honours Applied Computing) and, Bachelor of Science (Honours Computer Science with Software Engineering Specialization)be changed in accordance with the program/course change forms.^

^Subject to approval of the expenditures required.

Rationale/Approvals:
- The changes have been approved by the Department of of Computer Science Council, SPDC (as delegated by the Faculty of Science Coordinating Council), and the Program Development Committee.
- Supporting documentation for the proposed changes can be accessed by contacting the University Secretariat at ext. 3325, or through the October 21, 2022 Combined Program Development Committee PDF meeting file posted on the PDC website at: http://www.uwindsor.ca/secretariat/377/pdc-agendas-and-minutes. To access this item, go to item 5.2.

University of Windsor
Senate

*5.3.1:   **Senate Standing Committee Membership**

Item for: **Approval**

Forwarded by: **Senate Governance Committee**

MOTION: That the following Senate Standing Committee memberships be approved:

       Dr. Mitra Mirhassani, Faculty of Engineering, Representative-at-Large – Senate Governance Committee

University of Windsor
Senate

*5.3.2:   **Proposed Revisions to Bylaw 18 – Schedule A**

Item for: **Approval**

Forwarded by: **Senate Governance Committee**

MOTION: That proposed revisions to Bylaw 18, Schedule A, be approved.

Proposed Revisions
[revisions are in track changes]

Bylaw 18: Vice-President, Equity, Diversity and Inclusion – Schedule A – Duties and Responsibilities

Subject to determination by the Board and in consultation with the President, the Vice-President, Equity, Diversity and Inclusion shall:
- […]
- take primary responsibility for leading policy development on human resource matters, and for implementing new, or maintaining current, University policy related to human resources.
- provide oversight of the Office of Human Resources including employee engagement, staff collective bargaining, professional development, staff compensation and benefits, and staff recruitment and retention.

Rationale:
- Changes reflect senior administrative/organizational structure changes.

University of Windsor
Senate

5.3.3:   **Proposed Revisions to Bylaw 31 and Student Code of Conduct**

Item for: **Approval**

Forwarded by: **Senate Governance Committee**

MOTION 1: That the proposed revisions to the Student Code of Conduct be approved.

Student Code of Conduct - Proposed Revisions
[revisions are in track changes]

2. Application and Scope
This code applies to all students and student groups, including any person who is admitted to, or enrolled at, the University of Windsor in any capacity, full-time or part-time, pursuing credit or non-credit studies. This code applies regardless of whether the individual is currently registered in courses or is currently a candidate for a degree, diploma or certificate, including between semesters.

This code applies to:
(a)   conduct that occurs on the premises of the University or its federated and affiliated institutions; and
(b)   conduct that occurs off-campus and/or a virtual setting, when
       i.   the student is conducting University activities and/or the student is representing, or presenting themself as a representative of, the University or a student group/organization;
       ii. the student's actions or behaviour have, or might reasonably be seen to have, a negative impact on the University or on the rights of a member of the University community to use and enjoy the University's learning and working environments.
       iii. the student's action gives them an unearned advantage in matters affecting their academic standing.

*the policy also will be revised to ensure it is gender neutral.

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| Deleted: him/her |

MOTION 2: That the proposed revisions to Bylaw 31 be approved.

Bylaw 31 - Proposed Revisions
[revisions are in track changes]

1.2 This bylaw applies to:
       ▪ all current students, including any person who is admitted to, or enrolled at, the University of Windsor in any capacity, full-time or part-time, pursuing credit or non-credit; except for students registered in the Faculty of Law (including students registered in dual degree or joint programs with the Faculty of Law) or students registered in the Schulich School of Medicine and Dentistry.
       ▪ individuals (current and former students) who are alleged to have committed an act of misconduct while they were registered as students; and
       ▪ students and applicants who are alleged to have committed an act of misconduct to obtain admission, readmission or registration.

Page 1 of 2

Adjudicator means the Dean or designate of the Dean who will normally act to investigate and adjudicate academic misconduct matters occurring in courses offered by their Faculty. In the case of Continuing Education studies, the Executive Director of Continuing Education shall act as adjudicator. Where the instructor reporting the misconduct is also the adjudicator who would normally be reviewing the matter, the Dean shall act in the adjudicator's place or designate another to act as adjudicator under this bylaw on that particular matter. In the event of the absence or inability to act of the adjudicator, the Dean shall act in the adjudicator's place or designate another to act as adjudicator under this bylaw. If the Dean or the Executive Director of Continuing Education is the instructor initiating the complaint, the Provost shall act as, or designate, an adjudicator. In the case of academic misconduct involving graduate students, the Dean of the Faculty of Graduate Studies or designate of the Dean of the Faculty of Graduate Studies will normally act to investigate and adjudicate such matters.

*the bylaw also will be revised to ensure it is gender neutral.

Rationale:
- The revisions to the Student Code of Conduct and Bylaw 31 provide clarity on the application and scope (explicitly noting the new reality of virtual classrooms, meetings, conferences, *etc*.), as well as provide consistency of processes for addressing student academic and non-academic misconduct matters, including ensuring that individuals taking courses through Continuing Education are held to the same conduct expectations and adjudication procedures as students pursuing undergraduate, graduate, or professional studies. As courses offered through Continuing Education are not governed by Senate and do not fall within a Faculty, the equivalent adjudicator is the Executive Director of Continuing Education.
- The revisions to the Code as relate to non-academic misconduct matters have been approved by the Board.

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Page 2 of 2

University of Windsor
Senate

5.3.4: **Bylaw 2 Revision – Virtual Attendance Provisions for Committees of Senate**

Item for: **Approval**

Forwarded by: **Senate Governance Committee**

MOTION: **That the paragraphs relating to attendance for meetings of Committees of Senate, in Section I of Bylaw 2, be suspended and replaced with the following through to August 31, 2023:**
- **Meetings of the following Committees of Senate shall be held 100% virtually, unless there is unanimous agreement to hold a meeting or meetings 100% in-person: Academic Policy Committee; Program Development Committee; Senate Governance Committee; Senate Student Caucus; AAU/Faculty Councils; Faculty Coordinating Councils; and Faculty Assemblies.**
- **Meetings of the following Committees of Senate shall be held 100% in-person, unless there is unanimous agreement to hold a meeting or meetings 100% virtually: Search Committees; UCAPT; Appointments Committees; and RTP Committees.**
- **Members are exempted from required in-person meeting attendance where they have an approved registered accommodation through Human Resources or Student Accessibility Services to attend meetings virtually.**
- **Members participating virtually should, as possible, keep their video camera on for the entirety of the meeting to confirm presence.**

Rationale:
- Bylaw 2 provides for virtual meeting attendance by videoconferencing for Committees of Senate (those created by bylaw of Senate). These are: Academic Policy Committee; Program Development Committee; Senate Governance Committee; Senate Student Caucus; AAU/Faculty Councils, Faculty Coordinating Councils, and Faculty Assemblies; Search Committees; UCAPT; Appointments Committees; and RTP Committees.
- At the October 2022 Senate meeting, there was significant discussion around the proposed 10% restriction for virtual attendance for meetings of Senate Committees. Overall, members suggested greater flexibility for virtual committee meeting attendance than what the initial 10% proposal provided. It was also suggested that any provisions be subject to a trial period.
- A survey of Ontario universities revealed that there is no consistent approach to this and no perfect solution.
- The survey of Ontario universities also confirmed that hybrid meetings are more complex, require a minimum of 2-4 staff to run effectively depending on size of Committee, and raise logistical, implementation, and technical complications.
- SGC noted that the complexities and logistics involved in hybrid meetings make them less of a solution, not to mention the fact that there are limited facilities on campus with the required hybrid/hyflex technology to run hybrid meetings.
- The past two years have shown that, from an operational and technical standpoint, 100% in-person and 100% virtual committee meetings are fairly easy to manage.
- While it was noted that committee members should be held to the same standard as students, who are required to attend classes in-person in many cases, this proposal is being brought forward as a pilot, to be reassessed at the end of the academic year.

- There is differentiation in the proposal with the committees associated with personnel matters due to their conducting confidential matters and the importance of face-to-face interactions when interviewing (at least by the 2nd interview stage).
- Good governance would be to have committee members participating virtually keep their cameras on at all times to confirm member presence.
- This proposal relates to Committees of Senate only. Under Bylaw 2, Senate meets in-person in room 203 Toldo.

University of Windsor
Senate

5.3.5:   **External Reviewers' Report on the Operational Review of the Office of the Registrar**

Item for: **Information**

Forwarded by: **Senate Governance Committee**

In Winter 2022, three external reviewers were engaged to conduct an operational review of the Office of the Registrar was initiated, with the goal of providing perspective on operational practices and identifying opportunities to improve business processes, leverage technology, reimagine service delivery, and better understand the resources required to achieve goals and support the team in the Registrar's Office. The operational review will have human resources, financial, and staff collective bargaining impacts.

Although the review did not fall under Senate's academic oversight role, it was agreed that Senate feedback on the review would be provided through a SGC ad hoc advisory subcommittee comprising of Senators and SGC members, in light of the role of the Office of the Registrar in the operations of the University. It was noted that, as with all service units (ITS, Finance, Academic Advising, etc.), concerns and issues relating to the operations of the unit impacts the University's ability to deliver on its mission. The SGC ad hoc advisory subcommittee also provided oversight in terms of due diligence of process.

Following significant campus consultation, including a meeting between the external reviewers and the SGC ad hoc advisory subcommittee and feedback from more than 100 staff, faculty, and students from across the University, the report was completed and included 21 recommendations in priority order.

Excerpt from the University of Windsor External Review of the Registrar's Office (pp.4-5 & 9-11)

Key Recommendations
Organized into High to Low and listed in rank order

High Priorities
1. Reporting structure should be re-aligned and the Registrar should report directly to the Provost.
2. Invest in third-party support to finalize PeopleSoft UWin implementation.
3. Provide resources to support additional and ongoing training for staff on Campus Solutions competencies.
4. Provide resources to support team building/coaching initiatives with the Recruitment and Admissions units.
5. Address proliferation of leadership in acting/interim roles in the OTR.
6. Increase staffing levels in under-resourced areas.
7. Review and reconsider current customer ticketing service model.
8. Invest in the creation of a Data Strategy for the campus to create better business intelligence to inform decision making.
9. Consider moving the division of workload to, by Faculty, rather than alphabetical in Admissions and Records.

Medium-High Priority
10. Create/update business process documentation.
11. Consider separation of admissions and records work.

Medium Priorities
12. Consider investing in outside change management support to finalize InfoSilem implementation.

13. Consider LEAN process review/staffing in Admissions.
14. Improve morale through resources, professional development as well as proper staffing, technology and tools.
15. Address physical space issues.

Medium-Low Priority
16. Consider implementation of 'Service Hub/One Stop'.

Low Priorities
17. Consider moving Student Awards and Financial Aid to the OTR.
18. Develop OTR communications and outreach strategy.
19. Address course selection confusion by developing training materials/videos.
20. Address disconnects and the lack of communication with Academic Advising.
21. Clarify confusion regarding Activity Based Budgeting and impacts on OTR.

While most to the recommendations must await the hiring of the new Registrar, the first recommendation which would have the Registrar revert back to reporting to the Provost has been adopted and publicly announced in the October 5, 2022 issue of the Daily News, in order to move ahead with the job profile and hiring process.

The external reviewers' report was circulated to Senate following its last meeting and is attached for information.

University of Windsor

External Review of the Registrar's Office

Spring 2022

Confidential – not to be shared

University of Windsor

External Review of the Registrar's Office

EXECUTIVE SUMMARY

In March 2022, Dr. Patti Weir, the Provost and Vice President Academic requested an external review of the Office of the Registrar to help inform the search for a new University Registrar and to identify opportunities to improve business processes, leverage technology, reimagine service delivery and understand the resources needed to achieve goals and support the team in the Registrar's Office.

In partnership with the AVP Enrolment Management the Provost wished to obtain feedback, recommendations and a roadmap to ensure the future success of the Office of the University Registrar (OTR) and the University. The review team was asked to review the structure of the office, business processes, and the tools & technology utilized by the OTR and was guided by the Terms of Reference (Appendix 1).

To support the review, three current University Registrar's from across Ontario were invited to participate.

Angelique Saweczko, University Registrar, University of Toronto
University Registrar at the University of Toronto. Angelique brings over two decades of post-secondary experience. Prior, she was the University Registrar at the University of Calgary, Thompson Rivers University and has worked at the University of Regina and York University. Ang holds a Masters of Education in Postsecondary Studies from Memorial University of Newfoundland.

Geraldine Jones, Registrar and AVP, Enrolment, Brock University
University Registrar and AVP, Enrolment at Brock University. Geraldine has led transformative change in admissions, client service/one-stop, grad studies.

Ray Darling, University Registrar, University of Guelph
University Registrar at the University of Guelph. Ray has been in this position since 2017. Prior, he was University Registrar at the University of Waterloo and Wilfrid Laurier University. Darling holds a Master of Arts in Political Science from the University of Guelph.

Participants were asked to provide feedback on the structure of the office, business process, tools and technology in the context of four questions:
1. What is working well in the Office of the Registrar right now?
2. What do you feel are best practices in registrarial functions?
3. What aspects of the Office of the Registrar could be improved?
4. What would be the ideal characteristics of the new Registrar?

2

Interviews were conducted between March 1, 2022 and May 4, 2022. There was a pause in the review between March 8 and April 18 as the university established an ad-hoc advisory group on the external engagement of the UTR through the Senate Governance committee to provide oversight in terms of due diligence of process and accountability.

Between March 1 and May 4, over 28 interviews were conducted via MS Teams involving more than 100 staff, faculty and students from across the university. A detailed list of stakeholders interviewed is provided in Appendix 2. In addition to interviews, a number of documents were provided to the review team to provide additional context for the review including a self-study of the registrar's office provided by the interim registrar, the IT strategy, various policies and procedure documents, the strategic enrolment management plan and the strategic mandate agreement to name a few. The full listing of supporting documents is provided in Appendix 3.

Strengths

There is a tremendous amount of respect for the work in the Office of the Registrar (OTR) across the University of Windsor campus. Many stakeholders interviewed have a good understanding of aspects of the work conducted in the OTR and view the staff as friendly, hard-working and very knowledgeable. There is a strong sense of commitment by the staff to the OTR and the University of Windsor. Staff are known for taking pride in their work, and their desire to improve support for students.

It was highlighted that due to their expertise and collaborative nature, the OTR is often invited to provide input due to the value they add to the discussion.

The interim University Registrar, Lorraine was specifically mentioned on a number of occasions. Her dedication, support, efficiency and tireless efforts have been greatly appreciated by the campus community. She has made herself available for her team and the broader campus community to provide support, find creative solutions or to quickly address an issue. Several stakeholders highlighted that Lorraine is an incredible registrar and has created a more positive environment in the OTR.

Specific projects that positively impacted the campus community that were mentioned included:

- The OTR quickly and successfully switch to online/remote learning;
- There was good communication to keep students informed of what's going on and how things are working;
- The new waitlisting system is working well;
- There is good communication both to students and campus stakeholders;
- Transfer credit processes: shift to online workflows have made improvements;
- Move to online and self-service options for students has been positive;
- QR codes that help students access OTR staff.

While there were many strengths identified, the focus of the external review was to suggest opportunities for improvement and to highlight ideal characteristics for the registrar role to support the University of Windsor with the search for a new University Registrar. These are presented in the following sections.

3

Overarching Observations

1. Organizational structure and reporting lines
2. Organizational structure for the Office of the Registrar
3. Office morale and workload
4. Systems and business processes
5. Scheduling
6. Data governance and reporting
7. Physical space
8. Communications

Key Recommendations
Organized into High to Low and listed in rank order

High Priorities
1. Reporting structure should be re-aligned and the Registrar should report directly to the Provost.
2. Invest in third-party support to finalize PeopleSoft UWin implementation.
3. Provide resources to support additional and ongoing training for staff on Campus Solutions competencies.
4. Provide resources to support team building/coaching initiatives with the Recruitment and Admissions units.
5. Address proliferation of leadership in acting/interim roles in the OTR.
6. Increase staffing levels in under-resourced areas.
7. Review and reconsider current customer ticketing service model.
8. Invest in the creation of a Data Strategy for the campus to create better business intelligence to inform decision making.
9. Consider moving the division of workload to, by Faculty, rather than alphabetical in Admissions and Records.

Medium-High Priority
10. Create/update business process documentation.
11. Consider separation of admissions and records work.

Medium Priorities
12. Consider investing in outside change management support to finalize InfoSilem implementation.
13. Consider LEAN process review/staffing in Admissions.
14. Improve morale through resources, professional development as well as proper staffing, technology and tools.
15. Address physical space issues.

Medium-Low Priority
16. Consider implementation of 'Service Hub/One Stop'.

Low Priorities
17. Consider moving Student Awards and Financial Aid to the OTR.
18. Develop OTR communications and outreach strategy.

19. Address course selection confusion by developing training materials/videos.
20. Address disconnects and the lack of communication with Academic Advising.
21. Clarify confusion regarding Activity Based Budgeting and impacts on OTR.

Observations and Recommendations

Theme 1 - Organizational Structure and Reporting Lines

Observation

There is widespread concern about the change of having the University Registrar report to the Associate Vice-President Enrolment Management rather than directly to the Provost and Vice-President Academic. It is generally viewed that the change undermined the role and importance of the role of the University Registrar. There were also concerns that academic integrity is taking a back seat to the enrolment imperative, in particular with international student enrolment. Several stakeholders mentioned that the current organizational structure would make it challenging to recruit a well-qualified candidate and undermine their ability for success in the role.

Recommendation

It is the strong recommendation of the External Review Committee that the University Registrar should report directly to the Provost and Vice-President Academic once again to improve the credibility of the role and the academic integrity of the portfolio. This can be accomplished in one of several ways structurally:
1. The University Registrar could report directly to the Provost at the same level as the AVP Enrolment Management; or
2. The two roles could be merged into one, as is the case at other Canadian universities. (ex. AVP Enrolment Services & University Registrar); or
3. The AVP Enrolment could report to the University Registrar, renamed Vice-Provost & University Registrar.

Given observations and feedback provided during the review process, the reviewers would recommend the third approach. This would encourage continued synergy between the two teams and also ensure that the leader is a member of the University Senate, thereby demonstrating the commitment to the academic integrity of the entire unit. Some possible organization structures are provided in Appendix 4. While there are currently well-respected leaders in place at this senior level, the reviewers also highlight the necessity to engage in an open competition for role(s) resulting from this structural change. ***Priority - #1 (High)***

Theme 2 - Organizational Structure of the Office of the Registrar

Observation

The current structure of the Office of the Registrar is one that has worked for the University of Windsor historically and has evolved over time. There are adjustments that could be made to further evolve the structure to better support students and staff members.

The combination of admissions and records functions into single positions is unusual as is organizing staff work alphabetically by student. An advantage of this approach is that a single staff member may work with an individual's file through the whole student life cycle. The disadvantage is that there is no down-time in the staff members work cycle and it is clearly creating bottlenecks in terms of service to prospective and current students. Staff members also have less depth of knowledge about individual faculties in this type of model.

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The Hub is a student-service initiative that was started several years ago but was not fully implemented due to the Campus Solutions implementation project. There are issues in the Client Services unit of service delivery times, staff turnover and low morale.

In many universities, Student Awards & Financial Aid is part of the Registrar's Office in recognition of the key role financial aid plays in enrollment management and thus the connection with recruitment, admissions and registration. At some institutions, student billing is also part of the office. It is viewed as beneficial that both of these units are combined in their current location in the Finance and Administration portfolio.

Recommendations

There is an immediate need to address the proliferation of OTR leadership roles that are acting/interim. The organization is vulnerable and ill-equipped to carry on operations efficiently in the absence of stability and clear accountability established through strength in the organizational structure. Succession planning is almost impossible in this environment as staff who have the potential to be future leaders are not given the opportunity to grow and develop professionally. ***Priority - #5 (High)***

Serious consideration should be given to creating separate admissions and student records functions with an Associate Registrar leading each team. A division of responsibilities by Faculties instead of alphabetically would build degree specific expertise and is more in line with best practices at other institutions. It would be important to ensure that there are not single points of failure in this model with staff cross-trained to support each other. ***Priority - #11 (Medium-High)***

The Systems & Records team could be renamed the Systems & Scheduling team to more accurately reflect the work they are doing. The Client Services unit on this team could be moved to the new Student Records team, although consideration could be given to having the leader of this unit report directly to the Registrar, in particular if other changes in the report are accepted and other units join the One-Stop office. ***Priority - #11 (Medium)***

The systems team should receive additional training to build up their Campus Solutions competency and future hires should focus on business analyst skill sets. The systems team could also be built up to support the Recruitment and Admissions teams. ***Priority - #3 (High)***

While a low priority and no doubt politically challenging, consideration should be given to having the Student Awards & Financial Aid unit join the Office of the Registrar team, thereby creating a powerhouse enrolment management team and aligning all enrolment related student services within one area of the university. ***Priority - #17 (Low)***

Theme 3 - Office Morale and Workload

Summary

Many stakeholders commented on their perception that morale was quite low in the Office of the Registrar, in particular on the Client Services team, and that staff turnover was a concern. The organization chart shared with the reviewers showed that two of the five Client Services Specialist positions were indeed vacant. Several stakeholders also shared that they feel the staff on this team in general receive a lot of abuse from campus community members. There are clearly disconnects between the recruitment team and admissions team, with the former being very critical in their commentary on the latter over processing delays.

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There are several single points of failure in the office, especially in leadership roles. The leadership team itself is mostly composed of acting staff, with the one seasoned and well-respected manager approaching retirement. As mentioned above, there are structural challenges that are preventing OTR staff from performing at a higher level and creating significant workload issues; the Admissions and Records Officers being a great example. These staff are also called on to help in the Client Services area as well. In other words, they are supporting the front office and back office in two distinctively different areas. It is little wonder they are unable to make quick admission decisions. There is a feeling in the Office of the Registrar that there is still a separation between the two formerly separate units and that they are not yet working as a team.

Recommendations

Management should consider the introduction of a formalized business improvement process review such as LEAN. This may be especially beneficial in supporting potential future change in separating the admissions and expanding the automation of manual processes . The expertise could reside in the recommended Systems & Scheduling team portfolio but should also be incorporated in thinking of all OTR managers. ***Priority - #13 (Medium)***

Pursuing other recommendations in this report related to structural change and systems development will undoubtedly help with morale issues as staff will be better able to perform their duties. A "Taking Stock" session was completed several years back, which was lauded, but there are questions about operationalization of the findings. A similar exercise might be undertaken again, especially if structural changes are pursued. ***Priority - #14 (Medium)***

Even if they are not, a robust change management process should be put in place to support ongoing systems and staff changes. Team building activities between the recruitment and admissions team would be beneficial for them to better understand the challenges each are facing. ***Priority - #4 (High)***

While professional development, training and reflective team-building sessions are key to high-functioning teams, morale is also dependent on proper staffing, technology and tools to ensure staff can succeed. Multiple interviewees commented on the basic lack of staffing. There are simply not enough qualified team members, especially in the admissions and systems areas, to effectively address volume and workload. ***Priority - #6 (High)***

Theme 4 - Systems and Business Process

Summary

There is widespread dissatisfaction with the Student Information System, in spite of the fact that Campus Solutions is seen as an industry leader. There are major concerns with the Academic Advisement solution, which is difficult for advisors to use and misleading students in their degree completion. Registrarial staff are finding they have to move through several screens to complete tasks that could be completed in one or two screens in the past. There is a general feeling amongst stakeholders that systems were not properly or fully implemented.

Recommendations

It is highly recommended that budget funding be set aside to fill gaps in the Campus Solutions implementation that were either completed or implemented incorrectly. Special attention should be given to Academic Advisement and operational reporting needs (process tracking, degree audit reports). ***Priority - #2 (High)***

Theme 5 - Scheduling

Summary
While InfoSilem is generally viewed as being an improvement over what was used previously, it is noted that it is not being fully used at this point as it is not the Windsor culture to have a software system determine teaching location and time. At least one Faculty expressed interest in utilizing the algorithm in InfoSilem to optimize their class times and locations. InfoSilem is a powerful tool that allows campuses to maximize use of finite space and time. When implemented properly, it also creates efficiencies for staff involved in classroom scheduling while considering faculty preferences through the use of constraints.

Recommendations
Consideration should be given to the full implementation of InfoSilem for the scheduling of classrooms at the University of Windsor. It will require senior level support and proper committee structures to ensure full engagement and buy-in from Faculties. ***Priority - #12 (Medium)***

Theme 6 - Data Governance and Reporting

Summary
There is great frustration with the state of data reporting in the new system with the loss of Crystal Reports. The Power BI tool is a solid one but like other software solutions, it has not been fully utilized nor has the querying capabilities built directly within Campus Solutions. Institutional Analysis focuses on historical, government and financial reporting. Enrolment reporting resides in the Office of the Registrar

Recommendations
The University should consider a data strategy exercise to better define how they identify, store, provision, process and govern information. This exercise should identify which office should do what and what tools should be used. ***Priority - #8 (High)***

There is also an immediate need for operational reports within the registrar's office and institutional reports on admissions, registration and scheduling**.** There is an indication this functionality was lost during the Campus Solutions implementation resulting in stakeholders' feeling backward momentum that improving reporting would improve. ***Priority - #2 (High)***

Theme 7 - Physical Space

Summary
The physical space occupied by the Office of the Registrar was described by one campus stakeholder as an "abomination", a sentiment that was shared by those inside and outside of the office. There were questions about asbestos and it was described as dirty. Especially concerning is the space occupied by Client Services. An inferior work environment leads to issues with service, morale and team building. The University is implementing a Work-From-Home policy that may lessen the need for physical space if widely adopted in the office, leading to hoteling.

Recommendations
It is recommended that the University at least focus on a renovated Hub for student services so as to present an attractive front-end for students. Equally important is back-office space that inspires creativity and makes staff want to come to campus and collaborate. ***Priority #15 & 16 (Medium)***

Theme 8 - Communications

Summary

Stakeholders reflected positively about individuals in the Office of the Registrar with whom they interacted, especially Lorraine Chandler, but many admitted to being unclear about what the office does overall. One described the office as having a "Wizard of Oz" aura about it.

Recommendations

The Office of the Registrar should create an internal communications plan to regularly report to campus stakeholders about their operations and projects. The Office may want to consider establishing an annual impact report. *Priority - #18 (Low)*

SUMMARY OF RECOMMENDATIONS

#	Recommendation	Priority
1	The reporting structure should be re-aligned and the Registrar should report directly to the Provost. This better aligns core business functions and creates clarity of leadership and accountability. Would afford greater synergy of purpose for OTR and work in support of the entire student experience, both prospective and current students.	High
2	Invest in third-party support to finalize PeopleSoft UWin implementation. Address inaccurate and incomplete reporting functionality. System support requires sufficient staff (both volume and expertise) to manage on-going updates.	High
3	Provide resources to support additional and on-going training for staff on Campus Solutions competencies.	High
4	Senior administration should provide resources to support team building/coaching initiatives with the Recruitment and Admissions units. The current siloed organization and focus on recruitment as the primary enrolment activity has fostered a disconnect between these two teams. This has fostered a culture of "us" and "them" impacting positive and effective collaboration.	High
5	Address proliferation of leadership in acting/interim roles in the OTR. Roles need to be permanently and appropriately filled to begin establishing stability.	High

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6	Increase staffing levels in under-resourced areas. This will help in daily management of workload and will foster staff retention. There are not enough people to successfully manage overall volume and work in the OTR.	High
7	Review and reconsider current customer ticketing service model. Since the launch of UWin the proliferation of tickets from students, staff and faculty is unmanageable. This could benefit from LEAN process review.	High
8	Invest in the creation of a Data Strategy for the campus to create better business intelligence to inform decision making. Consider division of roles/responsibilities between OTR and Institutional Analysis. Could PowerBI be leveraged more to support reporting needs.	High
9	Consider moving to workload division by Faculty rather than alphabetical in Admissions and Records. This may facilitate more equitable workload between colleagues and develop flexibility and nimbleness, avoiding single points of failure.	High
10	Create/update business process documentation. The OTR should inventory all critical processes and create a repository for reference and cross-training. Knowledge about certain critical processes resides with individuals who have tremendous depth and breadth. This fosters a single point of failure and limits succession planning.	Medium-High
11	Consider separation of admissions and records work. Create back-office roles that specialize in function.	Medium-High
12	Consider investing in outside change management support to finalize InfoSilem implementation. Tool is underutilized and campus-wide scheduling is still highly manual. Senior Administration needs to champion new approach/scheduling principles.	Medium
13	Consider LEAN process review/staffing in Admissions to review reported delays in Admissions decisions.	Medium

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14	Improve morale by providing resources to host 'taking stock' session, one or two staff retreats. Professional development, training and reflective team-building sessions. While these are key to high-functioning teams, morale is also depending on proper staffing, technology and tools to ensure staff can succeed.	Medium
15	Address physical space issues. Attempt to co-locate members of the OTR, particularly units that have significant overlap. Existing office space is inefficient and claustrophobic. Consider how WFH may assist with space through hoteling.	Medium
16	Consider implementation of 'Service Hub/One Stop'. Include participation of critical front facing units to address student servicing needs.	Medium-Low
17	Consider moving Student Awards and Financial Aid to the OTR. Current disconnect could benefit from alignment under academic purview and being led by the OTR would improve customer service for students. Better supports an overall Strategic Enrolment Management approach.	Low
18	Develop OTR communications and outreach strategy. Internal communications rely on informal interpersonal relationships and "key" people. OTR needs to communicate what they are doing and critical timelines.	Low
19	Address course selection confusion by developing training materials/videos.	Low
20	Address disconnects and a lack of communication with Academic Advising by regularly attending advising meetings. Consider developing a community of practice.	Low
21	Clarify confusion regarding Activity Based Budgeting and impacts on OTR. Review revenue and expenses flowing in/out of OTR (i.e. transcript revenues). While out of scope of this review, the topic of ABB arose such that the reviewers recommend this is an area that may warrant more attention from senior administration.	Low

New Registrar: Skill Set and Characteristics

We understand that Dr. Weir and Dr. Busch are looking to this report to help inform the selection process for the new Registrar at the University of Windsor. Registrar's act as the connection between academic and administrative aspects of university operations. The role requires a breadth of skills and understanding to protect data, maintain integrity and support student services and their various educational pathways. Historically the registrar's work in curriculum cataloging and management, registration, degree audit and record-keeping reflect stable core job elements. However, increasingly the strategic imperatives of post-secondary education intersect with these traditional elements of the role, amplifying and elevating it into a lynchpin position on the leadership team of a campus. To this end, beyond core executive leadership competencies, it is recommended that the University of Windsor Registrar, should:

- model holistic and systematic thinking
- be a strategic leader and an operational expert
- model innovation and thought leadership in registrarial functions
- bring a culture of evidence-informed decision-making
- have experience leveraging technology and data to create efficiencies and improved services and supports for students
- incorporate an equity, diversity and inclusion perspective to the OTR
- understand the core concepts in Strategic Enrolment Management in the context of the Registrar's Office and beyond
- understand the union environment
- Foster a culture of caring and collaboration within the office and with campus stakeholders

CLOSING REMARKS

It is widely conveyed that the Office of the Registrar is doing an admirable job with the resources it has. Colleagues across campus commented on the job knowledge, dedication and work ethic demonstrated by staff who are engaged and committed to Windsor's mission. Positive comments in particular were heard about current interim leadership, with acknowledgment that positive change was already felt amongst the office staff under their tenure. There is general respect and support for the work of the Office of the Registrar across the stakeholders interviewed.

Change in a structure like that of a Registrar's Office can be challenging. The University of Windsor's OTR has experienced significant and understandable upheaval with the implementation of a new student information system. The recommendations and opportunities suggested through this review illustrate the need for further transformation in the OTR in alignment with the system change, along with the possibilities that a more holistic approach and further support may

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provide. The OTR provides continuity over time as academic leaders move in and out of term leadership roles within their programs and faculty. The OTR needs to be trusted as a reliable source of institutional history with an invaluable pan-university view. Its structure should provide academic leaders with context and perspective around policy and processes.

It has been a pleasure to learn more about the University of Windsor, and in concluding this report we would like to wish Dr. Weir and the team the best of luck in the search for a new registrar.

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APPENDICES

Appendix 1: Terms of Reference

Context: Building off the "taking stock" initiative and supporting our next University Registrar, we seek to undertake an external review of the Office of the Registrar (RO).

We want to learn about new ways of doing business, support our team, understand and benchmark resource requirements, prioritize, leverage technology, and reimagine services – all while keeping the university's mandate.

The demands on the RO are enormous and will continue to grow - so what does an optimal RO for UWin need to look like (people, scope, tech, automation) to meet or exceed the demands and be positioned for the future? It cannot be a report but a roadmap informed by data and effective practice that paves the way to finalize the leadership.

Preferred Timing: Before the appointment of the University Registrar. It is a natural opportunity to examine and re-event.

Review Team:
Ray Darling, Registrar at University of Guelph
Ray is currently Registrar at the University of Guelph and has been in this position since 2017. Prior, he was Registrar at the University of Waterloo and Wilfrid Laurier University. Darling holds a Master of Arts in Political Science from the University of Guelph.

Angelique (Ange) Saweczko, Registrar at University of Toronto
Ang is the Registrar at the University of Toronto. Ang brings over two decades of postsecondary enrolment services experience, having served at York, the University of Regina, Thompson Rivers, and the University of Calgary. She has extensive expertise in financial aid and awards, records and registration, student systems and scheduling, and curriculum governance.

Geraldine Jones, Registrar and AVP, Enrolment at Brock University
Geraldine is Registrar and AVP, Enrolment at Brock University and has led transformative change in admissions, client service/one-stop, grad studies.

Areas of focus:

- What should and could the RO look like? What does not belong (e.g., Test Centre, etc.), and how does this office support enrolment management?
- How does the structure inform workflow? We want to move towards a "HUB model," including Enrolment Services, Student Awards and Cashiers; however, we need to reconcile with a matrix reporting structure
- Evaluation of core operational pieces and identify weaknesses and gaps (e.g., the structure of admissions officer's jobs, staffing levels, client service, opportunities to automate, opportunities for cross-functional training; graduate/law admissions and intersection with the graduate admissions office, management of conditional admissions)

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- Ideas on how to implement more efficient registration procedures and policies
- Are there methods that we could employ to improve customer service delivered to internal and external stakeholders via traditional and electronic/virtual services
- Are there opportunities to advance Equity, Diversity, and Inclusivity in our admissions practices, policies, and practices?
- How can we access and leverage data for better enrollment reporting and analytics (deficiencies and identifying priorities) and improve compliance with federal, state/provincial regulations?
- What technologies should be adopted to support internal business processes and delivery of services (e.g., MyCreds.ca)?
- Evaluation of student-facing communications (e.g., offer letters (cumbersome), email templates, website, etc.) – are they learner-centric, align to student marketing and communications, and timely, especially in the context of the student life-cycle
- Methods to enhance and streamline graduation processes and who should support this

Guiding Principles:
We seek to develop a road map that leverages the following guiding principles:

- Puts the needs and expectations of today's students at the centre
- Ensures flexibility - a long-term solution that remains responsive to the needs of the campus stakeholders and can evolve with changing technology, behaviours, best practices, etc.
- Clearly defines and communicates the service and processing expectations, including clarifying the roles and responsibilities concerning delivery of service
- Enables and fosters collaboration and shared accountability
- Leverages enterprise-class technology by building off investments across UWinsite (e.g., Finance, Student, Service, and Engage) and other platforms (e.g., QLess) to strengthen service delivery, campus-community experience
- Identifies opportunities for internal and external stakeholders' engagement and consultation
- Supports efforts to create a diverse and welcoming campus community for all students.

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Appendix 2: Interviewee and Schedule

Name/Unit	Title or Role
Patti Weir	Interim Provost and Vice-President Academic
Edwin Tam	AVP, Academic and Quality Assurance
Penny Kollar	Institutional Quality Assurance Process
Phebe Lam	Acting Associate Vice-President, Student Experience
Mike Houston	Director, Student Accessibility Services And Academic Advising Centre
Cindy Crump	Director, Student Success And Leadership Centre
Beth Oakley	Director, International Student Centre
Chris Busch	AVP, Enrolment Management
Lorraine Chandler	Interim University Registrar
Susan Holiga	Acting Associate Registrar, Systems & Records
Darryl Danelon	Assistant Registrar - Undergraduate Admissions
Mark Trudell	Manager, Graduate And Professional Studies
Marie Hawkins	Director, Graduate Academic Services
Marian Doll	Director, Student Awards and Financial Aid
Chris Lanoue	Manager, Financial Services
Tina Pavicic	Manager, Student Accounts And Receivables
Various team members	Graduate Admissions (RO Team)
Various team members	Undergraduate Admissions (RO Team)
Various team members	Scheduling (RO Team)
Various team members	Systems and records (RO Team)
Various team members	Client Services (RO Team)
Chris O'Gorman	Academic Advisor Coordinator
Danielle Matias	Academic Advisor- Transfer Student Support
Denis Tetreault	Academic Advisor
Bethany Marcuz	Academic Advisor, Business
George Zhou	Associate Dean, Education
Francine Herlehy	Academic Advisor, Law
Susan Fox	Academic Advisor, Nursing
Fran Meloche	Academic Advisor, Nursing
Jennifer Johrendt	Academic Advisor, Engineering
Randy Bower	Academic Advisor, Engineering
Paul Henshaw	Academic Advisor, Engineering
Faouzi Ghrib	Academic Advisor, Engineering
Leo Oriet	Academic Advisor, Engineering
Mitra Mirhassani	Academic Advisor, Engineering
Ofelia Jianu	Academic Advisor, Engineering

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Nicholas Eaves	Academic Advisor, Engineering
Tiffany Martindale	Academic Advisor, Human Kinetics
Phil Dutton	Academic Advisor and Associate Dean, Science
Julie Smit	Academic Advisor, Biology
Tanya Noel	Academic Advisor, Biology
Isabelle Barrette-Ng	Academic Advisor, Biology
Holger Eichhorn	Academic Advisor, Chemistry and Biochemistry
Zhuo Wang	Academic Advisor, Chemistry and Biochemistry
Otis Vacratsis	Academic Advisor, Chemistry and Biochemistry
Sirinart Ananvoranich	Academic Advisor, Chemistry and Biochemistry
Imran Ahmad	Academic Advisor, School of Computer Science
Alice Grgicak-Mannion	Academic Advisor, School of the Environment
Maria Cioppa	Academic Advisor, School of the Environment
Steven Rehse	Academic Advisor, Physics
Justin Lariviere	Academic Advisor, Math
Nurlan Turdaliev	Academic Advisor, Economics
Danielle Soulliere	Academic Advisor, Faculty of Arts, Humanities and Social Sciences
Kyle Asquith	Academic Advisor, Communications, Media and Film
Johanna Frank	Academic Advisor, Communications, Media and Film
Nicole Markotic	Academic Advisor, English
Heather Metcalf	Academic Advisor, Sociology
Kai Hildebrandt	Academic Advisor, Psychology
Jill Grant	Academic Advisor, Social Work
Lionel Walsh	Academic Advisor, Dramatic Art
Tina Pugliese	Academic Advisor, Dramatic Art
Guillaume Teasdale	Academic Advisor, History
Shauna Huffaker	Academic Advisor, Arts and Science
Mustapha Hamil	Academic Advisor, Languages, Literatures, Cultures
Jeremy Worth	Academic Advisor, Languages, Literatures, Cultures
Victor Sevillano	Academic Advisor, Languages, Literatures, Cultures
Robert Weir	Academic Advisor, Languages, Literatures, Cultures
Jeff Noonan	Academic Advisor, Philosophy
Jamey Essex	Academic Advisor, Political Science
Nicholas Papador	Academic Advisor, School of the Creative Arts
Brandi Lucier	Academic Advisor, Women's and Gender Studies
Danielle Reaume	Academic Advisor, Women's and Gender Studies
Debbie Kane	Acting Dean, Faculty of Graduate Studies
Lori Buchanan	Associate Dean, Faculty of Graduate Studies
Chitra Rangan	Acting Associate Dean, Faculty of Graduate Studies
Marie Hawkins	Director, Graduate Academic Services

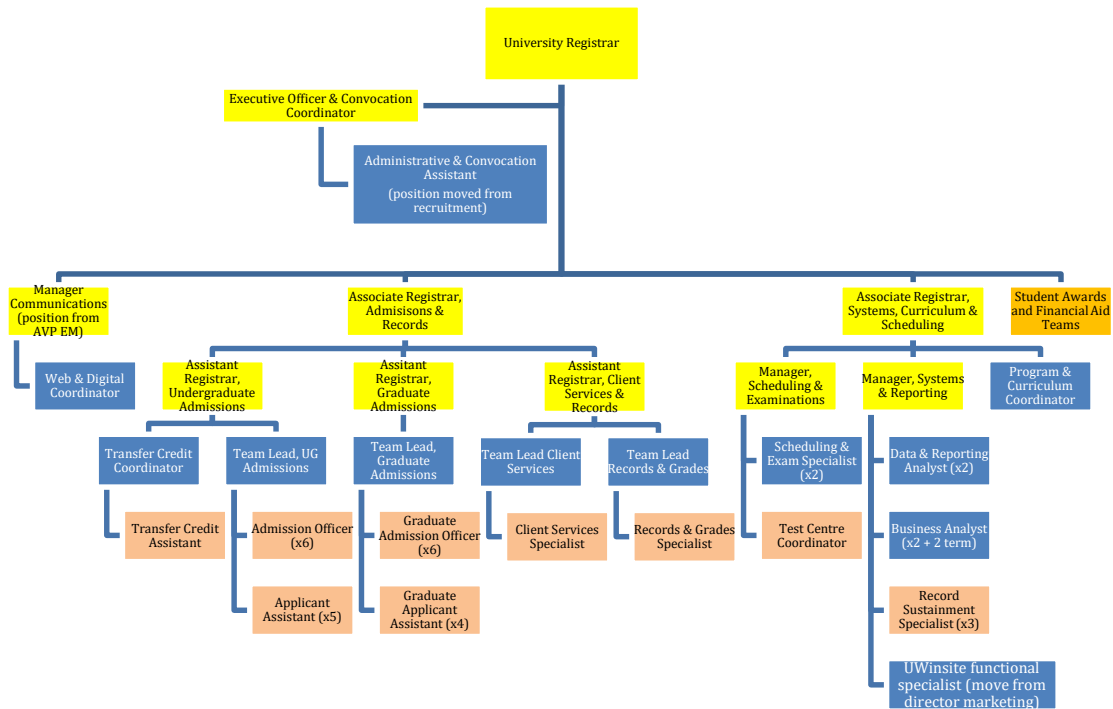|	
Ericka Kustra	Director, Centre For Teaching And Learning (CTL)
Ryan Kenney	Executive Director, Information Technology Services
John Osborne	Assistant Director, ITS - Bus. Sys Group
Rose Zanutto	Executive Director, Institutional Analysis
John Dube	Institutional Analyst - Accountability
Barb Reaburn	Institutional Analyst
Academic Deans	Dean, Faculty of Human Kinetics
	Dean, Faculty of Engineering
	Dean, Faculty of Science
	Dean, Odette School of Business
	Dean, Faculty of Nursing
	Dean, Faculty of Arts, Humanities and Social Sciences
	Dean, Faculty of Law
	Dean, Faculty of Education
Associate Deans	Associate Dean, Faculty of Human Kinetics
	Associate Dean, Faculty of Engineering
	Associate Dean, Faculty of Science
	Associate Dean, Odette School of Business
	Associate Dean, Faculty of Nursing
	Associate Dean, Faculty of Arts, Humanities and Social Sciences
	Associate Dean, Faculty of Law
	Associate Dean, Faculty of Education
Student Union Representatives	President, UWSA
	President, OPUS
	President, GSS
Gillian Heisz	Associate Vice-President, Finance
Renee Wintermute	University Secretary
Renee Trombley	Executive Director
Jennie Atkins	Executive Director
Vincent Georgie	Associate Vice-President, External Affairs
Mark Learn	Human Resources

Appendix 3: Documents Used to Inform the Review

- Admissions policies and practices
- Enrolment Management - Organizational Chart
- Implementation documents - UWinsite Student
- Implementation documents - UWinsite Student (change management)
- IT Strategy
- Job Descriptions: Office of the Registrar Team Members
- Key Performance Indicators
- Office of the Registrar - Floor Plans, Space Allocations, and Space Assignments
- Office of the Registrar - Mission, vision and values
- Office of the Registrar - Scope of Responsibilities
- One Hub Planning Documents
- Service Benchmarks
- Service Level Agreements
- Strategic Enrolment Management Plan
- Strategic Management Agreement (SMA 3)
- Summary of Flexible Work Committee (goals and objectives)
- University of Windsor Strategic Plan, incl. mission, vision, and values
- Video of Office of the Registrar (virtual tour)
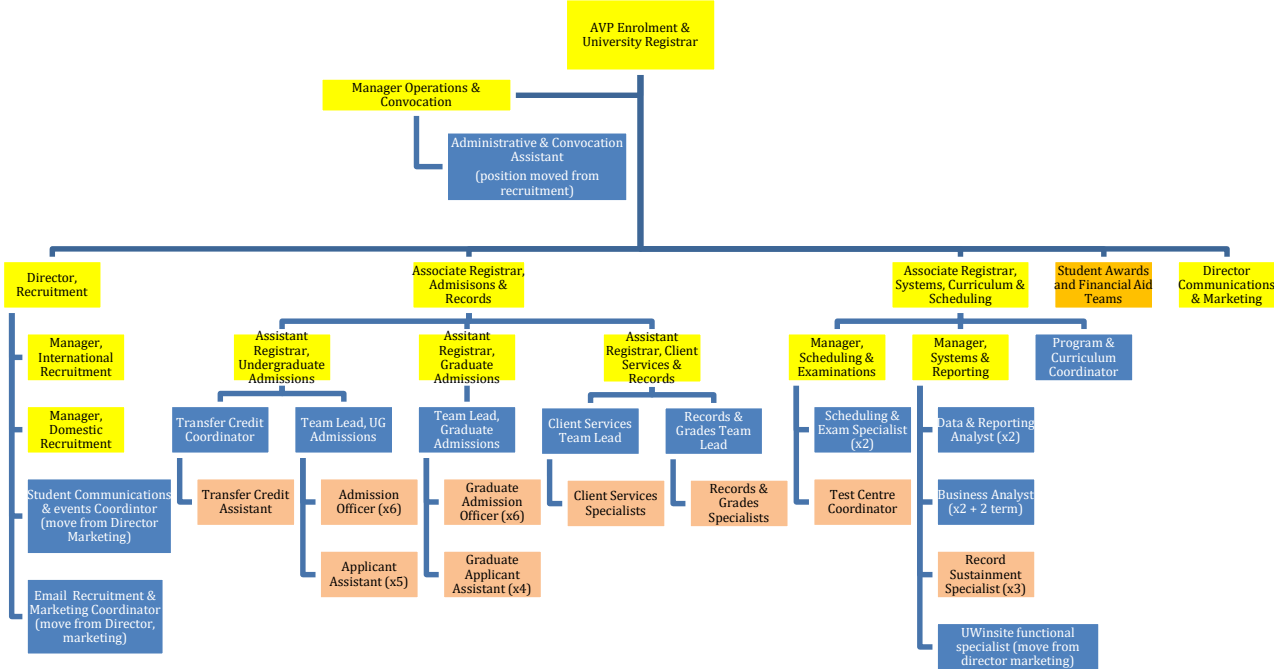- International Recruitment and Admissions Review

Appendix 4: Possible Organizational Structures

The following are three possible organizational structures based on the leadership recommendations made in recommendation #1.
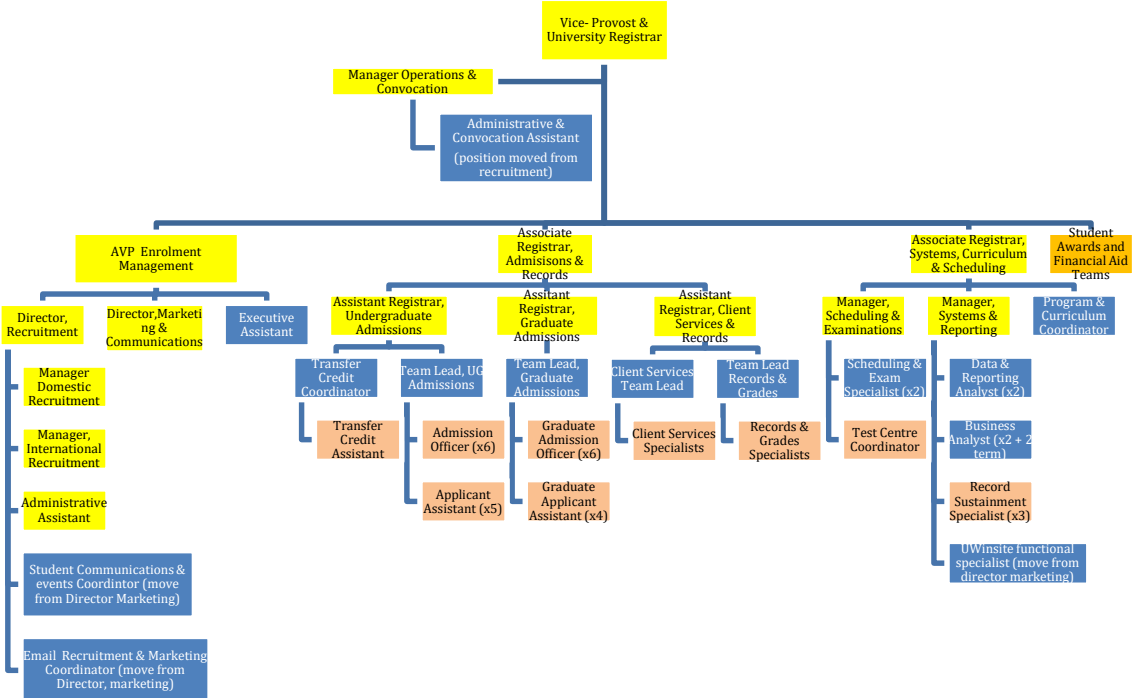
Option 1: University Registrar Reports Directly to the Provost

Option 2: Merge the AVP Enrolment and the University Registrar Positions

- AVP Enrolment & University Registrar
  - Manager Operations & Convocation
    - Administrative & Convocation Assistant (position moved from recruitment)
  - Director, Recruitment
    - Manager, International Recruitment
    - Manager, Domestic Recruitment
    - Student Communications & events Coordintor (move from Director Marketing)
    - Email Recruitment & Marketing Coordinator (move from Director, marketing)
  - Associate Registrar, Admisisons & Records
    - Assistant Registrar, Undergraduate Admissions
      - Transfer Credit Coordinator
        - Transfer Credit Assistant
      - Team Lead, UG Admissions
        - Admission Officer (x6)
        - Applicant Assistant (x5)
    - Assitant Registrar, Graduate Admissions
      - Team Lead, Graduate Admissions
        - Graduate Admission Officer (x6)
        - Graduate Applicant Assistant (x4)
    - Assistant Registrar, Client Services & Records
      - Client Services Team Lead
        - Client Services Specialists
      - Records & Grades Team Lead
        - Records & Grades Specialists
  - Associate Registrar, Systems, Curriculum & Scheduling
    - Manager, Scheduling & Examinations
      - Scheduling & Exam Specialist (x2)
      - Test Centre Coordinator
    - Manager, Systems & Reporting
      - Data & Reporting Analyst (x2)
      - Business Analyst (x2 + 2 term)
      - Record Sustainment Specialist (x3)
      - UWinsite functional specialist (move from director marketing)
    - Program & Curriculum Coordinator
  - Student Awards and Financial Aid Teams
  - Director Communications & Marketing

Option 3: The AVP Enrolment Reports to the Vice-Provost & University Registrar

University of Windsor
Senate

5.6:   **Report of the Academic Colleague**

Item for: **Information**

Forwarded by: **Dr. Philip J. Dutton**

Academic Colleagues met online on October 11 and 12, 2022 in a hybrid meeting.
The Council of Ontario Universities met on October 13, 2022 in a virtual meeting.

Evening meeting, Tuesday, October 11, 2022, 6:00 – 8:30 pm

A Land Acknowledgement was provided by Philip Dutton.

Discussion of Proximal and Distal Teaching Modalities

In preparation for the Council meeting, colleagues discussed lessons learned from the pandemic and online teaching and how we should recommend the sector move forward with strategic decisions regarding online learning. One of the first challenges we faced was identifying a common language or definition of different types of online learning. Two different institutions use two different words to describe the same type of online learning, and there are at least four discrete types of online learning. We referred to all types as "online" for simplicity. Some of the challenges and advantages of online learning were identified in a round table discussion. These were mostly in comparison to in person learning. We did discuss our perception that students *want* an on-campus experience and that many have been observing high participation and attendance in in-person classes as we have come out of the social restrictions. But, while students want an in-person experience, it is also apparent that they want online as well. We are also experiencing these issues with faculty and staff through flexible working arrangements and online or hybrid meeting environments. The cat is out of the bag, and it is not going back in.

Equity and access for students was considered as one of the significant positive factors of online learning for students. This is both from a perspective of remote access to learning but also for flexibility that supports an on-campus student's needs. Concepts of Universal Design were brought up several times. The chat and reactions in the online environment were seen to be powerful and encouraging for more voices to participate. The ability to bring in outside experts or discussion panels from a distance to augment the instructor perspective was also recognized (thesis examination was a topic here too). Breakout rooms and small group discussions are easier to manage online than in many classrooms. Instructors were forced by the pandemic to learn about pedagogical issues and be creative in pivoting their course delivery. These lessons should not be unlearned.

On the negative side of things there were the expected issues. Academic integrity and a perceived decline in academic standards headed the list of problems. Beyond that, the student experience was seen to have suffered dramatically due to the lack of the social interactions and activities. This was partly due to the societal social restrictions of the pandemic but also seen to be a problem because of student disengagement. It is interesting that we saw student engagement as both an advantage and a disadvantage in the online world. The technical infrastructure that was so quickly installed, and at a significant expense, still requires improvement. Workload and technical skills required of instructors, and in particular contract lecturers, is supported to some extent, but it does not seem that the full extent of the work required is recognized, nor do all instructors have the capabilities required (video editing for example). The student who might be on campus and participating in an online course has largely been disregarded in scheduling

and space considerations. Are we risking losing the differentiation that the ministry has been pushing so hard for by creating a melting pot of online courses?

A series of points was well made by one colleague. What is good for the student may not be good for the instructor; what is good for the instructor may not be good for the institution; and I would add, what is good for the institution may not be good for the Ministry. We can cycle that right back to what is good for the Ministry may not be good for the student. We are caught very tightly in a complex demanding environment that is severely constrained by demand, workload, available technology, and budget.

We are moving forward. Where do we want to be in five or ten years? What issues are we trying to address with online learning? Strategic decisions are necessary.

Colleagues meeting, Wednesday, October 12, 2022, 9:00 am – 12:00 pm

1. **Information sharing**
    Colleagues shared their campuses experiences. There were comments from most institutions about international student recruitment and visa issues, masking and further easing of restrictions, online meetings continuing in various ways, status of negotiations, efforts around strategic planning, Indigenization and equity, diversity, and inclusion processes, in addition to campus mental health strategies and budgets under pressure.

2. **COU update**
    Steve Orsini, President and CEO of the COU provided information to colleagues on current COU activities. Discussion ensued throughout Mr. Orsini's report.

    Government Communication
    We need to continue to inform the ministry of the role of Ontario universities. We cannot take for granted that they understand the vital role that we play. We have higher graduation rates, higher incomes, and higher job successes than colleges. We are getting double digit increases in applications.

    Auditor General Report on Laurentian
    Following the preliminary report on the situation at Laurentian University released in April, we are anticipating the final report soon. COU is working with the Ministry to find a way to ensure that institutions do not find themselves in the situation that Laurentian found themselves in. COU is pushing for a sector-based solution that reflects institutional autonomy and board accountability for the financial stability of the individual institutions.

    Institutional Autonomy
    There is talk of the government appointing an expert panel to examine post-secondary education. We do not know who might be on it or what the mandate will be. Expecting further news in November.

    General Discussion with Mr. Orsini
    Concerns were raised by a colleague regarding potential government approval of private universities and the quality standards to which they would be held. COU recognizes the issue that that government will have to tackle quality assurance and that both the government and the sector should be concerned about our international brand recognition.

3. **Planning for the Council Meeting**
    The rest of the morning meeting was spent preparing the colleagues presentation to Council on Proximal and Distal Teaching Modalities.

Council of Ontario Universities meeting, Thursday, October 13, 2022, 12:30 am – 2:30 pm

Academic Colleagues presented their perspectives to Council for an hour of scheduled presentation and discussion.

Proximal and Distal Teaching Modalities
Four academic colleagues presented a summary of our discussions and perspectives on proximal and distal teaching modalities.

Framing of the Discussion. Andrew Papadopoulos, Guelph
Andrew summarized much of the discussion of the previous two days reiterating our lived experience through COVID-19, the multimodal delivery of courses, and some positive and negative aspects of our experience. He closed off the discussion with a target of moving toward the ideal and maximizing outcomes.

Access. Jenn McArthur, Toronto Metropolitan University
Jenn discussed aspects of universal design and that asynchronous content can be designed to be accessible to a variety of students who require accommodations. Universal design elements are valuable for accommodating the needs of other students through the use of closed captioning, ability to rewind the instructor, and adjust lecture speed. She also discussed accessibility from a location perspective and the ability to accommodate students in extraordinary circumstances.

Student Engagement. Kim Helemans, Carleton
Kim presented some data from her survey of February 2022 probing Carleton students for their experience and feelings as online learners as assessed by statements rated on Likert scale. Students like the flexibility of online learning. Students did not feel they were more likely to cheat online but did feel that their colleagues were more likely to cheat. Procrastination and motivation were identified as negative issues. There were clear indications that students who identify as female were vulnerable in the areas of social connectivity and mental health. Data will be more fully analyzed but there is a clear indication that there are students who greatly benefit from the flexibility and accessibility of online learning. There is also a recognizable benefit for in-person learning, specifically around the connection to campus, peers, and professors, and the resulting positive mental health outcomes.

Technology and Support. Philip Dutton, Windsor
Philip discussed the hope coming out of the pandemic that instructors and institutions would retain some or perhaps many of the benefits from lessons learned during the COVID-19 pivot. He expressed ideals that a university should have a mix of modes of delivery across and within programs to give students flexibility in their studies. Problems associated with this are the limits of the technological infrastructure and the support for the faculty to provide the students the best experience they can within the constraints of budget and support. Centres for Teaching and Learning are recognized for their efforts. The island of the classroom, though, has little direct support. Rather than pushing instructors to use online technology in their practice, it would be better to pull them forward in a positive manner. Looking to the future, online is here to stay, and we need to give the faculty and students a good quality experience in teaching and learning. We have an opportunity to gain momentum, this is not a time to lose it.

A discussion followed. Executive heads were very interested in the conversation and in particular wondered how we can encourage a grass roots instructor and faculty led move to get parts of programs online in an effective manner.

Respectfully Submitted,

P.J. Dutton, Academic Colleague.

University of Windsor
Senate

5.8:   **Report of the Provost**

Item for: **Information**

Forwarded by: **Patti Weir**

1. Fall Convocation – L. Chandler
This year experienced several 'firsts' for Convocation. The Spring 2022 convocation was held in-person for the first time in two years. In addition, it was the first convocation to be held off site from the University of Windsor in a very long time, and the first convocation where virtual graduates from 2020 and 2021 were invited back to the stage. Most importantly, it was the first convocation in which Indigenous elements were incorporated into the ceremonies.

The Fall 2022 ceremonies continued to expand upon, as well as introduce new elements into the ceremonies. The 118th convocation was the first ceremony to be held at the new Toldo Lancer Centre, and there was an expansion of the Indigenous elements included in the ceremony in the form of smudging, dancing, drumming, and singing. In addition, members of the Convocation Committee participated in Indigenous preparations for the ceremony. This was an honour, and an amazing experience to learn and to grow. It also provided the last opportunity for virtual graduates from 2020 and 2021 to cross the stage.

The Convocation Committee also implemented 'Marching Order'; a new technology platform that facilitated the pronunciation of each graduate's name as well as an on-screen display of their name, degree, and awards. It also facilitated graduate check-in, statistics on attendance, as well as guest ticketing.

The 118th convocation was a resounding success, and work is already underway on the 119th convocation in June 2023.

2. Winter registration
The tentative Winter 2023 class schedule has now been posted, and students will have received registration appointment times. At this point in time, there are approximately 2300 class sections (lectures and labs) with approximately 23% of these sections taking place online. There are still some final scheduling changes that will take place prior to November 7th.

Registration is scheduled to begin November 14th, with the shopping cart opening November 7th.

3. Black Scholars Hiring Initiative
The open ads were published the first week of November.

4. Search Updates
a) Dean, Odette School of Business
The committee is moving forward with the first round of interviews.

b) AVP, Student Experience
The first round of interviews has been completed.

University of Windsor
Senate

5.8.1:   **Enrolment Management Update**

Item for: **Information**

Forwarded by: **Chris Busch, AVP Enrolment Management**

Enrolment Intelligence – Applicant Decline Survey and Early Leavers research
The Applicant Decline Survey measures up to fifty different factors to provide a comprehensive understanding of what matters to our applicants, why they elected to decline our offer of admission and where they went instead. Information collected is presented and shared annually with our faculties, enrolment partners, and marketing and recruitment professionals to inform our collective recruitment efforts better.

An early leaver is an undergraduate student registered at the University of Windsor who did not complete their program. Last year, the University wondered if we could learn more about why these individuals did not return to their post-secondary studies and conducted the Academic Group to develop and conduct the study. Challenges reported included difficulties managing their course load, understanding materials in their courses, being unprepared academically, and balancing the university and external pressures, such as work, family, and financial responsibilities. The results of this pilot study were shared with the faculties and recruitment partners. This survey is being conducted again to understand better the challenges early leavers face outside their pandemic experience.

High school engagement (*a return to in-person events*)
A hectic schedule of 900+ high school visits, education fairs, and online information events is well underway, with recruitment staff travelling locally, across Ontario, and globally to promote the University of Windsor and generate Lancer pride, leads, and applications.

This year's team has a wide range of academic backgrounds, but they are united in their intense passion for UWindsor and excellent communication skills. Recruiters will connect with students at schools into late November. A primary objective is to motivate participants to share their contact information so that representatives of the University may continue the conversation.

With the support of campus partners, the recruitment team is offering prospective students an opportunity to win a free first term — tuition, books, residence, and a meal plan — to maximize the chance to collect lead data.

Through December and January, they will shift gears to assist with the application process at schools, online, and at the Welcome Centre, providing support for anyone needing help completing their application.

GTHA and Transfer engagement
The best opportunities to achieve the University of Windsor's undergraduate new and transfer student enrolment priorities exist within the rapidly growing Greater Toronto and Hamilton Area (GTHA). Admittedly, progress in the highly competitive GTHA requires a different level of effort and investment than has been the case in recent years (Black, 2016).

To increase market share among GTHA students from high school and strategic college partners, the University funded the creation of a new enrolment advisor (a.k.a. Student Recruitment Officer) to focus exclusively on building

relationships with GTHA feeder high schools and colleges to support prospects and applicants from the associated territory.

As such, we are pleased to introduce Jessica Hardwick as our new Enrolment Advisor in Toronto. She grew up in Brampton and worked at Toronto Metropolitan University for several years as a recruiter for the past three years with their national team. She graduated with a BA in Arts and Contemporary Studies in 2016 and was a member of the Varsity Hockey program, holding various leadership roles as a student. She brings a strong background in recruitment from a large and complex Toronto university and has worked with multiple audiences provincially and nationally.

We look forward to leveraging Jessica's detailed understanding of the GTHA educational landscape and an established educator network within that market to help support the institution's academic mission.

UWindsor OUAC voucher Initiative

Accessing higher education remains challenging for marginalized student populations, often caused by adverse childhood experiences, inequities, and structural hurdles that start early and continue throughout life. Higher education cannot solve racism and societal injustice on its own. Still, we can take steps to be part of the solution, including making admissions and preparing students, initiatives, and policies that reduce equity gaps.

The University of Windsor has established a new undergraduate application voucher program that Ontario guidance counsellors and select community agencies/groups who work closely with marginalized communities (e.g., Hour A Day Study Club, Black Council of Windsor Essex, New Canadians' Centre of Excellence Inc), and Indigenous partners, with counsellors themselves identifying and sharing the vouchers with their students who are facing financial barriers and believe, would struggle financially to pay OUAC application fees.

The program officially launches at our upcoming Educator's day, bringing local high school teachers and counsellors to campus to learn more about the institution's academic programs and student support offerings.

Plan your program

A vital tactic we employ to support our incoming undergraduate students is offering comprehensive resources to help first-year first-term (FYFT) course registration and guide new Lancers towards programming that assist in their transition to university.

Plan Your Program - Website:

This umbrella website provides new undergraduate students with all the information associated with the enrolment journey and to understand the first-term courses they should register for. It also becomes the core resource for central advising.

This initiative helps students understand the following:
- How to complete their course registration with confidence
- How to access help in person or live online, and
- How to access on-demand resources such as the updated registration guide, relevant KBAs on ask.uwindsor.ca and registration links
- Encourages them to sign up for winter orientation programs

Our student marketing and communications team are busy working with Faculties and academic program areas to review and confirm website content before making the site live for Winter 2023.

University of Windsor
Senate

5.9: **Report of the Vice-President, Equity, Diversity, and Inclusion**

Item for: **Information**

Forwarded by: **Clinton Beckford**

Employee Engagement Survey

1. Employee Engagement Survey
- The Employee Engagement Survey Action Group was established in August 2022 with representation from various employee groups and President/VPs portfolios. More information can be found on the survey website.
- The group meets every other week to review the qualitative and quantitative data and identify key actions that can be undertaken by the University to enhance the employee experience. The goal is to have recommendations associated with the 7 high priority areas that emerged from the data analysis completed by TalentMap (service provider) by December 2022 and presented to the Executive Leadership Team by January 2023.

- Once the group completes their work associated with the high priority areas, it will then review the medium priority areas emerging from the data analysis conducted by TalentMap to identify any further emerging actions.

2. Department/Area Specific Action Planning
- Area/department specific survey results are being distributed by area leads (Deans, Associate Vice-Presidents, Executive Directors) based on a Vice-President specific approach.
- Information sessions with area leads have taken place in October 2022 to provide guidance and timelines for the distribution of Faculty/area/department specific reports to faculty and staff and the engagement of faculty and staff in the action planning process.
- The goal is for Faculties/areas/departments to develop realistic action plans by March 2023. These plans will be shared with the respective Vice-President by March 2023 and a report on progress will also be provided to the respective Vice-President by November 2023.

Mental Health Strategy for Employees
- The goal is to have the strategy completed by the Spring 2023.
- The Employee Mental Health Strategy Steering Committee has been established and will start meeting in mid-November. More information can be found on the Mental Health Strategy website.
- The data gathered through the Aspire Strategic Planning process and the Employee Engagement Survey will be leveraged for the development of the strategy.
- The University is in discussions with an external workplace mental health expert to provide guidance and research-informed subject matter expertise to the Steering Committee during all phases of the Employee Mental Health Strategy development process. The engagement of an external partner will be discussed at the first meeting of the Steering Committee.

- Given the University's obligations as an employer, the Employee Mental Health Strategy will be grounded on the 13 factors for addressing mental health in the workplace (National Standard of Canada for Psychological Health & Safety in the Workplace -Mental Health Commission of Canada).

Equity, Diversity, and Inclusion Recognition Awards
- The Equity, Diversity and Inclusion Awards committee has been established.
- The Committee will meet in mid-November to create an awards program to honour, celebrate, and recognize individuals and teams who have made significant contributions towards building a more diverse, equitable, and inclusive campus community.
- The goal is to launch the call for nominations in January and for the awards to be presented in March following UWindsor's EDI week. More details to follow.

Student Non-Academic Misconduct (SNAM)

Early in 2021, our campus community received a communication advising that the Office of Student Experience (OSE) would no longer be responsible for addressing infractions related to the Student Code of Conduct regarding Non-Academic Misconduct. More specifically, OSE would no longer have responsibility for investigation and discipline stemming from non-academic student misconduct. The communication also outlined that the University of Windsor would be taking steps to restructure the Office of Student Experience by undertaking a broad, campus-wide consultative process, to ensure that the creation of a new office is rooted in inclusive best practices, diverse campus expertise, student needs, and lived experiences. A Consultation Working Group was established to determine a framework for that process, which included: student surveys, interviews, and focus groups, as well as comprehensive consultations with faculty, staff, and experts in the field.

In the summer of 2021, the firm of Charles C. Smith Consulting was engaged as external subject matter experts to conduct, coordinate, and manage the process of a broad, campus-wide consultation and develop recommendations. The consultation focused on assessing Student Non-Academic Misconduct (SNAM) procedures as well as the culture of non-academic discipline at UWindsor in general. The consultative process was rolled out in 3 phases:

Phase 1: Foundational
- Document review
- Stakeholder consultations (62 in-depth semi-structured interviews with individuals and groups)

Phase 2: Comprehensive
- All-student online screening survey on (i) campus climate and (ii) previous contact with SNAM discipline process

Phase 3: Focused
- In-depth surveys to (i) current students and (ii) alumni with graduation years 2016-2021

The consultation has been completed and a report released by Charles C. Smith Consulting. There are several key success factors and principles that emerged from the report as follows:
- Developing a strategy to repair trust in the SNAM process and create positive precedents in particular for Black, Indigenous, and racialized students.
- Employing a communications strategy designed to counter and replace older narratives attached to the process at this time.
- Understanding that the misconduct process issue is, at this point in time, indelibly bound up with the question of race for UWindsor: Implementation steps must be assessed through the lens of racial equity and anti-racism and a racially and culturally diverse slate of candidates must be available for each position to be filled.
- Creating an effective misconduct prevention strategy rooted in student development theory with measures designed to inform a student's future development vs. being merely punitive.
- Defining expectations and behavioural standards as community standards (and in some faculties, standards of the students' future profession) vs. rules imposed by the institution.
- Considering legal and reputational risks or liability for the university when making decision.

- Building a wide network of connections between and across central administration, faculty departments and student groups for collaboration, support, or referral; countering the existing perceptions of a siloed SNAM process.

The following are the implementation steps that have and/or will be taken within the next several weeks:

Implementation Action #1 – CCS Consulting's report
The Consultant's report was shared with members of the Working Group and Anti-Black Racism Taskforce members and will also be made available to members of the campus community through the VP, EDI's website.

Implementation Action #2 – Establish a new and independent office
A new Office of Student Rights and Responsibilities will be established by December 1, 2022, with the following permanent positions:
o Intake Coordinator (TBD)
o Manager, Office of Student Rights and Responsibilities (Ola Adeboboye)
o Executive Director, Office Student Rights and Responsibilities (TBD)

Implementation Action #3 – Reporting lines
The newly established office will report through the VP, EDI for the next two years, at which time, there will be an opportunity to review as to whether the office will return to the portfolio of the Provost and more specifically whether it will report to either the Provost or to the AVP, Student Experience, or whether it will remain under the VP, EDI's portfolio permanently.

During this interim two-year period, the VP, EDI's office will provide support to the Office of Student Rights & Responsibilities in its mandate to:
o Repair trust with students and the greater campus community.
o Ensure that all phases of implementation will be assessed through the lens of racial equity and anti-racism and anti-oppression.
o Set expectations and behavioural standards which will be clearly communicated and articulated and that will be in the spirit of establishing community standards to ensure students' development is one based on social citizenship.
o Build relationships across campus and with various student support services offices (e.g., Aboriginal Education Centre, Black Student Support, Student Accessibility Services).
o Build professional expertise and become recognized leaders in the area of student conduct.

Implementation Action #4 – Revision of Student Code of Conduct Policy and Non-Academic Student Misconduct Procedures
Upon the appointment of the Executive Director, supported by the Manager, the ED will lead the review and revision of the Student Code of Conduct Policy and the Non-Academic Student Misconduct Procedures. The Executive Director will be responsible for identifying and engaging key partners, gaining their feedback, and facilitating discussions with the. Key partners will include Student Counselling Services, Residence Services, Athletics Services, Community Legal Aid, Sexual Violence Prevention, Resistance and Support, Assessment and Care Team, Associate Deans, OHREA, UWSA, etc.).

The Executive Director 's review and revision of the Policy and Procedures will also engage with the appropriate governance bodies (e.g., Senate and Board of Governors), particularly regarding the Policy revisions impacting both Academic integrity and Non-Academic Student Misconduct.

Implementation Action #5 – Building expertise within the Office of Student Rights & Responsibilities
The new office will build specific expertise around:
o Developing assessments that critically examine data and identify equity gaps and take steps to repair inequitable outcomes in processes, enact procedural changes, and advocate for policy shifts.

- o Setting policy, procedures, and expectations for record keeping, retention, and destruction for the university that is compliant with applicable laws and regulation.
- o Establishing case resolution pathways. In addition, reviewing resolution pathway data through various data points (i.e., race, gender, age, student status) and identifying patterns of behavior to improve equity and inclusion practices in resolution pathway. Facilitating, assessing, and training on resolution pathways.
- o Effectively conveying information regarding student conduct, healthy behaviors, and the importance of the work to students, families, campus partners, and leadership, as well as external partners.
- o Persistently evaluating organizational policies, practices, and procedures that reinforce historical colonial constructs. Advocating for intentional inclusion and social justice while guiding organizational transformation. Actively teaching the interconnection of systems of oppression and student conduct systems to others.
- o Identifies and facilitates educational curriculum and identifies gap areas in educational content and collaborates with campus partners in content development as it pertains to student conduct.

Anti-Racism
- Initiatives Against Anti-Asian Hate Working Group: Formed in September 2022, the purpose of this committee is to identify and implement key actions that the University can take to make our campus more inclusive, safe, and welcoming to members of the Asian community. Membership is made up of faculty and staff from across the university.
- Working with Student Groups regarding Racial and Cultural Awareness:
  - o Islamic Heritage Month (Muslim Chaplaincy, Muslim Students Association, Dr. Naved Bakali - Faculty of Education)
  - o UWindsor Jewish Students Association (assisting in the promotion of Holocaust Education Month in December)
  - o Diwali Celebration - October 24 and October 28th (Supported Office of Student Experience and BIDE Institute for the inaugural celebration. Working with student organizers to build a sustainable plan to make this an annual cultural event.)
- International Student Planning and Partnership
  - o collaborating with the efforts of the Windsor-Essex Local Immigration Partnership
  - o addressing the needs and concerns of our international students and addressing their needs within the City of Windsor.
- Building an Anti-Racism Website
  - o creating a hub for information and resources available for the campus community
- Ongoing campus support and consultations with faculty, students, staff, and alumni
- Black Student Support Coordinator
  - o planning to attend their first Fall Open House to promote program services and engage prospective students and families.
  - o ongoing student advising
  - o working with Black student groups to bring about awareness and forming partnerships and support
  - o developing a campus communications plan to ensure students are aware of services and support. Online campaigns and in-person events are to be scheduled.
  - o BSSC has now established contact with 440 Black students and outreach continues.

Student Self – Identification Survey
The student racialized and diversity data project is continuing. Phase 2 of the Student Self-Identification Survey was launched on October 18. The survey is open and accessible to all students through the SIS. The survey is optional, and we are taking steps to promote it to students.

Office of Human Rights, Equity, and Accessibility

EDI Education Framework
The presenter is Jodie Glean, Executive Director, Equity, Diversity, and Inclusion at the University of Toronto

Session One – November 30, 1:00pm – 3:00pm
Title: Deepening Your Practice in Antiracist Pedagogy: Transforming learning environments through Antiracism actions and inclusive teaching practices
During this foundational interactive session, participants will engage discussions and materials that will highlight the following areas through an intersectional lens:
- The foundational principles of Antiracist Pedagogy
- The common challenges and pitfalls that faculty members and TAs experience in the learning environment and tools to deepen one's preparation and response to difficult moments as they arise
- Proactive strategies to integrating inclusive practices into one's teaching practice

Session Two – December 8, 9:30am – 11:30am
Title: Deepening Your Practice in Antiracist Pedagogy: Transforming learning environments through Intentional Course Design
During this foundational interactive session, participants will engage discussions and application exercises that will highlight the following areas through an intersectional lens:
- Antiracist and decolonial approaches to course design
- The multifaceted factors to be taken into consideration in course and syllabus development across disciplines
- The interconnectedness between one's antiracist lens, inclusive teaching practice and course design

Training for Equity assessors and search/appointments' committees
We are finalizing a couple of dates for the PCEE equity training. The goal is to have two sessions later in Nov/early Dec.

University of Windsor
Senate

5.10:   **Report of the Vice-President, Research and Innovation**

Item for: **Information**

Forwarded by: **Chris Houser**

Research, scholarship, and creative activity are critical to the reputation of the University of Windsor and have a significant influence on our ability to recruit and retain undergraduate and graduate students. Reports from the Office of the Vice-President, Research and Innovation will include quarterly statistics on research activity including new awards and submissions (October), publications (this meeting), the activity of ORIS (December) and creative performances and exhibitions (January).

PUBLICATIONS
The number of publications is based on data from Scopus and Web of Science. Unfortunately, this does not capture the whole of the University's research enterprise and may under-represent research, creative, and scholarly work in the areas of arts and humanities, and law. Law especially is not well represented, as many of the Canadian law journals are not captured in either Scopus or Web of Science. In this respect, the information below is a simple baseline.

University of Windsor, Total Publications as of October 28th, 2022

Publication Type	2020	2021	2022	
Journal Paper	626	756	813	We are on track to have 1120 publications in 2022, with a 7.5% increase in journal papers over 2021
Conference Paper	169	138	71	
Chapter	67	58	24	
Review	40	50	50	
Book	8	6	3	
Grand Total	1070	1178	961	

Top 5 Windsor cited articles for 2020 and 2021 as of October 28, 2022

| Title	Journal	UWindsor Author	Citations
A genomic catalog of Earth's microbiomes	Nature Biotechnology	McKay GLIER, Science	142
Plastic wastes to construction products: Status, limitations, and future perspective	Case Studies in Const. Materials	Adesina Engineering	125
Transfer and transport of microplastics from biosolids to agricultural soils and the wider environment	Science of the Total Environment	Crossman Science	105
Failure Prognosis and Applications - A Survey of Recent Literature	IEEE Trans. On Reliability	Kordestani, Saif Engineering	102
China's carbon emissions trading and stock returns	Energy Economics	Wen Engineering	100

Top Cited Articles by Faculty for 2020 and 2021 as of October 28, 2022

| Faculty	Title	Journal	UWindsor Author
FAHSS	Integrating Sexual Assault Resistance, Bystander, and Men's Social Norms Strategies to Prevent Sexual Violence on College Campuses: A Call to Action	Trauma, Violence & Abuse	Senn

|			
Education	Centering complexity in 'educators' data literacy' to support future practices in faculty development: a systematic review of the literature	Teach. in Higher Ed.	Stewart
Engineering	Plastic wastes to construction products: Status, limitations, and future perspective	Case Studies in Const.Materials	Adesina
Human Kinetics	Stress, physical activity, and screen-related sedentary behaviour within the first month of the COVID-19 pandemic	Applied Psychology	Woodruff, Coyne
Law	Good Enough for Government Work? Life-Evaluation and Public Policy	J.l of Happiness Studies	Semple
Nursing	Simulated patient scenario development: A methodological review of validity and reliability reporting	Nurse Ed. Today	Mirza
Science	A genomic catalog of Earth's microbiomes	Nature Biotechnology	McKay

Books published in 2022 as of October 28, 2022

Natural Resource-Based Development in Africa: Panacea or Pandora's Box?
Jesse Salah Ovadia
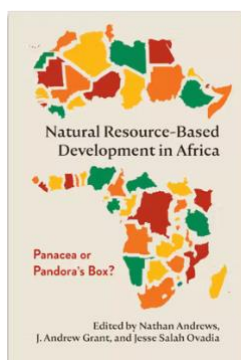
Police Funding, Dark Money, and the Greedy Institution
Randy K. Lippert
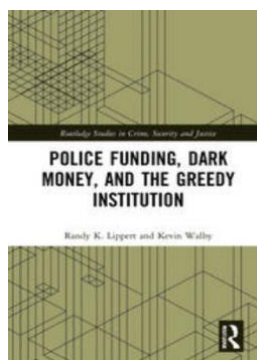
Corporate Governance and Economic Development Identifying Critical Institutional Reforms
Anna Lanoszka
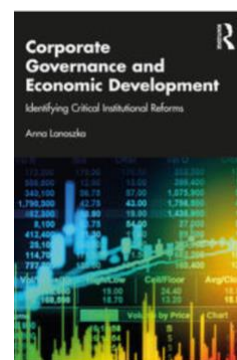
CANADA RESEARCH CHAIR (CRC) SEARCHES AND NEW STRATEGIC ALLOCATION MODEL

Please see the attached outline of the new CRC allocation strategy and institutional competition. Proposals are due to the OVPRI by December 15, 2022 and they require the approval of the Dean of the respective Faculty or Faculties.

EPICENTRE REVIEW

The EPICentre is the hub for all entrepreneurial endeavors on the University of Windsor campus. Following the approach used for the VPRI review completed last academic year, we will be initiating a review of the EpiCentre. There will be an opportunity for input from faculty, staff, and students.

PLANNING FOR NEXT CFI ALLOCATION

The Innovation Fund form the Canada Foundation for Innovation (CFI) is an opportunity for the institution to invest in infrastructure from fundamental research to applied research and technology development. Our most recent envelope (~$6.1 million) was recently allocated to several projects on campus (e.g., CANS Neutron Scattering) and as commitments to proposals led by other institutions (e.g., Guelph Freshwater Network). The last envelope of funding was announced in 2021, proposals were due in 2022, and announcements will be made in 2023. CFI is hoping to make this funding bi-annual, with the next envelope being announced sometime in the next year. We have historically been reactionary, and we have scrambled to identify projects and allocate the envelope. Moving forward I would like to be proactive in identifying strategic needs for research infrastructure so that we start proposal development. Whether given part or all of the CFI envelope, the projects that we identify now will be helpful for other grants, federal funding, and donor support.
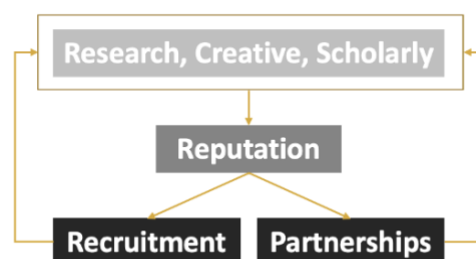
Deans have been asked to work directly with their Associate Deans of Research and to consult with faculty and aligned research centres and institutes to develop 1-page high-level proposals for use of the future CFI envelope. In your proposal consider how an investment in new research infrastructure will: 1) enhance research and reputation, 2) support the largest number of faculty across campus, 3) have potential to include collaborations and contributions

from other institutions (do not contact other institutions at this time), and 4) support the Windsor-Essex region, Ontario, and Canada. Faculties can submit multiple proposals and cross-Faculty proposals are encouraged. Given that opportunities, inspirations, and needs evolve, proposals and ideas that develop after that deadline will still be accepted on a rolling basis. Please note that the Innovation Fund is different from the CFI-JELF allocation.

Stanford's World's Top 2% Researchers

The Stanford database tracks citation data for both a faculty members entire career (up to 2021) and for the most recent full year that data is available (2021). The data is based on h-index, co-authorship, self-citations, and the size of the research field. It is important to note that this database does not capture the whole of a university's research enterprise and may under-represent research, creative, and scholarly work in the areas of arts ,humanities, and law.

Career	In-Year
Adam, Barry D.	Adesina, Adeyemi
Ahmadi, Majid	Ahmadi, Majid
Alpas, Ahmet T.	Al-Aasm, Ihsan S.
Aroca, Ricardo F.	Albanese, J.
Drake, G. W.F.	Alpas, Ahmet T.
ElMaraghy, Hoda	Aroca, Ricardo F.
Fisk, A. T.	Drake, G. W.F.
Fryer, B. J.	ElMaraghy, Hoda
Gorey, Kevin M.	Erdodi, Laszlo
Hackam, Reuben	Fisk, A. T.
Hu, H.	Hackam, Reuben
Jonathan Wu, Q. M.	Houser, Chris
Kaloni, P. N.	Hussey, Nigel E.
Kwan, Hon Keung	Jackson, Dennis L.
Liu, Bing	Jonathan Wu, Q. M.
Loeb, Stephen J.	Kar, Narayan C.
MacIsaac, Hugh J.	Kordestani, Mojtaba
Maticka-Tyndale, Eleanor	Kwan, Hon Keung
McGarvey, Bruce R.	Loeb, Stephen J.
Michael Siu, K. W.	MacIsaac, Hugh J.
Northwood, Derek O.	McCoy, Christopher Eric
Polat, Ali	Mennill, Daniel J.
Rourke, Byron P.	Mirza, Muhammad Usman
Saif, Mehrdad	Naderi, Bahman
Sale, Peter F.	Nie, Xueyuan
Ting, David S.K.	Northwood, Derek O.
Trenhaile, Alan	Polat, Ali
Tuck, D. G.	Rau, Jeffrey G.
Walton, Douglas	Razavi-Far, Roozbeh
Wang, Zhongde	Saif, Mehrdad
Wu, Huapeng	Sale, Peter F.
Zhang, Ning	Singh, Pushpinder
Zheng, Ming	Ting, David S.K.
	Trenhaile, Alan
	Walton, Douglas
	Zhang, Ning
	Zheng, Ming

33 current and former faculty from the University of Windsor are on the career list and 37 faculty and students are on the in-year list. Here is how we compare to other universities in Ontario without a medical school. Data is present as percent of faculty.

	Career	In Year
Brock	5.9%	4.7%
Laurier	2.5%	2.4%
Trent	10.0%	7.2%
Waterloo	19.8%	16.8%
Windsor	6.3%	7.1%
Carleton	7.2%	6.3%
Lakehead	6.6%	6.3%

Canada Research Chair (CRC) Allocation Strategy 2022

Background

Canada Research Chairs (CRCs) are an opportunity to invest in existing and emerging areas of research strength, and thereby enhance the reputation of the University of Windsor. Tier 1 CRCs are an opportunity to support outstanding researchers acknowledged by their peers as world leaders in their fields, while Tier 2 CRCs are an opportunity to support exceptional emerging researchers, acknowledged by their peers as having the potential to lead in their field. In this respect, the CRC program is an exciting opportunity to attract new high-caliber researchers to the University of Windsor with support from NSERC, SSHRC and CIHR.

The number of chairs at an institution are based on our three-year average of tri-agency funding (NSERC, SSHRC, and CIHR) and the national re-allocation process is conducted every 5 years. The University of Windsor currently has six Tier 1 Chairs and seven Tier 2 Chairs supported by NSERC (9), SSHRC (3) and CIHR (1).

	Tri-Agency Funding	% of Funding	Current CRCs
Odette	$129,806	1.3	0
Eng.	$3,389,267	33	3
Education	$88,808	0.9	1
FAHSS	$920,269	9.0	2
Hum. Kin.	$250,860	2.5	0
Law	$99,636	1.0	0
Nursing	$16,238	0.2	0
Science	$5,246,343	52	3

As of Fall 2022, there are 3 active chairs and another 4 in various states of renewal. There is also an active search in the Faculty of Engineering for an Environmental Engineer, 2 expiring chairs and 3 vacant chairs. Given that Tier 1 chairs can be split into two Tier 2 chairs, the University of Windsor has an immediate need to initiate a search for 5 and 7 chairs. To meet the Tri-Council equity targets, several of these searches will be restricted to women and gender minorities, persons with disabilities, Indigenous Peoples, and racialized minorities.

In consultation with the Deans and the CRCs, there will be expectations of current and future chairholders to be visible research leaders on campus and in the community, and ensure that their research, creative, and scholarly work is strengthening the reputation of the University of Windsor nationally and internationally.

CRCs at the University of Windsor

CRC	Agency	Tier	Status	Research
Catherine Febria	NSERC	2	Renewal	Freshwater Restoration Ecology
Jennifer Willett	SSHRC	2	Renewal	Art, Science and Ecology
Aaron Fisk	NSERC	1	Renewal	Trophic Ecology
Charlene Senn	CIHR	1	Renewal	Sexual Violence
Ning Zhang	NSERC	2	Active	Edge Computing and Internet of Vehicles
Narayan Kar	NSERC	1	Active	Electrified Vehicles
Hugh MacIsaac	NSERC	1	Active	Aquatic Invasive Species
Oliver Love	NSERC	2	Expiring	Integrative Ecology
Stephen Loeb	NSERC	1	Expiring	Supramolecular Chemistry
Shijing Xu	SSHRC	2	Expiring	International and Intercultural Reciprocal Learning
Unfilled	NSERC	2	In Search	Environmental Engineering
Unfilled	SSHRC	2	Vacant	Open
Unfilled	NSERC	2	Vacant	Open

It is important to note that CRCs are not permanently allocated to Faculties. When a research chair is vacated it has always and will continue to move back to the central pool for redistribution based on current and future strategic research priorities.

2022/23 Allocation Process

Through consultation and in parallel with the Aspire Strategic Plan development, the University of Windsor is adopting a more strategic approach to the allocation of CRCs to complement existing and emerging research areas.

Consultation with the Deans, Associate Deans of Research, and the current CRCs, revealed the following strategic research areas as opportunities for one or more CRC:
1. Public and Environmental Health
2. Smart Technology and Materials
3. Automobility and Cybersecurity
4. Community and Regional Transformation
5. Indigenous Research & Scholarship
6. Black Research & Scholarship

It is important to note that these are broad areas and there are other research themes (e.g., Social Justice) that can be brought forward through one or more of these broad areas.

The allocation and search process for the Indigenous and Black Scholarship CRCs will be developed and allocated based on further consultation and are not included in the following allocation strategy:

1. Internal Competition: Proposals are invited from the Deans or their designate for one or more chairs in the strategic research areas (1-4) outlined above. Multi-Faculty proposals are encouraged, and all proposals require the approvals of the respective Deans. The 2-page proposals should provide the following information:
   a. Chair title (e.g., Canada Research Chair in ……..)
   b. Strategic Research Area
   c. Summary of the strategic research opportunity that will enhance research and reputation
   d. Statement on how the chair aligns to existing research strengths and how the chair will serve as a catalyst for increasing research activity and funding
   e. Description of how the chair will increase research funding, support academic program development and training, provide opportunities for advancement, etc.
   f. Description of how the position will need to be funded (e.g., open line, bridge to future open lines, need for support, etc.)
2. Proposals will be due to the OVPRI on **December 15, 2022.**
3. Proposals will be reviewed by the President's Executive Leadership Team (ELT) based on the quality of the research proposal, potential to strength research and build reputation, opportunities for new undergraduate and graduate program development, and the current distribution of chairs. Opportunities for combining proposals will be explored if there is sufficient overlap.
4. Results will be announced early Winter 2023.