



NOTICE OF MEETING

There will be a meeting of the Senate on Friday, April 14, 2023, 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 March 10, 2023 Approval S230310M
3 Business arising from the minutes
4 Outstanding Business/Action Items
\*4.1 PDC Program/Course Changes Lionel Walsh-Approval S230414-4.1a-c
(a) Master of Engineering – Minor Program Changes (Form C)
(b) Engineering – Minor Program Changes (Form C)
(c) Engineering – New Course Proposals (Form D)
5 Reports/New Business
5.1 Program Development Committee
\*5.1.1 PDC Report on Computer Science’s University Program Review Progress Report Lionel Walsh-Information S230414-5.1.1
\*5.1.2 Program/Course Changes Lionel Walsh-Approval S230414-5.1.2a-e
(a) Kinesiology (Graduate) – Minor Program Changes (Form C)
(b) Psychology (Graduate) – Minor Program Changes (Form C)
(c) Engineering – New Course Proposal (Form D)
(d) Engineering – Minor Program Changes (Form C)
(e) Business – Minor Program Changes (Form C)
5.2 Academic Policy Committee
5.2.1 2023-2024 Operating Budget Proposal Isabelle Barrette-Ng -Information S230414-5.2.1
a. Proposed Tuition and Compulsory Ancillary Fees
b. Proposed Operating Budget
5.2.1.1 Report from Academic Policy Committee Isabelle Barrette-Ng-Information
5.3 Senate Governance Committee Rob Gordon
5.4 Senate Student Caucus Dave Andrews-Information
5.5 Report from the Student Presidents UWSA/GSS/OPUS-Information
5.6 Report of the Academic Colleague Lisa Porter

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|--------------|---|--|
| <b>5.7</b>   | <b>Report of the President</b>  | <b>Robert Gordon-Information</b>                   |
| <b>5.8</b>   | <b>Report of the Provost</b>  | <b>Patti Weir-Information</b><br>S230414-5.8       |
| <b>5.8.1</b> | <b>Microcredentials Update</b>  | <b>Jennie Atkins-Information</b>                   |
| <b>5.8.2</b> | <b>Enrolment Management Update</b>  | <b>Chris Busch-Information</b><br>S230414-5.8.2    |
| <b>5.9</b>   | <b>Report of Vice-President, Equity, Diversity, and Inclusion</b>   | <b>Clinton Beckford-Information</b><br>S230414-5.9 |
| <b>5.10</b>  | <b>Report of Vice-President, Research, and Innovation</b>   | <b>Chris Houser-Information</b><br>S230414-5.10    |
| <b>5.11</b>  | <b>Acting Vice-President, Equity, Diversity, and Inclusion – Contract Renewal to Official Starting Date of VP, PEI (<i>in camera</i>)</b> | <b>Rob Gordon-Approval</b>                         |
| <b>6</b>     | <b>Question Period/Other Business</b>   |  |
| <b>7</b>     | <b>Adjournment</b>  |  |

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

\*4.1a: **Master of Engineering – Minor Program Changes (Form C)**

Item for: **Approval**

Forwarded by: **Program Development Committee**

**MOTION: That the admission and degree requirements for Master of Engineering 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 Faculty of Engineering Council, the Faculty of Graduate Studies Council, and the Program Development Committee.
- *See attached.*

The document is coming back to Senate, following revisions to section B.1 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material.

<b>TITLE OF PROGRAM(S)/CERTIFICATE(S):</b>	<b>Master of Engineering (MEng)</b>
<b>DEPARTMENT(S)/SCHOOL(S):</b>	<b>Engineering</b>
<b>FACULTY(IES):</b>	<b>Engineering</b>

<b>Proposed change(s) effective as of*</b> [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i>	<b>Graduate Fall 2023</b>
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### A.1 PROGRAM REQUIREMENT CHANGES

Please provide the current program requirements and the proposed new program requirements by cutting and pasting from the current undergraduate or graduate web calendar ([www.uwindsor.ca/secretariat/calendars](http://www.uwindsor.ca/secretariat/calendars)) and clearly marking deletions with strikethrough (~~strikethrough~~) and additions/new information with **bolding and underlining**. Example: Degree requirements: WXYZ-1000, ~~WXYZ-1010~~, WXYZ-1100, WXYZ-2100, WXYZ-3100, WXYZ-4100, plus three additional courses at the **3000-level or** 4000-level.

#### Master of Engineering (MEng)

##### Degree Requirements

Students in MEng Electrical and Computer Engineering, Mechanical Engineering, Engineering Materials, and Industrial Engineering must take Eight (8) courses, equivalent to 24 credits, including:

- (a) Four (4) mandatory courses, equivalent to 12 credits, including GENG-8000 (Engineering Technical Communications)\*, GENG-8010 (Engineering Mathematics), and GENG-8020 (Engineering Project Management) and GENG-8030 (Computational Methods and Modeling for Engineering Applications).
- (b) Four (4) major graduate courses, equivalent to 12 credits, one of which may be taken from the 4000-level courses related to the area of study. ~~major~~ (Students in MEng Electrical and Computer Engineering are not permitted to take a 4000-level course).

~~\*Engineering Technical Communications may be waived (i.e., replaced by another graduate course of equal or greater credit value approved by the program coordinator,) at the discretion of the department pending an evaluation of the student's communication ability by the department.~~

[...]

Students in MEng Civil Engineering and MEng Environment Engineering must take eight (8) courses, equivalent to 24 credits, including:

- (a) three (3) mandatory courses, equivalent to 9 credits: GENG-8000 Engineering Technical Communications\*, GENG-8010 Engineering Mathematics and GENG-8020 Engineering Project Management
- (b) five (5) major courses, equivalent to 15 credits, one of which may be taken from the 4000-level courses related to the major.

~~\*Engineering Technical Communications can be waived (i.e., replaced by another graduate course of equal or greater credit value approved by the program coordinator,) at the discretion of the department pending an evaluation of the students' communication ability by the department.~~

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

#### Master of Engineering – Admission Requirements (Revisions)

4.1 Undergraduate degree (BASc /BSc. in Engineering/B.Eng. degree or equivalent\*) with at least a **72%** (~~70%~~)-average over the last four years. International applicants are advised to refer to the specified minimum admission requirements, listed by country, at the Faculty of Engineering's Professional and Graduate Studies (FEPGS) website and the Faculty of Graduate Studies website. Students whose undergraduate degree programs do not provide them with sufficient GPA/overall average, background in Design and Applied Science and Professional/Technical communications are required to ~~enter a qualifying program of courses (complete~~ Honour Certificate ~~Program)~~ at the undergraduate level before admission to candidature for the MEng degree. Students entering and successfully completing the ~~MEng qualifying program~~ in any Civil, Environmental, Industrial Manufacturing Systems Engineering as well as Electrical and Computer Engineering with the minimum overall average of 77% can gain admission to the MEng in the respective program.

[...]

5.3 While strongly discouraged, a full-time MASc student may apply for admission into the MEng degree track. A maximum of **(four)** ~~two~~ courses of advanced standing may be granted towards the requirements of the MEng degree provided the courses are on the Department's approved MEng course list. Applications for admission to the MEng from the MASc program must conform to the general regulations regarding admission to the MEng program. Admission is not guaranteed. Students transferring from the MASc research degree to the MEng course-based degree will be expected to be self-supporting and can expect no financial assistance from the Department or University during the remainder of their studies.

#### A.2 MINOR COURSE CHANGES REQUIRING ADDITIONAL RESOURCES OR AFFECTING DEGREE REQUIREMENTS

*If this is a minor course and calendar change (usually noted on a Form E) requiring additional resources or affecting degree requirements, please provide the current course information and the proposed new course information by cutting and pasting from the current undergraduate or graduate web calendar and clearly marking deletions with strikethrough (~~strikethrough~~) and additions/new information with **bolding and underlining**.*

*Examples of minor course changes include: deleting courses, course description changes, pre/anti/co- requisite changes, contact hour/lab requirement changes, course title changes, renumbering courses, and/or cross-listing courses. Minor course calendar changes, which do not require additional resources or do not affect degree requirements, should be submitted on a **Form E**.*

N/A

#### B. RATIONALE

*Please provide a rationale for the proposed change(s).*

These courses are legitimate courses offered by our various departments and not allowing students to receive credits when they pass the courses is not logical or student friendly. The goal of the Engineering Technical Communications is to convey Indigenous-related materials and to teach our students how to write a technical report, how to do proper citations as well as create professional presentations. Knowing the English language is not sufficient to waive this course.

Due to the large number of applications, we are receiving for the M.Eng Program and the challenges faced by less well-prepared students, the time has come to increase the GPA requirement by 2% to have better prepared students admitted to the program.

#### B.1 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?

## FOREWORD

The present PDC form is associated with the Master of Engineering (MEng) programs, which serve a large (>2500) body of students who are mainly (i.e. more than 98%) newcomers to Canada, with limited knowledge of the history of their new home. To be specific, we have found that these students have little knowledge of the history of the injustices meted out to Indigenous peoples across Canada through the history of the country. The other aspect of the challenge of educating our MEng students on these topics is that the MEng programs require eight courses and are normally completed in four semesters (i.e., 16 months), so the students are on-campus for a relatively short time. Despite these challenges, we aspire to bring awareness of Indigenous issues to all of our MEng students and are committed to incorporating engaging learnings and assessments to achieve this.

### Responses to the Specific Questions in Section B.1

#### **1. What process has your department/Faculty used to consider Indigenization?**

Due to the brevity of the Master of Engineering program, the opportunity for the Faculty of Engineering to include Indigenous learning and knowledge content is more challenging than for our undergraduate programs. The module in the *GENG-8000 Engineering Technical Communications* course (which is taken by all MEng students in their first semester at UWindsor), described below, is our initial effort to bring these issues to our students. This module is an extension of the existing course module on Cultural Considerations, in which students are introduced to differences between high context and low context cultures and made aware of the importance of body language and gestures.

The Indigenous materials presented to GENG-8000 students have been reviewed and endorsed by Indigenous Learning

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

Specialist Jaimie Kechego, of the Centre for Teaching and Learning (CTL) and include information on a number of Indigenous issues through the lens of a large engineering infrastructure project and its effects on a community. After reviewing the materials, students are assigned a discussion post writing assignment to reflect upon the information and discuss its relevance to them and/or the engineering profession. They are then required to review and comment upon the work of two of their classmates.

This approach has been taken to reinforce the fact that these issues are important to the engineering profession, regardless of discipline, as discussed below, while reinforcing the importance of good communication skills and introducing the students to the vocabulary of Indigenous and social justice issues in Canada. The discussion post approach, in which students must reply to each other, is also an attempt to bring Indigenous pedagogical approaches, such as reflective and sharing techniques into the classroom.

This process has been undertaken by the GENG-8000 Course Coordinator (Dr. Lindsay Miller) and the Associate Dean, Professional Programs (Dr. Peter Frise), in communication with the Associate Dean, Academic (Dr. Afsaneh Edrisy) who has worked with Jaimie Kechego, the Indigenization Learning Specialist in the Centre for Teaching and Learning (CTL).

Consultations and further work on this initiative is planned to ensure continuous improvement and enhancements to the existing program as we gain experience with it.

#### **2. How have you considered the importance or relevance to the course/program?**

These materials are relevant to GENG8000 as this course in technical communication incorporates broad cultural considerations when writing and presenting to various audiences. The expansion to include specific Indigenous considerations is relevant to the course and the program.

Licensing requirements in all Canadian provinces and territories require all professional engineering work to consider the societal and environmental impacts of building designs, infrastructure projects, machinery operation, consumer product manufacturing, energy generation and distribution systems, information technology, and other technical work. Issues such as climate change and global trade are discussed throughout the MEng program in applicable courses, and our inclusion of Indigenous ways of knowing in the GENG-8000 course is designed to bring our new MEng students, virtually all of whom are newcomers to Canada, into the circle of awareness of these topics which are of special note to all Canadians.

The most important requirement embodied in the Professional Engineers Ontario (PEO) Code of Ethics is to “regard the practitioner’s duty to public welfare as paramount.” [1]. We are reinforcing to all our students that this duty implies respect for, and collaboration with, Indigenous communities when developing infrastructure and processes and we are endeavoring to bring this knowledge to our programs in as many ways as we can.

#### **3. How has your department or faculty approached raising awareness for Indigenous knowledges in your area?**

This area requires much more development in the Professional Programs portfolio of the Faculty of Engineering. The process described above was created by the Associate Dean, Academic and the GENG-8000 Course Coordinator in consultation with the Associate Dean, Professional Programs with some input from other faculty members. It is modelled on the work of the Associate Dean, Academic who has developed the program for UWindsor Engineering undergraduate programs.

Along with the new content in the *GENG-8000 Engineering Technical Communications* course (described above and detailed in *Section B2* below), the Faculty of Engineering Equity, Diversity and Inclusion Officer has also been working with groups of faculty members to make everyone aware of the issues of decolonization and the history of Indigenous people in Canada.

# PROGRAM DEVELOPMENT COMMITTEE

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To provide a solid foundation of knowledge, the Associate Dean, Professional Programs is taking the short course *"Pulling Together: A Guide for Curriculum Developers."* which is being taught by Jaimie Kecheho of the CTL on-campus. This is a six-week course which includes readings and video-based materials backed-up by self-reflections on interviews of Indigenous Elders and scholars from across Canada. The knowledge gained from this course, and elsewhere, will be communicated throughout the group of MEng program instructors to enhance the content of Indigeneity and Indigenous ways of knowing in as many components of the Professional Programs portfolio as possible.

Our goal is to create a community of allies within Engineering to foster a desire among our students to use their technical skills and talents over their careers to improve the lives of Indigenous peoples throughout Canada.

#### **4. What do the [TRC](#) and [University Principles](#) documents suggest relevant to your course?**

At the present time, the module within the GENG-8000 course described above is our initial effort to describe and affirm the spirit of the Truth and Reconciliation Commission (TRC) Call to Action item 62(i), to create "curriculum on residential schools, Treaties, and Aboriginal peoples' historical and contemporary contributions to Canada." [2].

Also, the University Principles document states that focus should be placed on learning outcomes. This is an activity on which the Faculty of Engineering has been working to implement for more than a decade. The Faculty's current process aligns with the principle *"Recognize the importance of providing greater exposure and knowledge for non-Indigenous students on the realities, histories, cultures and beliefs of Indigenous people in Canada"* [3].

In addition, the GENG-8000 Course Coordinator has applied for two ELEVATE Scholarships which will provide funding and collaborative opportunities for Indigenous students in Engineering, to align with the commitment to *"develop opportunities for Indigenous students"* [3].

#### **5. What have other similar courses/programs done that might be relevant to your course/program?**

The Professional Programs portfolio within the Faculty of Engineering has begun our journey by developing and implementing the materials within the GENG-8000 course which is taken by all MEng students - but this should be regarded as only a beginning.

Building on the grant received by Associate Dean, Academic Edrisy, and others, on February 7, 2023, to fund research into the current practices on Indigeneity within engineering programs across Canada, best practices at engineering schools across Canada will be examined over the coming year or two as part of the collective effort of UWindsor Engineering. This work will advise all programs within Engineering – including the Professional Programs portfolio.

Along with the research and program development efforts described above, the Associate Dean, Professional Programs, has contacted the CEO of one of Canada's top Indigenous-owned consulting engineering firms to seek advice on a new Master of Engineering program to address the engineering challenges of clean water, secure housing, and durable infrastructure in Indigenous and remote communities. This effort is at an early stage, but the initial discussions with the firm look promising.

#### **6. In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?**

The answers to questions 1 and 2 have identified specific area – the GENG-8000 course - of the MEng program that is most relevant to the inclusion of Indigenous approaches or knowledge, i.e., in considering the environmental and social impacts of product and process designs, and when we discuss "ethics and equity" and respect for others, our community, and "regard the practitioner's duty to public welfare as paramount" [1].



# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

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The course coordinator, in consultation with Jaimie Kechego, is also considering ways to bring Indigenous pedagogical approaches to learning into a large classroom including non-verbal communication, visualized learning processes, hands-on, and reflective techniques.

#### **7. 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?**

Faculty members are developing their awareness in several ways: several people have taken Jaimie Kechego's "*Pulling Together*" course; the work of the recently awarded grant will help a lot, especially once the results are disseminated throughout the Faculty and others are using private research and reading to enhance their knowledge and engagements with these issues.

Overall, it must be admitted that the awareness of these issues within the Faculty of Engineering varies widely, with some faculty members having limited knowledge and others being better informed. The Equity, Diversity and Inclusion Officer in Engineering, who was hired in 2022 in the midst of the pandemic, has been providing relevant resources and workshops to Faculty members and Indigenous issues are key components of these materials. For example, materials were provided to all instructors to include in our classes to make students aware of Orange Shirt Day, how it arose and why it is important, and to advertise key events that occurred on Orange Shirt Day across our region and the country.

#### **8. 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)**

Sources of information include the "*Pulling Together: A Guide for Curriculum Developers*" short course and discussions with instructor, Jaimie Kechego. She has reviewed our process and the GENG-8000 course presentations and materials that are provided to students. Other references consulted are listed below in the **References** section.

As noted earlier, this should be regarded as a beginning: we will be refining and enhancing our program instruction as we gain experience and new knowledge. Our discussions with the Indigenous-owned engineering firm will also be valuable as we focus on how engineers can do their part to redress the injustices of the past and present and provide solutions that are relevant and appropriate to serve the needs of Indigenous people across the country.

It might also be noted that PEO (the regulator of professional engineering in Ontario) has recently published an issue of its official publication, *Engineering Dimensions*, about Indigenous engineering firms, Indigenizing engineering, and Indigenous pathways to engineering. This literature provides an Ontario-based foundation for our research into the current state of the profession and approaches taken by other institutions.

#### **9. Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?**

In terms of direct engagement on Indigenous issues, we are at the early stages of this analysis. This is particularly true of the MEng programs which serve an almost entirely international student body in a relatively short (approx. 16 months) duration graduate program. Consequently, our work to date on Settler Colonialism and Decolonization is limited, but we will be expanding the content of the program to include issues such as those to the greatest extent possible.

#### **10. Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?**

Except for the previously described module on Indigenous issues that has been incorporated into the *GENG-8000 Engineering Technical Communications* course, the present PDC form deals largely with changes to degree admission

# PROGRAM DEVELOPMENT COMMITTEE

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requirements and program regulations, rather than curriculum adjustments.

It is clear to us that we need to do much more work within our Faculty and within the student body we serve – but the journey in Engineering has begun.

#### **B.2 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material**

To meet the commitment to provide instruction related to Indigenous issues, we have designated the *GENG-8000 Engineering Technical Communications* course as the MEng program component for the inclusion of the module on Indigenous content and education. The learning outcome assessment associated with this teaching module is associated with Ethics and Equity. Specifically, the assessment considers the identification of equity issues within the engineering profession and Canadian society, with an emphasis on the role of Indigenous Peoples.

The specific assignment is called a Discussion Post and requires the students to read from a specified reference and write a reflective piece on that material and review the work of two of their peers in writing. The assignment which will convey this material and require the students to demonstrate knowledge of it, is reproduced below (*passage taken from the course material related to this assignment*):

#### **GENG8000 – Engineering Technical Communications**

##### **Discussion Post #2 | Learning from the Land**

This discussion post will extend from the Indigenous Knowledges module presented in class. For this reflection post, please refer to the following website: [Learning from The Land - FNMIEAO](#) for additional background information. Specifically, you will be required to watch the video “*Impact of Technology on Wild Rice in the Lake of the Woods*” which can be found by clicking of this link: [\(189\) Impacts of Technology on Wild Rice in Lake of the Woods - YouTube](#).

Once you have watched the video, you will write a short reflection that responds to the following questions:

- The Anishinaabek have protected rights to carry out their traditional harvesting practices. How are the dams infringing on these rights?
- What could be a possible resolution to meet the needs of everyone involved? What would you propose?

Your reflection should be at least 250 words and be grammatically correct.

Once you have posted your reflection, you are also required to write an engaging reply to two of your peers’ reflections.

#### **Reference:**

[Learning From the Land - FNMIEAO](#)

**NOTE:** As this module is presently (W2023) in its first implementation, we do not yet have results but the reception by our students has been positive to date.

#### **References**

1. Government of Ontario. “R.R.O. 1990, Regulation 941: GENERAL under Professional Engineers Act, R.S.O. 1990, c. P28.” January 1, 2023. <https://www.ontario.ca/laws/regulation/900941>
2. Truth and Reconciliation Commission of Canada. “Truth and Reconciliation Commission of Canada: Calls to Action.” 2015. [https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls\\_to\\_Action\\_English2.pdf](https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls_to_Action_English2.pdf)
3. Universities Canada. “Universities Canada principles on Indigenous education.” June 29, 2015. <https://www.univcan.ca/media-room/media-releases/universities-canada-principles-on-indigenous-education/>

**PROGRAM DEVELOPMENT COMMITTEE  
MINOR PROGRAM CHANGES  
FORM C**

**C. RESOURCES**

**C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)**

*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 revised program. Please do not name specific individuals in this section.*

*Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university.*

*Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example:*

- *faculty resources (within and outside the unit),*
- *existing courses (within and outside the unit),*
- *equipment or facilities outside the proposer's control,*
- *external resources requiring maintenance or upgrading using external resources*
- *staff support,*
- *library,*
- *teaching and learning support,*
- *information technology support,*
- *laboratory access,*
- *student support services,*
- *space,*
- *equipment,*
- *facilities*
- *GA/TA*

There are sufficient resources for the revised admission requirements and revised program.

**C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)**

*Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.*

There is sufficient faculty expertise for the revised program

**C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)**

*Explain how supervisory loads will be distributed and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.*

N/A

# PROGRAM DEVELOPMENT COMMITTEE

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### FORM C

**C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)**

*Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.*

N/A

**C.4 Anticipated New Resources (QAF sections 2.1.2.6)**

*List all **anticipated new resources** originating from within the area, department, or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.*

N/A

**C.5 Planned Reallocation of Resources and Cost-Savings**

*Describe all opportunities for internal reallocation of resources and cost savings identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)*

N/A

**C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)**

*Describe all **additional faculty, staff, and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.*

<b>Faculty:</b>	N/A
<b>Staff:</b>	N/A
<b>GA/TAs:</b>	N/A

**C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)**

*Describe all **additional institutional resources and services** required by all affected areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.*

<b>Library Resources and Services:</b>	N/A
<b>Teaching and Learning Support:</b>	N/A
<b>Student Support Services:</b>	N/A
<b>Space and Facilities:</b>	N/A
<b>Equipment (and Maintenance):</b>	N/A

University of Windsor  
Senate

4.1b:           **Engineering – Minor Program Changes (Form C)**

Item for:       **Approval**

Forwarded by: **Program Development Committee**

**MOTION: That the degree requirements for all Bachelor of Applied Science and BEngTech programs in Mechanical Engineering 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 Mechanical, Automotive, and Materials Engineering Council, the Faculty of Engineering Coordinating Council, and the Program Development Committee.
- *See attached.*

The document is coming back to Senate, following revisions to section B.1 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material.

# PROGRAM DEVELOPMENT COMMITTEE

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### FORM C

University policy states that students may follow the academic rules and program regulations set out in the calendar of the term in which they were first admitted to a program or any subsequent calendar. In light of this, students already in the program must be permitted to complete the degree requirements according to the calendar of the term in which they enrolled (or any subsequent calendar). If courses are no longer available, appropriate substitutes must be made.

<b>TITLE OF PROGRAM(S)/CERTIFICATE(S):</b>	<b>Mechanical Engineering, including all Options</b>
<b>DEPARTMENT(S)/SCHOOL(S):</b>	<b>Mechanical, Automotive, and Materials Engineering</b>
<b>FACULTY(IES):</b>	<b>Engineering</b>

<b>Proposed change(s) effective as of*</b> [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i>	Summer 2023
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#### A.1 PROGRAM REQUIREMENT CHANGES

Please provide the current program requirements and the proposed new program requirements by cutting and pasting from the current undergraduate or graduate web calendar ([www.uwindsor.ca/secretariat/calendars](http://www.uwindsor.ca/secretariat/calendars)) and clearly marking deletions with strikethrough (~~strikethrough~~) and additions/new information with bolding and underlining. Example: Degree requirements: WXYZ-1000, ~~WXYZ-1010~~, WXYZ-1100, WXYZ-2100, WXYZ-3100, WXYZ-4100, plus three additional courses at the **3000-level or** 4000-level.

#### Bachelor of Applied Science in Mechanical Engineering

Degree Requirements

...

THIRD YEAR

...

Summer Term

MECH-3217. Applied Thermodynamics

MECH-3220. Fluid Mechanics II

MECH-3228. Heat Transfer

MECH-4221. Machine Design

MECH-4259. Computer Aided Engineering - CAE **or** **MECH -4258. Computational Fluid Dynamics**

1 additional course\*

#### Bachelor of Applied Science in Mechanical Engineering with Aerospace Option

Degree Requirements

...

THIRD YEAR

...

Summer Term

MECH-3217. Applied Thermodynamics

MECH-3220. Fluid Mechanics II

MECH-4259. Computer Aided Engineering – CAE **or** **MECH -4258. Computational Fluid Dynamics**

MECH-4221. Machine Design

MECH-3228. Heat Transfer

MECH-3670. Aerospace Engineering Fundamentals

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

#### **Bachelor of Applied Science in Mechanical Engineering with Automotive Option**

Degree Requirements

...

THIRD YEAR

...

Summer Term

MECH-3217. Applied Thermodynamics

MECH-3220. Fluid Mechanics II

MECH-4259. Computer Aided Engineering – CAE or **MECH -4258. Computational Fluid Dynamics**

MECH-4221. Machine Design

MECH-3228. Heat Transfer

MECH-3430. Automotive Engineering Fundamentals

#### **Bachelor of Applied Science in Mechanical Engineering with Environmental Option**

Degree Requirements

...

THIRD YEAR

...

Summer Term

MECH-3217. Applied Thermodynamics

MECH-3220. Fluid Mechanics II

MECH-4259. Computer Aided Engineering – CAE or **MECH -4258. Computational Fluid Dynamics**

MECH-4221. Machine Design

MECH-3228. Heat Transfer

MECH-4228. Sustainability in Engineering

#### **Bachelor of Applied Science in Mechanical Engineering with Materials Option**

Degree Requirements

...

THIRD YEAR

...

Summer Term

MECH-3217. Applied Thermodynamics

MECH-3220. Fluid Mechanics II

MECH-4259. Computer Aided Engineering – CAE or **MECH -4258. Computational Fluid Dynamics**

MECH-4221. Machine Design

MECH-3228. Heat Transfer

MECH-3830. Materials and Properties

#### **Bachelor of Applied Science in Mechanical Engineering Articulation Agreement with St. Mary's University Diploma of Engineering**

Degree Requirements

...

Summer Term

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

MECH-3217. Applied Thermodynamics  
MECH-3220. Fluid Mechanics II  
MECH-3228. Heat Transfer  
MECH-3224. Engineering Measurements  
MECH-4221. Machine Design  
MECH-4259. Computer Aided Engineering or **MECH -4258. Computational Fluid Dynamics**

#### **Bachelor of Applied Science in Mechanical Engineering with Automotive Option Articulation Agreement with St. Mary's University Diploma of Engineering**

Degree Requirements

...

Summer Term

MECH-3217. Applied Thermodynamics  
MECH-3220. Fluid Mechanics II  
MECH-3228. Heat Transfer  
MECH-4221. Machine Design  
MECH-4259. Computer Aided Engineering or **MECH -4258. Computational Fluid Dynamics**  
MECH-3430. Automotive Eng. Fundamentals

#### **Bachelor of Applied Science in Mechanical Engineering with Environmental Option Articulation Agreement with St. Mary's University Diploma of Engineering**

Degree Requirements

...

Summer Term

MECH-3217. Applied Thermodynamics  
MECH-3220. Fluid Mechanics II  
MECH-3228. Heat Transfer  
MECH-4228. Sustainability in Engineering  
MECH-4221. Machine Design  
MECH-4259. Computer Aided Engineering or **MECH -4258. Computational Fluid Dynamics**

#### **Bachelor of Applied Science in Mechanical Engineering with Materials Option Articulation Agreement with St. Mary's University Diploma of Engineering**

Degree Requirements

...

Summer Term

MECH-3217. Applied Thermodynamics  
MECH-3220. Fluid Mechanics II  
MECH-3228. Heat Transfer  
MECH-3830. Materials and Their Properties  
MECH-4221. Machine Design  
MECH-4259. Computer Aided Engineering or **MECH -4258. Computational Fluid Dynamics**

#### **Bachelor of Engineering Technology (BEngTech) – Mechanical Stream**

Degree Requirements

...



# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

Summer Courses

MECH-3217. Applied Thermodynamics

MECH-4228. Sustainability in Engineering

MECH-4255. Environmental Effects & Control of Noise

GENG-4210. Engineering and Society

1 course from MECH-3224 Engineering Measurements, MECH-4259 Computer Aided Engineering, or **MECH -4258.**

**Computational Fluid Dynamics**, MECH-3670 Aerospace Engineering Fundamentals, MECH-3430 Automotive Engineering Fundamentals, MECH-3830 Materials and their Properties

#### A.2 MINOR COURSE CHANGES REQUIRING ADDITIONAL RESOURCES OR AFFECTING DEGREE REQUIREMENTS

*If this is a minor course and calendar change (usually noted on a Form E) requiring additional resources or affecting degree requirements, please provide the current course information and the proposed new course information by cutting and pasting from the current undergraduate or graduate web calendar and clearly marking deletions with strikethrough (~~strikethrough~~) and additions/new information with **bolding** and underlining. Examples of minor course changes include: deleting courses, course description changes, pre/anti/co- requisite changes, contact hour/lab requirement changes, course title changes, renumbering courses, and/or cross-listing courses. Minor course calendar changes, which do not require additional resources or do not affect degree requirements, should be submitted on a **Form E**.*

N/A

#### B. RATIONALE

*Please provide a rationale for the proposed change(s).*

While the Finite Element Analysis (FEA) content in the current required course MECH-4259 Computer Aided Engineering - CAE prepares students well for the needs of industry in terms of applications of solid mechanics, the Mechanical Engineering program does not have an equivalent course in fluids mechanics, i.e., Computational Fluid Dynamics (CFD), which has also become increasing commonplace in industry. With this change, students will be required to take either the existing MECH-4259 course, or the new MECH-4258 course. For those students who would like to study both topics, the second course would be available as an elective. This change allows students to better align their studies with their interests.

#### B.1 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?*

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

- *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?*

#### **B.2 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material**

The following information describes how the undergraduate mechanical engineering programs incorporate Indigenous content, perspectives, and material and what the Faculty of Engineering is doing to learn and grow in this area.

##### **1. What process has your department/Faculty used to consider Indigenization?**

The process the Faculty of Engineering has taken has been to create presentations that are provided to students in courses that are common to all B.A.Sc. programs in each year of study. These presentations discuss residential schools, Truth and Reconciliation, and colonialism. Following these presentations, students are assigned a writing assignment to reflect upon the information and discuss its relevance to them and/or the engineering profession. This approach has been taken to reinforce the fact that these issues are important to the engineering profession, regardless of discipline, as discussed below. This process was undertaken by the Associate Dean, Academic, in communication with the Indigenization Learning Specialist within the Centre for Teaching and Learning. GENG-1101 Engineering 1 is the first-year course that provides a presentation about residential schools, Truth and Reconciliation, and colonialism and assigns a reflection assignment for the first-year program, which is common to all engineering students. GENG-2101 Engineering 2 is the second-year course that provides a project in which students consider an engineering-focused issue facing an Indigenous community. GENG-3130 Engineering Economics is the third-year course that provides a presentation about Indigenous issues and students complete an assignment. MECH-4200 Capstone Design is the fourth-year course that incorporates the Seventh Generation Principle into the decision-making process for design teams to consider the impacts of their design choices and materials on the next seven generations. This is a concept that is introduced in the first-year course GENG-1201 Cornerstone Design, then reinforced in the 2<sup>nd</sup> and 3<sup>rd</sup>-year design courses GENG-2201 Engineering Design 2 and GENG-3201 Engineering Design 3, respectively.

##### **2. How have you considered the importance or relevance to the course/program?**

Engineering design is a topic that is part of the curricula throughout students' four years of study. A much-overlooked aspect of engineering design has historically been considering the environmental and social impacts of designs. This has led to the most pressing global issue – climate change. The engineering profession can learn from Indigenous ways of knowing, especially the appreciation that our current activities will impact the next seven generations.

As well, Indigenization is relevant when we discuss ethics and equity issues within the profession and Canadian society. "Ethics and Equity" is one of twelve Graduate Attributes to be demonstrated by students graduating from an accredited engineering program. Within this context, students are made aware of their responsibility to act equitably and ethically in their actions with their community, colleagues, clients, and society. The most important requirement within the Professional Engineers Ontario (PEO) Code of Ethics is to "regard the practitioner's duty to public welfare as paramount" [1]. This duty lends itself to discussing respect for and collaboration with Indigenous communities when developing infrastructure and processes.

##### **3. How has your department or faculty approached raising awareness for Indigenous knowledges in your area?**

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

This is an area of weakness within the Faculty of Engineering. The initial process was created by the Associate Dean, Academic, without much involvement by faculty members. However, changes are being made to raise awareness. Through the Faculty's Equity, Diversity and Inclusion Advisor, faculty members have been made aware of relevant presentations and workshops, e.g., events that were held on and around Orange Shirt Day as well as slides for instructors to use in their classes to provide information about Orange Shirt Day. The Faculty of Engineering Curriculum Committee has identified Indigenous knowledge as a topic that should be more thoroughly covered within all B.A.Sc. curricula. The Associate Dean, Academic, and the Undergraduate Programs Coordinator have enrolled in the short course "Pulling Together: A Guide for Curriculum Developers." All the instructors in the Faculty were also encouraged to attend the workshops to raise awareness (an email was sent on Feb 10, 2023). As part of each program's continuous improvement process, an email was sent to instructors on January 27, 2023, asking, among other items, instructors to consider if, and how, their courses can include Indigenous content.

#### **4. What do the [TRC](#) and [University Principles](#) documents suggest relevant to your course?**

The process that the Faculty of Engineering is taking (described in answer to question 1) affirms the spirit of the TRC Call to Action item 62(i), to create a "curriculum on residential schools, Treaties, and Aboriginal peoples' historical and contemporary contributions to Canada" [2]. As well the University Principles document states that focus should be placed on learning outcomes. This is an activity that the Faculty has been working to implement for over a decade. Furthermore, the Faculty's current process of presenting information on residential schools, Truth and Reconciliation, and colonialism aligns with the principle "Recognize the importance of providing greater exposure and knowledge for non-Indigenous students on the realities, histories, cultures and beliefs of Indigenous people in Canada" [3]. Finally, the ELEVATE program provides funding and collaborative opportunities for Indigenous students in Engineering, which aligns with the principle of committing to "develop opportunities for Indigenous students" [3].

#### **5. What have other similar courses/programs done that might be relevant to your course/program?**

The Faculty of Engineering began by developing and implementing our own approach. Now, we are beginning to explore what other engineering programs are doing across Canada. A grant was received on February 7, 2023, to fund research into the current practices within engineering programs across Canada.

#### **6. In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?**

The answers to questions 1 and 2 have identified specific areas of the programs that are most relevant for the inclusion of Indigenous approaches or knowledge, i.e., in considering the environmental and social impacts of product and process designs, and when we discuss "ethics and equity" and respect for others, our community, and "regard the practitioner's duty to public welfare as paramount" [1].

#### **7. 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?**

As a whole, the Faculty's awareness is limited. Some faculty members are better informed than others, but this is another area of weakness. The Equity, Diversity and Inclusion Officer in Engineering, who has been hired recently, has begun providing relevant resources and workshops to Faculty members. Indigenous issues are part of these materials. For example, slides were prepared and provided to all instructors to include in our classes to make students aware of Orange Shirt Day, what it is and why it is important, and to advertise events that occurred on Orange Shirt Day.

#### **8. 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)**

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

We have met with the Indigenization Learning Specialist, Jaimie Kehego, to review our process and the presentations that are provided to students. This is an iterative process; we have been learning and improving as the process develops, and we will continue to make changes as we learn. We have also reached out to Professional Engineers Ontario (PEO) on January 26, 2023, and First Nations Engineering Services Ltd. on February 3, 2023, to connect with local professional engineers who identify as Indigenous. Building relationships with Indigenous professional engineers would be invaluable for the Faculty of Engineering.

PEO has recently published an issue of its official publication, Engineering Dimensions, about Indigenous engineering firms, Indigenizing engineering, and Indigenous pathways to engineering. This literature provides an Ontario-based foundation for our research into the current state of the profession and approaches taken by other institutions.

#### **9. Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?**

No, we have not performed this critical analysis. Much more learning needs to occur for those within the Faculty who are developing the curricula to better understand what decolonization looks like within engineering. This is a project that will begin with educating ourselves; the Associate Dean, Academic, and the Undergraduate Programs Coordinator have enrolled in a six-week course "Pulling Together: A Guide for Curriculum Developers" offered by the University of Windsor and taught by Jaimie Kehego.

#### **10. Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?**

Courses that assess these topics have associated learning outcomes in their PDC forms and their course syllabi.

#### **References**

1. Government of Ontario. "R.R.O. 1990, Regulation 941: GENERAL under Professional Engineers Act, R.S.O. 1990, c. P28." January 1, 2023. <https://www.ontario.ca/laws/regulation/900941>
2. Truth and Reconciliation Commission of Canada. "Truth and Reconciliation Commission of Canada: Calls to Action." 2015. [https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls\\_to\\_Action\\_English2.pdf](https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls_to_Action_English2.pdf)
3. Universities Canada. "Universities Canada principles on Indigenous education." June 29, 2015. <https://www.univcan.ca/media-room/media-releases/universities-canada-principles-on-indigenous-education/>

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

#### C. RESOURCES

##### C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)

*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 revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA,*

The newly created required course will be offered using current resources in the department. There are no resource implications for other units on campus.

##### C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)

*Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.*

The course is expected to be offered by an existing tenured or tenure-track faculty member.

##### C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

*Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.*

N/A

##### C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)

*Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.*

N/A

##### C.4 Anticipated New Resources (QAF sections 2.1.2.6)

*List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.*

No new resources are anticipated.

##### C.5 Planned Reallocation of Resources and Cost-Savings

*Describe all opportunities for internal reallocation of resources and cost savings identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)*

No significant reallocation of resources or cost savings is anticipated.

# PROGRAM DEVELOPMENT COMMITTEE

## MINOR PROGRAM CHANGES

### FORM C

**C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)**

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

*If not applicable, write n/a.*

<b>Faculty:</b>	N/A
<b>Staff:</b>	N/A
<b>GA/TAs</b>	N/A

**C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)**

*Describe all **additional institutional resources and services** required by all affected areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.*

<b>Library Resources and Services:</b>	N/A
<b>Teaching and Learning Support:</b>	N/A
<b>Student Support Services:</b>	N/A
<b>Space and Facilities:</b>	N/A
<b>Equipment (and Maintenance):</b>	N/A

**University of Windsor  
Senate**

\*4.1c:           **Engineering – New Course Proposals (Form D)**

Item for:       **Approval**

Forwarded by: **Program Development Committee**

**MOTION: That the following courses be approved:^**

**MECH-4258. Computational Fluid Dynamics - CFD**

**MECH-4641. Directed Studies in Aerospace Engineering**

**MECH-4673. Aerospace Structures**

**MECH-4471/MECH-4871. Automotive Materials and Manufacturing Methods**

*^Subject to approval of the expenditures required.*

**Rationale/Approvals:**

- These courses have been approved by the Faculty of Mechanical, Automotive, and Materials Engineering Council, the Faculty of Engineering Coordinating Council, the Faculty of Graduate Studies Council, and the Program Development Committee.
- *See attached.*

The document is coming back to Senate, following revisions to section B.1 Indigenous (First Nations, Métis, or Inuit) Content, Perspectives, or Material.

**PROGRAM DEVELOPMENT COMMITTEE  
NEW COURSE PROPOSALS  
FORM D**

<b>TITLE OF PROGRAM(S)/CERTIFICATE(S):</b>	Mechanical Engineering, plus all Option programs in Mechanical Engineering
<b>DEPARTMENT(S)/SCHOOL(S):</b>	Mechanical, Automotive, & Materials Engineering
<b>FACULTY(IES):</b>	Engineering

<b>Proposed change(s) effective as of*</b> [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i>	Summer 2023
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**A. NEW COURSE PROFILE**

**Course # and Title: MECH-4258. Computational Fluid Dynamics - CFD**

**A.1 Calendar Description**

*Calendar descriptions should be written in the third person and should provide a general outline of the course material. Where appropriate, examples of topics or themes, which might be covered in the course, should also be provided.*

Fundamentals of finite volume methods for problem solving in fluid flow and heat transfer, using CFD computer programs. (Pre-requisites: MECH 3233) (Co-requisites: MECH-3220)

**A.2 Experiential Learning Categories**

*Does the course include experiential learning? Check all that apply.  
For definitions go to: <https://www.uwindsor.ca/cces/1423/experiential-learning-definitions>*

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> applied research<br><input type="checkbox"/> capstone<br><input type="checkbox"/> clinic<br><input type="checkbox"/> co-op<br><input type="checkbox"/> community service learning<br><input type="checkbox"/> creative performance or exhibit <i>(for visual and performing arts)</i><br><input type="checkbox"/> entrepreneurship<br><input type="checkbox"/> field experience or site visit<br><input type="checkbox"/> labs<br><input type="checkbox"/> No experiential learning in this course | <input type="checkbox"/> field work<br><input type="checkbox"/> industry/community consulting project<br><input checked="" type="checkbox"/> interactive simulations<br><input type="checkbox"/> internship – full-time<br><input type="checkbox"/> internship – part-time<br><input type="checkbox"/> professional practicum<br><input type="checkbox"/> research project<br><input type="checkbox"/> study abroad |
|--|---|

**A.3 Other Course Information**

*Please complete the following tables.*

Credit weight	Total contact hours	Delivery format				Breakdown of contact hours/week			
		In-class	e-learning	Distance	Other flexible learning delivery <i>[please specify]</i>	Lecture	Lab/ Tutorial	Online	Co-op/ practicum/ experiential learning
3.0	60	X				2	3		

Pre-requisites	Co-requisites	Anti-requisites	Cross-listed with:	Required course?	Replacing old course*** <i>[provide old course number]</i>
MECH 3233	MECH 3220			No	



**PROGRAM DEVELOPMENT COMMITTEE  
NEW COURSE PROPOSALS  
FORM D**

**\*\*\*Replacing Old Course: this does not mean that the former course will be deleted from the calendar. If it is to be deleted, a Form E must be completed.**

Will students be able to obtain credit for the new course and the course(s) that it is replacing? N/A

**B. RATIONALE**

**B.1 Course Goal(s)**

*Please provide a statement about the purpose of the course within the program of study or as an option.*

The Department currently offers and requires all Mechanical Engineering students to take the course MECH-4259 Computer Aided Engineering – CAE. The primary topic of this course is the use of specialized engineering software tools that enable an analysis technique known as Finite Element Analysis (FEA). This FEA analysis is applied to solid bodies (e.g., engine, pump, or turbine components, brackets, fasteners, etc.) to predict their strength under various types of external forces, and is used widely in industry. However, there is an equivalent application of this type of tool to problems in fluid mechanics that is not covered in MECH-4259. As it stands, the Mechanical Engineering program does not have an equivalent course in fluids, (i.e., Computational Fluid Dynamics - CFD), which has also become increasing commonplace in industry. This course is being created to meet that need.

The intent of this form (along with the related Form C) is that students will be required to take either the existing MECH-4259 course, or alternatively, the new MECH-4258 CFD course. For those students who would like to study both topics, the second course would be available as an elective. This change allows students to better align their studies with their interests.

**B.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 developing this new course, **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) or in the course syllabus where appropriate?*

**1. What process has your department/Faculty used to consider Indigenization?**

The process the Faculty of Engineering has taken has been to create presentations that are provided to students in

# PROGRAM DEVELOPMENT COMMITTEE

## NEW COURSE PROPOSALS

### FORM D

courses that are common to all B.A.Sc. programs in each year of study. These presentations discuss residential schools, Truth and Reconciliation, and colonialism. Following these presentations, students are assigned a writing assignment to reflect upon the information and discuss its relevance to them and/or the engineering profession. This approach has been taken to reinforce the fact that these issues are important to the engineering profession, regardless of discipline, as discussed below. This process was undertaken by the Associate Dean, Academic, in communication with the Indigenization Learning Specialist within the Centre for Teaching and Learning. GENG-2101 Engineering 2 is the second-year course that provides a project in which students consider an engineering-focused issue facing an Indigenous community. Throughout the curriculum, the Seventh Generation Principle is reflected upon during the decision-making process for design teams to consider the impacts of their design choices and materials on the next seven generations. This is a concept that is introduced in the first-year course GENG-1201 Cornerstone Design, then reinforced in the 2nd, 3rd-year, and 4th-year design courses, GENG-2201 Engineering Design 2, GENG-3201 Engineering Design 3, and MECH-4200 Capstone Design, respectively.

MECH-4258, Computational Fluid Dynamics – CFD, does not include Indigenous content.

#### **2. How have you considered the importance or relevance to the course/program?**

Engineering design is a topic that is part of the curricula throughout students' four years of study. A much-overlooked aspect of engineering design has historically been considering the environmental and social impacts of designs. This has led to the most pressing global issue – climate change. The engineering profession can learn from Indigenous ways of knowing, especially the appreciation that our current activities will impact the next seven generations. As well, Indigenization is relevant when we discuss ethics and equity issues within the profession and Canadian society. "Ethics and Equity" is one of twelve Graduate Attributes to be demonstrated by students graduating from an accredited engineering program. Within this context, students are made aware of their responsibility to act equitably and ethically in their actions with their community, colleagues, clients, and society. The most important requirement within the Professional Engineers Ontario (PEO) Code of Ethics is to "regard the practitioner's duty to public welfare as paramount" [1]. This duty lends itself to discussing respect for and collaboration with Indigenous communities when developing infrastructure and processes.

#### **3. How has your department or faculty approached raising awareness for Indigenous knowledges in your area?**

This is an area of weakness within the Faculty of Engineering. The initial process was created by the Associate Dean, Academic without much involvement by faculty members. However, changes are being made to raise awareness. Through the Faculty's Equity, Diversity and Inclusion Advisor, faculty members have been made aware of relevant presentations and workshops, e.g., events that were held on and around Orange Shirt Day as well as slides for instructors to use in their classes to provide information about Orange Shirt Day. The Faculty of Engineering Curriculum Committee has identified Indigenous knowledge as a topic that should be more thoroughly covered within all B.A.Sc. curricula. The Associate Dean, Academic, and the Undergraduate Programs Coordinator have enrolled in the short course "Pulling Together: A Guide for Curriculum Developers." As part of each program's continuous improvement process, an email was sent instructors on January 27, 2023, asking, among other items, instructors to consider if, and how, their courses can include Indigenous content.

#### **4. What do the [TRC](#) and [University Principles](#) documents suggest relevant to your course?**

The process that the Faculty of Engineering is taking (described in the answer to question 1) affirms the spirit of the TRC Call to Action item 62(i), to create "curriculum on residential schools, Treaties, and Aboriginal peoples' historical and contemporary contributions to Canada" [2]. As well the University Principles document states that focus should be placed on learning outcomes. This is an activity that the Faculty has been working to implement for over a decade. Furthermore, the Faculty's current process of presenting information on residential schools, Truth and Reconciliation, and colonialism aligns with the principle "Recognize the importance of providing greater exposure and knowledge for non-Indigenous students on the realities, histories, cultures and beliefs of Indigenous people in Canada" [3]. Finally, the ELEVATE program provides funding and collaborative opportunities for Indigenous students in Engineering, which aligns with the principle of committing to "develop opportunities for Indigenous students" [3].

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#### 5. What have other similar courses/programs done that might be relevant to your course/program?

The Faculty of Engineering began by developing and implementing our own approach. Now, we are beginning to explore what other engineering programs are doing across Canada. A grant was received on February 7, 2023, to fund research into the current practices within engineering programs across Canada.

#### 6. In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?

The answers to questions 1 and 2 have identified specific areas of the programs that are most relevant for the inclusion of Indigenous approaches or knowledge, i.e., in considering the environmental and social impacts of product and process designs, and when we discuss “ethics and equity” and respect for others, our community, and “regard the practitioner’s duty to public welfare as paramount” [1].

#### 7. 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?

As a whole, the Faculty’s awareness is limited. Some faculty members are better informed than others, but this is another area of weakness. The Equity, Diversity and Inclusion Officer in Engineering, who has been hired recently, has begun providing relevant resources and workshops to Faculty members. Indigenous issues are part of these materials. For example, slides were prepared and provided to all instructors to include in our classes to make students aware of Orange Shirt Day, what it is and why it is important, and to advertise events that occurred on Orange Shirt Day.

#### 8. 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)

We have met with the Indigenization Learning Specialist, Jaimie Kechege, to review our process and the presentations that are provided to students. This is an iterative process; we have been learning and improving as the process develops, and we will continue to make changes as we learn. We have also reached out to Professional Engineers Ontario (PEO) on January 26, 2023, and First Nations Engineering Services Ltd. on February 3, 2023, to connect with local professional engineers who identify as Indigenous. Building relationships with Indigenous professional engineers would be invaluable for the Faculty of Engineering.

PEO has recently published an issue of its official publication, Engineering Dimensions, about Indigenous engineering firms, Indigenizing engineering, and Indigenous pathways to engineering. This literature provides an Ontario-based foundation for our research into the current state of the profession and approaches taken by other institutions.

#### 9. Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?

No, we have not performed this critical analysis. Much more learning needs to occur for those within the Faculty who are developing the curricula to better understand what decolonization looks like within engineering. This is a project that will begin with educating ourselves; the Associate Dean, Academic, and the Undergraduate Programs Coordinator have enrolled in a six-week course “Pulling Together: A Guide for Curriculum Developers” offered by the University of Windsor and taught by Jaimie Kechege.

#### 10. Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?

This course does not include Indigenous content, perspectives, or material.

#### References

1. Government of Ontario. “R.R.O. 1990, Regulation 941: GENERAL under Professional Engineers Act, R.S.O. 1990, c. P28.” January 1, 2023. <https://www.ontario.ca/laws/regulation/900941>
2. Truth and Reconciliation Commission of Canada. “Truth and Reconciliation Commission of Canada: Calls to Action.” 2015. [https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls\\_to\\_Action\\_English2.pdf](https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls_to_Action_English2.pdf)

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3. Universities Canada. "Universities Canada principles on Indigenous education." June 29, 2015.  
<https://www.univcan.ca/media-room/media-releases/universities-canada-principles-on-indigenous-education/>

**B.3 LEARNING OUTCOMES (QAF section 2)**

*Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. **If a specific learning outcome is not applicable for the course, please enter N/A or not applicable.** Information on learning outcomes is appended to this form (Appendix A). Proposers are also strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.*

<b>Course Learning Outcomes</b> <i>This is a sentence completion exercise.</i> <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b> <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A. ...Explain the basics of how finite volume methods are used to solve discrete approximations of continuous fluid mechanics problems.  Carry out geometry generation, grid (mesh) generation, problem set-up and solution, and grid independence evaluation for fluid flow/heat transfer problems.  Explain the limitations of accuracy of CFD solutions and how modeling choices can affect the results obtained (e.g., choice of turbulence model).  Explain the various levels of fidelity in use in CFD today and appropriate applications for each (RANS/URANS, (I)(D)DES, LES).	A. the acquisition, application and integration of knowledge
B. ...Determine appropriate selections of discretization, solver type, and boundary conditions based on the physical characteristics of the problem at hand and documentation available for the software being used.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. ...Identify the appropriate criteria by which to judge the convergence of a CFD solution, and determine what steps can be taken to improve convergence.  ...Interpret the results of a CFD simulation as it pertains the objectives of the analysis, for example in assessing the acceptability of a design or in determining geometry changes required to achieve design intent.	C. critical thinking and problem-solving skills
D.	D. literacy and numeracy skills
E.	E. responsible behaviour to self, others and society
F.	F. interpersonal and communications skills

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<b>Course Learning Outcomes</b> <i>This is a sentence completion exercise.</i>	<b>Characteristics of a University of Windsor Graduate</b>
At the end of this course, the successful student will know and be able to:	A U of Windsor graduate will have the ability to demonstrate:
G.	G. teamwork, and personal and group leadership skills
H. ...Select and apply appropriate visualization techniques to make it easy to interpret results of a CFD simulation.	H. creativity and aesthetic appreciation
I. ...Explain the variety of types of both open-source and commercial CFD codes available and have some knowledge of similarities and differences between popular options, as well as the most common use cases for each.	I. the ability and desire for continuous learning

**B.4 Demand for Course**

*Please provide as much information on projected enrollment as possible.*

Projected enrollment levels for the first 5 years of the new course.	Year 1	Year 2	Year 3	Year 4	Year 5
	60	60	60	60	60

**B.4.1 Impact of New Course on Enrollment in Existing Courses**

*What will be the impact of offering the new course on enrollments in existing courses in the program or Department?*

It is anticipated that offering the new course will significantly reduce the enrolment in MECH-4259 Computer-Aided Engineering, as it will be an alternative to MECH-4259, i.e., the student will take one or the other. The intention is that the student cohort will split along approximately 50/50 distribution between the two courses. Note that if the class were to split as anticipated, then due to the current two-section offering of MECH-4259, this change would be neutral in terms of the department course delivery commitment.

**C. RESOURCES**

**C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)**

*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 revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA.*

The newly created required course will be offered using current resources in the department. There are no resource implications for other units on campus.

**C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)**

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*Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.*

The course is expected to be offered by an existing tenured or tenure-track faculty member.

**C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)**

*Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.*

N/A

**C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)**

*Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.*

N/A

**C.4 Anticipated New Resources (QAF sections 2.1.2.6)**

*List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.*

No new resources are anticipated.

**C.5 Planned Reallocation of Resources and Cost-Savings**

*Describe all opportunities for internal reallocation of resources and cost savings identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)*

No significant reallocation of resources or cost savings is anticipated.

**C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)**

*Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.*

<b>Faculty:</b>	n/a
<b>Staff:</b>	n/a
<b>GA/TAs</b>	n/a

**C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)**

*Describe all **additional institutional resources and services** required by all affected areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.*

<b>Library Resources and Services:</b>	n/a
<b>Teaching and Learning Support:</b>	n/a
<b>Student Support Services:</b>	n/a
<b>Space and Facilities:</b>	n/a
<b>Equipment (and Maintenance):</b>	n/a

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<b>TITLE OF PROGRAM(S)/CERTIFICATE(S):</b>	<b>BASc in Mechanical Engineering with Aerospace Option</b>
<b>DEPARTMENT(S)/SCHOOL(S):</b>	<b>Mechanical, Automotive, &amp; Materials Engineering</b>
<b>FACULTY(IES):</b>	<b>Engineering</b>

<b>Proposed change(s) effective as of*</b> [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i>	Spring 2023
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**A. NEW COURSE PROFILE**

**Course # and Title: MECH-4641. Directed Studies in Aerospace Engineering**

**A.1 Calendar Description**

*Calendar descriptions should be written in the third person and should provide a general outline of the course material. Where appropriate, examples of topics or themes, which might be covered in the course, should also be provided.*

A special course of studies in Aerospace Engineering with content and direction approved by the Department Head. (Prerequisite: Semester 7 or higher standing with a 70% average or better.)

**A.2 Experiential Learning Categories**

*Does the course include experiential learning? Check all that apply.  
For definitions go to: <https://www.uwindsor.ca/cces/1423/experiential-learning-definitions>*

- |  |  |
|--|--|
| <input type="checkbox"/> applied research<br><input type="checkbox"/> capstone<br><input type="checkbox"/> clinic<br><input type="checkbox"/> co-op<br><input type="checkbox"/> community service learning<br><input type="checkbox"/> creative performance or exhibit <i>(for visual and performing arts)</i><br><input type="checkbox"/> entrepreneurship<br><input type="checkbox"/> field experience or site visit<br><input checked="" type="checkbox"/> labs<br><input type="checkbox"/> No experiential learning in this course | <input type="checkbox"/> field work<br><input type="checkbox"/> industry/community consulting project<br><input type="checkbox"/> interactive simulations<br><input type="checkbox"/> internship – full-time<br><input type="checkbox"/> internship – part-time<br><input type="checkbox"/> professional practicum<br><input type="checkbox"/> research project<br><input type="checkbox"/> study abroad |
|--|--|

**A.3 Other Course Information**

*Please complete the following tables.*

Credit weight	Total contact hours	Delivery format				Breakdown of contact hours/week			
		In-class	e-learning	Distance	Other flexible learning delivery <i>[please specify]</i>	Integrated Lecture and lab	Lab/Tutorial	Online	Co-op/practicum/experiential learning
3	36				3	3			

Pre-requisites	Co-requisites	Anti-requisites	Cross-listed with:	Required course?	Replacing old course*** <i>[provide old course number]</i>
Semester 7 or higher standing with a 70% average or better.				No	

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**\*\*\*Replacing Old Course: this does not mean that the former course will be deleted from the calendar. If it is to be deleted, a Form E must be completed.**

Will students be able to obtain credit for the new course and the course(s) that it is replacing? N/A

#### B. RATIONALE

##### B.1 Course Goal(s)

*Please provide a statement about the purpose of the course within the program of study or as an option.*

A directed studies course is essentially a one-on-one independent study at the undergraduate level, which the student arranges individually with a professor if the topic is not already covered in regularly offered courses. The topic and the content of the studies must be approved by the Department Head.

##### B.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 developing this new course, **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) or in the course syllabus where appropriate?*

#### 1. What process has your department/Faculty used to consider Indigenization?

The process the Faculty of Engineering has taken has been to create presentations that are provided to students in courses that are common to all B.A.Sc. programs in each year of study. These presentations discuss residential schools, Truth and Reconciliation, and colonialism. Following these presentations, students are assigned a writing assignment to reflect upon the information and discuss its relevance to them and/or the engineering profession. This approach has been taken to reinforce the fact that these issues are important to the engineering profession, regardless of discipline, as discussed below. This process was undertaken by the Associate Dean, Academic, in communication with the Indigenization Learning Specialist within the Centre for Teaching and Learning. GENG-2101 Engineering 2 is the



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second-year course that provides a project in which students consider an engineering-focused issue facing an Indigenous community. Throughout the curriculum, the Seventh Generation Principle is reflected upon during the decision-making process for design teams to consider the impacts of their design choices and materials on the next seven generations. This is a concept that is introduced in the first-year course GENG-1201 Cornerstone Design, then reinforced in the 2nd, 3rd-year, and 4th-year design courses, GENG-2201 Engineering Design 2, GENG-3201 Engineering Design 3, and MECH-4200 Capstone Design, respectively.

MECH-4641. Directed Studies in Aerospace Engineering may include Indigenous content depending on topic.

#### **2. How have you considered the importance or relevance to the course/program?**

Engineering design is a topic that is part of the curricula throughout students' four years of study. A much-overlooked aspect of engineering design has historically been considering the environmental and social impacts of designs. This has led to the most pressing global issue – climate change. The engineering profession can learn from Indigenous ways of knowing, especially the appreciation that our current activities will impact the next seven generations.

As well, Indigenization is relevant when we discuss ethics and equity issues within the profession and Canadian society. "Ethics and Equity" is one of twelve Graduate Attributes to be demonstrated by students graduating from an accredited engineering program. Within this context, students are made aware of their responsibility to act equitably and ethically in their actions with their community, colleagues, clients, and society. The most important requirement within the Professional Engineers Ontario (PEO) Code of Ethics is to "regard the practitioner's duty to public welfare as paramount" [1]. This duty lends itself to discussing respect for and collaboration with Indigenous communities when developing infrastructure and processes.

#### **3. How has your department or faculty approached raising awareness for Indigenous knowledges in your area?**

This is an area of weakness within the Faculty of Engineering. The initial process was created by the Associate Dean, Academic without much involvement by faculty members. However, changes are being made to raise awareness. Through the Faculty's Equity, Diversity and Inclusion Advisor, faculty members have been made aware of relevant presentations and workshops, e.g., events that were held on and around Orange Shirt Day as well as slides for instructors to use in their classes to provide information about Orange Shirt Day. The Faculty of Engineering Curriculum Committee has identified Indigenous knowledge as a topic that should be more thoroughly covered within all B.A.Sc. curricula. The Associate Dean, Academic, and the Undergraduate Programs Coordinator have enrolled in the short course "Pulling Together: A Guide for Curriculum Developers." As part of each program's continuous improvement process, an email was sent instructors on January 27, 2023, asking, among other items, instructors to consider if, and how, their courses can include Indigenous content.

#### **4. What do the [TRC](#) and [University Principles](#) documents suggest relevant to your course?**

The process that the Faculty of Engineering is taking (described in the answer to question 1) affirms the spirit of the TRC Call to Action item 62(i), to create "curriculum on residential schools, Treaties, and Aboriginal peoples' historical and contemporary contributions to Canada" [2]. As well the University Principles document states that focus should be placed on learning outcomes. This is an activity that the Faculty has been working to implement for over a decade. Furthermore, the Faculty's current process of presenting information on residential schools, Truth and Reconciliation, and colonialism aligns with the principle "Recognize the importance of providing greater exposure and knowledge for non-Indigenous students on the realities, histories, cultures and beliefs of Indigenous people in Canada" [3]. Finally, the ELEVATE program provides funding and collaborative opportunities for Indigenous students in Engineering, which aligns with the principle of committing to "develop opportunities for Indigenous students" [3].

#### **5. What have other similar courses/programs done that might be relevant to your course/program?**

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#### **6. In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?**

The answers to questions 1 and 2 have identified specific areas of the programs that are most relevant for the inclusion of Indigenous approaches or knowledge, i.e., in considering the environmental and social impacts of product and process designs, and when we discuss “ethics and equity” and respect for others, our community, and “regard the practitioner’s duty to public welfare as paramount” [1].

#### **7. 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?**

As a whole, the Faculty’s awareness is limited. Some faculty members are better informed than others, but this is another area of weakness. The Equity, Diversity and Inclusion Officer in Engineering, who has been hired recently, has begun providing relevant resources and workshops to Faculty members. Indigenous issues are part of these materials. For example, slides were prepared and provided to all instructors to include in our classes to make students aware of Orange Shirt Day, what it is and why it is important, and to advertise events that occurred on Orange Shirt Day.

#### **8. 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)**

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#### **9. Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?**

No, we have not performed this critical analysis. Much more learning needs to occur for those within the Faculty who are developing the curricula to better understand what decolonization looks like within engineering. This is a project that will begin with educating ourselves; the Associate Dean, Academic, and the Undergraduate Programs Coordinator have enrolled in a six-week course “Pulling Together: A Guide for Curriculum Developers” offered by the University of Windsor and taught by Jaimie Kecheogo.

#### **10. Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?**

This course does not include Indigenous content, perspectives, or material.

#### **References**

1. Government of Ontario. “R.R.O. 1990, Regulation 941: GENERAL under Professional Engineers Act, R.S.O. 1990, c. P28.” January 1, 2023. <https://www.ontario.ca/laws/regulation/900941>
2. Truth and Reconciliation Commission of Canada. “Truth and Reconciliation Commission of Canada: Calls to Action.” 2015. [https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls\\_to\\_Action\\_English2.pdf](https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls_to_Action_English2.pdf)
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**B.3 LEARNING OUTCOMES (QAF section 2.1.1, 2.1.3, and 2.1.6)**

<b>Course Learning Outcomes</b> <i>This is a sentence completion exercise.</i> <u>At the end of this course, the successful student will know and be able to:</u>	<b>Characteristics of a University of Windsor Graduate</b> <u>A U of Windsor graduate will have the ability to demonstrate:</u>
A. Identify and explain key concepts, theories, and themes in an area of aerospace engineering. Review and evaluate key concepts, theories, and themes in an area of aerospace engineering. Research and identify gaps in the literature within aerospace engineering. Use data to develop theoretical and process-related questions in an area of aerospace engineering.	A. the acquisition, application and integration of knowledge
B. Critically analyze and evaluate scholarly literature in an area of aerospace engineering.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Debate information, outcomes, decision making processes, research methods, and data interpretations in an area of aerospace engineering.  Develop and debate solutions and conclusions/recommendations in an area of aerospace engineering.	C. critical thinking and problem-solving skills
D. Articulate questions regarding the empirical interpretation of information pertaining to research conclusions, assumptions, problems, methodology, results, and theoretical insights in an area of aerospace engineering.	D. literacy and numeracy skills
E. N/A	E. responsible behaviour to self, others and society
F. Orally communicate complex ideas, concepts, and research results to varied audiences.	F. interpersonal and communications skills
G. N/A	G. teamwork, and personal and group leadership skills
H. N/A	H. creativity and aesthetic appreciation
I. N/A	I. the ability and desire for continuous learning

**B.4 Demand for Course**

*Please provide as much information on projected enrolment as possible.*

Projected enrolment levels for the first 5 years of the new course.	Year 1	Year 2	Year 3	Year 4	Year 5
	5	5	5	5	5

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#### B.4.1 Impact of New Course on Enrolment in Existing Courses

*What will be the impact of offering the new course on enrolments in existing courses in the program or Department?*

There is no adverse impact anticipated on the enrollment in existing courses. This course is open to BAsC in Mechanical Engineering with Aerospace Option students only or with the permission of other program options and is primarily intended for only those students who are proceeding to graduate studies, and are lacking background in a particular topic that is important for their research program.

#### B.5 Student Workload

*Provide information on the expected workload per week of a student enrolled in this course.  
NOTE: Student workload should be consistent with the credit weight assigned to the course.*

**Average number of hours per week that the student will be expected to devote to:**

	Lectures	
	Tutorials	
	Labs	
	Practical experience	
2	Independent Study	
3	Reading for the course	
3	Work for assessment (essays, papers, projects, laboratory work)	
	Meeting with others for group work/project assignments	
	Studying for tests/examinations	
	Other: <u>[specify]</u>	
<b>How does the student workload for this course compare with other similar courses in the department/program area?</b>		Similar

#### C. RESOURCES

##### C.1 Available Faculty Expertise and Staff Resources (QAF sections 2.1.7, 2.1.8, 2.1.9 and 2.1.10)

*Describe all faculty expertise and staff resources (e.g., administrative, teaching, supervision) from all affected areas/departments currently available and actively committed to support the new course. Please do not name specific individuals.*

This course will be taught by a number of instructors in the Department of Mechanical Engineering.

##### C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program

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

The course will be staffed with full-time faculty and AAS members. No adjunct, limited-term, or sessional faculty will be required.

##### C.2 Resource Implications for Other Campus Units (Ministry sections 3 and 4)

*Describe the reliance of the proposed new course on existing resources from other campus units, including for example: faculty teaching, equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources. Provide relevant details.*

The staff and resources for this course are contained entirely in the Department of Mechanical, Automotive, & Materials Engineering.

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**C.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 new course.*

N/A

**C.4 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)**

*Describe all opportunities for internal reallocation of resources and cost savings identified and pursued by the area/department in support of the new course. (e.g., streamlining existing programs and courses, deleting courses, etc.).*

N/A

**C.5 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 offer the new course. If not applicable, write n/a.*

<b>Faculty:</b>	N/A
<b>Staff:</b>	N/A
<b>GA/TAs</b>	N/A

**C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments**

*Describe all **additional institutional resources and services** required by all affected areas or departments to offer the new course, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.*

<b>Library Resources and Services:</b>	N/A
<b>Teaching and Learning Support:</b>	N/A
<b>Student Support Services:</b>	N/A
<b>Space and Facilities:</b>	N/A
<b>Equipment (and Maintenance):</b>	N/A

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<b>TITLE OF PROGRAM(S)/CERTIFICATE(S):</b>	Mechanical Engineering, plus all Option programs in Mechanical Engineering
<b>DEPARTMENT(S)/SCHOOL(S):</b>	Mechanical, Automotive, & Materials Engineering
<b>FACULTY(IES):</b>	Engineering

<b>Proposed change(s) effective as of*</b> [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i>	Spring 2023
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**A. NEW COURSE PROFILE**

**Course # and Title: MECH-4673. Aerospace Structures**

**A.1 Calendar Description**

*Calendar descriptions should be written in the third person and should provide a general outline of the course material. Where appropriate, examples of topics or themes, which might be covered in the course, should also be provided.*

In this course, students will become familiar with the loads acting on aircraft and its individual parts, learn how to choose appropriate structural idealizations, and perform stress analysis of airframe parts. The following topics will be considered: parts of an airframe, their function and loads transfer between major structural elements; airframe loads; airframe as a thin-walled stiffened beam: bending of thin-walled beams, shear of thin-walled beams, torsion of thin-walled beams; structural idealization of the airframe; stress analysis of wing spars and box beams; stress analysis of fuselages; stress analysis of wings. (Prerequisite: MECH-3211.) (3 lecture, 1 tutorial hours a week.)

**A.2 Experiential Learning Categories**

*Does the course include experiential learning? Check all that apply.  
For definitions go to: <https://www.uwindsor.ca/cces/1423/experiential-learning-definitions>*

- |   |  |
|---|--|
| <input type="checkbox"/> applied research<br><input type="checkbox"/> capstone<br><input type="checkbox"/> clinic<br><input type="checkbox"/> co-op<br><input type="checkbox"/> community service learning<br><input type="checkbox"/> creative performance or exhibit ( <i>for visual and performing arts</i> )<br><input type="checkbox"/> entrepreneurship<br><input type="checkbox"/> field experience or site visit<br><input type="checkbox"/> labs<br><input type="checkbox"/> No experiential learning in this course | <input type="checkbox"/> field work<br><input type="checkbox"/> industry/community consulting project<br><input type="checkbox"/> interactive simulations<br><input type="checkbox"/> internship – full-time<br><input type="checkbox"/> internship – part-time<br><input type="checkbox"/> professional practicum<br><input type="checkbox"/> research project<br><input type="checkbox"/> study abroad |
|---|--|

**A.3 Other Course Information**

*Please complete the following tables.*

Credit weight	Total contact hours	Delivery format				Breakdown of contact hours/week			
		In-class	e-learning	Distance	Other flexible learning delivery <i>[please specify]</i>	Lecture	Lab/Tutorial	Online	Co-op/practicum/experiential learning
3.0	48					3	1		

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Pre-requisites	Co-requisites	Anti-requisites	Cross-listed with:	Required course?	Replacing old course*** [provide old course number]
MECH-3211					

**\*\*\*Replacing Old Course: this does not mean that the former course will be deleted from the calendar. If it is to be deleted, a Form E must be completed.**

**Will students be able to obtain credit for the new course and the course(s) that it is replacing?** n/a

**B. RATIONALE**

**B.1 Course Goal(s)**

*Please provide a statement about the purpose of the course within the program of study or as an option.*

The purpose of the course is to provide Mechanical Engineering students who choose the Aerospace Option with exposure to the topic of applied solid mechanics / strength analysis, but with content tailored to the specific needs of the aircraft industry. For example, because aircraft are designed with much more emphasis on weight savings than other vehicles, the use of thin wall construction techniques is more prevalent. Other examples include the extensive use of lightweight alloy materials which usually cannot easily be welded, and therefore require riveted construction. These choices affect the assumptions and equations used to assess the strength of the assembly.

**B.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 developing this new course, **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) or in the course syllabus where appropriate?*

**1. What process has your department/Faculty used to consider Indigenization?**

The process the Faculty of Engineering has taken has been to create presentations that are provided to students in courses that are common to all B.A.Sc. programs in each year of study. These presentations discuss residential schools, Truth and Reconciliation, and colonialism. Following these presentations, students are assigned a writing assignment to reflect upon the information and discuss its relevance to them and/or the engineering profession. This approach has been taken to reinforce the fact that these issues are important to the engineering profession, regardless of

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discipline, as discussed below. This process was undertaken by the Associate Dean, Academic, in communication with the Indigenization Learning Specialist within the Centre for Teaching and Learning. GENG-2101 Engineering 2 is the second-year course that provides a project in which students consider an engineering-focused issue facing an Indigenous community. Throughout the curriculum, the Seventh Generation Principle is reflected upon during the decision-making process for design teams to consider the impacts of their design choices and materials on the next seven generations. This is a concept that is introduced in the first-year course GENG-1201 Cornerstone Design, then reinforced in the 2nd, 3rd-year, and 4th-year design courses, GENG-2201 Engineering Design 2, GENG-3201 Engineering Design 3, and MECH-4200 Capstone Design, respectively.

MECH-4673. Aerospace Structures, does not include Indigenous content.

#### **2. How have you considered the importance or relevance to the course/program?**

Engineering design is a topic that is part of the curricula throughout students' four years of study. A much-overlooked aspect of engineering design has historically been considering the environmental and social impacts of designs. This has led to the most pressing global issue – climate change. The engineering profession can learn from Indigenous ways of knowing, especially the appreciation that our current activities will impact the next seven generations. As well, Indigenization is relevant when we discuss ethics and equity issues within the profession and Canadian society. "Ethics and Equity" is one of twelve Graduate Attributes to be demonstrated by students graduating from an accredited engineering program. Within this context, students are made aware of their responsibility to act equitably and ethically in their actions with their community, colleagues, clients, and society. The most important requirement within the Professional Engineers Ontario (PEO) Code of Ethics is to "regard the practitioner's duty to public welfare as paramount" [1]. This duty lends itself to discussing respect for and collaboration with Indigenous communities when developing infrastructure and processes.

#### **3. How has your department or faculty approached raising awareness for Indigenous knowledges in your area?**

This is an area of weakness within the Faculty of Engineering. The initial process was created by the Associate Dean, Academic without much involvement by faculty members. However, changes are being made to raise awareness. Through the Faculty's Equity, Diversity and Inclusion Advisor, faculty members have been made aware of relevant presentations and workshops, e.g., events that were held on and around Orange Shirt Day as well as slides for instructors to use in their classes to provide information about Orange Shirt Day. The Faculty of Engineering Curriculum Committee has identified Indigenous knowledge as a topic that should be more thoroughly covered within all B.A.Sc. curricula. The Associate Dean, Academic, and the Undergraduate Programs Coordinator have enrolled in the short course "Pulling Together: A Guide for Curriculum Developers." As part of each program's continuous improvement process, an email was sent instructors on January 27, 2023, asking, among other items, instructors to consider if, and how, their courses can include Indigenous content.

#### **4. What do the [TRC](#) and [University Principles](#) documents suggest relevant to your course?**

The process that the Faculty of Engineering is taking (described in the answer to question 1) affirms the spirit of the TRC Call to Action item 62(i), to create "curriculum on residential schools, Treaties, and Aboriginal peoples' historical and contemporary contributions to Canada" [2]. As well the University Principles document states that focus should be placed on learning outcomes. This is an activity that the Faculty has been working to implement for over a decade. Furthermore, the Faculty's current process of presenting information on residential schools, Truth and Reconciliation, and colonialism aligns with the principle "Recognize the importance of providing greater exposure and knowledge for non-Indigenous students on the realities, histories, cultures and beliefs of Indigenous people in Canada" [3]. Finally, the ELEVATE program provides funding and collaborative opportunities for Indigenous students in Engineering, which aligns with the principle of committing to "develop opportunities for Indigenous students" [3].

#### **5. What have other similar courses/programs done that might be relevant to your course/program?**

The Faculty of Engineering began by developing and implementing our own approach. Now, we are beginning to explore what other engineering programs are doing across Canada. A grant was received on February 7, 2023, to fund



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research into the current practices within engineering programs across Canada.

#### **6. In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?**

The answers to questions 1 and 2 have identified specific areas of the programs that are most relevant for the inclusion of Indigenous approaches or knowledge, i.e., in considering the environmental and social impacts of product and process designs, and when we discuss “ethics and equity” and respect for others, our community, and “regard the practitioner’s duty to public welfare as paramount” [1].

#### **7. 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?**

As a whole, the Faculty’s awareness is limited. Some faculty members are better informed than others, but this is another area of weakness. The Equity, Diversity and Inclusion Officer in Engineering, who has been hired recently, has begun providing relevant resources and workshops to Faculty members. Indigenous issues are part of these materials. For example, slides were prepared and provided to all instructors to include in our classes to make students aware of Orange Shirt Day, what it is and why it is important, and to advertise events that occurred on Orange Shirt Day.

#### **8. 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)**

We have met with the Indigenization Learning Specialist, Jaimie Kehego, to review our process and the presentations that are provided to students. This is an iterative process; we have been learning and improving as the process develops, and we will continue to make changes as we learn. We have also reached out to Professional Engineers Ontario (PEO) on January 26, 2023, and First Nations Engineering Services Ltd. on February 3, 2023, to connect with local professional engineers who identify as Indigenous. Building relationships with Indigenous professional engineers would be invaluable for the Faculty of Engineering.

PEO has recently published an issue of its official publication, Engineering Dimensions, about Indigenous engineering firms, Indigenizing engineering, and Indigenous pathways to engineering. This literature provides an Ontario-based foundation for our research into the current state of the profession and approaches taken by other institutions.

#### **9. Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?**

No, we have not performed this critical analysis. Much more learning needs to occur for those within the Faculty who are developing the curricula to better understand what decolonization looks like within engineering. This is a project that will begin with educating ourselves; the Associate Dean, Academic, and the Undergraduate Programs Coordinator have enrolled in a six-week course “Pulling Together: A Guide for Curriculum Developers” offered by the University of Windsor and taught by Jaimie Kehego.

#### **10. Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?**

This course does not include Indigenous content, perspectives, or material.

#### **References**

4. Government of Ontario. “R.R.O. 1990, Regulation 941: GENERAL under Professional Engineers Act, R.S.O. 1990, c. P28.” January 1, 2023. <https://www.ontario.ca/laws/regulation/900941>
5. Truth and Reconciliation Commission of Canada. “Truth and Reconciliation Commission of Canada: Calls to Action.” 2015. [https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls\\_to\\_Action\\_English2.pdf](https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls_to_Action_English2.pdf)
6. Universities Canada. “Universities Canada principles on Indigenous education.” June 29, 2015. <https://www.univcan.ca/media-room/media-releases/universities-canada-principles-on-indigenous-education/>

**PROGRAM DEVELOPMENT COMMITTEE**  
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**B.3 LEARNING OUTCOMES (QAF section 2)**

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. **If a specific learning outcome is not applicable for the course, please enter N/A or not applicable.** Information on learning outcomes is appended to this form (Appendix A). Proposers are also strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.

<b>Course Learning Outcomes</b> <i>This is a sentence completion exercise.</i>	<b>Characteristics of a University of Windsor Graduate</b>
<u>At the end of the course, the successful student will know and be able to:</u>	<u>A U of Windsor graduate will have the ability to demonstrate:</u>
A. Develop an understanding of functions of the major airframe components  Develop an understanding of different categories of loads experienced by airframe	A. the acquisition, application and integration of knowledge
B. Describe the underlying theory and conduct stress analysis of thin-walled beams  Apply techniques of semi-monocoque aerospace structures idealization using the thin-walled beams theory	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Conduct stress analysis of aircraft components (wing, fuselage) and their parts	C. critical thinking and problem-solving skills
D. Conduct design calculations for an airframe part	D. literacy and numeracy skills
E. N/A	E. responsible behaviour to self, others and society
F. N/A	F. interpersonal and communications skills
G. N/A	G. teamwork, and personal and group leadership skills
H. N/A	H. creativity and aesthetic appreciation
I. N/A	I. the ability and desire for continuous learning

**B.4 Demand for Course**

Please provide as much information on projected enrolment as possible.

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Projected enrolment levels for the first 5 years of the new course.	Year 1	Year 2	Year 3	Year 4	Year 5
	20	20	20	20	20

**B.4.1 Impact of New Course on Enrolment in Existing Courses**

*What will be the impact of offering the new course on enrolments in existing courses in the program or Department?*

N/A

**C. RESOURCES**

**C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)**

*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 revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA*

No new resources are anticipated.

**C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)**

*Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.*

No new resources are anticipated.

**C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)**

*Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.*

No new resources are anticipated.

**C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)**

*Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.*

No new resources are anticipated.

**C.4 Anticipated New Resources (QAF sections 2.1.2.6)**

*List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.*

No new resources are anticipated.

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**C.5 Planned Reallocation of Resources and Cost-Savings**

*Describe all opportunities for internal reallocation of resources and cost savings identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)*

No new resources are anticipated.

**C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)**

*Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.*

<b>Faculty:</b>	N/A
<b>Staff:</b>	N/A
<b>GA/TAs:</b>	N/A

**C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)**

*Describe all **additional institutional resources and services** required by all affected areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.*

<b>Library Resources and Services:</b>	N/A
<b>Teaching and Learning Support:</b>	N/A
<b>Student Support Services:</b>	N/A
<b>Space and Facilities:</b>	N/A
<b>Equipment (and Maintenance):</b>	N/A

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<b>TITLE OF PROGRAM(S)/CERTIFICATE(S):</b>	<b>Mechanical Engineering</b>
<b>DEPARTMENT(S)/SCHOOL(S):</b>	<b>Mechanical, Automotive and Materials Engineering</b>
<b>FACULTY(IES):</b>	<b>Engineering</b>

<b>Proposed change(s) effective as of*</b> [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i>	Spring 2023
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**A. NEW COURSE PROFILE**

**Course # and Title: MECH-4471/MECH-4871. Automotive Materials and Manufacturing Methods**

**A.1 Calendar Description**

*Calendar descriptions should be written in the third person and should provide a general outline of the course material. Where appropriate, examples of topics or themes, which might be covered in the course, should also be provided.*

**MECH-4471. Automotive Materials and Manufacturing Methods**

The objective of this course is to introduce both the metallic and non-metallic materials employed in automobiles. The content to be covered ranges from the production of introduced automotive materials to their recent development. To understand the rationale for using various automotive materials, the advantages of their manufacturability and properties are discussed. Different manufacturing processes corresponding to specific automotive materials are highlighted. The mechanical properties and microstructure of automotive materials are reviewed. The implementation of automotive materials in automobiles is presented. Upon completing this course, students are expected to understand the basic principles of manufacturing and the advantages and disadvantages of introduced automotive materials over other materials in terms of performance and weight saving. The course also trains students to obtain knowledge of advanced manufacturing processes, structural characterization and property evaluation, and component design of various automotive materials. (Prerequisite: Semester 7 or higher standing.) (3 lecture, 2 tutorial hours a week.) (Also offered as MECH-4871. Credit cannot be obtained for both MECH-4471 and MECH-4871.)

**MECH-4871. Automotive Materials and Manufacturing Methods**

The objective of this course is to introduce both the metallic and non-metallic materials employed in automobiles. The content to be covered ranges from the production of introduced automotive materials to their recent development. To understand the rationale for using various automotive materials, the advantages of their manufacturability and properties are discussed. Different manufacturing processes corresponding to specific automotive materials are highlighted. The mechanical properties and microstructure of automotive materials are reviewed. The implementation of automotive materials in automobiles is presented. Upon completing this course, students are expected to understand the basic principles of manufacturing and the advantages and disadvantages of introduced automotive materials over other materials in terms of performance and weight saving. The course also trains students to obtain knowledge of advanced manufacturing processes, structural characterization and property evaluation, and component design of various automotive materials. (Prerequisite: Semester 7 or higher standing.) (3 lecture, 2 tutorial hours a week.) (Also offered as MECH-4471. Credit cannot be obtained for both MECH-4471 and MECH-4871.)

**A.2 Experiential Learning Categories**

*Does the course include experiential learning? Check all that apply.  
For definitions go to: <https://www.uwindsor.ca/cces/1423/experiential-learning-definitions>*

- |  |   |
|--|---|
| <input type="checkbox"/> applied research<br><input type="checkbox"/> capstone | <input type="checkbox"/> field work<br><input type="checkbox"/> industry/community consulting project |
|--|---|

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- |  |   |
|--|---|
| <input type="checkbox"/> clinic<br><input type="checkbox"/> co-op<br><input type="checkbox"/> community service learning<br><input type="checkbox"/> creative performance or exhibit <i>(for visual and performing arts)</i><br><input type="checkbox"/> entrepreneurship<br><input type="checkbox"/> field experience or site visit<br><input type="checkbox"/> labs<br><input checked="" type="checkbox"/> No experiential learning in this course | <input type="checkbox"/> interactive simulations<br><input type="checkbox"/> internship – full-time<br><input type="checkbox"/> internship – part-time<br><input type="checkbox"/> professional practicum<br><input type="checkbox"/> research project<br><input type="checkbox"/> study abroad |
|--|---|

**A.3 Other Course Information**

*Please complete the following tables.*

Credit weight	Total contact hours	Delivery format				Breakdown of contact hours/week			
		In-class	e-learning	Distance	Other flexible learning delivery <i>[please specify]</i>	Lecture	Lab/Tutorial	Online	Co-op/practicum/experiential learning
3.0	60	X				3	2		

Pre-requisites	Co-requisites	Anti-requisites	Cross-listed with:	Required course?	Replacing old course*** <i>[provide old course number]</i>
Semester 7 or higher standing		MECH-4471/4871			MECH-4440-Special Topics Section 10. Automotive Materials

**\*\*\*Replacing Old Course: this does not mean that the former course will be deleted from the calendar. If it is to be deleted, a Form E must be completed.**

<b>Will students be able to obtain credit for the new course and the course(s) that it is replacing?</b>	Not if taken as MECH-4440-Special Topics Section 10. Automotive Materials
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**B. RATIONALE**

**B.1 Course Goal(s)**

*Please provide a statement about the purpose of the course within the program of study or as an option.*

This course has been a Special Topics for a few years now, and we'd like to add it permanently to the calendar. We'd like to give the course two numbers because we'd like it to qualify as a suitable elective for students in the Automotive Option, as well as for students in the Materials Option. We use the second digit of the course number to make the distinction. A course numbered MECH-4471 is a fourth year Mechanical Engineering course for Auto Option, while MECH-4871 would indicate a Materials Option course. The same course description should apply to both courses, and they should be anti-requisites of each other.

**B.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](#)*

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(1967). In developing this new course, **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) or in the course syllabus where appropriate?

#### 1. What process has your department/Faculty used to consider Indigenization?

The process the Faculty of Engineering has taken has been to create presentations that are provided to students in courses that are common to all B.A.Sc. programs in each year of study. These presentations discuss residential schools, Truth and Reconciliation, and colonialism. Following these presentations, students are assigned a writing assignment to reflect upon the information and discuss its relevance to them and/or the engineering profession. This approach has been taken to reinforce the fact that these issues are important to the engineering profession, regardless of discipline, as discussed below. This process was undertaken by the Associate Dean, Academic, in communication with the Indigenization Learning Specialist within the Centre for Teaching and Learning. GENG-2101 Engineering 2 is the second-year course that provides a project in which students consider an engineering-focused issue facing an Indigenous community. Throughout the curriculum, the Seventh Generation Principle is reflected upon during the decision-making process for design teams to consider the impacts of their design choices and materials on the next seven generations. This is a concept that is introduced in the first-year course GENG-1201 Cornerstone Design, then reinforced in the 2nd, 3rd-year, and 4th-year design courses, GENG-2201 Engineering Design 2, GENG-3201 Engineering Design 3, and MECH-4200 Capstone Design, respectively.

MECH-4471/MECH-4871. Automotive Materials and Manufacturing Methods, does not include Indigenous content.

#### 2. How have you considered the importance or relevance to the course/program?

Engineering design is a topic that is part of the curricula throughout students' four years of study. A much-overlooked aspect of engineering design has historically been considering the environmental and social impacts of designs. This has led to the most pressing global issue – climate change. The engineering profession can learn from Indigenous ways of knowing, especially the appreciation that our current activities will impact the next seven generations.

As well, Indigenization is relevant when we discuss ethics and equity issues within the profession and Canadian society. "Ethics and Equity" is one of twelve Graduate Attributes to be demonstrated by students graduating from an accredited engineering program. Within this context, students are made aware of their responsibility to act equitably and ethically in their actions with their community, colleagues, clients, and society. The most important requirement within the Professional Engineers Ontario (PEO) Code of Ethics is to "regard the practitioner's duty to public welfare as paramount" [1]. This duty lends itself to discussing respect for and collaboration with Indigenous communities when developing infrastructure and processes.

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#### **3. How has your department or faculty approached raising awareness for Indigenous knowledges in your area?**

This is an area of weakness within the Faculty of Engineering. The initial process was created by the Associate Dean, Academic without much involvement by faculty members. However, changes are being made to raise awareness. Through the Faculty's Equity, Diversity and Inclusion Advisor, faculty members have been made aware of relevant presentations and workshops, e.g., events that were held on and around Orange Shirt Day as well as slides for instructors to use in their classes to provide information about Orange Shirt Day. The Faculty of Engineering Curriculum Committee has identified Indigenous knowledge as a topic that should be more thoroughly covered within all B.A.Sc. curricula. The Associate Dean, Academic, and the Undergraduate Programs Coordinator have enrolled in the short course "Pulling Together: A Guide for Curriculum Developers." As part of each program's continuous improvement process, an email was sent instructors on January 27, 2023, asking, among other items, instructors to consider if, and how, their courses can include Indigenous content.

#### **4. What do the [TRC](#) and [University Principles](#) documents suggest relevant to your course?**

The process that the Faculty of Engineering is taking (described in the answer to question 1) affirms the spirit of the TRC Call to Action item 62(i), to create "curriculum on residential schools, Treaties, and Aboriginal peoples' historical and contemporary contributions to Canada" [2]. As well the University Principles document states that focus should be placed on learning outcomes. This is an activity that the Faculty has been working to implement for over a decade. Furthermore, the Faculty's current process of presenting information on residential schools, Truth and Reconciliation, and colonialism aligns with the principle "Recognize the importance of providing greater exposure and knowledge for non-Indigenous students on the realities, histories, cultures and beliefs of Indigenous people in Canada" [3]. Finally, the ELEVATE program provides funding and collaborative opportunities for Indigenous students in Engineering, which aligns with the principle of committing to "develop opportunities for Indigenous students" [3].

#### **5. What have other similar courses/programs done that might be relevant to your course/program?**

The Faculty of Engineering began by developing and implementing our own approach. Now, we are beginning to explore what other engineering programs are doing across Canada. A grant was received on February 7, 2023, to fund research into the current practices within engineering programs across Canada.

#### **6. In what ways could your course/program have flexibility to include new ways of learning, or content for Indigenous approaches or knowledges?**

The answers to questions 1 and 2 have identified specific areas of the programs that are most relevant for the inclusion of Indigenous approaches or knowledge, i.e., in considering the environmental and social impacts of product and process designs, and when we discuss "ethics and equity" and respect for others, our community, and "regard the practitioner's duty to public welfare as paramount" [1].

#### **7. 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?**

As a whole, the Faculty's awareness is limited. Some faculty members are better informed than others, but this is another area of weakness. The Equity, Diversity and Inclusion Officer in Engineering, who has been hired recently, has begun providing relevant resources and workshops to Faculty members. Indigenous issues are part of these materials. For example, slides were prepared and provided to all instructors to include in our classes to make students aware of Orange Shirt Day, what it is and why it is important, and to advertise events that occurred on Orange Shirt Day.

#### **8. 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)**

We have met with the Indigenization Learning Specialist, Jaimie Kehego, to review our process and the presentations that are provided to students. This is an iterative process; we have been learning and improving as the process develops, and we will continue to make changes as we learn. We have also reached out to Professional Engineers Ontario (PEO) on January 26, 2023, and First Nations Engineering Services Ltd. on February 3, 2023, to connect with



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## NEW COURSE PROPOSALS

### FORM D

local professional engineers who identify as Indigenous. Building relationships with Indigenous professional engineers would be invaluable for the Faculty of Engineering.

PEO has recently published an issue of its official publication, Engineering Dimensions, about Indigenous engineering firms, Indigenous engineering, and Indigenous pathways to engineering. This literature provides an Ontario-based foundation for our research into the current state of the profession and approaches taken by other institutions.

#### 9. Are you engaging in critical analysis of Settler Colonialism and/or Decolonization?

No, we have not performed this critical analysis. Much more learning needs to occur for those within the Faculty who are developing the curricula to better understand what decolonization looks like within engineering. This is a project that will begin with educating ourselves; the Associate Dean, Academic, and the Undergraduate Programs Coordinator have enrolled in a six-week course “Pulling Together: A Guide for Curriculum Developers” offered by the University of Windsor and taught by Jaimie Kehego.

#### 10. Have you included the information in the other relevant areas in the PDC form (such as learning outcomes) or in the course syllabus where appropriate?

This course does not include Indigenous content, perspectives, or material.

#### References

7. Government of Ontario. “R.R.O. 1990, Regulation 941: GENERAL under Professional Engineers Act, R.S.O. 1990, c. P28.” January 1, 2023. <https://www.ontario.ca/laws/regulation/900941>
8. Truth and Reconciliation Commission of Canada. “Truth and Reconciliation Commission of Canada: Calls to Action.” 2015. [https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls\\_to\\_Action\\_English2.pdf](https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls_to_Action_English2.pdf)
9. Universities Canada. “Universities Canada principles on Indigenous education.” June 29, 2015. <https://www.univcan.ca/media-room/media-releases/universities-canada-principles-on-indigenous-education/>

### B.3 LEARNING OUTCOMES (QAF section 2)

*Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in “To Greater Heights” by listing them in the appropriate rows. Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. **If a specific learning outcome is not applicable for the course, please enter N/A or not applicable.** Information on learning outcomes is appended to this form (Appendix A). Proposers are also strongly encouraged to contact the Centre for Teaching and Learning for assistance with the articulation of learning outcomes.*

### MECH-4471/MECH-4871. Automotive Materials and Manufacturing Methods

#### LEARNING OUTCOMES TABLE

Course Learning Outcomes <i>This is a sentence completion exercise.</i>	Characteristics of a University of Windsor Graduate
<u>At the end of the course, the successful student will know and be able to:</u>	<u>A U of Windsor graduate will have the ability to demonstrate:</u>
A. Categorize automotive materials according to metallic and non-metallic concepts. Identify the role of engineering performance and the specific weight of	A. the acquisition, application and integration of knowledge

**PROGRAM DEVELOPMENT COMMITTEE  
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FORM D**

<b>Course Learning Outcomes</b> <i>This is a sentence completion exercise.</i>	<b>Characteristics of a University of Windsor Graduate</b>
At the end of the course, the successful student will know and be able to:	A U of Windsor graduate will have the ability to demonstrate:
materials in the solution of automotive applications.	
B. Define engineering performance of various automotive materials with manufacturing processes. Describe intuitive meaning of different types of automotive materials.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
C. Develop strategies for designing automotive components based on the balance between engineering properties and materials lightweight advantages. Formulate criteria for selecting automotive materials according to engineering requirement, environmental friendliness, and cost.	C. critical thinking and problem-solving skills
D. Identify microstructure of automotive steels based on phase diagrams and TTT diagrams.	D. literacy and numeracy skills
E. Design automotive components with an in-depth understanding of engineering performance, environmental friendliness, and manufacturing and materials cost.	E. responsible behaviour to self, others and society
F. N/A	F. interpersonal and communications skills
G. N/A	G. teamwork, and personal and group leadership skills
H. N/A	H. creativity and aesthetic appreciation
I. N/A	I. the ability and desire for continuous learning

**B.4 Demand for Course**

*Please provide as much information on projected enrolment as possible.*

Projected enrolment levels for the first 5 years of the new course.	Year 1	Year 2	Year 3	Year 4	Year 5
	20	20	20	20	20

**B.4.1 Impact of New Course on Enrolment in Existing Courses**

*What will be the impact of offering the new course on enrolments in existing courses in the program or Department?*

None.

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**C. RESOURCES**

**C.1 Resources In Support of the Revised Program and Resource Implications for Other Campus Units or Programs (QAF section 2.1.2.6)**

*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 revised program. Please do not name specific individuals in this section. Describe the impact of the planned utilization of existing human, physical and financial resources (within and outside the unit) on other existing programs in the department or at the university. Provide an assessment of the reliance of the revised program on existing resources from other campus units and include evidence that there are adequate resources available and committed to the revised program to sustain the quality of scholarship produced by undergraduate students as well as graduate students' scholarship and research activities. Consider, for example: faculty resources (within and outside the unit), existing courses (within and outside the unit), equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources, staff support, library, teaching and learning support, information technology support, laboratory access, student support services, space, equipment, facilities, GA/TA*

There are sufficient resources for the proposed courses.

**C.1.1 Extent of Reliance on Adjunct, Limited-term, and Sessional Faculty in Delivering the Revised Program (QAF section 2.1.2.6)**

*Describe the area's expected reliance on, and the role of adjunct, limited-term, and sessional faculty in delivering the revised program and the associate plans to ensure the sustainability of the revised program and quality of the student experience.*

There are sufficient resources for the proposed courses.

**C.2 Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)**

*Explain how supervisory loads will be distributed, and describe the qualifications and appointment status of faculty who will provide instruction and supervision in the revised program.*

There are sufficient resources for the proposed courses.

**C.3 Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY) (QAF section 2.1.2.7)**

*Where appropriate to the revised program, provide evidence that financial assistance for graduate students will be sufficient to ensure adequate quality and numbers of students.*

N/A

**C.4 Anticipated New Resources (QAF sections 2.1.2.6)**

*List all **anticipated new resources** originating from within the area, department or faculty (external grants, donations, government grants, etc.) and committed to supporting the revised program.*

N/A

**C.5 Planned Reallocation of Resources and Cost-Savings**

*Describe all opportunities for internal reallocation of resources and cost savings identified and pursued by the area/department in support of the revised program. (e.g., streamlining existing programs and courses, deleting courses, etc.)*

N/A

**C.6 Additional Resources Required – Resources Requested (QAF section 2.1.2.6f)**

*Describe all **additional faculty, staff and GA/TA resources** (in all affected areas and departments) required to run the revised program. If not applicable, write n/a.*

**PROGRAM DEVELOPMENT COMMITTEE  
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<b>Faculty:</b>	N/A
<b>Staff:</b>	N/A
<b>GA/TAs:</b>	N/A

**C.6.1 Additional Institutional Resources and Services Required by all Affected Areas or Departments (QAF section 2.1.2.6f)**

*Describe all **additional institutional resources and services** required by all affected areas or departments to run the revised program, including library, teaching and learning support services, student support services, space and facilities, and equipment and its maintenance. If not applicable, write n/a.*

<b>Library Resources and Services:</b>	N/A
<b>Teaching and Learning Support:</b>	N/A
<b>Student Support Services:</b>	N/A
<b>Space and Facilities:</b>	N/A
<b>Equipment (and Maintenance):</b>	N/A

University of Windsor  
Senate

\*5.1.1: **PDC Report on Computer Science's University Program Review Progress Report**

Item for: **Information**

Forwarded by: **Program Development Committee**

**Background:**

- The attached University Program Review Progress Report has been conducted under the Institutional Quality Assurance Process (IQAP) (combining undergraduate and graduate program reviews) which was developed in accordance with the COU's Quality Assurance Framework. As of Fall 2011, the Ontario Universities' Quality Council is responsible for reviewing, auditing and approving all new undergraduate and graduate programs and cyclical program reviews.
- Some of the information contained in the progress reports may seem outdated since these reports provide a historical look at the department's actions over a review cycle, showing a progression of changes over the years.

**UNIVERSITY OF WINDSOR**  
**UNIVERSITY PROGRAM REVIEW (UPR)/FINAL ASSESSMENT REPORT AND IMPLEMENTATION PLAN**  
**PROGRESS REPORT ON: COMPUTER SCIENCE**  
**UNDERGRADUATE AND GRADUATE PROGRAMS**  
January 2023

Teaching, Learning, and Research

**Recommendation 1:** That the School submit learning outcomes and assessment methods for each of its undergraduate and graduate courses that clearly correspond to the University's stated "Characteristics of a University of Windsor Graduate"; as well as curriculum maps for each of its undergraduate and graduate programs submitted through the PDC approval process.

*[Program LOs have been submitted for each of the School undergraduate and graduate programs. There remain several undergraduate and graduate courses for which learning outcomes have not been submitted through the approval process.]*

**Agents:** School Council, Head, CTL

**Completion by:** Fall 2022

**Actions taken 2021 and 2022:**

For about 93% of courses, the approved learning outcomes appear on the Curriculum Mapping Aid (CuMA) web site (<https://ctl2.uwindsor.ca/cuma>). Learning outcomes for the remaining courses are in the approval process.

**PDC Comments:**

PDC looks forward to receiving the learning outcomes for the remaining courses, as well as curriculum maps for each of its undergraduate and graduate programs.

**Status:**    ahead of target        x   on target         behind target         recommendation satisfied

**Recommendation 2:** That the School of Computer Science bring its programs into closer alignment with the ACM recommendations followed by many other universities, for example, by making a course on professional practice mandatory in all of its undergraduate programs.

**Agents:** Head, School Council

**Completion by:** Fall 2022

**Actions taken 2021 and 2022:**

In Canada, the ACM Curriculum accreditation falls under the Canadian Information Processing Society (CIPS) which falls under Recommendation 3. The School requests that this recommendation be removed.

**PDC Comments:**

PDC notes that this recommendation is about Computer Science bringing its program into closer alignment with the ACM recommendations, not that it pursue total alignment or accreditation. Specifically, Computer Science is asked to report on whether it will introduce a mandatory course on ethics and professional practice in all of its undergraduate programs, including a rationale if the area decides not to do so given the importance of ethics in computer science.

**Status:**    ahead of target        X   on target         behind target         recommendation satisfied

**Recommendation 3:** That the School of Computer Science consider embarking on a process to become accredited by the Canadian Information Processing Society. Following the requirements of the Canadian Information Processing Society accreditation also would help the School streamline its curriculum and reduce teaching demands on the faculty.

**Agents:** Head, Dean

**Completion by:** Fall 2022

**Actions taken 2021 and 2022:**

The School of Computer Science pays close attention to any development in ACM/CIPS Curricula including the latest 2020 release and has an already established internal review process using the Course Advisory Committees who deal with individual courses, and the Undergraduate Program Committee who oversee entire programs. The Undergrad Curriculum Committee regularly reviews all undergraduate program curricula and will determine if it is necessary and feasible to adjust the curriculum to make room for additions and changes to courses. For instance, a course in ethics and professional practices is already part of the Bachelor of Science (Honours Computer Science with Software Engineering Specialization). The School thus considers this recommendation addressed through its existing procedures.

A past cyclical review brought a similar recommendation and the School embarked on its implementation. However, once all program modifications were implemented into the Academic Calendar, the School counsellors were suddenly fielding a spike in student complaints about the new changes. After extensive consultation with students and monitoring of their academic progress, particularly choice of programs and courses, the School retracted the program changes and decided to not become accredited by CIPS. The key drawback of CIPS accreditation is that students felt the new curriculum did not adequately prepare them for the job market. Students felt that they are being forced to take unrelated non-cs courses just to meet the accreditation requirements while they missed out on additional and important CS course that would have significantly strengthened their career readiness for CS jobs. Many students therefore opted to switch to the original program calendar where they were able to take more CS courses as electives. Consequently, on the recommendation of the Undergrad Curriculum Committee who was closely monitoring the situation, School Council decided to roll back on the pre-accreditation curriculum. Given the history of this experience, and the need to meet industry demand for skilled workforce in CS, the School Council is recommending to maintain the current program structure without accreditation and to consider this recommendation closed. Note, that as per Recommendation #2 where CIPS is the ACM accreditation body in Canada, the School's Curriculum Committee will continue ongoing monitoring of any new curricula and carefully evaluate their impact on student experience and recommend any necessary future changes.

**PDC Comments:**

PDC notes that the area has given careful consideration to pursuing accreditation and has decided not to do so. PDC concurs that this recommendation is satisfied.

**Status:**  ahead of target     on target     behind target     recommendation satisfied

**Recommendation 4:** That the School of Computer Science add an Honours option to the Bachelor of Computer Science obtained via a degree completion pathway, providing students with the background required to continue their computer science education at the graduate level.

**Agents:** Head, Dean

**Completion by:** Fall 2022

**Actions taken 2021 and 2022:**

The School of Computer Science acknowledged this recommendation and created a new Honours BCS degree completion pathway program. This program is in place since the 2021-22 academic year.

**PDC Comments:**

PDC notes that this recommendation has been satisfied.

**Status:**  *ahead of target*       *on target*       *behind target*       *recommendation satisfied*

**Recommendation 5:** That the School of Computer Science, working with the Faculty of Science and the Office of the Provost, develop a plan with metrics to get the computer science program back into the top 20 national rankings.  
**Agents:** Head, Dean, Office of the Provost  
**Completion by:** Fall 2024

**Actions taken 2021 and 2022:**  
The School of Computer Science acknowledged this recommendation and worked hard to be back in the top 20 national ranking. As a result, the School is back in the 2022 ranking as one of the top 20 Computer Science schools. We recognize that this is an ongoing annual ranking and we would require ongoing support from the Dean of Science office, as well as, the University’s Public Affairs and Communication department to help promote positive reputation.

**PDC Comments:**

PDC commends the area for being reinstated in the top 20 national rankings for computer science programs and notes that this recommendation has been satisfied. PDC encourages the area to continue working with the Faculty and PAC to maintain this standing.

**Status:**  *ahead of target*       *on target*       *behind target*       *recommendation satisfied*

**Recommendation 6:** That the School of Computer Science report on its plan to:

- a. perform a peer review of teaching, at the faculty and sessional level, to improve the accountability of the large number of sections taught by sessional instruction;
- b. create uniform policies and course syllabi templates to improve student satisfaction by eliminating and reducing inconsistencies in multi-section courses.

**Agents:** Head, faculty members, CTL, Peer Collaboration Network  
**Completion by:** Fall 2022

**Actions taken 2021 and 2022:**

- (a) For sessional instructors, the School implemented in its hiring grid, criteria to include recent CTL training. This is reflected in the posting of sessional courses and is designed to guide the sessional faculty to enrich their teaching skills.  
For full-time faculty, the School is encouraging faculty members to attend CTL training and PEARLS workshops. The School has offered to cover the fees for selected CTL training courses. Junior faculty members are paired with senior faculty as mentors. We already have a number of faculty members completing the CTL peer review and course training.  
Furthermore, the School has an enhanced RTP criteria where it created a comprehensive rubric aimed at assisting new faculty with achieving excellence in teaching.
- (b) The School implemented a common course syllabi template since Fall 2021, for all CS undergraduate and graduate courses. Multiple offerings of the same courses use the same syllabus as well.







**Recommendation 10:** That the School of Computer Science develop a hiring plan appropriate to the current and future context and then make a case to the Dean of Science, and the Provost or VP, Research and Innovation (as appropriate), for elements such as:

- a. converting the part-time Undergrad Secretary role to full-time, especially given the recent growth in the number of incoming undergraduate students.
- b. hiring an ancillary academic staff person (AAS) to coordinate undergraduate counselling and program advising.
- c. hiring a full-time lab instructor(s) or lab coordinator(s), particularly for first year classes.
- d. hiring tenure-track faculty in Computer Science or reduce enrolment in Computer Science to bring the undergraduate faculty to student ratio closer to the average at the University of Windsor, as well as the average in Computer Science departments across Canada.
- e. obtaining a research chair to attract a new faculty member with a strong research profile.

**Agents:** Head, Dean, Provost, VPRI

**Completion by:** Fall 2024

**Actions taken 2021 and 2022:**

- a. The School of Computer Science has recently developed job descriptions for a full-time undergraduate secretary, computer technician and undergraduate counselling position and submitted them to the dean's office for review and approval. We currently have over 900 undergraduate student majors in CS with only 1 part-time program secretary who also serves as the liaison for over 5000 students in the service courses. We need to keep the part-time secretary and add (instead of replacing it) another full-time secretary.
- b. We had a failed search for an AAS before COVID, we are connecting with the dean's office for the possibility of a new search or even a joint Science/CS appointment.
- c. We made no progress on this one. We are trying to fill the 3 positions instead from (a) above where the technical position can be more helpful for the laboratories setup. Discussions are still ongoing.
- d. This is an ongoing request. There is one new TT position currently with an active search. We currently have 1 faculty for approximately every 70 students, well above the Faculty of Science ratio of 1:20.

**PDC Comments:**

PDC notes the area's efforts with regard to this recommendation and encourages it to continue them.

**Status:**  ahead of target     on target     behind target     recommendation satisfied

**Recommendation 11:** That the School of Computer Science enter into discussions with Dean of Science and Office of the Provost to renew the funding agreement between the University and the School with respect to the MAC program.

**Agents:** Head, Dean, Office of the Provost

**Completion by:** Fall 2022

**Actions taken 2021 and 2022:**

The School had several discussions with the Dean's office, Provost's office and Finance. Since the establishment of the MAC program in 2014 as a professional, cost-recovery program, under a budget model that directly flowed revenue to the program, there have been several changes, including a change to the ECM model in 2016 that incorporated the MAC budget into the Faculty of Science budget, the change in the financial system in 2018, and another budget model change in 2021.

These changes have been very frustrating for the School, and their details are not fully transparent to the School's program planning committee. The new ABB model provides little incentive with information about the changes shared long after planning for our program needs to take place.

The MAC program continued witnessing ongoing growth in quantity and quality, with international recognition consistently drawing a large pool of applicants. While the School recognizes the need for maintaining and growing student enrollments to benefit the institution's financial revenue as a whole, there needs to be critical investment back into the program to support it, including computing, space, teaching, student support, and staffing resources at the discretion of the program planning committee. As a result of the changing budget model, some resources faced limitations, and the overall program's sustainability is threatened. For instance, the program, since its inception, has been supported mostly by limited-term faculty and overload/sessional instructors and subsequently, taking on an additional class cohort would only stress the existing teaching resources and raise the faculty and staff workload. This is particularly important as the significant increase in enrollment to the program adds workload to the current CS faculty in addition to the large number of sessional instructors needed from a limited pool of qualified applicants. Furthermore, a lack of continuing investments in student support will threaten the quality of the student experience and preparation to land a successful internship and future employment. This is particularly critical given the fragility of the international student population and the need for them to land employment which can be a limiting factor to the growth of the program. Support staff, including technical IT specialists and academic advisors, are just as important in meeting sustainable targets.

The School continues to have discussions with the Dean's office, Provost's office and Finance to help clarify funding concerns and find ways to increase support for the program. The School requires certainty and stability in the funding and resources to be able to plan properly its cohort sizes and to determine if additional cohorts will yield benefits.

The Dean of Science recently supported CS through the introduction of five tenure-track teaching intensive faculty that are replacing five existing limited-term faculty; zero-net growth in faculty teaching complement is still an issue, but we recognize that permanent faculty provide more stability to the program delivery. The Dean of Science is currently advocating for new staff lines as well, however, the concern from the School is that in a cost-recovery program model, there should have been immediate investment when needed to maintain quality and not be subjected to uncertainty or long delays when the students who need the resources are already enrolled in the program. The recent acquisition of the 300 Ouellette space and the move of the program downtown is a step forward in addressing space resources, though it is critical that the space needs be met and not stressed or subjected to delays or shortfalls; this again emphasizes the need to have certainty in the revenue model to renovate and deploy the spaces in an effective and dynamic way.

The School will continue to conduct discussions with the Dean's office and the Office of the Provost.

**PDC Comments:**

PDC appreciates the limitations on Computer Science with regard to this recommendation and notes the School's continued discussions with the Office of the Dean, the Office of the Provost, and the Office of the Vice-President, Finance and Operations to seek to address them.

**Status:**  ahead of target       on target       behind target       recommendation satisfied

**Recommendation 12:** That the School of Computer Science publicize its high-quality publications, and directly provide objective evaluation metrics such as impact factor and number of citations, when making arguments for increased resources and applying for grants.

**Agents:** Head, faculty members

**Completion by:** Fall 2024

**Actions taken 2021 and 2022:**

This is typically done by an individual faculty researcher at the time of application for a particular grant. We do not have the human resources for any additional work. There are conference and journal ranking sites that are used along with H-Index and other existing impact factor information on databases such as google scholar. It is up to the individual faculty member as well to publicize their high-quality publication and write an article for the Daily news. We are open to ideas on how to proceed with this when we have no additional resources.

**PDC Comments:**

PDC notes that Computer Science may consider hiring Ignite students who could assist with creating a central repository on the School’s webpage and annually collecting and publicizing faculty members’ publication on this webpage.

**Status:**    *ahead of target*        X   *on target*         *behind target*         *recommendation satisfied*

**Recommendation 13:** That the School of Computer Science seek to obtain more scholarships and/or bursaries for domestic and international Masters and PhD students through, for instance, advancement activities or funding from industry.  
**Agents:** Head, Dean, Advancement Office  
**Completion by:** Fall 2024  
  
**Actions taken 2021 and 2022:**  
Advancement is the purview of the Dean’s office. We connect regularly for opportunities and offer suggestions, but no significant campaigns or results can be noted to date. We will work with the Faculty on an ongoing basis to create scholarships to support our growing student population.

**PDC Comments:**

PDC encourages the area to increase its efforts with the Office of the Dean, and to reach out to the Advancement Office and the Office of the Vice-President, Research and Innovation, for assistance in seeking funding from industry or through advancement activities to create scholarships/bursaries for graduate students.

**Status:**    *ahead of target*        X   *on target*         *behind target*         *recommendation satisfied*

Governance

**Recommendation 14:** That the School of Computer Science simplify or reorganize the internal governance with respect to the committees.  
**Agents:** Head, School Council  
**Completion by:** Fall 2022  
  
**Actions taken 2021 and 2022:**  
The School has a structure for internal governance in place that was based on a retreat in 2013. The Graduate and the Undergraduate program chairs assist the Director directly. Without incentives for course releases or research funding from the dean’s office we cannot really add much since the workload is very high given the large student population (800+ grad and 900+ undergrad). We will review this again in an upcoming retreat to be scheduled when the new director term begins.

**PDC Comments:**

PDC notes that the rationale for the original recommendation was to reduce and streamline the administrative governance structure and workload, rather than add to it. Specifically, “The reviewers noted during meetings with the various committees relating to the graduate program (and undergraduate programs as well) that these committees are large and numerous, and the committee structure seems somewhat more complicated and onerous than at other institutions with which we are familiar. Considering the higher-than-normal teaching load, student advising, and other duties performed by faculty members, we would recommend that the school take a close look at the internal governance and committee structure, with the goal of streamlining the administrative workload of the

faculty members.” (External Reviewers’ Report)

With this in mind, the School is directed to review and report on progress made with regard to streamlining its internal governance and committee structure in its next self-study.

**Status:**    *ahead of target*        X   *on target*         *behind target*         *recommendation satisfied*

University of Windsor  
Senate

\*5.1.2a: **Kinesiology (Graduate) – Minor Program Changes (Form C)**

Item for: **Approval**

Forwarded by: **Program Development Committee**

**MOTION:** **That the degree requirements for the Master of Human Kinetics (Applied Human Performance) 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 Faculty of Human Kinetics Council, the Faculty of Graduate Studies 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 March 15, 2023 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**

\*5.1.2b: **Psychology (Graduate) – Minor Program Changes (Form C)**

Item for: **Approval**

Forwarded by: **Program Development Committee**

**MOTION: That the degree and program requirements for Master’s degree in Clinical Psychology and Applied Social Psychology 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 Psychology Council, the Faculty of Arts, Humanities a Social Sciences Council, the Faculty of Graduate Studies 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 March 15, 2023 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 5.3.



University of Windsor  
Senate

\*5.1.2c:       **Engineering – New Course Proposal (Form D)**

Item for:       **Approval**

Forwarded by: **Program Development Committee**

**MOTION:       That the following course be approved:^**  
**GENG-1202. Introductory Electrical and Computer Engineering**

*^Subject to approval of the expenditures required.*

**Rationale/Approvals:**

- This course has been approved by the Faculty of Engineering 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 March 15, 2023 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 5.4.

University of Windsor  
Senate

\*5.1.2d:       **Engineering – Minor Program Changes (Form C)**

Item for:       **Approval**

Forwarded by: **Faculty of Engineering**

**MOTION:**     **That the degree requirements for Bachelor of Applied Science (all programs and options) (with/without co-op) 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 Faculty of Engineering 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 March 15, 2023 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 5.5.

**University of Windsor  
Senate**

\*5.1.2e: **Business – Minor Program Changes (Form C)**

Item for: **Approval**

Forwarded by: **Program Development Committee**

**MOTION:** That the Honours Business Administration Programs with Specialization in Supply Chain and Business Analytics be renamed: Honours Business Administration Programs with Specialization in *Business Analytics and Supply Chain Management*; that all specializations be available to all programs in Business; and that the degree requirements for the Business programs with the Business Analytics and Supply Chain Management specialization, with the Human Resources specialization, and with the International Business specialization be approved in accordance with the program/course change forms.<sup>^</sup>

<sup>^</sup>*Subject to approval of the expenditures required.*

**Rationale/Approvals:**

- The changes have been approved by Odette School of Business 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 March 15, 2023 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 5.6.

University of Windsor  
Senate

5.2.1: **2023-2024 Operating Budget Proposal**

Item for: **Information**

Forwarded by: **Academic Policy Committee**

The 2023-2024 Operating Budget Proposal includes the:

- a. Proposed Tuition and Compulsory Ancillary Fees (S230414-5.2.1a)
- b. Proposed Operating Budget (S230414-5.2.1b)

Note:

- Compulsory Ancillary fees have been approved by the Ancillary Fee Board.
- In March 2023, the Ministry of Colleges and Universities confirmed a continuation of a domestic (Ontario) tuition freeze during the 2023/24 academic year but have allowed out of province tuition increases up to 5%.
- Administration is recommending a 5% increase for all out of province student tuition rates in regulated programs.
- International tuition rate increases are consistent with the International Student Tuition Guarantee (ITG), are based on recommendations from the Tuition and Financial Aid Steering Committee, and have been reviewed with all Faculty Deans and student leaders.

*See attached.*



# University of Windsor

## 2023/24 Tuition and Ancillary Fee Schedule

Domestic Undergraduate Full Time .....	1
Domestic Undergraduate Part Time .....	2
Domestic Undergraduate Out of Province Full Time.....	3
Domestic Undergraduate Out of Province Part Time .....	4
International Undergraduate Full Time .....	5
International Undergraduate Part Time .....	6
International Undergraduate US Neighbour .....	7
Domestic Graduate Full Time & Part Time .....	8
Domestic Graduate Cohort Based Masters .....	9
Domestic Graduate Out of Province Full Time & Part Time .....	10
Domestic Graduate Out of Province Cohort Based Masters .....	11
International Graduate Masters Full Time & Part Time .....	12
International Graduate PhD Full Time & Part Time .....	13
International Graduate US Neighbour .....	13
International Graduate Cohort Based Masters.....	14
Compulsory Ancillary Fees .....	15

## 2023/24 Tuition Fees: Undergraduate - Domestic, Out of Province, International & US Neighbour

UNDERGRADUATE TUITION FEES - DOMESTIC		2023/24 PER SEMESTER (PROPOSED)	2022/23 PER SEMESTER (APPROVED)	\$ INCREASE	% INCREASE
<b>FULL TIME</b>					
Business	1st year <sup>21</sup>	4,513.30	4,381.85	131.45	3.0%
Business	2nd year	4,340.15	4,340.15	0.00	0.0%
Business	3rd year	4,298.80	4,298.80	0.00	0.0%
Business	4th year	4,298.80	4,298.80	0.00	0.0%
Computer Science	1st year	4,512.15	4,512.15	0.00	0.0%
Computer Science	2nd year	4,469.15	4,469.15	0.00	0.0%
Computer Science	3rd year	4,426.60	4,426.60	0.00	0.0%
Computer Science	4th year	4,426.60	4,426.60	0.00	0.0%
Education	1st year	3,410.70	3,410.70	0.00	0.0%
Education	2nd year	3,410.70	3,410.70	0.00	0.0%
Concurrent Education programs	1st year	3,054.05	3,054.05	0.00	0.0%
Concurrent Education programs	2nd year	3,054.05	3,054.05	0.00	0.0%
Concurrent Education programs	3rd year	3,054.05	3,054.05	0.00	0.0%
Concurrent Education programs	4th year	3,054.05	3,054.05	0.00	0.0%
Engineering	1st year <sup>21</sup>	4,897.30	4,754.70	142.60	3.0%
Engineering	2nd year	4,709.40	4,709.40	0.00	0.0%
Engineering	3rd year	4,664.55	4,664.55	0.00	0.0%
Engineering	4th year	4,664.55	4,664.55	0.00	0.0%
Human Kinetics	1st year	2,985.95	2,985.95	0.00	0.0%
Human Kinetics	2nd year	2,985.95	2,985.95	0.00	0.0%
Human Kinetics	3rd year	2,985.95	2,985.95	0.00	0.0%
Human Kinetics	4th year	2,985.95	2,985.95	0.00	0.0%
Science (excl. Computer Science)	1st year	2,985.95	2,985.95	0.00	0.0%
Science (excl. Computer Science)	2nd year	2,985.95	2,985.95	0.00	0.0%
Science (excl. Computer Science)	3rd year	2,985.95	2,985.95	0.00	0.0%
Science (excl. Computer Science)	4th year	2,985.95	2,985.95	0.00	0.0%
Social Work	1st year	2,985.95	2,985.95	0.00	0.0%
Social Work	2nd year	2,985.95	2,985.95	0.00	0.0%
Social Work	3rd year	2,985.95	2,985.95	0.00	0.0%
Social Work	4th year	2,985.95	2,985.95	0.00	0.0%
Other	1st year	2,899.90	2,899.90	0.00	0.0%
Other	2nd year	2,899.90	2,899.90	0.00	0.0%
Other	3rd year	2,899.90	2,899.90	0.00	0.0%
Other	4th year	2,899.90	2,899.90	0.00	0.0%
Law	1st year <sup>21</sup>	9,436.50	8,778.15	658.35	7.5%
Law	2nd year	8,694.50	8,694.50	0.00	0.0%
Law	3rd year	8,611.70	8,611.70	0.00	0.0%
Dual JD	1st year <sup>21</sup>	9,436.50	8,778.15	658.35	7.5%
Dual JD	2nd year	8,360.10	8,360.10	0.00	0.0%
Dual JD	3rd year	7,962.05	7,962.05	0.00	0.0%

<sup>21</sup> Proposed increase subject to Ministry approval, otherwise would follow Domestic tuition framework for 2023/24.

## 2023/24 Tuition Fees: Undergraduate - Domestic, Out of Province, International & US Neighbour

UNDERGRADUATE TUITION FEES - DOMESTIC		2023/24 PER COURSE (PROPOSED)	2022/23 PER COURSE (APPROVED)	\$ INCREASE	% INCREASE
<b><u>PART TIME</u></b>					
Business	1st year <sup>21</sup>	902.66	876.37	26.29	3.0%
Business	2nd year	868.03	868.03	0.00	0.0%
Business	3rd year	859.76	859.76	0.00	0.0%
Business	4th year	859.76	859.76	0.00	0.0%
Computer Science	1st year	902.43	902.43	0.00	0.0%
Computer Science	2nd year	893.83	893.83	0.00	0.0%
Computer Science	3rd year	885.32	885.32	0.00	0.0%
Computer Science	4th year	885.32	885.32	0.00	0.0%
Education	1st year	682.14	682.14	0.00	0.0%
Education	2nd year	682.14	682.14	0.00	0.0%
Concurrent Education programs	1st year	610.81	610.81	0.00	0.0%
Concurrent Education programs	2nd year	610.81	610.81	0.00	0.0%
Concurrent Education programs	3rd year	610.81	610.81	0.00	0.0%
Concurrent Education programs	4th year	610.81	610.81	0.00	0.0%
Engineering	1st year <sup>21</sup>	979.46	950.94	28.52	3.0%
Engineering	2nd year	941.88	941.88	0.00	0.0%
Engineering	3rd year	932.91	932.91	0.00	0.0%
Engineering	4th year	932.91	932.91	0.00	0.0%
Human Kinetics	1st year	597.19	597.19	0.00	0.0%
Human Kinetics	2nd year	597.19	597.19	0.00	0.0%
Human Kinetics	3rd year	597.19	597.19	0.00	0.0%
Human Kinetics	4th year	597.19	597.19	0.00	0.0%
Science (excl. Computer Science)	1st year	597.19	597.19	0.00	0.0%
Science (excl. Computer Science)	2nd year	597.19	597.19	0.00	0.0%
Science (excl. Computer Science)	3rd year	597.19	597.19	0.00	0.0%
Science (excl. Computer Science)	4th year	597.19	597.19	0.00	0.0%
Social Work	1st year	597.19	597.19	0.00	0.0%
Social Work	2nd year	597.19	597.19	0.00	0.0%
Social Work	3rd year	597.19	597.19	0.00	0.0%
Social Work	4th year	597.19	597.19	0.00	0.0%
Other	1st year	579.98	579.98	0.00	0.0%
Other	2nd year	579.98	579.98	0.00	0.0%
Other	3rd year	579.98	579.98	0.00	0.0%
Other	4th year	579.98	579.98	0.00	0.0%
Law - Part Time	1st year <sup>21</sup>	4,718.25	4,389.08	329.18	7.5%
Law - Part Time	2nd year	4,347.25	4,347.25	0.00	0.0%
Law - Part Time	3rd year	4,305.85	4,305.85	0.00	0.0%

<sup>21</sup> Proposed increase subject to Ministry approval, otherwise would follow Domestic tuition framework for 2023/24.

## 2023/24 Tuition Fees: Undergraduate - Domestic, Out of Province, International & US Neighbour

UNDERGRADUATE TUITION FEES - DOMESTIC OUT OF PROVINCE		2023/24 PER SEMESTER (PROPOSED)	2022/23 PER SEMESTER (APPROVED)	\$ INCREASE	% INCREASE
<b>FULL TIME</b>					
Business	1st year	4,830.90	4,600.90	230.00	5.0%
Business	2nd year	4,785.00	4,557.15	227.85	5.0%
Business	3rd year	4,739.35	4,513.70	225.65	5.0%
Business	4th year	4,739.35	4,513.70	225.65	5.0%
Computer Science	1st year	4,974.60	4,737.75	236.85	5.0%
Computer Science	2nd year	4,927.20	4,692.60	234.60	5.0%
Computer Science	3rd year	4,880.25	4,647.90	232.35	5.0%
Computer Science	4th year	4,880.25	4,647.90	232.35	5.0%
Education	1st year	3,760.25	3,581.20	179.05	5.0%
Education	2nd year	3,760.25	3,581.20	179.05	5.0%
Concurrent Education programs	1st year	3,367.05	3,206.75	160.30	5.0%
Concurrent Education programs	2nd year	3,367.05	3,206.75	160.30	5.0%
Concurrent Education programs	3rd year	3,367.05	3,206.75	160.30	5.0%
Concurrent Education programs	4th year	3,367.05	3,206.75	160.30	5.0%
Engineering	1st year	5,242.00	4,992.40	249.60	5.0%
Engineering	2nd year	5,192.05	4,944.85	247.20	5.0%
Engineering	3rd year	5,142.60	4,897.75	244.85	5.0%
Engineering	4th year	5,142.60	4,897.75	244.85	5.0%
Human Kinetics	1st year	3,291.95	3,135.20	156.75	5.0%
Human Kinetics	2nd year	3,291.95	3,135.20	156.75	5.0%
Human Kinetics	3rd year	3,291.95	3,135.20	156.75	5.0%
Human Kinetics	4th year	3,291.95	3,135.20	156.75	5.0%
Science (excl. Computer Science)	1st year	3,291.95	3,135.20	156.75	5.0%
Science (excl. Computer Science)	2nd year	3,291.95	3,135.20	156.75	5.0%
Science (excl. Computer Science)	3rd year	3,291.95	3,135.20	156.75	5.0%
Science (excl. Computer Science)	4th year	3,291.95	3,135.20	156.75	5.0%
Social Work	1st year	3,291.95	3,135.20	156.75	5.0%
Social Work	2nd year	3,291.95	3,135.20	156.75	5.0%
Social Work	3rd year	3,291.95	3,135.20	156.75	5.0%
Social Work	4th year	3,291.95	3,135.20	156.75	5.0%
Other	1st year	3,197.05	3,044.85	152.20	5.0%
Other	2nd year	3,197.05	3,044.85	152.20	5.0%
Other	3rd year	3,197.05	3,044.85	152.20	5.0%
Other	4th year	3,197.05	3,044.85	152.20	5.0%
Law	1st year	9,677.90	9,217.05	460.85	5.0%
Law	2nd year	9,585.65	9,129.20	456.45	5.0%
Law	3rd year	9,494.35	9,042.25	452.10	5.0%
Dual JD	1st year	9,677.90	9,217.05	460.85	5.0%
Dual JD	2nd year	9,217.00	8,778.10	438.90	5.0%
Dual JD	3rd year	8,778.15	8,360.15	418.00	5.0%



## 2023/24 Tuition Fees: Undergraduate - Domestic, Out of Province, International & US Neighbour

		2023/24 PER COURSE (PROPOSED)	2022/23 PER COURSE (APPROVED)	\$ INCREASE	% INCREASE
<b>UNDERGRADUATE TUITION FEES - DOMESTIC OUT OF PROVINCE</b>					
<b><u>PART TIME</u></b>					
Business	1st year	966.18	920.18	46.00	5.0%
Business	2nd year	957.00	911.43	45.57	5.0%
Business	3rd year	947.87	902.74	45.13	5.0%
Business	4th year	947.87	902.74	45.13	5.0%
Computer Science	1st year	994.92	947.55	47.37	5.0%
Computer Science	2nd year	985.44	938.52	46.92	5.0%
Computer Science	3rd year	976.05	929.58	46.47	5.0%
Computer Science	4th year	976.05	929.58	46.47	5.0%
Education	1st year	752.05	716.24	35.81	5.0%
Education	2nd year	752.05	716.24	35.81	5.0%
Concurrent Education programs	1st year	673.41	641.35	32.06	5.0%
Concurrent Education programs	2nd year	673.41	641.35	32.06	5.0%
Concurrent Education programs	3rd year	673.41	641.35	32.06	5.0%
Concurrent Education programs	4th year	673.41	641.35	32.06	5.0%
Engineering	1st year	1,048.40	998.48	49.92	5.0%
Engineering	2nd year	1,038.41	988.97	49.44	5.0%
Engineering	3rd year	1,028.52	979.55	48.97	5.0%
Engineering	4th year	1,028.52	979.55	48.97	5.0%
Human Kinetics	1st year	658.39	627.04	31.35	5.0%
Human Kinetics	2nd year	658.39	627.04	31.35	5.0%
Human Kinetics	3rd year	658.39	627.04	31.35	5.0%
Human Kinetics	4th year	658.39	627.04	31.35	5.0%
Science (excl. Computer Science)	1st year	658.39	627.04	31.35	5.0%
Science (excl. Computer Science)	2nd year	658.39	627.04	31.35	5.0%
Science (excl. Computer Science)	3rd year	658.39	627.04	31.35	5.0%
Science (excl. Computer Science)	4th year	658.39	627.04	31.35	5.0%
Social Work	1st year	658.39	627.04	31.35	5.0%
Social Work	2nd year	658.39	627.04	31.35	5.0%
Social Work	3rd year	658.39	627.04	31.35	5.0%
Social Work	4th year	658.39	627.04	31.35	5.0%
Other	1st year	639.41	608.97	30.44	5.0%
Other	2nd year	639.41	608.97	30.44	5.0%
Other	3rd year	639.41	608.97	30.44	5.0%
Other	4th year	639.41	608.97	30.44	5.0%
Law - Part Time	1st year	4,838.95	4,608.53	230.42	5.0%
Law - Part Time	2nd year	4,792.83	4,564.60	228.22	5.0%
Law - Part Time	3rd year	4,747.18	4,521.13	226.05	5.0%

## 2023/24 Tuition Fees: Undergraduate - Domestic, Out of Province, International & US Neighbour

UNDERGRADUATE TUITION FEES - INTERNATIONAL		2023/24 PER SEMESTER (PROPOSED)	2022/23 PER SEMESTER (APPROVED)	\$ INCREASE	% INCREASE
<b>FULL TIME</b>					
Business	Cohort 2023-24 <sup>20</sup>	17,170.00	17,170.00	0.00	0.0%
Business	Cohort 2022-23 <sup>15</sup>	17,170.00	17,170.00	0.00	0.0%
Business	Cohort 2021-22 <sup>1</sup>	16,200.00	16,200.00	0.00	0.0%
Business	Pre-Cohort	15,000.00	15,000.00	0.00	0.0%
Education, Engineering & Nursing	Cohort 2023-24 <sup>20</sup>	19,460.00	19,460.00	0.00	0.0%
Education, Engineering & Nursing	Cohort 2022-23 <sup>15</sup>	19,460.00	19,460.00	0.00	0.0%
Education, Engineering & Nursing	Cohort 2021-22 <sup>1</sup>	18,360.00	18,360.00	0.00	0.0%
Education, Engineering & Nursing	Pre-Cohort	17,000.00	17,000.00	0.00	0.0%
Computer Science	Cohort 2023-24 <sup>20</sup>	17,745.00	17,745.00	0.00	0.0%
Computer Science	Cohort 2022-23 <sup>15</sup>	17,745.00	17,745.00	0.00	0.0%
Computer Science	Cohort 2021-22 <sup>1</sup>	16,740.00	16,740.00	0.00	0.0%
Computer Science	Pre-Cohort	15,500.00	15,500.00	0.00	0.0%
Science (excl. Computer Science)	Cohort 2023-24 <sup>20</sup>	16,530.00	16,530.00	0.00	0.0%
Science (excl. Computer Science)	Cohort 2022-23 <sup>15</sup>	16,530.00	16,530.00	0.00	0.0%
Science (excl. Computer Science)	Cohort 2021-22 <sup>1</sup>	15,595.00	15,595.00	0.00	0.0%
Science (excl. Computer Science)	Pre-Cohort	14,440.00	14,440.00	0.00	0.0%
Other	Cohort 2023-24 <sup>20</sup>	15,100.00	15,100.00	0.00	0.0%
Other	Cohort 2022-23 <sup>15</sup>	15,100.00	15,100.00	0.00	0.0%
Other	Cohort 2021-22 <sup>1</sup>	14,660.00	14,660.00	0.00	0.0%
Other	Pre-Cohort	13,575.00	13,575.00	0.00	0.0%
Law	Cohort 2023-24 <sup>20</sup>	24,615.00	24,615.00	0.00	0.0%
Law	Cohort 2022-23 <sup>15</sup>	24,615.00	24,615.00	0.00	0.0%
Law	Cohort 2021-22 <sup>1</sup>	23,220.00	23,220.00	0.00	0.0%
Dual JD	Cohort 2023-24 <sup>20</sup>	12,895.00	12,895.00	0.00	0.0%
Dual JD	Cohort 2022-23 <sup>15</sup>	12,895.00	12,895.00	0.00	0.0%
Dual JD	Cohort 2021-22 <sup>1</sup>	12,165.00	12,165.00	0.00	0.0%

<sup>1</sup> Cohort 2021-22 refers to students who commence their degree either the Spring/Summer 2021, Fall 2021 or Winter 2022 semesters.

<sup>15</sup> Cohort 2022-23 refers to students who commence their degree either the Spring/Summer 2022, Fall 2022 or Winter 2023 semesters.

<sup>20</sup> Cohort 2023-24 refers to students who commence their degree either the Spring/Summer 2023, Fall 2023 or Winter 2024 semesters.

## 2023/24 Tuition Fees: Undergraduate - Domestic, Out of Province, International & US Neighbour

UNDERGRADUATE TUITION FEES - INTERNATIONAL		2023/24 PER COURSE (PROPOSED)	2022/23 PER COURSE (APPROVED)	\$ INCREASE	% INCREASE
<b><u>PART TIME</u></b>					
Business	Cohort 2023-24 <sup>20</sup>	3,434.00	3,434.00	0.00	0.0%
Business	Cohort 2022-23 <sup>15</sup>	3,434.00	3,434.00	0.00	0.0%
Business	Cohort 2021-22 <sup>1</sup>	3,240.00	3,240.00	0.00	0.0%
Business	Pre-Cohort	3,000.00	3,000.00	0.00	0.0%
Engineering, Education, Nursing	Cohort 2023-24 <sup>20</sup>	3,892.00	3,892.00	0.00	0.0%
Engineering, Education, Nursing	Cohort 2022-23 <sup>15</sup>	3,892.00	3,892.00	0.00	0.0%
Engineering, Education, Nursing	Cohort 2021-22 <sup>1</sup>	3,672.00	3,672.00	0.00	0.0%
Engineering, Education, Nursing	Pre-Cohort	3,400.00	3,400.00	0.00	0.0%
Computer Science	Cohort 2023-24 <sup>20</sup>	3,549.00	3,549.00	0.00	0.0%
Computer Science	Cohort 2022-23 <sup>15</sup>	3,549.00	3,549.00	0.00	0.0%
Computer Science	Cohort 2021-22 <sup>1</sup>	3,348.00	3,348.00	0.00	0.0%
Computer Science	Pre-Cohort	3,100.00	3,100.00	0.00	0.0%
Science (excl. Computer Science)	Cohort 2023-24 <sup>20</sup>	3,306.00	3,306.00	0.00	0.0%
Science (excl. Computer Science)	Cohort 2022-23 <sup>15</sup>	3,306.00	3,306.00	0.00	0.0%
Science (excl. Computer Science)	Cohort 2021-22 <sup>1</sup>	3,119.00	3,119.00	0.00	0.0%
Science (excl. Computer Science)	Pre-Cohort	2,888.00	2,888.00	0.00	0.0%
Other	Cohort 2023-24 <sup>20</sup>	3,020.00	3,020.00	0.00	0.0%
Other	Cohort 2022-23 <sup>15</sup>	3,020.00	3,020.00	0.00	0.0%
Other	Cohort 2021-22 <sup>1</sup>	2,932.00	2,932.00	0.00	0.0%
Other	Pre-Cohort	2,715.00	2,715.00	0.00	0.0%
Law - Part Time	Cohort 2023-24 <sup>20</sup>	12,307.50	12,307.50	0.00	0.0%
Law - Part Time	Cohort 2022-23 <sup>15</sup>	12,307.50	12,307.50	0.00	0.0%
Law - Part Time	Cohort 2021-22 <sup>1</sup>	11,610.00	11,610.00	0.00	0.0%

<sup>1</sup> Cohort 2021-22 refers to students who commence their degree either the Spring/Summer 2021, Fall 2021 or Winter 2022 semesters.

<sup>15</sup> Cohort 2022-23 refers to students who commence their degree either the Spring/Summer 2022, Fall 2022 or Winter 2023 semesters.

<sup>20</sup> Cohort 2023-24 refers to students who commence their degree either the Spring/Summer 2023, Fall 2023 or Winter 2024 semesters.

## 2023/24 Tuition Fees: Undergraduate - Domestic, Out of Province, International & US Neighbour

		2023/24 PER SEMESTER (PROPOSED)	2022/23 PER SEMESTER (APPROVED)	\$ INCREASE	% INCREASE
<b>UNDERGRADUATE TUITION FEES - INTERNATIONAL - US NEIGHBOUR - FULL TIME</b>					
<b><u>FULL TIME</u></b>					
US Neighbour Fee -First Entry Programs	1st year	8,000.00	7,300.00	700.00	9.6%
US Neighbour Fee -First Entry Programs	2nd year	8,000.00	7,300.00	700.00	9.6%
US Neighbour Fee -First Entry Programs	3rd year	8,000.00	7,300.00	700.00	9.6%
US Neighbour Fee -First Entry Programs	4th year	8,000.00	7,300.00	700.00	9.6%
US Neighbour Fee -Dual JD	1st year	10,700.00	9,800.00	900.00	9.2%
US Neighbour Fee -Dual JD	2nd year	10,700.00	9,800.00	900.00	9.2%
US Neighbour Fee -Education	1st year	10,700.00	9,800.00	900.00	9.2%
US Neighbour Fee -Education	2nd year	10,700.00	9,800.00	900.00	9.2%
		2023/24 PER COURSE (PROPOSED)	2022/23 PER COURSE (APPROVED)	\$ INCREASE	% INCREASE
<b>UNDERGRADUATE TUITION FEES - INTERNATIONAL - US NEIGHBOUR - PART TIME</b>					
<b><u>PART TIME</u></b>					
US Neighbour Fee -First Entry Programs	1st year	1,600.00	1,460.00	140.00	9.6%
US Neighbour Fee -First Entry Programs	2nd year	1,600.00	1,460.00	140.00	9.6%
US Neighbour Fee -First Entry Programs	3rd year	1,600.00	1,460.00	140.00	9.6%
US Neighbour Fee -First Entry Programs	4th year	1,600.00	1,460.00	140.00	9.6%

## 2023/24 Tuition Fees: Graduate - Domestic, Out of Province, International & US Neighbour

GRADUATE TUITION FEES - DOMESTIC	2023/24 PER SEMESTER (PROPOSED)	2022/23 PER SEMESTER (APPROVED)	\$ INCREASE	% INCREASE
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### FULL TIME

Master's Qualifying	All Masters Qualifying tuition rates equal to undergraduate tuition rates				
Master's Candidate	1st year	2,393.10	2,393.10	0.00	0.0%
Master's Candidate	2nd year	2,393.10	2,393.10	0.00	0.0%
Master's Candidate	3rd year	2,393.10	2,393.10	0.00	0.0%
Master's Candidate	4th year & beyond	2,393.10	2,393.10	0.00	0.0%
Master's Candidate -Social Work	1st year	3,081.75	3,081.75	0.00	0.0%
Master's Candidate -Social Work	2nd year	3,081.75	3,081.75	0.00	0.0%
Master's Candidate -Social Work	3rd year	3,081.75	3,081.75	0.00	0.0%
Master's Candidate -Social Work	4th year & beyond	3,081.75	3,081.75	0.00	0.0%
Master's Candidate -Economics	1st year	2,795.35	2,795.35	0.00	0.0%
Master's Candidate -Economics	2nd year	2,795.35	2,795.35	0.00	0.0%
Master's Candidate -Economics	3rd year	2,795.35	2,795.35	0.00	0.0%
Master's Candidate -Economics	4th year & beyond	2,795.35	2,795.35	0.00	0.0%
PhD - General Base Tuition	1st year	2,393.10	2,393.10	0.00	0.0%
PhD - Social Work	1st year	3,081.75	3,081.75	0.00	0.0%

### PART TIME

Master's Qualifying	All Masters Qualifying tuition rates equal to undergraduate tuition rates				
Master's Candidate - Part Time	1st year	1,196.55	1,196.55	0.00	0.0%
Master's Candidate - Part Time	2nd year	1,196.55	1,196.55	0.00	0.0%
Master's Candidate - Part Time	3rd year	1,196.55	1,196.55	0.00	0.0%
Master's Candidate - Part Time	4th year & beyond	1,196.55	1,196.55	0.00	0.0%
Master's Candidate -Social Work - Part Time	1st year	1,540.88	1,540.88	0.00	0.0%
Master's Candidate -Social Work - Part Time	2nd year	1,540.88	1,540.88	0.00	0.0%
Master's Candidate -Social Work - Part Time	3rd year	1,540.88	1,540.88	0.00	0.0%
Master's Candidate -Social Work - Part Time	4th year & beyond	1,540.88	1,540.88	0.00	0.0%
PhD - General Base Tuition - Part Time	1st year	1,196.55	1,196.55	0.00	0.0%
PhD - Social Work - Part Time	1st year	1,540.88	1,540.88	0.00	0.0%

## 2023/24 Tuition Fees: Graduate - Domestic, Out of Province, International & US Neighbour

		2023/24 PER SEMESTER (PROPOSED)	2022/23 PER SEMESTER (APPROVED)	\$ INCREASE	% INCREASE
<b>GRADUATE TUITION FEES - DOMESTIC</b>					
<b><u>DOMESTIC GRADUATE - COHORT BASED MASTERS</u></b>					
<b><u>Government Regulated Programs</u></b>					
Master of Applied Economics and Policy	1st year	2,795.35	2,795.35	0.00	0.0%
Master of Applied Economics and Policy	2nd year	2,795.35	2,795.35	0.00	0.0%
Master of Business Administration (4 semester assessment)	1st year	4,675.25	4,675.25	0.00	0.0%
Master of Business Administration (4 semester assessment)	2nd year	4,675.25	4,675.25	0.00	0.0%
Master of Business Administration -Accounting (3 semester assessment)	1st year	8,977.50	8,977.50	0.00	0.0%
Master of Business Administration -Accounting (3 semester assessment)	2nd year	8,977.50	8,977.50	0.00	0.0%
Master of Business Administration for Managers and Professionals <sup>3</sup>	1st year	5,250.00	5,250.00	0.00	0.0%
Master of Business Administration for Managers and Professionals <sup>3</sup>	2nd year	5,250.00	5,250.00	0.00	0.0%
Master of Engineering Management	1st year	2,795.35	2,795.35	0.00	0.0%
Master of Engineering Management	2nd year	2,795.35	2,795.35	0.00	0.0%
Master of Engineering -Full Time	1st year	2,795.35	2,795.35	0.00	0.0%
Master of Engineering -Full Time	2nd year	2,795.35	2,795.35	0.00	0.0%
Master of Engineering -Full Time	3rd year	2,795.35	2,795.35	0.00	0.0%
Master of Engineering -Full Time	4th year & beyond	2,795.35	2,795.35	0.00	0.0%
Master of Engineering -Part Time	1st year	1,397.68	1,397.68	0.00	0.0%
Master of Engineering -Part Time	2nd year	1,397.68	1,397.68	0.00	0.0%
Master of Engineering -Part Time	3rd year	1,397.68	1,397.68	0.00	0.0%
Master of Engineering -Part Time	4th year & beyond	1,397.68	1,397.68	0.00	0.0%
Master of Science in Translational Health Science <sup>16</sup>	1st year	3,516.66	3,516.66	0.00	0.0%
<b><u>Unregulated Programs</u></b>					
Master of Actuarial Sciences <sup>2,4</sup>	1st year	8,925.00	8,500.00	425.00	5.0%
Master of Actuarial Sciences <sup>2,4</sup>	2nd year	8,728.13	8,312.50	415.63	5.0%
Master of Applied Computing <sup>2,4</sup>	1st year	9,500.00	8,700.00	800.00	9.2%
Master of Applied Computing <sup>2,4</sup>	2nd year	9,076.87	8,312.50	764.37	9.2%
Master of Management <sup>2,4</sup>	1st year	10,750.00	9,800.00	950.00	9.7%
Master of Management <sup>2,4</sup>	2nd year	10,283.80	9,375.00	908.80	9.7%
Master of Medical Biotechnology <sup>2,4</sup>	1st year	9,375.00	8,700.00	675.00	7.8%
Master of Medical Biotechnology <sup>2,4</sup>	2nd year	8,957.44	8,312.50	644.94	7.8%
Master of Materials Chemistry and Engineering <sup>2</sup>	1st year	8,125.00	8,000.00	125.00	1.6%
Master of Materials Chemistry and Engineering <sup>2</sup>	2nd year	8,125.00	8,000.00	125.00	1.6%

<sup>2</sup> Charged per semester over 4 semesters

<sup>3</sup> Charged per semester over 6 semesters

<sup>4</sup> All cohort-based masters programs will charge a per course fee where a student registers for a course following completion of four full-time semesters.

The per course fee will be determined by dividing the program fee by the number of required courses.

<sup>16</sup> Charged per semester over 3 semesters

## 2023/24 Tuition Fees: Graduate - Domestic, Out of Province, International & US Neighbour

GRADUATE TUITION FEES - DOMESTIC OUT OF PROVINCE	2023/24 PER SEMESTER (PROPOSED)	2022/23 PER SEMESTER (APPROVED)	\$ INCREASE	% INCREASE
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### FULL TIME

Master's Qualifying	All Masters Qualifying tuition rates equal to undergraduate tuition rates				
Master's Candidate	1st year	2,512.75	2,393.10	119.65	5.0%
Master's Candidate	2nd year	2,512.75	2,393.10	119.65	5.0%
Master's Candidate	3rd year	2,512.75	2,393.10	119.65	5.0%
Master's Candidate	4th year & beyond	2,512.75	2,393.10	119.65	5.0%
Master's Candidate -Social Work	1st year	3,235.80	3,081.75	154.05	5.0%
Master's Candidate -Social Work	2nd year	3,235.80	3,081.75	154.05	5.0%
Master's Candidate -Social Work	3rd year	3,235.80	3,081.75	154.05	5.0%
Master's Candidate -Social Work	4th year & beyond	3,235.80	3,081.75	154.05	5.0%
Master's Candidate -Economics	1st year	2,935.10	2,795.35	139.75	5.0%
Master's Candidate -Economics	2nd year	2,935.10	2,795.35	139.75	5.0%
Master's Candidate -Economics	3rd year	2,935.10	2,795.35	139.75	5.0%
Master's Candidate -Economics	4th year & beyond	2,935.10	2,795.35	139.75	5.0%
PhD - General Base Tuition	1st year	2,393.10	2,393.10	0.00	0.0%
PhD - Social Work	1st year	3,081.75	3,081.75	0.00	0.0%

### PART TIME

Master's Qualifying	All Masters Qualifying tuition rates equal to undergraduate tuition rates				
Master's Candidate & PhD - Part Time	1st year	1,256.38	1,196.55	59.83	5.0%
Master's Candidate & PhD - Part Time	2nd year	1,256.38	1,196.55	59.83	5.0%
Master's Candidate & PhD - Part Time	3rd year	1,256.38	1,196.55	59.83	5.0%
Master's Candidate & PhD - Part Time	4th year & beyond	1,256.38	1,196.55	59.83	5.0%
Master's Candidate & PhD -Social Work - Part Time	1st year	1,617.90	1,540.88	77.03	5.0%
Master's Candidate & PhD -Social Work - Part Time	2nd year	1,617.90	1,540.88	77.03	5.0%
Master's Candidate & PhD -Social Work - Part Time	3rd year	1,617.90	1,540.88	77.03	5.0%
Master's Candidate & PhD -Social Work - Part Time	4th year & beyond	1,617.90	1,540.88	77.03	5.0%
PhD - General Base Tuition - Part Time	1st year	1,196.55	1,196.55	0.00	0.0%
PhD - Social Work - Part Time	1st year	1,540.88	1,540.88	0.00	0.0%

## 2023/24 Tuition Fees: Graduate - Domestic, Out of Province, International & US Neighbour

GRADUATE TUITION FEES - DOMESTIC OUT OF PROVINCE	2023/24 PER SEMESTER (PROPOSED)	2022/23 PER SEMESTER (APPROVED)	\$ INCREASE	% INCREASE
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### DOMESTIC GRADUATE - COHORT BASED MASTERS

#### Government Regulated Programs

Master of Applied Economics and Policy	1st year	2,935.10	2,795.35	139.75	5.0%
Master of Applied Economics and Policy	2nd year	2,935.10	2,795.35	139.75	5.0%
Master of Business Administration (4 semester assessment)	1st year	4,909.00	4,675.25	233.75	5.0%
Master of Business Administration (4 semester assessment)	2nd year	4,909.00	4,675.25	233.75	5.0%
Master of Business Administration -Accounting (3 semester assessment)	1st year	9,426.35	8,977.50	448.85	5.0%
Master of Business Administration -Accounting (3 semester assessment)	2nd year	9,426.35	8,977.50	448.85	5.0%
Master of Business Administration for Managers and Professionals <sup>3</sup>	1st year	5,788.13	5,512.50	275.63	5.0%
Master of Business Administration for Managers and Professionals <sup>3</sup>	2nd year	5,788.13	5,512.50	275.63	5.0%
Master of Engineering Management	1st year	2,935.10	2,795.35	139.75	5.0%
Master of Engineering Management	2nd year	2,935.10	2,795.35	139.75	5.0%
Master of Engineering -Full Time	1st year	2,935.10	2,795.35	139.75	5.0%
Master of Engineering -Full Time	2nd year	2,935.10	2,795.35	139.75	5.0%
Master of Engineering -Full Time	3rd year	2,935.10	2,795.35	139.75	5.0%
Master of Engineering -Full Time	4th year & beyond	2,935.10	2,795.35	139.75	5.0%
Master of Engineering -Part Time	1st year	1,467.55	1,397.68	69.88	5.0%
Master of Engineering -Part Time	2nd year	1,467.55	1,397.68	69.88	5.0%
Master of Engineering -Part Time	3rd year	1,467.55	1,397.68	69.88	5.0%
Master of Engineering -Part Time	4th year & beyond	1,467.55	1,397.68	69.88	5.0%
Master of Science in Translational Health Science <sup>16</sup>	1st year	3,692.49	3,516.66	175.83	5.0%

#### Unregulated Programs

Master of Actuarial Sciences <sup>2,4</sup>	1st year	8,925.00	8,500.00	425.00	5.0%
Master of Actuarial Sciences <sup>2,4</sup>	2nd year	8,728.13	8,312.50	415.63	5.0%
Master of Applied Computing <sup>2,4</sup>	1st year	9,500.00	8,700.00	800.00	9.2%
Master of Applied Computing <sup>2,4</sup>	2nd year	9,076.87	8,312.50	764.37	9.2%
Master of Management <sup>2,4</sup>	1st year	10,750.00	9,800.00	950.00	9.7%
Master of Management <sup>2,4</sup>	2nd year	10,283.80	9,375.00	908.80	9.7%
Master of Medical Biotechnology <sup>2,4</sup>	1st year	9,375.00	8,700.00	675.00	7.8%
Master of Medical Biotechnology <sup>2,4</sup>	2nd year	8,957.44	8,312.50	644.94	7.8%
Master of Materials Chemistry and Engineering <sup>2</sup>	1st year	8,125.00	8,000.00	125.00	1.6%
Master of Materials Chemistry and Engineering <sup>2</sup>	2nd year	8,125.00	8,000.00	125.00	1.6%

<sup>2</sup> Charged per semester over 4 semesters

<sup>3</sup> Charged per semester over 6 semesters

<sup>4</sup> All cohort-based masters programs will charge a per course fee where a student registers for a course following completion of four full-time semesters.  
The per course fee will be determined by dividing the program fee by the number of required courses.

<sup>16</sup> Charged per semester over 3 semesters



## 2023/24 Tuition Fees: Graduate - Domestic, Out of Province, International & US Neighbour

GRADUATE TUITION FEES - INTERNATIONAL - MASTERS	2023/24 PER SEMESTER (PROPOSED)	2022/23 PER SEMESTER (APPROVED)	\$ INCREASE	% INCREASE
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### FULL TIME

Master's Qualifying		All Masters Qualifying tuition rates equal to undergraduate tuition rates			
Master's Candidate <sup>5</sup>	Cohort 2023-24 <sup>20</sup>	7,820.00	7,665.00	155.00	2.0%
Master's Candidate <sup>5</sup>	Cohort 2022-23 <sup>15</sup>	7,665.00	7,665.00	0.00	0.0%
Master's Candidate <sup>5</sup>	Cohort 2021-22 <sup>1</sup>	7,665.00	7,665.00	0.00	0.0%
Master's Candidate <sup>5</sup>	Pre-Cohort	7,665.00	7,665.00	0.00	0.0%
Master's Candidate -Economics	Cohort 2023-24 <sup>20</sup>	8,245.00	8,085.00	160.00	2.0%
Master's Candidate -Economics	Cohort 2022-23 <sup>15</sup>	8,085.00	8,085.00	0.00	0.0%
Master's Candidate -Economics	Cohort 2021-22 <sup>1</sup>	8,085.00	8,085.00	0.00	0.0%
Master's Candidate -Economics	Pre-Cohort	8,085.00	8,085.00	0.00	0.0%
Master's Candidate -Computer Science	Cohort 2023-24 <sup>20</sup>	8,280.00	8,120.00	160.00	2.0%
Master's Candidate -Computer Science	Cohort 2022-23 <sup>15</sup>	8,120.00	8,120.00	0.00	0.0%
Master's Candidate -Computer Science	Cohort 2021-22 <sup>1</sup>	8,120.00	8,120.00	0.00	0.0%
Master's Candidate -Computer Science	Pre-Cohort	8,120.00	8,120.00	0.00	0.0%
Master's Candidate -Education <sup>5</sup>	Cohort 2023-24 <sup>20</sup>	8,600.00	8,430.00	170.00	2.0%
Master's Candidate -Education <sup>5</sup>	Cohort 2022-23 <sup>15</sup>	8,430.00	8,430.00	0.00	0.0%

### PART TIME

Master's Qualifying		All Masters Qualifying tuition rates equal to undergraduate tuition rates			
Master's Candidate - Part Time	Cohort 2023-24 <sup>20</sup>	3,910.00	3,832.50	77.50	2.0%
Master's Candidate - Part Time	Cohort 2022-23 <sup>15</sup>	3,832.50	3,832.50	0.00	0.0%
Master's Candidate - Part Time	Cohort 2021-22 <sup>1</sup>	3,832.50	3,832.50	0.00	0.0%
Master's Candidate - Part Time	Pre-Cohort	3,832.50	3,832.50	0.00	0.0%
Master's Candidate -Economics - Part Time	Cohort 2023-24 <sup>20</sup>	4,122.50	4,042.50	80.00	2.0%
Master's Candidate -Economics - Part Time	Cohort 2022-23 <sup>15</sup>	4,042.50	4,042.50	0.00	0.0%
Master's Candidate -Economics - Part Time	Cohort 2021-22 <sup>1</sup>	4,042.50	4,042.50	0.00	0.0%
Master's Candidate -Economics - Part Time	Pre-Cohort	4,042.50	4,042.50	0.00	0.0%
Master's Candidate -Computer Science - Part Time	Cohort 2023-24 <sup>20</sup>	4,140.00	4,060.00	80.00	2.0%
Master's Candidate -Computer Science - Part Time	Cohort 2022-23 <sup>15</sup>	4,060.00	4,060.00	0.00	0.0%
Master's Candidate -Computer Science - Part Time	Cohort 2021-22 <sup>1</sup>	4,060.00	4,060.00	0.00	0.0%
Master's Candidate -Computer Science - Part Time	Pre-Cohort	4,060.00	4,060.00	0.00	0.0%
Master's Candidate -Education <sup>5</sup> - Part Time	Cohort 2023-24 <sup>20</sup>	4,300.00	4,215.00	85.00	2.0%
Master's Candidate -Education <sup>5</sup> - Part Time	Cohort 2022-23 <sup>15</sup>	4,215.00	4,215.00	0.00	0.0%

<sup>1</sup> Cohort 2021-22 refers to students who commence their degree either the Spring/Summer 2021, Fall 2021 or Winter 2022 semesters.

<sup>5</sup> The Master of Education program, previously offered as two separate degree programs (one cohort-based and exclusively for international students and one for any student with options for either research-based or course-based studies), has been merged into a single M.Ed. program. All students continuing in either stream have been grandfathered into their tuition rate.

<sup>12</sup> List of applicable programs can be found at [www.uwindsor.ca/finance/788/fees-and-charges](http://www.uwindsor.ca/finance/788/fees-and-charges)

<sup>15</sup> Cohort 2022-23 refers to students who commence their degree either the Spring/Summer 2022, Fall 2022 or Winter 2023 semesters.

<sup>20</sup> Cohort 2023-24 refers to students who commence their degree either the Spring/Summer 2023, Fall 2023 or Winter 2024 semesters.

## 2023/24 Tuition Fees: Graduate - Domestic, Out of Province, International & US Neighbour

		2023/24 PER SEMESTER (PROPOSED)	2022/23 PER SEMESTER (APPROVED)	\$ INCREASE	% INCREASE
<b>GRADUATE TUITION FEES - INTERNATIONAL - PhD</b>					
<b><u>FULL TIME</u></b>					
PhD General Base Tuition <sup>5</sup>	Cohort 2023-24 <sup>20</sup>	7,665.00	7,665.00	0.00	0.0%
PhD General Base Tuition <sup>5</sup>	Cohort 2022-23 <sup>15</sup>	7,665.00	7,665.00	0.00	0.0%
PhD General Base Tuition <sup>5</sup>	Cohort 2021-22 <sup>1</sup>	7,665.00	7,665.00	0.00	0.0%
PhD General Base Tuition <sup>5</sup>	Pre-Cohort	7,665.00	7,665.00	0.00	0.0%
PhD -Computer Science	Cohort 2023-24 <sup>20</sup>	8,120.00	8,120.00	0.00	0.0%
PhD -Computer Science	Cohort 2022-23 <sup>15</sup>	8,120.00	8,120.00	0.00	0.0%
PhD -Computer Science	Cohort 2021-22 <sup>1</sup>	8,120.00	8,120.00	0.00	0.0%
PhD -Computer Science	Pre-Cohort	8,120.00	8,120.00	0.00	0.0%
PhD -Education	Cohort 2023-24 <sup>20</sup>	8,430.00	8,430.00	0.00	0.0%
PhD -Education	Cohort 2022-23 <sup>15</sup>	8,430.00	8,430.00	0.00	0.0%
<b><u>PART TIME</u></b>					
PhD General Base Tuition - Part Time	Cohort 2023-24 <sup>20</sup>	3,832.50	3,832.50	0.00	0.0%
PhD General Base Tuition - Part Time	Cohort 2022-23 <sup>15</sup>	3,832.50	3,832.50	0.00	0.0%
PhD General Base Tuition - Part Time	Cohort 2021-22 <sup>1</sup>	3,832.50	3,832.50	0.00	0.0%
PhD General Base Tuition - Part Time	Pre-Cohort	3,832.50	3,832.50	0.00	0.0%
PhD -Computer Science - Part Time	Cohort 2023-24 <sup>20</sup>	4,060.00	4,060.00	0.00	0.0%
PhD -Computer Science - Part Time	Cohort 2022-23 <sup>15</sup>	4,060.00	4,060.00	0.00	0.0%
PhD -Computer Science - Part Time	Cohort 2021-22 <sup>1</sup>	4,060.00	4,060.00	0.00	0.0%
PhD -Computer Science - Part Time	Pre-Cohort	4,060.00	4,060.00	0.00	0.0%
PhD -Education - Part Time	Cohort 2023-24 <sup>20</sup>	4,215.00	4,215.00	0.00	0.0%
PhD -Education - Part Time	Cohort 2022-23 <sup>15</sup>	4,215.00	4,215.00	0.00	0.0%
<b>GRADUATE TUITION FEES - INTERNATIONAL - US NEIGHBOUR <sup>12</sup></b>					
<b><u>FULL TIME</u></b>					
US Neighbour Fee - Masters	1st year	6,710.00	6,100.00	610.00	10.0%
US Neighbour Fee - Masters	2nd year	6,710.00	6,100.00	610.00	10.0%
US Neighbour Fee - PhD	1st year	6,710.00	6,100.00	610.00	10.0%
US Neighbour Fee - PhD	2nd year	6,710.00	6,100.00	610.00	10.0%
<b><u>PART TIME</u></b>					
US Neighbour Fee - Masters	1st year	3,355.00	3,050.00	305.00	10.0%
US Neighbour Fee - Masters	2nd year	3,355.00	3,050.00	305.00	10.0%
US Neighbour Fee - PhD	1st year	3,355.00	3,050.00	305.00	10.0%
US Neighbour Fee - PhD	2nd year	3,355.00	3,050.00	305.00	10.0%

<sup>1</sup> Cohort 2021-22 refers to students who commence their degree either the Spring/Summer 2021, Fall 2021 or Winter 2022 semesters.

<sup>12</sup> List of applicable programs can be found at [www.uwindsor.ca/finance/788/fees-and-charges](http://www.uwindsor.ca/finance/788/fees-and-charges)

<sup>15</sup> Cohort 2022-23 refers to students who commence their degree either the Spring/Summer 2022, Fall 2022 or Winter 2023 semesters.

<sup>20</sup> Cohort 2023-24 refers to students who commence their degree either the Spring/Summer 2023, Fall 2023 or Winter 2024 semesters.

## 2023/24 Tuition Fees: Graduate - Domestic, Out of Province, International & US Neighbour

		2023/24 PER SEMESTER (PROPOSED)	2022/23 PER SEMESTER (APPROVED)	\$ INCREASE	% INCREASE
<b>INTERNATIONAL GRADUATE - COHORT BASED MASTERS</b>					
Master of Applied Economics and Policy <sup>2,4</sup>	Cohort 2023-24 <sup>20</sup>	8,662.50	8,250.00	412.50	5.0%
Master of Applied Economics and Policy <sup>2,4</sup>	Cohort 2022-23 <sup>15</sup>	8,250.00	8,250.00	0.00	0.0%
Master of Business Administration (4 semester assessment)	Cohort 2023-24 <sup>20</sup>	12,000.00	11,100.00	900.00	8.1%
Master of Business Administration (4 semester assessment)	Cohort 2022-23 <sup>15</sup>	11,100.00	11,100.00	0.00	0.0%
Master of Business Administration -Accounting (3 semester assessment)	Cohort 2023-24 <sup>20</sup>	16,956.00	15,700.00	1,256.00	8.0%
Master of Business Administration -Accounting (3 semester assessment)	Cohort 2022-23 <sup>15</sup>	15,700.00	15,700.00	0.00	0.0%
Master of Business Administration for Managers and Professionals <sup>3</sup>	Cohort 2023-24 <sup>20</sup>	11,655.00	11,100.00	555.00	5.0%
Master of Business Administration for Managers and Professionals <sup>3</sup>	Cohort 2022-23 <sup>15</sup>	11,100.00	11,100.00	0.00	0.0%
Master of Engineering Management	Cohort 2023-24 <sup>20</sup>	8,750.00	8,000.00	750.00	9.4%
Master of Engineering Management	Cohort 2022-23 <sup>15</sup>	8,000.00	8,000.00	0.00	0.0%
Master of Engineering (charged per course -8 courses)	Cohort 2023-24 <sup>20</sup>	5,187.50	4,800.00	387.50	8.1%
Master of Engineering (charged per course -8 courses)	Cohort 2022-23 <sup>15</sup>	4,800.00	4,800.00	0.00	0.0%
Master of Actuarial Sciences <sup>2,4</sup>	Cohort 2023-24 <sup>20</sup>	8,925.00	8,500.00	425.00	5.0%
Master of Actuarial Sciences <sup>2,4</sup>	Cohort 2022-23 <sup>15</sup>	8,500.00	8,500.00	0.00	0.0%
Master of Applied Computing <sup>2,4</sup>	Cohort 2023-24 <sup>20</sup>	9,500.00	8,700.00	800.00	9.2%
Master of Applied Computing <sup>2,4</sup>	Cohort 2022-23 <sup>15</sup>	8,700.00	8,700.00	0.00	0.0%
Master of Management <sup>2,4</sup>	Cohort 2023-24 <sup>20</sup>	10,750.00	9,800.00	950.00	9.7%
Master of Management <sup>2,4</sup>	Cohort 2022-23 <sup>15</sup>	9,800.00	9,800.00	0.00	0.0%
Master of Medical Biotechnology <sup>2,4</sup>	Cohort 2023-24 <sup>20</sup>	9,375.00	8,700.00	675.00	7.8%
Master of Medical Biotechnology <sup>2,4</sup>	Cohort 2022-23 <sup>15</sup>	8,700.00	8,700.00	0.00	0.0%
Master of Materials Chemistry and Engineering <sup>2</sup>	Cohort 2023-24 <sup>20</sup>	8,125.00	8,000.00	125.00	1.6%
Master of Materials Chemistry and Engineering <sup>2</sup>	Cohort 2022-23 <sup>15</sup>	8,000.00	8,000.00	0.00	0.0%
Master of Science in Translational Health Science <sup>16</sup>	Cohort 2023-24 <sup>20</sup>	8,125.00	8,000.00	125.00	1.6%
Master of Science in Translational Health Science <sup>16</sup>	Cohort 2022-23 <sup>15</sup>	8,000.00	8,000.00	0.00	0.0%

<sup>2</sup> Charged per semester over 4 semesters

<sup>3</sup> Charged per semester over 6 semesters

<sup>4</sup> All cohort-based masters programs will charge a per course fee where a student registers for a course following completion of four full-time semesters. The per course fee will be determined by dividing the program fee by the number of required courses.

<sup>5</sup> The Master of Education program, previously offered as two separate degree programs (one cohort-based and exclusively for international students and one for any student with options for either research-based or course-based studies), has been merged into a single M.Ed. program. All students continuing in either stream have been grandfathered into their tuition rate.

<sup>15</sup> Cohort 2022-23 refers to students who commence their degree either the Spring/Summer 2022, Fall 2022 or Winter 2023 semesters.

<sup>16</sup> Charged per semester over 3 semesters

<sup>20</sup> Cohort 2023-24 refers to students who commence their degree either the Spring/Summer 2023, Fall 2023 or Winter 2024 semesters.

## 2023/24 Compulsory Ancillary Fees

	2023/24 RATES (PROPOSED)	2022/23 RATES (APPROVED)	\$ INCREASE	% INCREASE
<b><u>COOPERATIVE EDUCATION FEE</u><sup>6</sup></b>				
Domestic	460.00	455.00	5.00	1.1%
International	570.00	565.00	5.00	0.9%
<b><u>ISC OHIP EQUIVALENT HEALTH PLAN</u><sup>11</sup></b>				
Single coverage <sup>8</sup>	729.65	729.65	0.00	0.0%
Couple coverage (additional premium) <sup>8</sup>	1,341.10	1,341.10	0.00	0.0%
Family coverage (additional premium) <sup>8</sup>	1,651.10	1,651.10	0.00	0.0%
<b><u>STUDENT ASSOCIATION FEES</u></b>				
UWSA - Operating Fee <sup>7</sup>	35.38	33.13	2.25	6.8%
UWSA - Other Fees <sup>7</sup>	25.65	25.65	0.00	0.0%
UWSA - Third Party Fees <sup>7</sup>	27.32	26.71	0.61	2.3%
UWSA - Transit Windsor UPass Administration Fee <sup>14</sup>	2.50	2.50	0.00	0.0%
UWSA - Drug and Dental Plan <sup>8</sup>	293.72	293.72	0.00	0.0%
OPUS - Awards and Bursaries <sup>7</sup>	10.22	9.57	0.65	6.8%
OPUS - Social Events and Workshops <sup>7</sup>	11.83	11.08	0.75	6.8%
OPUS - Part Time Student Service <sup>7</sup>	11.33	10.61	0.72	6.8%
OPUS - CFS - Third Party <sup>7</sup>	5.63	5.27	0.36	6.8%
OPUS - Student Support Program <sup>7</sup>	2.22	2.08	0.14	6.8%
OPUS - Benefits Plan <sup>8</sup>	340.97	340.97	0.00	0.0%
GSS - Capital Fee <sup>7</sup>	7.10	6.65	0.45	6.8%
GSS - Operations Fee <sup>7</sup>	7.09	6.64	0.45	6.8%
GSS - Student Advocate Fee <sup>7</sup>	2.86	2.68	0.18	6.8%
GSS - Opportunity Fee (Full-Time) <sup>7</sup>	17.23	16.13	1.10	6.8%
GSS - Opportunity Fee (Part-Time) <sup>7</sup>	15.24	14.27	0.97	6.8%
GSS - OPIRG Fee (Full-Time) <sup>7</sup>	0.00	2.00	-2.00	-100.0%
GSS - OPIRG Fee (Part-Time) <sup>7</sup>	0.00	1.00	-1.00	-100.0%
GSS - CFS (Winter & Fall Full-Time) <sup>7</sup>	9.71	9.09	0.62	6.8%
GSS - CFS (Winter & Fall Part-Time) <sup>7</sup>	5.61	5.25	0.36	6.8%
GSS - Transit Windsor UPass Administration Fee <sup>14</sup>	2.50	2.50	0.00	0.0%
GSS - Supplemental Benefits Plan (12 Month Fee) <sup>8</sup>	548.76	524.62	24.14	4.6%
GSS - Supplemental Benefits Plan (16 Month Fee) <sup>9</sup>	726.90	693.49	33.41	4.8%
GSS - Supplemental Benefits Plan Administration Fee <sup>8</sup>	9.00	9.00	0.00	0.0%
Transit Windsor UPass <sup>7</sup>	79.91	75.39	4.52	6.0%
<b><u>STUDENT SOCIETY FEES</u><sup>7</sup></b>				
Commerce (Business)	50.00	50.00	0.00	0.0%
Computer Science	20.00	20.00	0.00	0.0%
Creative Arts	5.00	5.00	0.00	0.0%
Dramatic Arts	5.00	5.00	0.00	0.0%
Education	2.25	2.25	0.00	0.0%
Engineering	20.00	20.00	0.00	0.0%
Human Kinetics	5.00	5.00	0.00	0.0%
International Student (full time students only)	3.50	3.50	0.00	0.0%
Law	12.50	12.50	0.00	0.0%
Law - Part Time	12.50	12.50	0.00	0.0%
Nursing	15.00	15.00	0.00	0.0%
Nursing - Part Time	10.00	10.00	0.00	0.0%
Science	10.00	10.00	0.00	0.0%
Social Science	2.50	2.50	0.00	0.0%
Social Work	5.00	5.00	0.00	0.0%
M.B.A.	27.13	24.66	2.47	10.0%
M.B.A. - Part Time	13.56	12.33	1.23	10.0%
Graduate Nursing	15.00	15.00	0.00	0.0%
Graduate Nursing -Part Time	10.00	10.00	0.00	0.0%
MEng <sup>19</sup>	2.00	0.00	NEW	NEW
<b><u>CAPITAL FEES</u><sup>7</sup></b>				
Lancer Sports and Recreation Centre Fee (max of two semester assessments per year) <sup>10</sup>	65.63	62.50	3.13	5.0%
Sports and Recreation Capital Fee -Undergraduate (maximum of two semester assessments per year)	22.04	20.64	1.40	6.8%
Sports and Recreation Capital Fee -Graduate (maximum of two semester assessments per year)	16.95	15.87	1.08	6.8%

## 2023/24 Compulsory Ancillary Fees

	2023/24 RATES (PROPOSED)	2022/23 RATES (APPROVED)	\$ INCREASE	% INCREASE
<b><u>OTHER ANCILLARY FEES</u></b> <sup>7</sup>				
Student Wellness Fee -Full Time	36.58	34.25	2.33	6.8%
Student Wellness Fee -Part Time	16.62	15.56	1.06	6.8%
Athletics and Recreation Fee -Full Time	121.90	110.86	11.04	10.0%
Athletics and Recreation Fee -Part Time	50.48	45.63	4.85	10.6%
CAW Student Centre Operating - Full time	63.38	59.35	4.04	6.8%
CAW Student Centre Operating - per course (max of 5 course assessments per semester)	12.68	11.87	0.81	6.8%
Human Kinetics Undergraduate Lounge Fee	10.00	10.00	0.00	0.0%
Human Kinetics Technology Fee	15.00	15.00	0.00	0.0%
Engineering Students' Endowment Fund	22.03	20.63	1.40	6.8%
Law Duplicating -Full Time	17.50	17.50	0.00	0.0%
Law Duplicating -Part Time	8.75	8.75	0.00	0.0%
Law - Career Development Officer -Full Time	130.00	130.00	0.00	0.0%
Law - Career Development Officer -Part Time	65.00	65.00	0.00	0.0%
Education Learning Centre Fee	33.14	31.03	2.11	6.8%
Nursing Lab Fee 1st Year	101.97	92.70	9.27	10.0%
Nursing Lab Fee 2nd Year	103.62	94.20	9.42	10.0%
Nursing Lab Fee 3rd Year	51.97	47.25	4.72	10.0%
Nursing Lab Fee 4th Year	25.98	23.62	2.36	10.0%
<b><u>OTHER MISCELLANEOUS FEES</u></b>				
UWin Card Fee (assessed first semester only)	30.00	30.00	0.00	0.0%
First Year Transition Support Fee (assessed first semester only)	74.57	69.82	4.75	6.8%
English Academic Preparation Program	1,650.00	1,650.00	0.00	0.0%
English Language Improvement Program (ELIP)	4,150.00	5,070.00	-920.00	-18.1%
English Language Improvement Program - Fast Track (ELIP Fast Track)	3,650.00	5,550.00	-1,900.00	-34.2%
MMB - Lab Fee <sup>17</sup>	1,000.00	1,000.00	0.00	0.0%
MMCE - Lab Fee <sup>17</sup>	1,000.00	1,000.00	0.00	0.0%
MAC - Lab Fee <sup>17</sup>	500.00	500.00	0.00	0.0%
MOM Data Analytics Stream - Lab Fee <sup>17</sup>	1,500.00	1,500.00	0.00	0.0%
MSW Practicum Fee <sup>7</sup>	412.00	412.00	0.00	0.0%
<b><u>OTHER ADDITIONAL COST RECOVERY COURSE FEES</u></b>				
<b><u>Science</u></b>				
Field Measurement and Mapping Techniques (ESCI3745-01)	500.00	500.00	0.00	0.0%
Field Methods in Environmental Science (ESCI3735-01)	500.00	500.00	0.00	0.0%
Global Perspective in Science - N. Europe (ESCI3806-22)	2,500.00	3,000.00	-500.00	-16.7%
Global Perspective in Science - Costa Rica (EICI3806-20)	3,000.00	3,000.00	0.00	0.0%
Global Perspective in Science - Iceland (ESCI3806-21)	3,000.00	3,000.00	0.00	0.0%
Great Lakes Field Biology (BIOL4864-11)	750.00	750.00	0.00	0.0%
Great Lakes Field Biology (BIOL4864-XX) all other sections	350.00	350.00	0.00	0.0%
Special Topics - Global Perspectives - Scotland (FRSC4018-20)	3,000.00	3,000.00	0.00	0.0%
Traditional Ecological Knowledge (BIOL4208) - New in 2023/24	1,500.00	0.00	NEW	NEW
Global Perspectives in Science - Destination Mexico (ESCI3806-23) - New in 2023/24	3,000.00	0.00	NEW	NEW
<b><u>Human Kinetics</u></b>				
Kinesiology - Outdoor Education (KINE-4770)	450.00	450.00	0.00	0.0%
Kinesiology - PTA of Basketball (KINE-3920)	25.00	25.00	0.00	0.0%
Kinesiology - PTA of Football (KINE-3880)	25.00	25.00	0.00	0.0%
Kinesiology - PTA of Golf (KINE-3820)	125.00	125.00	0.00	0.0%
Kinesiology - PTA of Hockey (KINE-3830)	125.00	125.00	0.00	0.0%
Kinesiology - PTA of Squash (KINE-XXXX)	50.00	50.00	0.00	0.0%
Kinesiology - PTA of Track & Field (KINE-3980)	25.00	25.00	0.00	0.0%
Kinesiology - PTA of Volleyball (KINE-3940)	25.00	25.00	0.00	0.0%
Kinesiology - Special Topics in PTA of Sport (KINE-4880)	25.00	25.00	0.00	0.0%
Kinesiology - Sports Therapy (Physical Fitness) (KINE-3980)	55.00	55.00	0.00	0.0%
Kinesiology - Functional Anatomy (KINE-1650)	30.00	30.00	0.00	0.0%
Kinesiology - Functional Anatomy II (KINE-1660)	30.00	30.00	0.00	0.0%
Kinesiology - Laboratory Experience in Biomechanics & Ergonomics (KINE-4910)	25.00	25.00	0.00	0.0%
Kinesiology - Laboratory Experience in Human & Exercise Physiology (KINE-4920)	25.00	25.00	0.00	0.0%
Kinesiology - Laboratory Experience in Motor Learning & Psychology of Physical Activity (KINE-4930)	25.00	25.00	0.00	0.0%
<b><u>Business</u></b>				
MBA - Professional Accounting Specialization - Exam prep package (ACCT-8080)	1,322.61	1,322.61	0.00	0.0%

## 2023/24 Compulsory Ancillary Fees

	2023/24 RATES (PROPOSED)	2022/23 RATES (APPROVED)	\$ INCREASE	% INCREASE
<b>Arts, Humanities, and Social Sciences</b>				
Advanced Photography (VSAR-3530)	0.00	50.00	-50.00	-100.0%
Aeronautics Flight - (AERO-1970) - First Year Students <sup>18</sup>	10,594.00	10,594.00	0.00	0.0%
Aeronautics Flight - (AERO-2970) - Second Year <sup>18</sup>	10,594.00	10,594.00	0.00	0.0%
Aeronautics Flight - (AERO-3970) - Third Year <sup>18</sup>	10,594.00	10,594.00	0.00	0.0%
Aeronautics Flight - (AERO-4970) - Fourth Year <sup>18</sup>	10,594.00	10,594.00	0.00	0.0%
BioArt (VSAR-3860)	110.00	110.00	0.00	0.0%
Cinematography I (FILM-2400)	30.00	30.00	0.00	0.0%
Cinematography II (FILM-3400)	30.00	30.00	0.00	0.0%
Cinematography III (FILM-4400)	30.00	30.00	0.00	0.0%
Commercial & Industrial Film Production (FILM-4110)	30.00	30.00	0.00	0.0%
Directing (FILM-3700)	30.00	30.00	0.00	0.0%
Documentary (FILM-2200)	30.00	30.00	0.00	0.0%
Documentary Production (FILM-3200)	30.00	30.00	0.00	0.0%
Experimental Film & Video (FILM-2050)	30.00	30.00	0.00	0.0%
Film Editing I (FILM-2600)	30.00	30.00	0.00	0.0%
Film Editing II (FILM-3600)	30.00	30.00	0.00	0.0%
Film Production (FILM-2100)	30.00	30.00	0.00	0.0%
Film Production IV (FILM-3100)	30.00	30.00	0.00	0.0%
Film Production V (FILM-4100)	30.00	30.00	0.00	0.0%
Film Production VI (FILM-4105)	30.00	30.00	0.00	0.0%
Green Corridor (VSAR-3850)	55.00	55.00	0.00	0.0%
Independent Studio (VSAR-3650)	84.00	84.00	0.00	0.0%
Introductory Photography (CMAF-2530)	0.00	100.00	-100.00	-100.0%
Introductory Photography (VSAR-2530)	100.00	100.00	0.00	0.0%
Introductory Printmaking Intaglio (VSAR-2230)	80.00	80.00	0.00	0.0%
Introductory Printmaking Lithography (27-224)	0.00	80.00	-80.00	-100.0%
Introductory Sculpture (VSAR-2330)	50.00	33.50	16.50	49.3%
Music Fee - Private Instruction (1/2 hour)	534.00	525.00	9.00	1.7%
Music Fee - Private Instruction (full hour)	1,068.00	1,050.00	18.00	1.7%
Photography (VSAR-2900/3460/3470/3480)	66.00	66.00	0.00	0.0%
Printmaking (VSAR-3230)	80.00	80.00	0.00	0.0%
Production Planning & Development (FILM-3800)	30.00	0.00	30.00	0.0%
Sculpture (VSAR-3330)	75.00	55.00	20.00	36.4%
Sound I (FILM-2500)	30.00	30.00	0.00	0.0%
Studio Practice & Ideas/Space (VSAR-1050)	50.00	33.00	17.00	51.5%
Studio Practice I (VSAR-4800)	90.00	90.00	0.00	0.0%
Studio Practice II (VSAR-4810)	90.00	90.00	0.00	0.0%
Style in Theatre (DRAM-4000)	100.00	90.00	10.00	11.1%
The Art of Photo-blogging (CMAF-2210)	0.00	30.00	-30.00	-100.0%
VABE Transportation Fee	1,000.00	1,000.00	0.00	0.0%
Applied Composition - Western Classical (MUSP-3720) (full hour) - New 2023/24	1,068.00	0.00	NEW	NEW
Applied Composition/Arranging - Jazz/Pop (MUSP-3730) (full hour) - New 2023/24	1,068.00	0.00	NEW	NEW
Directed Studies in Performance (DRAM-4530) - New 2023/24	40.00	0.00	NEW	NEW
Scene Painting for the Theatre (DRAM-2130) - New 2023/24	100.00	0.00	NEW	NEW
Stage Makeup (DRAM-2500) - New 2023/24	150.00	0.00	NEW	NEW
Studies in Design (DRAM-3190)- New 2023/24	100.00	0.00	NEW	NEW

<sup>6</sup> Fee charged per semester -Students approved to complete work semesters in excess of the standard number out in their program, will incur a supplemental co-op fee for each additional work-semester.

<sup>7</sup> Fee charged per semester

<sup>8</sup> Fee charged annually

<sup>9</sup> Charged to Cohort Based Masters 4 Semester programs only

<sup>10</sup> The Lancer Sports and Recreation Centre opened during 2022-23 academic year.

<sup>11</sup> Fee includes 8% RST

<sup>14</sup> Fee charged per semester; charged as 8-month in Fall term

<sup>17</sup> Fee charged over 4 semesters

<sup>18</sup> Flight Training Vendor Fee currently under negotiation and subject to change.

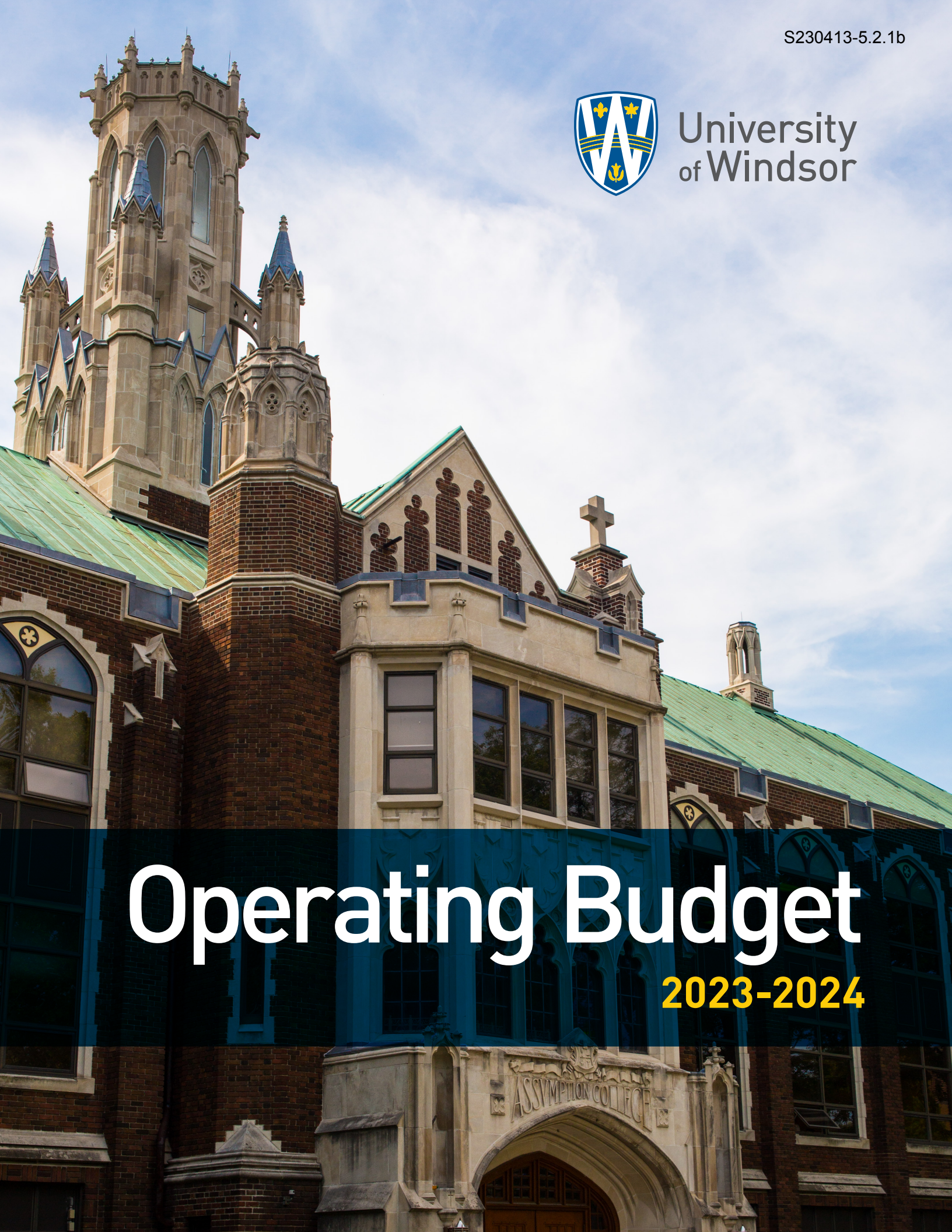
<sup>19</sup> Fee pending successful student referendum.



University  
of Windsor

# Operating Budget

2023-2024



To the University of Windsor Campus Community,

As the 2023/24 University of Windsor Operating Budget is released, most of our faculty and staff will have returned to campus life and community while students continue learning through enhanced modes of program delivery including face-to-face, hyflex, and online. Despite domestic tuition remaining primarily frozen for the 2023/24 budget and a few other uncertainties, we are pleased to present a balanced budget for 2023/24.

We are proud that this year's budget includes salary and benefit improvements consistent with all staff collective agreements ratified in 2022. Inflationary and unavoidable items have resulted in cost increases that are captured in the 2023/24 budget, along with a select few new investments in key areas including our virtual environment, international graduate scholarships, and the Registrar's office.

The budget continues to include a number of strategic reserve funds to ensure the institution is ready for the unexpected – be it a change in enrolment patterns, or unexpected costs – as well as investments in our financial future.

Institutional financial sustainability is critical to our ability to fulfil our academic mission, to serve communities, and to create knowledge. Many factors impact the sustainability of our University. These include provincial funding models, changing regional demographics, fundraising, post-pandemic enrolment patterns, evolving competition in the postsecondary sector, cost pressures, and institutional financial management.

Thoughtful and strategic approaches to fiscal responsibility, fundraising, cost management, alternate revenue generation, and enrolment planning are critical to creating the stability that enables future planning, possibility, and innovation. The priorities of the *Aspire* strategic plan will provide direction and guidance for human, capital, and financial resource allocations and revenue generation planning to ensure that we reach our goals over the next five years.

Financial planning must be nimble in order to respond to shifting provincial funding frameworks, changes in demand, and the international context. The strategic investment funds have been carefully designed to support the *Aspire: Together for Tomorrow* strategic plan and to mitigate institutional risk.

Robert Gordon, PhD  
President and Vice-Chancellor



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## *2023/24 Operating Budget*

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# I. THE UWINDSOR ACTIVITY BASED BUDGET MODEL

This is now the third year that the University of Windsor (UWindsor) has budgeted under the Activity Based Budget (ABB) model. A budget model is a management tool used to assist with resourcing decisions. It does not, in and of itself, create additional revenue for the institution. Rather, it is a vehicle employed to help achieve the strategic mission of the institution. At UWindsor, the ABB model was developed by a diverse Budget Model Redesign Committee (BRC) in 2020 and has been monitored since by an ABB Governance Committee. The model is designed to achieve the following vision and operates under the four philosophy pillars described below.

## 1. MODEL VISION AND PHILOSOPHY

### Vision

The UWindsor ABB Model is aligned with four main aspirations for the institution:

1. The desire to be a comprehensive institution,
2. The desire to be innovative,
3. The desire to be competitive on a local and global scale, and
4. The desire for our culture to be research intensive.

### Model Philosophy

The UWindsor ABB Model’s philosophy has four pillars:

1. A long-term view, and incentivize long term enrolment planning, stability, and strategic growth where it makes sense.
2. Fairly, consistently applied and fully transparent.
3. Flexibility for the Deans to make their own financial plans, with progress against individual plans incentivized.
4. Support the core academic and research mission and align activities with institutional strategy.

## 2. HOW THE UWINDSOR ABB MODEL WORKS

The UWindsor ABB Model is organized such that the major revenue-generating departments (i.e. the Faculties) are identified as ‘Revenue Centres’ with all revenues flowing through them and all expenses of the institution allocated against them. In simple terms, the budget model calculates a “notional” financial position for each of the Revenue Centres using the formula below.

*Image 1: The ABB Net Position Calculation*

$\text{Budgeted Revenues} - \text{Direct and Allocated Expenses} = \text{Net Position (of the Revenue Centre)}$
---

## Revenues in the UWindsor ABB Model

### **1. Student Fees**

Student fees include tuition fees, tuition adjustments (for service teaching) and student incidental fees. Tuition is assigned directly to the Revenue Centre (Faculty) where the students major. The UWindsor ABB Model incorporates a 'created rate' for domestic undergraduate tuition at 3% premia to the general base rate to account for historical tuition rate increase inequities under prior government tuition frameworks. All other tuition fees are assigned according to their actual rates.

Tuition revenue is then adjusted for service teaching to account for courses students take outside their home Faculty. Students in joint major programs are counted as enrolled 50% in each program meaning their service teaching adjustment will now be based on an average of both home Faculty tuition rates whereas students taking a minor would observe the tuition rate of the Faculty where they are majoring.

Student incidental fees in the Operating Budget include Athletics and Recreation fees, Co-op fees, Student Health fees, Student Late Payment fees, among others. Where possible, these fees are assigned in the model directly to the department they are supporting. In some cases, they are assigned against the University Fund which supports institutional strategic initiatives and central reserve funds.

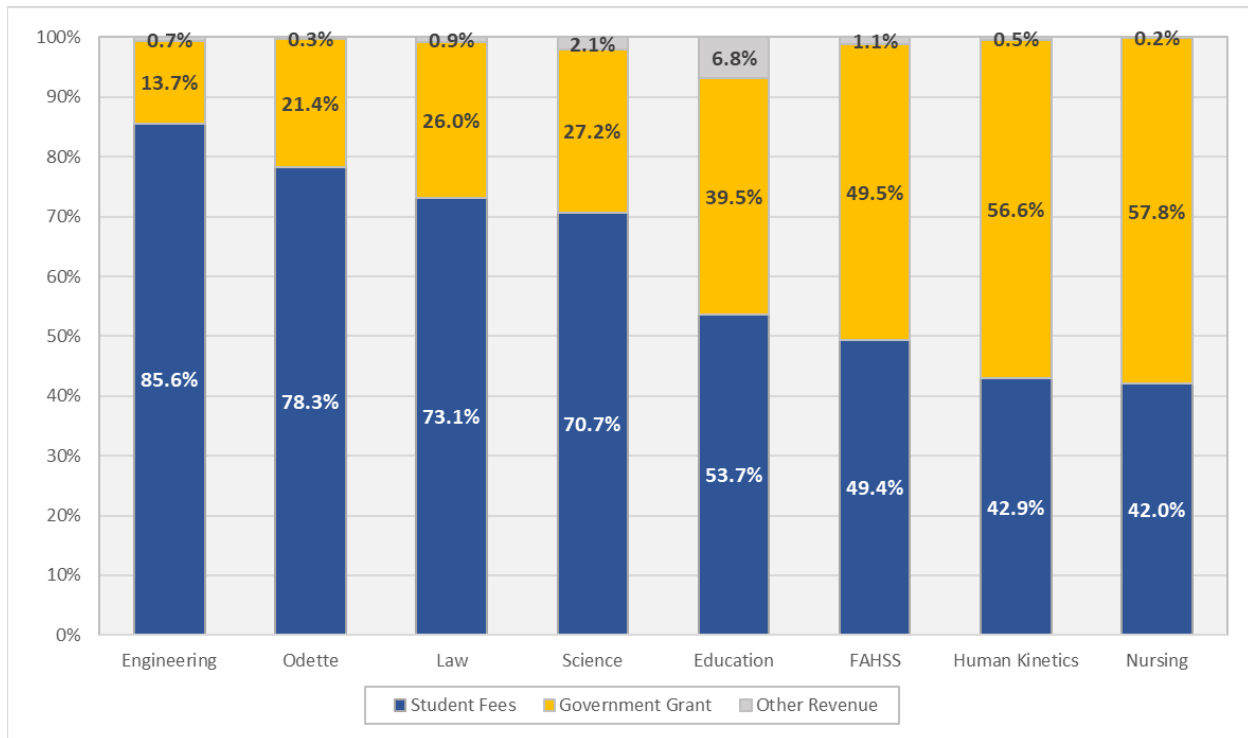
### **2. Government Operating Grants**

The Core Operating Grant and the Performance Grant for the institution are allocated to all Faculties based on Weighted Grant Units (WGUs). This is the same activity driver the government uses when calculating institutional grants. New for 2023/24 is a SMA3 Contingency Reserve to mitigate against the risk of possible grant claw backs as a result of missing on Strategic Mandate Agreement (SMA) metrics. The SMA3 Contingency Reserve is also allocated in the ABB model using WGUs. Special purpose grants (i.e. Nursing Collaborative Grant) are assigned directly to the Faculty or department they are supporting.

### **3. Other Revenues**

All other revenues generated by the institution are allocated, where possible, to the Revenue Centres. This includes application fees, direct faculty revenues (i.e. lab fees), etc. Indirect Research revenues are allocated 70% to the Revenue Centres and 30% to support strategic research activities under the direction of the Vice-President, Research and Innovation. Investment income, foreign exchange and other small levies are not easily allocated and are directed towards the University Fund. The chart below illustrates the percentage of total revenues generated by each of the Revenue Centres (i.e. Faculties). Faculties on the left side of the graph tend to have higher tuition rates (domestic and visa), and except for Law, have a higher concentration of international students. The Faculties towards the right are generally less diversified and more focused on domestic students and, therefore, rely more on government grant funding.

Chart 1: 2023/24 Faculty Sources of Revenue (under UWindsor ABB)



Expenditures in the UWindsor ABB Model

**1. Direct Costs**

These are the direct costs of academic delivery where each Faculty has ‘direct control’ and include faculty and staff salaries and benefits, GA/TA support, sessional instruction, office expenses, lab costs, Faculty research support and all other discretionary costs of each Faculty. In order to balance the budget for 2023/24, every Faculty and department across campus is required to realign 1% of their salary and benefits budget. This realignment is netted against each Faculty salary and benefits budget.

**2. Other Assigned Direct Costs**

These are direct costs that are hosted outside of Faculty budgets but are directly assigned as part of the cost of individual Faculties. These include Research Institute expenses that are assigned directly to the Faculty that aligns with the home Faculty of the Chair of the institute. The ABB Governance committee has set as a top priority the review of the allocation methodology for Research institutes in the ABB model. The Law Library is assigned as a direct cost for the Faculty of Law. It should be noted that Law does not participate in the allocation of Leddy Library costs. International student recovery and international student recruitment partner costs are assigned as direct costs of the international student’s home Faculty.

### 3. Allocated Costs

Allocated costs represent each Faculty’s portion of the institution’s shared-service costs. For ease of allocation, the shared-service costs are grouped together into eight ‘Cost Pools’. The grouping of similar costs into cost pools is done only for the purpose of ease of allocation within the UWindsor ABB Model and does not represent any type of reporting reorganization within the institution. Each cost pool is allocated to the Revenue Centres using ‘Cost Driver(s)’ that are selected to best represent the activities that drive costs within the shared-service unit. Hence, an “activity-based budget.”

The table below provides details of the cost pools and the cost drivers used to allocate these costs to the Revenue Centres.

*Table 1: Cost Pools and Cost Pool Drivers in the UWindsor ABB Model*

<b>Cost Pool</b>	<b>Cost Driver</b>	<b>Shared-service Units (Examples)</b>
<b>Financial Costs</b>	50% Tuition & Operating Grant 50% Direct Operating Budget	Debt costs; Finance Department
<b>Central Administrative Costs</b>	Campus FTEs (Student + Faculty + Staff)	Office of the President, Provost, VP, EDI, VP Finance & Operations; Institutional Support services; Other Central costs
<b>Occupancy Costs</b>	Net Assignable Square Meters	Utilities; Facility Services Department
<b>Operating Scholarship Costs</b>	70% Actual Scholarship Usage 30% Student FTEs	All Operating Budget-funded scholarships and bursaries awarded
<b>Campus Community Support Costs</b>	Campus FTEs (with slight adjustments for the Leddy Library)	Human Resources; Campus Police; Centre for Teaching & Learning/Open Learning; Information Technology; Leddy Library; Public Affairs & Communications
<b>Student Experience Costs</b>	Student FTEs	Student & Academic Services; Student Experience; Athletics & Recreation Services; Faculty of Graduate Studies
<b>Pre-/Post Student Development Costs</b>	30% Student Offers 70% Student Registrations	Enrolment Management; Admissions & Registrations; Student Recruitment; Advancement and Alumni
<b>Research Support Costs</b>	55% External Research Revenue 35% Research Applications 10% Tenured Faculty Counts	Office of the VP Research & Innovation; Research Services; Research Finance

The ABB Governance committee performed a preliminary review of the cost pools prior to the development of the 2023/24 budget. The committee brought forward the following recommended changes that were accepted by Provost Budget Committee:

- i. Small reclassifications of departments/costs within the following cost pools
- ii. An update to the cost allocation methodology for cost pool 7-Pre-/Post Student Development as follows:
  - 70% based on the # of Registrations (was 50%)
  - 30% based on the # of Student Offers (was 50%)
- iii. A recommendation to cross-allocate cost pool 3-Occupancy Costs to the other cost pools. This recommendation essentially creates a more accurate reflection of the total cost of space at the University by assigning space costs to the Cost Centres (in addition to the Revenue Centres). It should be noted that, due to the complexity of this change, it will be implemented in the 2024/25 budget year.
- iv. A recommendation to phase out Revenue Centre (Faculty) support for the Profit Centres (i.e. Continuing Ed and Centre for English Language Development) that had previously been affiliated with cost pool 6-Student Experience. This recommendation will be implemented over multiple years (not exceeding five) based on the submission of a sustainability business plan proposal.

### Service Level Agreements

The allocation of shared-service costs to Faculties in the UWindsor ABB Model has created a new, more transparent accountability between the shared service provider departments and the Faculties. Because Faculties are now allocated the shared-service costs, academic leaders are eager to better understand the services provided by the shared service units.

Service Level Agreements (SLAs) specifying the terms of service provided by shared-service units to their 'customers' will be drafted to answer these questions. An SLA Guiding Committee has formed and established the parameters for the completion of SLAs. SLAs are expected to provide several benefits across campus, including:

- Providing a better awareness and understanding of the shared services provided,
- Identifying where service volumes should change to better support changing academic programming,
- Providing an accountability link in the allocation of costs in the UWindsor ABB model,
- Providing a better understanding of the boundaries/constraints to providing services,
- Creating efficiencies and improvements in the services provided to the campus community, and
- Better aligning service delivery towards supporting the academic and research mission of the institution.

The preparation of SLAs is ongoing and expected to be completed by all services areas across campus during the 2023/24 budget year.

#### 4. Initial Contribution to the University Fund

The University Fund is the mechanism within the UWindsor ABB Model that provides the institution with the ability to act as one entity for key initiatives. It is used to support institutional strategic investments, contingencies, and reserve funds (the “first contribution”) and finally, provides balancing across the Revenue Centres, with the Faculties in a positive net position under the model supporting those in a negative net position (the “second contribution”, discussed in the Calculating the Net Position section below).

Each Faculty makes a first contribution to the University Fund based on a percentage of their revenue generation. This is a significant strategic “lever” available to the Executive Leadership Team within the budget model, which has been used in 2023/24 again to prioritize domestic student growth. The table below provides a year-over-year comparison of University Fund contribution rates by revenue category. Note 2023/24 has a lower overall effective rate as the costs in the Fund have decreased.

*Table 2: University Fund Contribution Rates by Revenue Category*

<b>Fiscal Year</b>	<b>Domestic Student Tuition</b>	<b>International Student Tuition</b>	<b>Government Operating Grant</b>	<b>Effective Rate</b>
<b>2021/22</b>	2.75%	2.75%	2.75%	<b>2.75%</b>
<b>2022/23</b>	0.00%	8.25%	5.00%	<b>4.95%</b>
<b>2023/24</b>	0.00%	6.15%	3.50%	<b>3.70%</b>

#### Calculating Net Position

After working through the net position formula, each Faculty will either be in a positive or negative net position.

Faculties in positive net positions will receive base budget investments and will contribute towards subsidizing the negative net position Faculties. Faculties in negative net positions will receive subsidies and will be required to realign their base budgets. These base budget investments and realignments will be based on approved Faculty Financial Sustainability Plans (FFSPs).

#### Faculty Financial Sustainability Plans (FFSPs)

Faculty Financial Sustainability Plans (FFSPs) are strategic financial documents prepared by the Deans and approved by PBC that will include, but are not limited to, the following details:

- Identification of financial challenges facing the Faculty, including previously unaddressed realignments, accumulated debt to the institution and negative net positions under the UWindsor ABB Model,
- Enrolment Planning for all categories of students, including risk mitigation and diversification strategies,
- Other revenue opportunities,
- Planning for faculty and staff positions,

- Strategic initiatives,
- Long term capital planning, and
- Additional requests customized for each Faculty.

FFSPs will form the foundation for decision making related to budget investments and realignments for each Faculty and will align with the *Aspire* strategic plan.

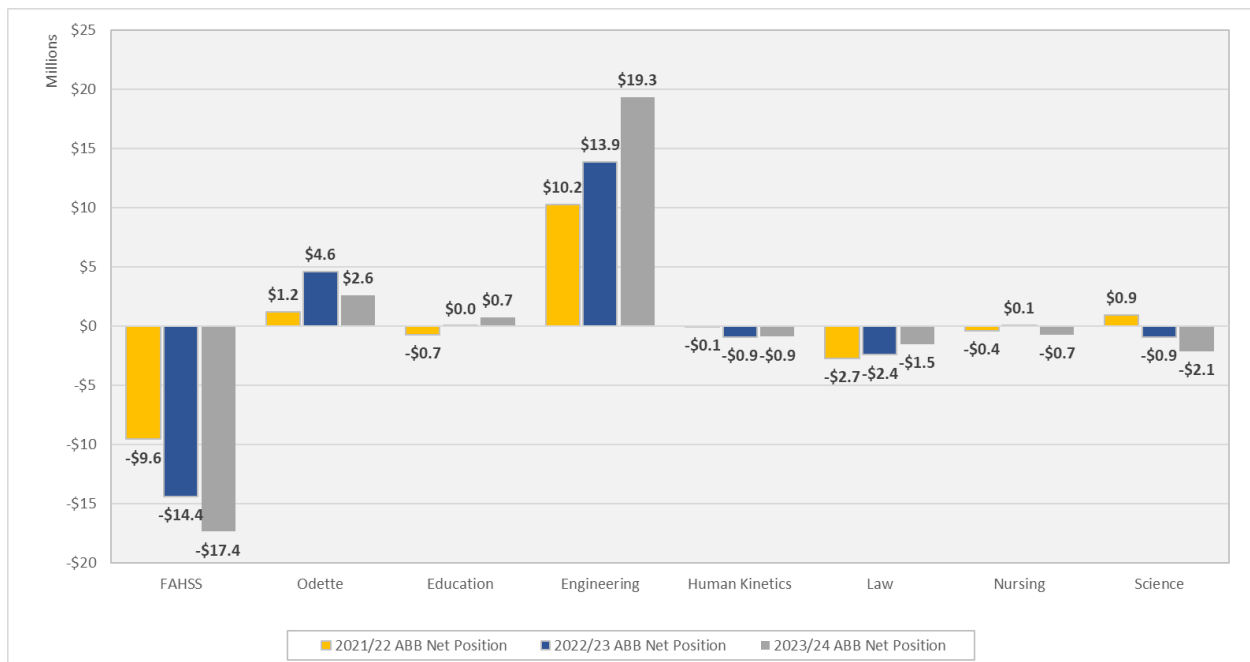
The institution’s philosophy is that no negative budget position be considered truly permanent, rather Faculties should be striving to ensure that they are consistently showing progress towards a neutral or predetermined net position. As noted above, UWindsor is a comprehensive university, hence it is expected that certain Faculties will be in net negative positions with other Faculties financially supporting them on a regular basis.

### 3. FACULTY POSITIONS UNDER THE UWINDSOR ABB MODEL FOR 2023/24

In 2023/24, the UWindsor ABB Model has produced a result where three Faculties – Education, Engineering, and the Odette School of Business – are in positive net positions, with the other five Faculties – Arts, Humanities & Social Science, Human Kinetics, Law, Nursing and Science – in negative net positions. Appendix C provides the net position calculation for the eight UWindsor Revenue Centres and the chart below provides a graphical representation of these positions.

The chart below provides a year-over-year comparison of Faculty net positions under the UWindsor ABB Model.

Chart 2: Faculty Net Position Comparison (in \$M)





## **II. BUDGETING ENROLMENT**

Student enrolment continues to drive almost all operating revenue for UWindsor. Faculties concentrate their efforts on achieving their enrolment management strategies as base budgets are directly impacted by enrolment levels under the UWindsor ABB Model.

### **1. MANAGING ENROLMENT WITHIN THE FACULTIES**

Enrolment is classified into four main components: 1) undergraduate domestic; 2) undergraduate international; 3) graduate domestic; and 4) graduate international.

There has been a shift over the past several years towards graduate international students and away from undergraduate domestic students as a percentage of the total student population at UWindsor. This shift can be primarily attributed to the continuing growth in international student enrolment in cohort-based Masters' programs in Engineering, Science, and Business.

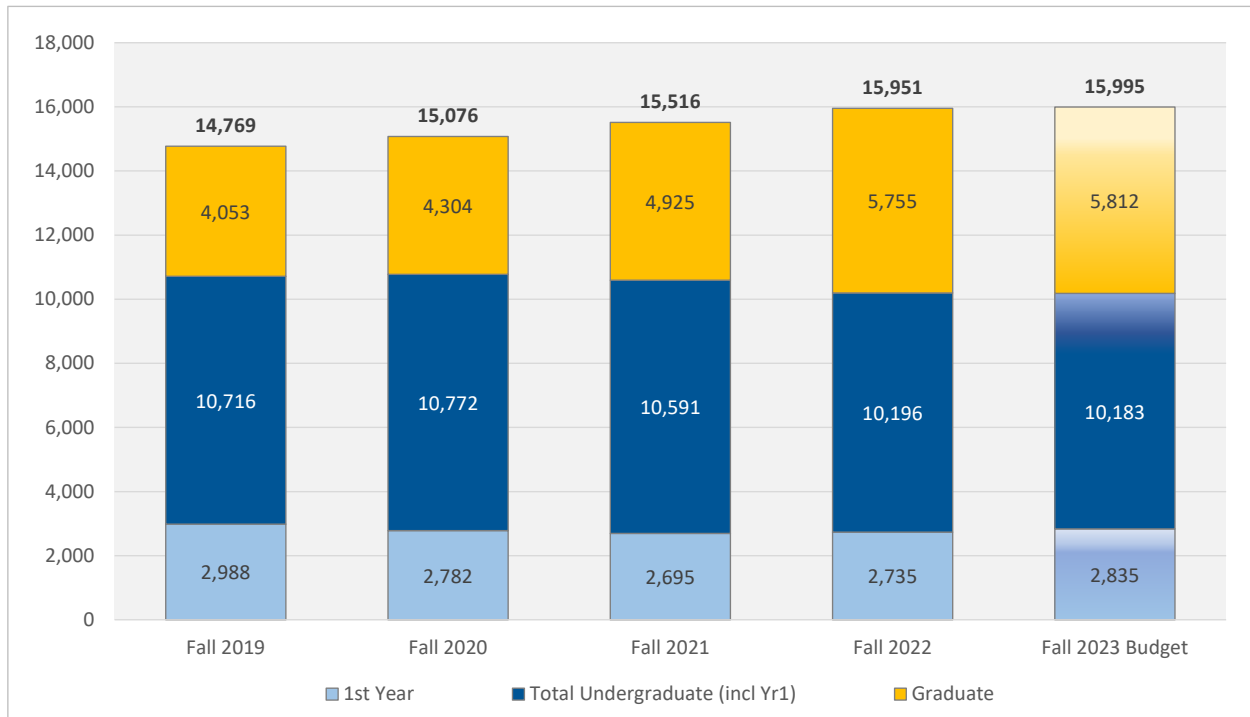
Under the UWindsor ABB Model, Faculties receive a share of the Provincial Operating Grant proportionate to their eligible domestic student enrolment, which is an important element to motivate Faculties to grow domestically, both at the undergraduate and graduate levels.

### **2. ENROLMENT PROJECTIONS**

UWindsor's total full-time enrolment is budgeted at 15,995 in Fall 2023. The budgeted totals for undergraduate and graduate students are 10,183 and 5,812, respectively, which represents an overall 0.3% increase over Fall 2022 levels. It is anticipated that 32% of the full-time UWindsor student body will be comprised of international students in Fall 2023.

In Fall 2022, there were a high number of international cohort-based Masters' graduate enrolment as programs increased capacity as a response to the extraordinarily high number of students who had deferred their term of admission during the pandemic. The decrease in the graduate student enrolment from Fall 2022 is expected as enrolments return to previous intake levels.

Chart 3: Enrolment Retrospective Fall 2019 to Fall 2023

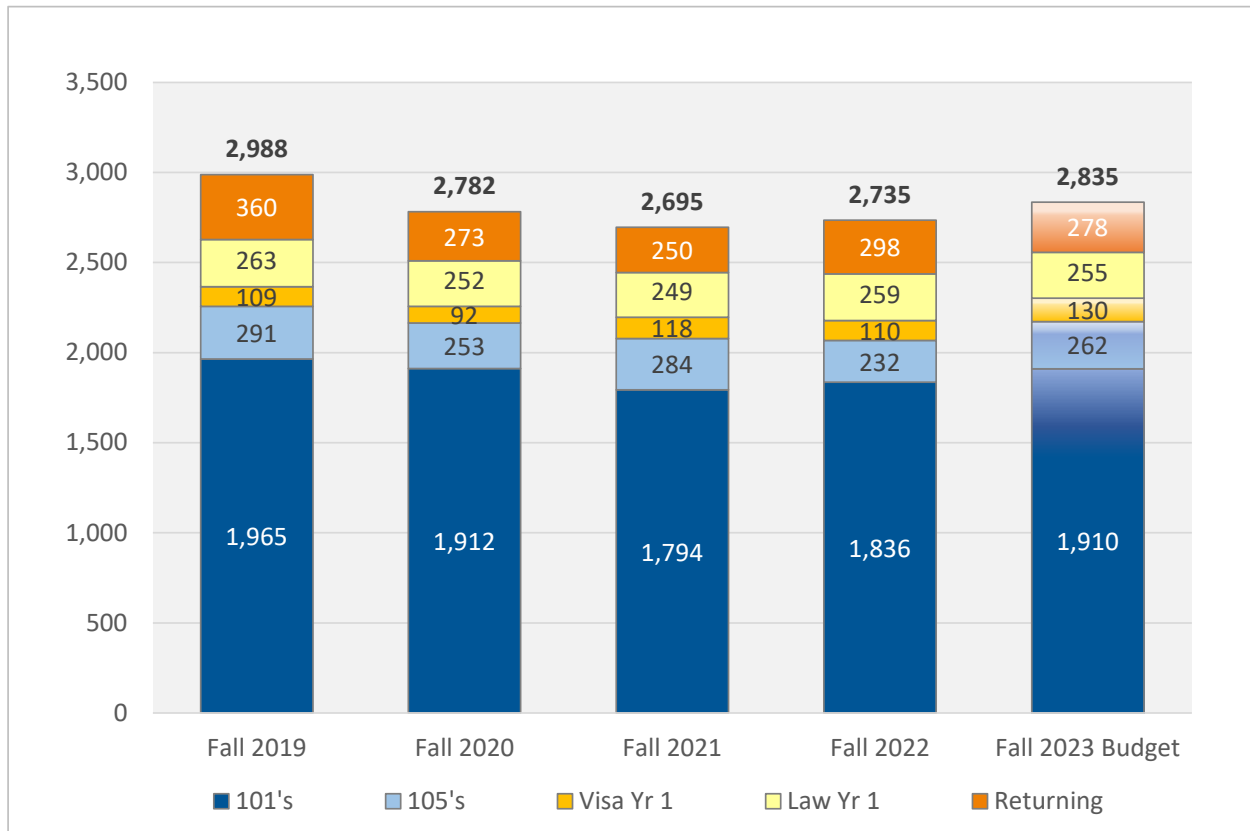


i) Undergraduate Students

First-year enrolment has a multi year effect on the undergraduate enrolment as the cohort of students moves through their program of study. Year 1 in Fall 2023 is budgeted to increase by 100 students over Fall 2022 levels.

First-year enrolment has several components, including 101s (students entering university directly from high school), 105s (college transfers and out of province Canadian students), international students, students entering Law School, and returning students (those who are continuing at the year 1 level).

Chart 4: First Year Undergraduate Enrolment



The Faculty of Education has an intake counted as part of the fourth-year undergraduate number for students in the Consecutive Education program and is not presented in *Chart 4*. The budgeted intake for Fall 2023 for Consecutive Education students is stable at 290 (290 in Fall 2022).

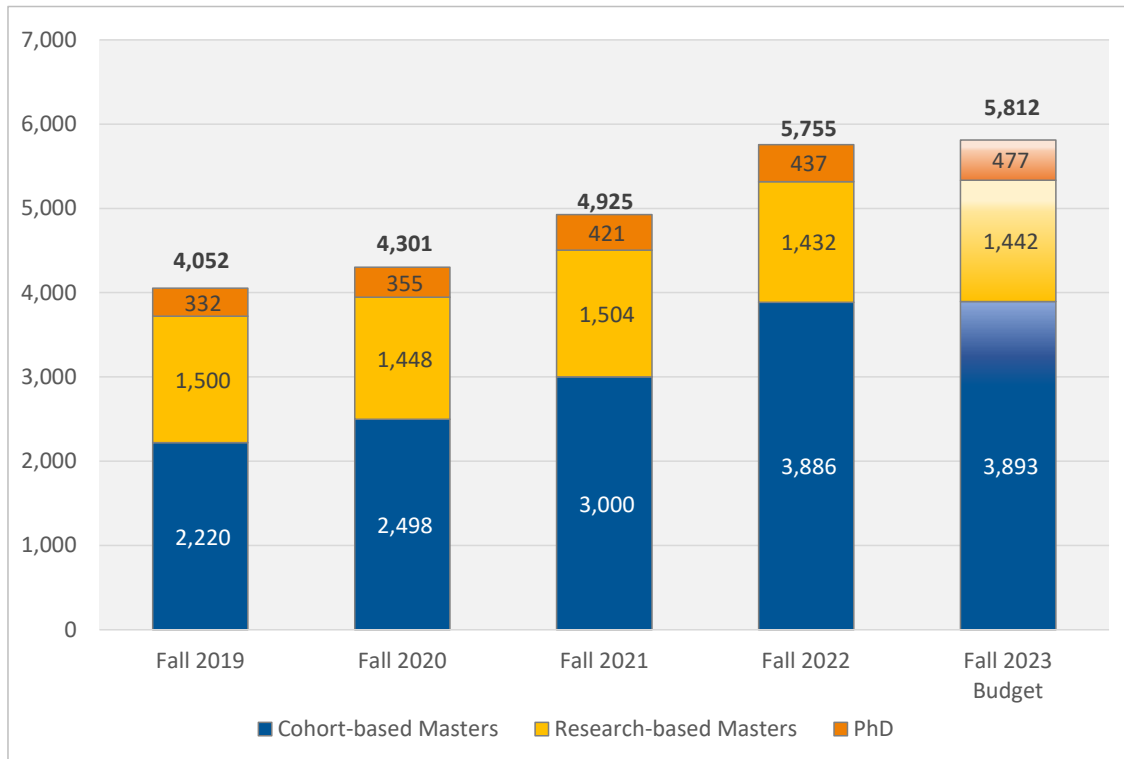
ii) Graduate Students

Total full-time graduate student enrolment headcount is budgeted for 5,812 for Fall 2023. This figure includes 5,335 Masters and 477 PhD students.

Last year, UWindsor’s international cohort-based Masters’ program growth had increased due to higher program intake decisions to address deferrals and increased demand that developed in the COVID-19 pandemic. Demand for the cohort-based Masters’ programs continues to be very strong; however the projections for 2023/24 show a small decline as enrolments transition back to a pre-pandemic number of cohorts.

Domestic enrolment at the graduate level increased in 2021/22 and this budget shows a continuing increase in both PhD and Masters’ students. Most domestic students are enrolled in research-based graduate programs, as well as the Master of Social Work (FAHSS), MBA (Odette) and the Master of Engineering Management (Odette/Engineering) programs.

Chart 5: Graduate Enrolment (Domestic and International students)



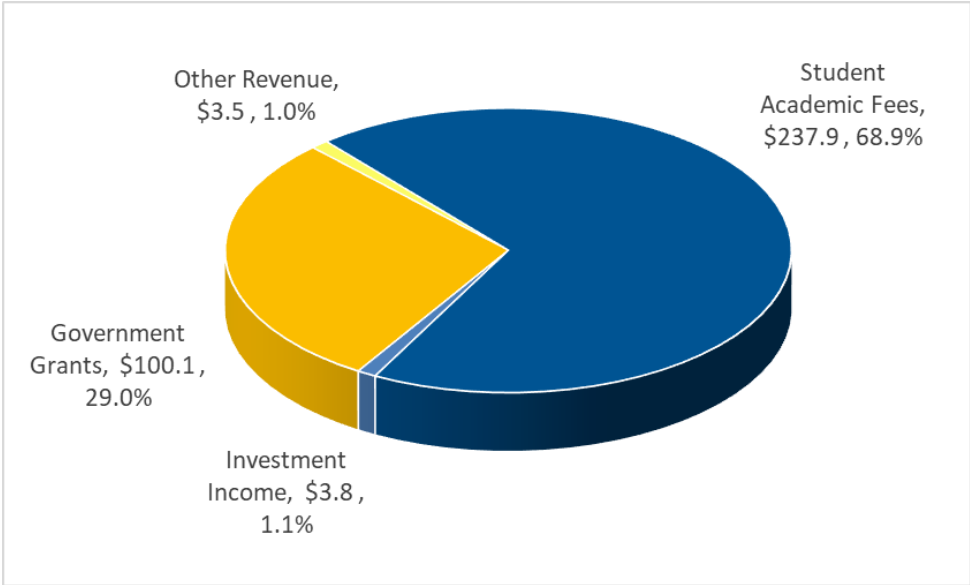
The cohort-based Masters’ programs are globally recognized, and demand is strong. The most significant cohort-based Masters’ program continues to be the Master of Engineering program.

### III. OPERATING REVENUE

Operating revenue for 2023/24 is budgeted at \$345.3M, an increase of 2.7% (or \$9.2M) versus last year (see Appendix A for further details).

The chart below provides a breakdown of the four major categories of UWindsor operating revenue

Chart 6: 2023/24 Operating Revenue (in \$M)



#### 1. STUDENT ACADEMIC FEES

In January 2019, the Ministry of Colleges, and Universities (MCU) announced a 10% reduction of all domestic tuition rates effective for the 2019/20 academic year and a tuition rate freeze for the 2020/21 academic year. An extension of the freeze was later announced for the 2021/22 and 2022/23 academic years.

On March 2, 2023 MCU announced the extension of the domestic student tuition rate freeze for 2023/24. Once again, an exception is included allowing tuition rate increases of no more than 5% (all years) for domestic students from outside the province of Ontario.

In 2023/24, MCU has afforded an opportunity for institutions to apply for Tuition Anomaly Adjustments for up to 3 programs where current domestic rates are 15% (or more) below the sector average for comparable programs. UWindsor has three undergraduate programs which meet the criteria and has submitted applications accordingly. Budget assumptions related to the anomaly opportunity are minimal.

Lobbying efforts are continuing with MCU to support post-secondary institutions by providing reasonable increases to regulated tuition rates.

### International Student Tuition Guarantee

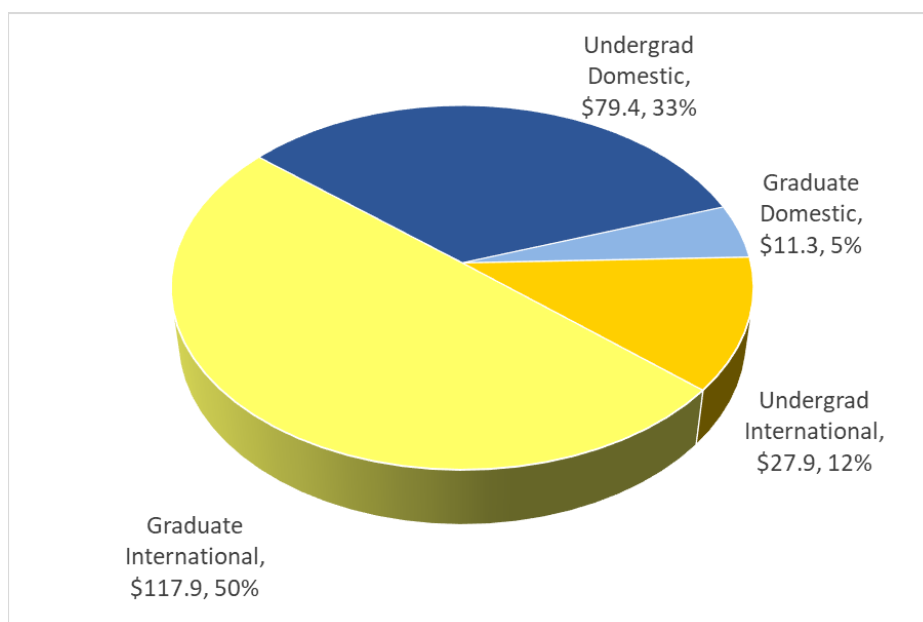
In 2021/22, UWindsor announced the International Student Tuition Guarantee (ITG) providing both undergraduate and graduate international students with a commitment to hold tuition rates consistent as the rate they pay in their first term of study (assuming their degree takes the typical number of years to complete). Considerations for the ITG have been included in the 2023/24 tuition fee budget.

### Institutional Tuition Fees

Total gross institutional tuition fee revenue is budgeted at \$236.5M, up \$3.4M (or 1.5%) compared with the prior year budget of \$233.1M. This small increase was consistent with the institution’s long term budget planning as the domestic tuition rate freeze continues and international enrolment levels begin to normalize.

The chart below provides details of the tuition fee budget by major student category:

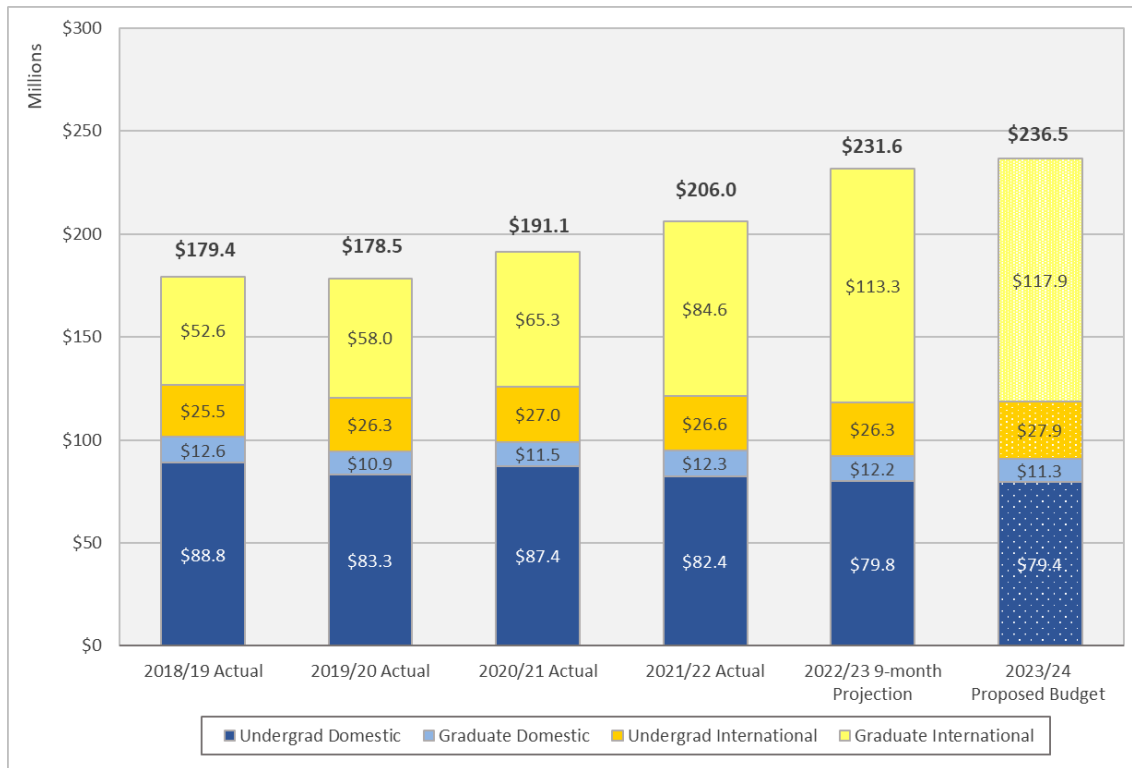
*Chart 7: 2023/24 Tuition Fee Revenue Budget by Student Category (in \$M)*



### Historical Tuition Trends

The shift in reliance on tuition from international students can be linked to provincial funding policies controlling UWindsor revenue generating capabilities. Please see Table 3: Degree of Revenue Generating Flexibility included in the “Understanding the Impact of Provincial Policy and Funding on UWindsor” section to better understand exactly how these policies (and other factors) are contributing to changes in UWindsor and other Ontario university tuition generating trends.

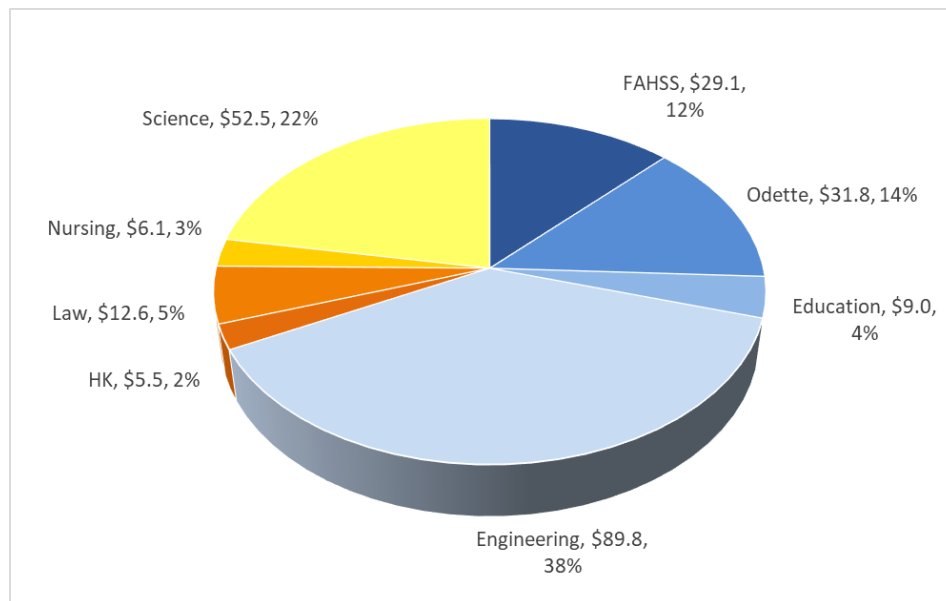
**Chart 8: Historical Tuition Revenue by Student Category (in \$M) – Stacked Bar Graph Format**



**Tuition by Faculty**

The following chart provides the distribution of total tuition revenue for each UWindsor Faculty:

**Chart 9: 2023/24 Tuition Fee Revenue Budget by Faculty (in \$M)**



The Faculty of Engineering leads the way, earning 38% of the total institutional tuition budget.

As recently as 2019/20 the Faculty of Arts, Humanities & Social Sciences accounted for 19% of the total tuition budget. However, FAHSS has seen its share of the UWindsor tuition pie eroded down to only 12% as a result of their reliance on domestic students with frozen tuition rates.

When further examining the tuition revenue budget, UWindsor Faculties can be broadly organized into two distinctive groups: 1) Faculties with significant international cohort-based graduate program tuition revenue and 2) Faculties that rely primarily (and almost exclusively) on domestic student tuition revenues.

The Faculties of Engineering and Science, and the Odette School of Business generate a significant amount of their tuition fee revenue from graduate international students. The Faculties of Education, Human Kinetics, Nursing, and Arts, Humanities & Social Sciences rely heavily on domestic tuition revenues and receive only a small portion of their tuition fees from international students while the Faculty of Law relies almost entirely on domestic tuition fees.

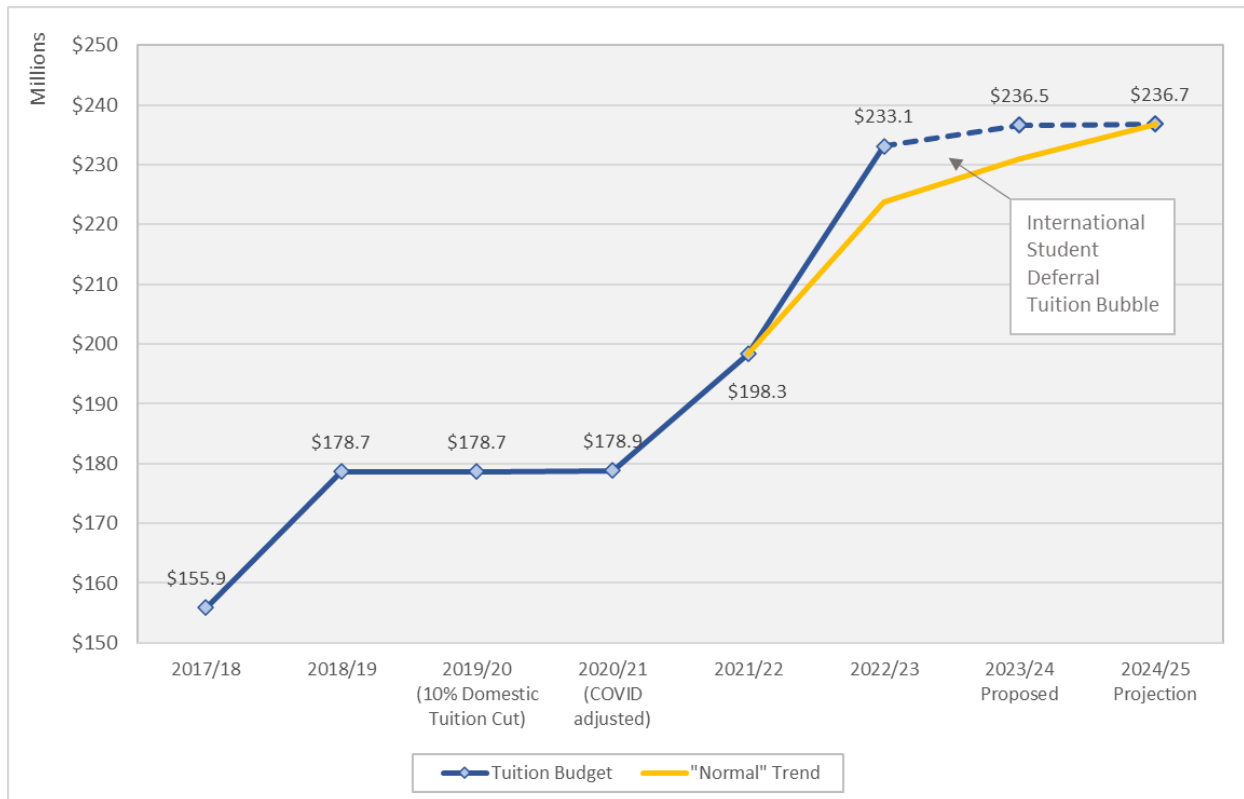
#### *Managing International Student Extraordinary Enrolment in 2023/24*

In 2022/23 UWindsor Faculties offering international cohort-based masters programs made the decision to offer additional cohorts of their programs to accommodate the significant number of international students who had deferred their acceptance into those programs during the COVID-19 pandemic. This effectively created a temporary tuition revenue “bubble” where revenue expectations exceeded “normal” tuition revenue trends (i.e. excess graduate international tuition revenues not anticipated to be consistently maintained into the future).

The chart below graphically depicts the international student tuition bubble by forecasting tuition revenue ahead to the 2024/25 academic year and comparing the budget against a more “normal” growth trend if the increased cohorts of international students had not been offered.



Chart 10: Tuition Revenue Trends and the International Student Deferral Tuition Bubble (in \$M)



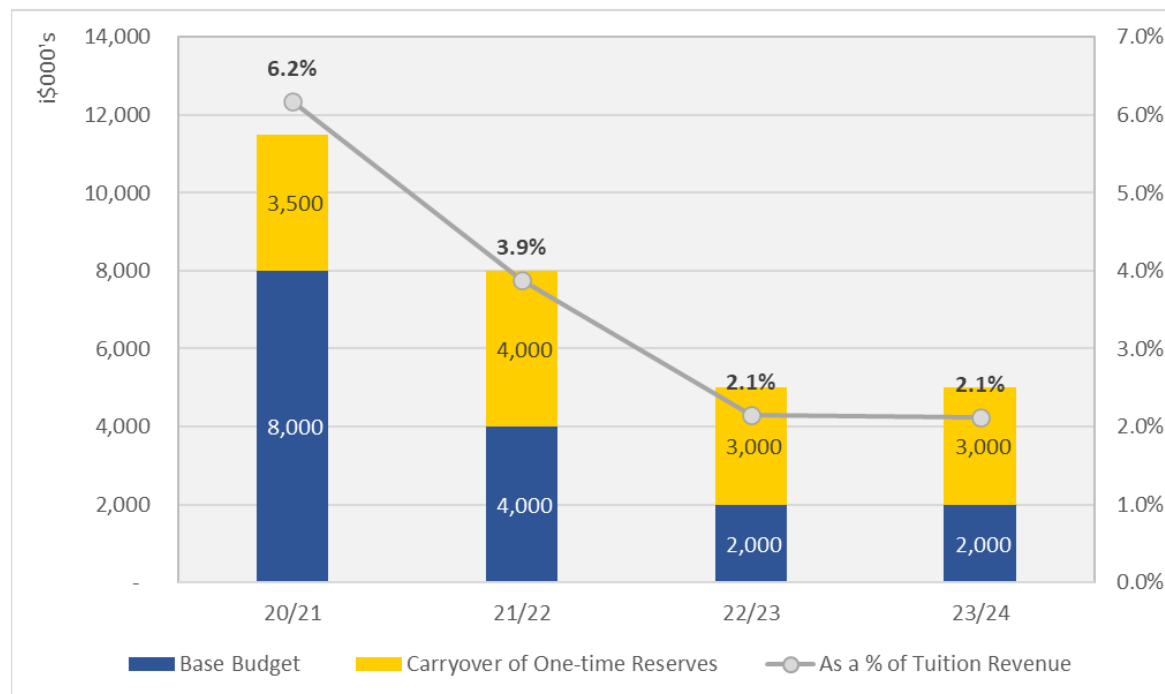
In 2022/23 an Extraordinary Enrolment Offset fund was established at \$9M representing an offset against tuition budgeted above the normal trend. Investment in the Offset fund continues in 2023/24, at \$5.5M, representing the remainder of those students still enrolled above normal levels. It is anticipated that the Offset fund will be eliminated, returning the budget to normal levels once the extra cohort students have graduated, in 2024/25.

One-time funding generated in-year while the Extraordinary Enrolment Offset fund is in place during 2022/23 and 2023/24 and will be invested into international student priority areas in the Faculties of Engineering, Science, and the Odette School of Business. Priority projects from 2022/23 include classroom renovations, renovations of international student lounges, and technical infrastructure investment in the UWindsor advanced computing innovation hub at 300 Ouellette. In this way, we are mitigating the risk of international student tuition fluctuations that will not necessarily become part of the base Operating Budget, while at the same time, continuing to support international students during their time at the University.

**Enrolment Contingency Reserve (ECR)**

Originally introduced as a COVID-19 pandemic risk mitigation tool, the Enrolment Contingency Reserve (ECR) is being maintained in the 2023/24 operating budget as a risk mitigation strategy (in effect, an allowance). The ECR will be funded at \$5M again in 2023/24 (\$2M base plus \$3M one-time reserves) or about 2% of the gross tuition revenue budget.

Chart 11: Enrolment Contingency Reserve Planning (in \$000's)



### Student Incidental Fees

Compulsory student incidental fees budgeted within the UWindsor Operating Budget include Student Late Payment Fees, Student Health Fees, Co-op Fees, and Athletics & Recreation Service Fees among others. In 2023/24, these fees are budgeted at \$8.9M, up \$1.1M from prior year as a result of changes including a \$600K increase to Co-op fees as a result of increased enrolments in co-op programs, and a \$450K increase to Athletics & Recreation Fees based on an approved rate increase and CPI-driven changes. Revenues generated against these budgets is either specifically designated in support of relevant expenditures or directed to non-academic units to fund costs associated with supporting academic programs.

## **2. GOVERNMENT OPERATING GRANTS**

### Core Operating Grant

The Core Operating Grant (COG) is governed by an enrolment corridor in which the University receives a base level of funding by maintaining eligible enrolment within +/- 3% of the corridor midpoint. First established in 2016/17, the University's corridor midpoint has grown from 26,337 Weighted Grant Units (WGUs) to 27,046 WGUs in 2023/24. This change reflects the roll-in of WGUs associated with the growth of Education and Graduate enrolments relative to associated targets. UWindsor is within the corridor as of the last reported enrolment data to MCU (Fall 2022).

In the 2019 Ontario budget, the government announced that the next round of Strategic Mandate Agreements (SMA3) would see a substantial portion of funding tied to performance by way of 10 metrics. This would be accomplished using existing levels of funding and reallocating a portion of the Core Operating Grant into the newly renamed Performance Grant (previously referred to as the Differentiation envelope). In 2023/24 we are budgeting to receive \$56.5M (up from \$47.4M last year) in Performance funding representing 60% of our total grant allocation with only \$36.5M (or 40%) remaining in the COG.

The ten metrics were phased in over three years, with all ten now in place.

- Graduate Employment rate in a related field
- Institutional Strength/focus\*
- Graduation Rate
- Community/Local Impact of student enrolment
- Economic Impact\*
- Research Funding: Federal Tri-Agency Funding
- Experiential Learning
- Innovation: Industry Funding
- Graduate Employment Earnings
- Skills and Competency\*

The government determined and defined all but three of the metrics denoted with an asterisk. The three metrics were to be institution-specific but were required to meet guidelines and fall within the parameters established by the Ministry.

Initially, the intention was to link 25% of funding to performance, increasing to 60% by 2024/25 at a 'steady state' when all metrics have been developed and activated, however, the beginning of the pandemic coincided with the proposed start of the SMA3, pushing the signing of the agreement to the summer of 2020. Given the uncertainty of the COVID-19 impacts, the ministry delayed the planned activation of the performance-based funding for the first two years of the SMA3, and later continued the delay into year 3. The Ministry intended to assess the sector's readiness to activate the funding in year 4 at a revised system-wide proportion of 10%. In late March 2023, it was confirmed that the funding would indeed be activated at 10% with two model adjustments to support implementation: annual metric reweighting, and a "stop-loss" mechanism to cap funding losses. Currently, the sector awaits further communication on the details of the "stop-loss" mechanism.

Any expected decrease in the Operating grant due to anticipated performance in the metrics is accommodated within the budget, although the actual transfer payments on a cash basis are not impacted until at least Year 5 of SMA3 (i.e., 2024/25).

### Special Purpose Grants

Special Purpose Grants are grants provided to address government and system-wide priorities, including a Municipal Tax Grant, the Clinical Nursing Grant, and Grants for students with disabilities.

The 2023/24 budget for Special Purpose grants totals approximately \$1.825M and includes the following:

1. Funding for Students with Disabilities - \$457,000;
2. Municipal Tax Grant - \$841,000;
3. Clinical Nursing Grant - \$427,000; and
4. Mental Health Services - \$100,000.

### Other Grants

In addition to the above grants, UWindsor has budgeted \$5.5M for the Collaborative Nursing Grant, based on prior year enrolment levels. This separate envelope supports a Collaborative Nursing program currently offered jointly with St. Clair and Lambton Colleges. During 2022, the dissolution of the collaborative agreement with Lambton College was negotiated with the last intake by Lambton College in Fall 2022. The plan outlines the commitment for the students to complete their studies without disruption through the collaborative program and has been approved by the Ministry. The collaborative program with St. Clair College will continue uninterrupted.

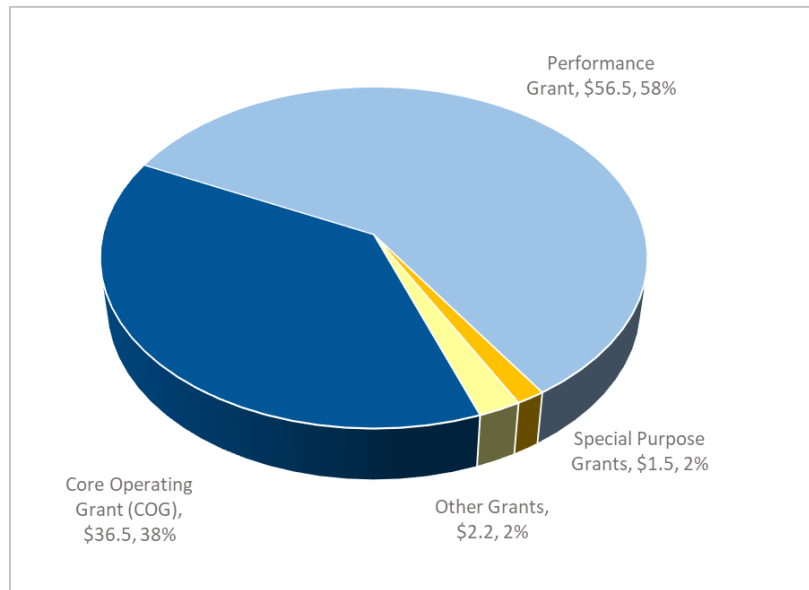
Please note that special purpose grants extended by the Provincial government that are finite in nature are not included in the base budget of the institution. This includes incremental clinical education funding for the Faculty of Nursing announced in 2022.

### MCU International Student Recovery

The International Student Recovery (ISR) effectively reduces the COG by \$750.00 for each international undergraduate and Masters' student enrolled at the institution (PhDs are excluded) and is budgeted at \$3.72M (expense) for 2023/24, representing 4% of the institution's total Core and Performance grant. Since the tuition decrease and freeze in budget year 2019/20, UWindsor has spent approximately \$11.7M on the ISR.

The chart below provides a breakdown by category of the Provincial Operating Grants budgeted for UWindsor in 2023/24 with details provided in Appendix B.

Chart 12: 2023/24 Provincial Operating Grants (in \$M)



Please note the International Student Recovery cost has been net against “Other Grants”.

### Blue Ribbon Panel

On March 2, 2023, the Ontario government announced the launch of a Blue-Ribbon Panel on financial sustainability of the post-secondary education sector. The Panel is Chaired by Dr. Alan Harrison, former Provost and Vice-Principal (Academic) at Queen's University and is made up of leaders from the business and academic communities, including Bonnie Patterson, former President and Vice-Chancellor of Trent University and the President and CEO of the Council of Ontario Universities.

The Panel is mandated with providing advice and recommendations to the Minister of Colleges and Universities to improve the financial sustainability of the postsecondary education sector, and its work will be guided by the following principles:

- Enhancing student experience and access
- Rewarding excellence and financial sustainability
- Improving labour market alignment
- Promoting economic growth and prosperity
- Keeping education affordable for lower- and middle-income families

Over the spring and summer, the panel will conduct research and consultations with key stakeholders about the actions Ontario can take to improve the financial sustainability of the postsecondary sector.

### **3. OTHER SOURCES OF OPERATING REVENUE**

#### Investment Income

The 2023/24 Operating Budget includes \$3.8M for revenue raised through the investment of working capital funds which are actively managed within the constraints of the Statement of Investment Policies and Procedures for Working Capital Funds (the SIPP). Working capital will continue to be managed and reinvested in response to changing market conditions within the constraints of the SIPP.

#### Other Operating Revenue

Other miscellaneous sources of operating revenue, including application fees and recoveries from the ancillary operations of the institution, are budgeted at \$3.5M. The institution remains focused on the development and implementation of alternative revenue strategies.

### 4. UNDERSTANDING THE IMPACT OF PROVINCIAL POLICY AND FUNDING ON UWINDSOR

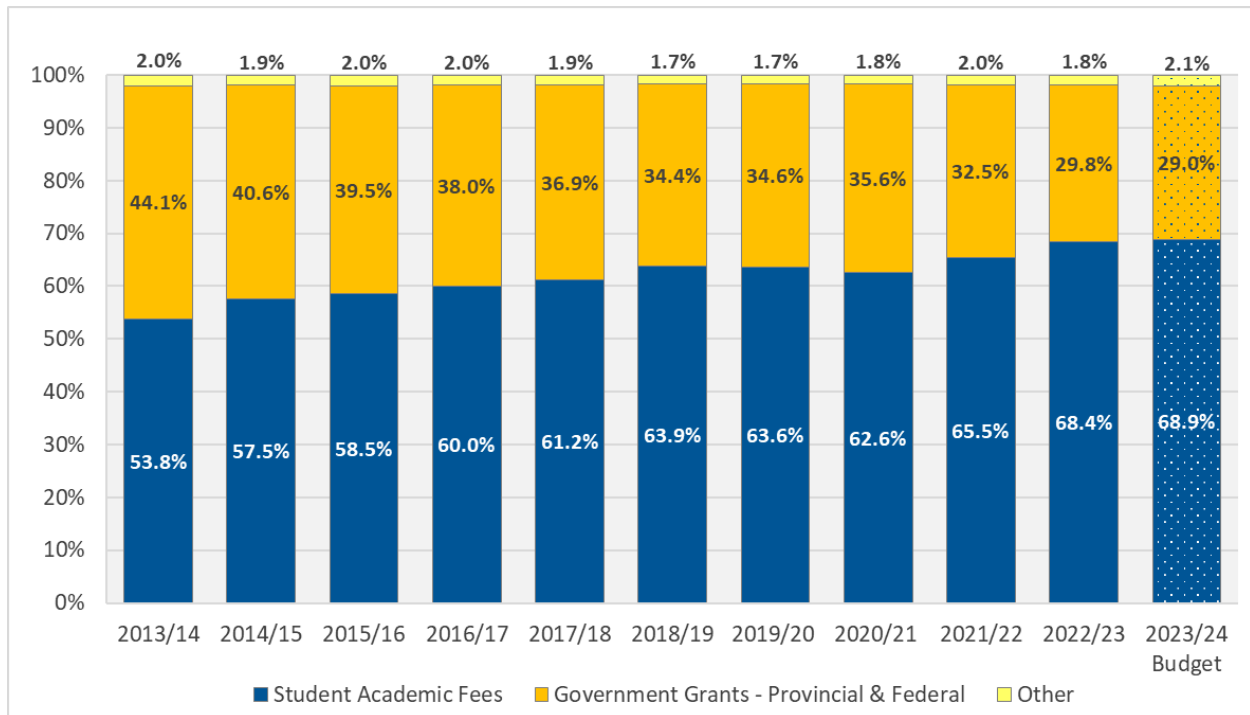
The University is reliant on financial support from the Province of Ontario for the Operating Grant and other strategic grant-funded initiatives that align with the priorities of the government. These grants now comprise only 29% of the UWindsor Operating Budget. The table below provides a detailed examination of the ability to influence or change the various components of the UWindsor operating revenue alternatives.

Table 3: Degree of Revenue Generating Flexibility

Revenue Component	Degree of Flexibility	Primary Constraint(s)
Provincial Operating Grant	None	MCU controlled through the WGU funding corridor and SMA3 agreement with the institution.
Domestic Enrolment	Low	Limited incentive to recruit past our grant corridor. Declining local population for university-aged demographic challenges domestic enrolment from traditional catchment, but opportunity exists within the Greater Toronto and Hamilton areas.
Domestic Tuition Rates	Very Low	Regulated under MCU Tuition and Ancillary Fee Framework. Reduced by 10% in 2019/20 then frozen for the past 4 years by the current Ontario government.
International Enrolment	High	Internally restricted based on operating capacity. Strong demand for program offerings and proven ability to recruit students.
International Tuition Rates	Moderate	Not regulated, however offset by the MCU international student recovery expense. Restricted by market competition. Influenced by UWindsor international student tuition guarantee (ITG).
Other Revenues	Moderate (but limited)	Most are not regulated. Requires investment in and development of new business activities that align with our core competencies.

This shift in revenue sources, from 1:1 student academic fees-to-government operating grant, is now more than 2:1 and represents the foundation of structural financial challenges facing post-secondary institutions in Ontario. UWindsor, Council of Ontario Universities (COU) and Universities Canada continue to engage with all levels of government to advocate for stable funding for the sector, and fair and equitable access to post-secondary education for Ontario students.

Chart 13: UWindsor’s Shifting Operating Revenue Pattern



## IV. OPERATING EXPENDITURES

UWindsor is presenting a balanced budget for 2023/24 as operating expenditures – including investment and reserve funds – are budgeted at \$345.3M, up \$9.3M (or 2.8%) from last year and equal to institutional operating revenues (see Appendix A for further details).

The single largest component of the institutional budget, comprising \$257.6M, or approximately 74.6% of all budgeted expenditures, is the cost of employee salaries, wages, and benefits.

### 1. FACULTY & STAFF SALARIES, WAGES & BENEFITS

UWindsor operates with eight bargaining units and a non-union group as follows:

- 1) Windsor University Faculty Association – Faculty, librarians, ancillary academic staff, and sessional instructors;
- 2) UNIFOR Local 444 – Campus Community Police & Parking Services;
- 3) UNIFOR Local 2458 Full-time – Office & Clerical Staff;
- 4) UNIFOR Local 2458 Part-time – Office & Clerical Staff;
- 5) UNIFOR Local 2458 Engineers – Stationary Engineers;
- 6) CUPE Local 1001 – Full- & Part-time Food Services, Housekeeping & Grounds;
- 7) CUPE Local 1393 – Technical Staff, trades, and professional staff; and
- 8) CUPE Local 4580 – Graduate and Teaching Assistants.

Collective agreements for all CUPE and UNIFOR unions were negotiated and ratified in 2022. The 2023/24 budget includes increases to salaries and benefits consistent with the terms of all the newly ratified collective agreements.

The benefit cost to the institution, which amounts to approximately 21.7% of budgeted salaries and wages (prior year was 20.3%), can be classified into three main areas:

- i) Legislated Benefits
- ii) Negotiated Benefits
- iii) Pension Contributions

Of these three areas, contributions to the University's two pension plans: 1) the Employees' Plan, and 2) the Faculty Plan, which provides post-retirement support to faculty and staff, are budgeted at approximately 8.2% of budgeted salaries and wages. Legislated benefits are budgeted at 6.8% and negotiated benefit costs at 6.7% of budgeted salaries and wages.

#### Pension Plan Costs

Planning for pension plan contributions is continuous due to their volatile nature and the significant cost to the institution's expenditure budget. The Financial Services Regulatory Authority of Ontario requires tri-annual actuarial valuations. These actuarial valuations dictate contribution levels required by members of the Plans and by UWindsor.



Valuations were filed for both Plans as of July 1, 2021, due to preferential market conditions over the previous January 1, 2020 valuations. The new valuations have had significant positive outcomes for required contributions. The next valuations for both Plans will be required on or before July 1, 2024.

*The Employees' Plan* is fully cost-shared between UWindsor and the Plan membership. As of July 1, 2021 valuation, the Employees' Plan is showing a going concern surplus (118%) as well as a solvency surplus (103%). Contributions to the plan are shared evenly between the members and the University. In 2022, each group contributed a blended rate of approximately 6.8% of earnings to the pension plan. During collective bargaining, the University and members of the Employees' Plan agreed to amend early retirement provisions enabling employees who have reached the age of 63 (was 65) and have 25 years of credited service to retire with unreduced pensions. This change will result in an increase to average contributions of approximately 0.1% or 6.9% of earnings. The total budgeted cost of the Employees' Plan (current service costs) for the University in 2023/24 is \$4.6M.

*The Faculty Plan* is a hybrid plan comprised of two components: 1) a Money Purchase Plan component (MPP); and 2) the Minimum Guaranteed Benefit (MGB). Contributions to the MPP component for the Faculty Plan are currently 9% of pensionable earnings for plan members and 6% for UWindsor, subject to Income Tax Act annual contribution limits. UWindsor is solely responsible for funding the MGB liability, of 5.4% of earnings which represents the amount paid to ensure pensions are at the defined benefit level as prescribed in the Plan. The total budgeted cost of the Faculty Plan (current service cost) for the University for 2023/24 is \$11.5M.

A key financial impact for UWindsor filing the July 1, 2021 valuation is that the Faculty Plan moved into a surplus position on a going concern basis, and thus, the special payments were eliminated. The Faculty Plan, which until the latest valuation had a going concern deficit, has a going concern surplus (105%) and a solvency surplus (124%, 266% when excluding the money purchase component) as of July 1, 2021.

As valuations are not required again until July 1, 2024 (though the University can elect to file early if desired), the new contribution rates and elimination of special payments for the Faculty Plan has provided much needed stability for the institution's benefit budget for several budget years. Administration continues to actively monitor market trends with the Plan's actuary.

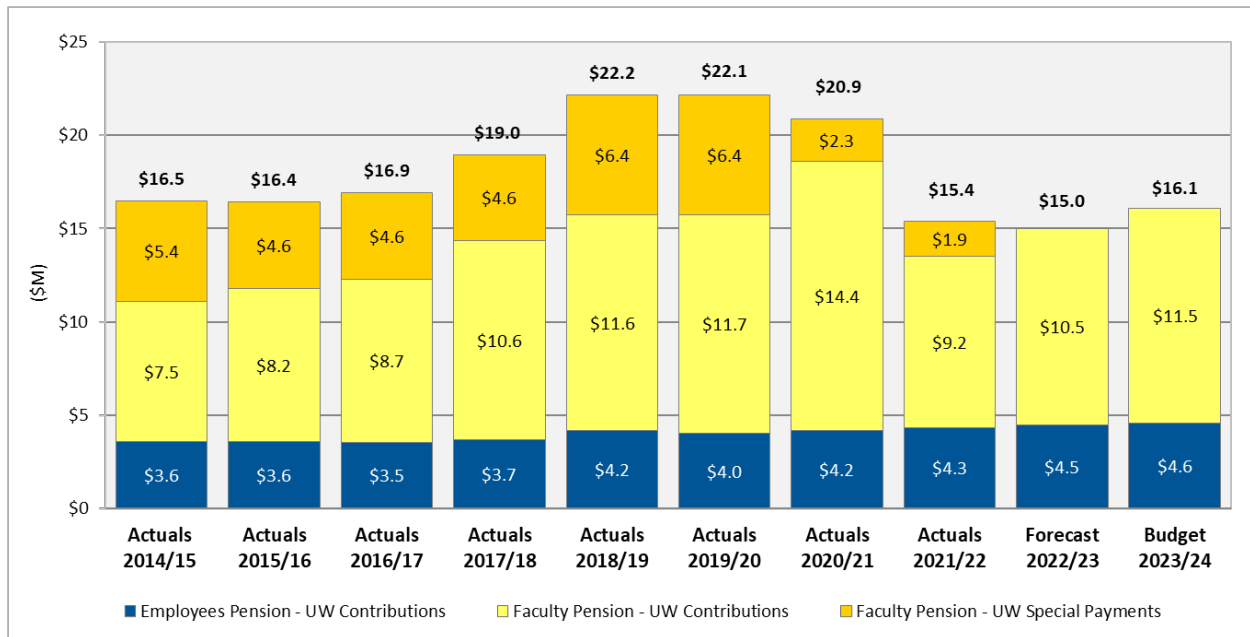
### *Pension Stabilization Reserve*

As has been seen over time, pension plan valuations can fluctuate dramatically, and the risk of future pension special payments remains. In addition, we have seen volatile and at times, extraordinary market conditions in the shadow of the COVID-19 pandemic, which increases the risk that the expenses could change dramatically at the next valuation date.

During the 2021/22 Operating Budget, when Faculty Plan pension special payments decreased materially, UWindsor established a Pension Sustainability Reserve. The Operating budget includes continued investment in the Pension Stabilization Reserve at the current \$2.8M level, with the objective of ensuring that within the next three years, the institution has sufficient base budget available to manage special payments in the event they were return to historically high rates, or a material increase in contributions was to return for the Employees' Plan. This strategy creates stability within the base

budget for the coming years, while ensuring the institution is prepared for a potential material adverse change in the contribution amounts at the next valuation date (July 1, 2024).

Chart 14: UWindsor Pension Contributions (Employees' and Faculty Plans) (in \$M)



## 2. DIRECT COSTS OF ACADEMIC DELIVERY

Salaries, wages and benefits for faculty and staff working within Faculty units comprise approximately 89.5% of the direct Faculty expenditure budgets. Graduate and undergraduate teaching assistantship funding accounts for 6.5% of Faculty budgets leaving 5.4% in discretionary budget and 0.7% Research Investment in Faculties.

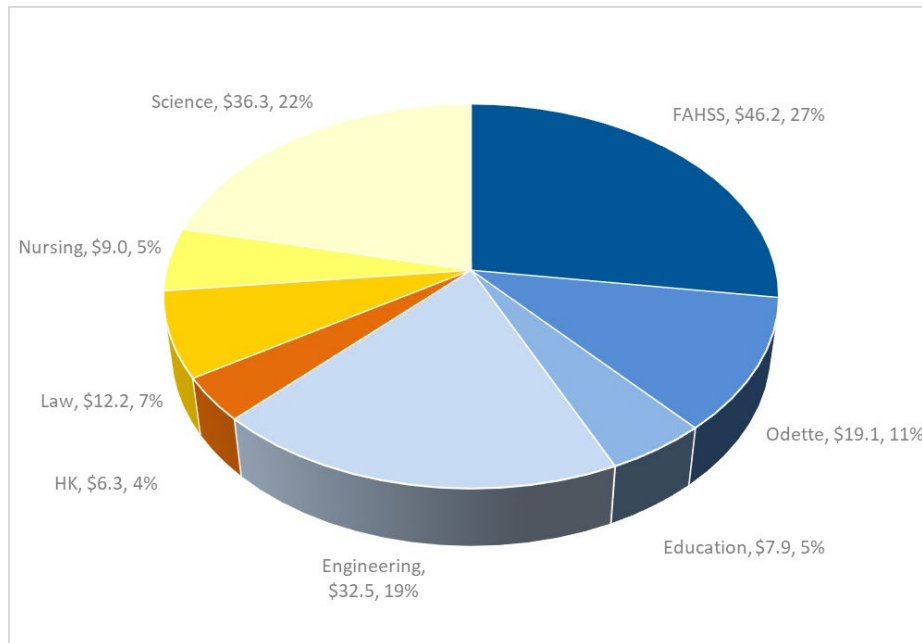
The table below provides the aggregate Direct Cost of Academic Delivery budget by major category with a comparison to the prior year while the chart provides the 2023/24 budget by Faculty.

Table 4: Aggregate Direct Cost of Academic Delivery Comparison (in \$000s)

Description	2022/23 Budget	2023/24 Budget	% of Total	Variance
Direct Faculty Revenues	(\$1,889)	(\$1,889)	-1.1%	\$0
Salaries, Wages & Benefits*	147,958	151,016	89.5%	4,889
GA/TA Funding	10,648	10,998	6.5%	350
Discretionary Funding	7,864	9,099	5.4%	1,235
Research Investment in Faculties	1,250	1,250	0.7%	0
Realignment (1% Salary, Wages & Benefits)	0	(1,592)	-0.9%	-1,592
<b>Total</b>	<b>\$164,730</b>	<b>\$169,612</b>	<b>100%</b>	<b>\$4,882</b>

\*any free base and/or untreated budget cuts are netted into salaries, wages, and benefits

Chart 15: Direct Cost of Academic Delivery by Faculty (in \$M)



As previously explained, Faculties will continue to see their base expenditure budgets adjusted – invested in or realigned against – based on their respective ABB Net Position and as governed by their respective approved Faculty Financial Sustainability Plans (FFSPs).

### 3. SHARED SERVICE COSTS

Costs of delivering key services in support of academic and research activities of the institution can be broadly divided into two categories:

- 1) Costs directly linked to supporting the student experience; and
- 2) Costs indirectly linked that provide the infrastructure from which services are provided.

Within the first category are costs related to Academic & Student Support, the Library, Outreach and Communications, and Scholarships. The second category includes the costs of Facilities (including Utilities), Information Technology Services, Equity, Diversity, Inclusion and Decolonialization, Administration, and Debt Financing. Investments in these shared service areas can be broadly split into two categories:

- 1) Unavoidable cost increases, and
- 2) New Investments that align with the strategic priorities of the institution.

Unavoidable cost increases are related to the following:

- Labour-related costs – salary annual increases and benefit improvements consistent with recently ratified collective agreement.

- Inflationary pressures – examples include utility costs, library resources, IT system licenses and maintenance agreements.
- Maintaining current service levels – costs required to service the increasing student population (i.e. international recruitment partner costs).

A selection of the new investments into the base budgets of the shared service areas in 2023/24 include:

- \$300K to fund new and existing positions in the Registrar’s Office
- \$250K investment into Campus Police to expand services
- \$250K for strengthening of the security of the institution’s digital infrastructure
- \$200K to support new positions related to the implementation of *Aspire*
- \$120K to support a new Research Partnerships position
- \$100K to support international research-based Masters student scholarships

All new investments are made according to specific strategic priority criteria and are approved by the Provost Budget Committee.

When we examine year-over-year budget changes by shared service cost category, the most noticeable cost increase of 13.1% is observed in the Outreach and Communications area as we continue to increase the budget in support of international student recruitment partnership fees. The Academic and Student Service area budget is increasing 7.7% over prior year due to the new investments in the Registrar’s office and Campus Police discussed above. In addition, the budgeting of increased student incidental fees for Athletics and Recreation Services and Co-op Education programming creates new funding for this area. The third largest year-over-year cost increase of 5.0% is in Facilities as a result of inflationary pressures on our utility costs coupled with increasing ‘carbon tax’ fees.

#### **4. BUDGET REALIGNMENT**

##### *Budget Realignment (1% Salary, Wage & Benefit Tax)*

Balancing the operating budget continues to present challenges as government constraints limit opportunities for revenue growth while inflationary pressures, collective agreements and other costs strain the expenditure budget. As the University emerges from the post-COVID extraordinary enrolment trends experienced, assuming no change in the domestic tuition framework, long term forecasting is suggesting that expenses may outpace revenues. Under the leadership of the President, the institution will start to reduce budgets now, in 2023/24, both to provide a base-balanced budget in 2023/24 and to reduce pressures in future fiscal years.

An “across-the-board” base budget realignment equal to 1% of the eligible salary, wage & benefit budget has been enforced as part of this budget. This represents a reduction of approximately \$2.4M in expenses, spread across the institution. Budget managers, including Deans, are responsible for determining the most appropriate way to reduce budgets without adversely impacting service.

## V. STRATEGIC INVESTMENT & RESERVE FUNDS

Strategic Investment Funds are established to support institutional strategic priorities and enable the institution to execute key initiatives. Potential uses include:

- Support initiatives integral to the *Aspire: Together for Tomorrow* strategic plan,
- Prioritize performance against the metrics reported as part of the Strategic Mandate Agreement,
- Ensure subsidies are available to support the operating model structure,
- Providing start-up funding for priority programs,
- Directly underwrite new initiatives that do not naturally fall under one of the Faculties, and
- Reserve funds intended to mitigate institutional risk by setting aside funding to meet potential future financial obligations, especially those that might arise unexpectedly.

The table below provides a year-over-year comparison of UWindsor Strategic Investment and Reserve Funds held in the Operating Budget:

Table 5: Strategic Investment & Reserve Funds (in \$000s)

Fund Name	2022/23 Budget	2023/24 Budget	Variance
<i>Strategic Investment Funds</i>			
Strategic Priority Fund*	\$5,308	\$2,500	\$(2,808)
Research Support Fund	200	-	(200)
Strategic Research Activity Fund	700	998	298
Deferred Maintenance Fund	2,000	2,000	-
Environmental Sustainability Small Projects Fund	-	100	100
	<b>\$8,208</b>	<b>\$5,598</b>	<b>\$(2,610)</b>
<i>Reserve Funds</i>			
For the Future Fund	\$3,000	\$3,500	\$500
Pension Stabilization Fund	2,800	2,800	-
Energy Sustainability Reserve	2,000	1,800	(200)
SMA3 Protection Reserve	0	100	100
	<b>\$7,800</b>	<b>\$8,200</b>	<b>\$400</b>
<b>Total Investment &amp; Reserve Funds</b>	<b>\$16,008</b>	<b>\$13,798</b>	<b>\$(2,210)</b>

\* 2022/23 Strategic Priority Fund budget of \$5.3M includes prior year commitments of \$2.5M. For Fiscal 2023/24, we have allocated out commitments made as of March 31, 2023 to the related faculties/departments.

### Strategic Priority Fund

The SPF will be deployed to support initiatives that align with the institution's new *Aspire: Together for Tomorrow* strategic plan.

The Aspire strategic plan begins with a fundamental commitment towards our people: students, staff, faculty, alumni, and communities. The areas framing the strategic plan fall into three distinct categories:

1. **Foundational Commitments** – specific actions that address gaps in campus practices that are either not working well or take too much time and effort to accomplish.
2. **Strategic Priorities** – goals and transformative priorities within specific areas of institutional practice that will help us to further our mission, achieve our vision, live our values, and capitalize on our untapped potential.
3. **Strategic Opportunities** – ambitious, multi-disciplinary opportunities that have transformative possibilities beyond our strategic priorities.

There are 6 areas of Foundational Commitments highlighted in *Aspire*:

1. Improving Communications and Knowledge Transfer
2. Connecting, Reconnecting and Enhancing Collaboration
3. Improving Institutional Processes and Coordination of Services
4. Collecting and Using Meaningful and Reliable Data
5. Supporting People Through Enhanced Human Resources and Leadership Development
6. Enhancing Infrastructure to Support our People

*Aspire* includes 6 Strategic Priorities:

1. Advancing Bold, Impactful Research and Creative Activity
2. Becoming an Equitable, Diverse, Inclusive and Just Campus
3. Continuing the Journey towards Truth and Reconciliation
4. Ensuring High Quality, Effective, Relevant Teaching, Learning and Student Experience for Everyone
5. Fostering an Engaged, Healthy, and Sustainable Campus
6. Generating Local and Global Partnership and Community Engagement

The strategic plan also outlines a framework for future planning of ambitious, multi-disciplinary and multi-area opportunities that have transformative possibilities that extend beyond our strategic priorities. These Strategic Opportunities or “Moon Shots” are the kinds of projects that can change us. They require everyone to pull together collaboratively in support of initiatives that can clearly demonstrate alignment with several criteria to be prioritized for investment and development. The following key areas have been identified that could significantly enhance the impact of strategic opportunities:

- Multi and interdisciplinary research,
- For-credit curriculum and life-long learning programs,
- Indigenization and decolonization initiatives,
- Equity, diversity, and inclusion lens,
- Experiential learning opportunities, and
- Community engagement and partnerships.

The Executive Leadership Team will deploy funds from the SPF through strategic investments (both base and one-time) in activities happening across campus that align with the strategic plan.

### Strategic Research Activity Funds

This is year three of a three-year transition plan to fund the Strategic Research Activity Fund to a \$1M level – approximately 30% of the research incentive funding received by UWindsor. These funds are managed under the direction of the VP, Research and Innovation.

In addition to these centrally managed research activity funds, it is important to remember that under UWindsor ABB, each Faculty receives a percentage share of the indirect research incentive grant received by the institution for use by the Faculty in year to stimulating and supporting research. The total strategic funds available for research purposes, both centrally and within the Faculties, in the 2023/24 Operating Budget are \$2.25M, including the Strategic Research Activity Funds described above.

### Deferred Maintenance Fund

The Deferred Maintenance Fund was established to focus on the maintenance of our existing campus physical assets. Ongoing improvements and maintenance of existing buildings is of utmost importance as properly maintained facilities reflect the pride of the institution. The investment from the Operating Budget, along with Facility Renewal Project funds from the MCU not included in the Operating Budget, are together invested in areas of priority across campus.

### Environmental Sustainability Small Projects Fund

While drafting and achieving the institution's carbon neutrality goals is primarily work that is funded by the institution's Capital Budget, it is recognized that small, grass roots projects happening across campus that support our environmental sustainability are also high value in the fight against climate change. A Small Projects Fund has been established in this budget to provide seed funding to student, staff or faculty-led initiatives, and to support efforts around communicating the institution's priorities around the environment.

### For the Future Fund

The Budget Model Redesign Committee set a goal of establishing a Base Fund approximately equal to 1% of total revenues in the first five years of implementation. In 2023/24 the For the Future fund is budgeted at \$3.5M or 1% of total institutional revenues.

### Pension Stabilization Reserve

The Pension Stabilization Reserve is explained in *Section IV. Operating Expenditures*.

### Savings for Long-Term Debt

As is customary for the institution, the cost of investing in Board-restricted funds for the repayment of the debentures of the institution are captured in the budget for Debt costs, rather than as an investment in a Reserve. The amount of funds budgeted for this purpose in 2023/24 are \$1.25M.

## **VI. CONCLUSION**

As the world emerges from the shadows of the COVID-19 pandemic, a new reality begins for UWindsor. The Operating Budget 2023/24, balanced without the use of reserves, helps to prepare the institution for long-term financial sustainability.



## APPENDIX A: 2023/24 OPERATING BUDGET

	2022/23 RECLASSIFIED BUDGET (\$000s)	2023/24 PROPOSED BUDGET (\$000s)	% OF TOTAL 2022/23 BUDGET	\$ INCREASE/ (DECREASE) TO 2022/23 (\$000s)	% INCREASE/ (DECREASE) TO 2022/23
<b>OPERATING REVENUE</b>					
Student Academic Fees	\$ 233,090	\$ 236,500	68.5%	\$ 3,410	1.5%
Less: Enrolment Contingency Reserve	(2,000)	(2,000)	(0.6%)	-	0.0%
Less: Extraordinary Enrolment Offset	(9,000)	(5,500)	(1.6%)	3,500	(38.9%)
Student Incidental Fees	7,775	8,874	2.6%	1,100	14.1%
Government Grant - Provincial	96,665	96,684	28.0%	19	0.0%
Government Grant - Federal	3,327	3,444	1.0%	116	3.5%
Investment Income	2,734	3,772	1.1%	1,038	38.0%
Other Revenue	3,418	3,528	1.0%	110	3.2%
<b>TOTAL OPERATING REVENUE</b>	<b>\$ 336,009</b>	<b>\$ 345,302</b>	<b>100.0%</b>	<b>\$ 9,293</b>	<b>2.8%</b>
<b>OPERATING EXPENDITURES</b>					
Faculty Expenditures	\$ 164,730	\$ 169,613	49.1%	\$ 4,882	3.0%
Research Services	7,040	7,361	2.1%	321	4.6%
Outreach & Communications	12,499	14,140	4.1%	1,641	13.1%
Academic & Student Services	26,989	29,075	8.4%	2,087	7.7%
Library	13,717	14,037	4.1%	320	2.3%
Scholarships	14,198	14,352	4.2%	154	1.1%
Administration	26,018	26,187	7.6%	169	0.6%
Information Technology	14,809	15,323	4.4%	514	3.5%
Facility Costs (including Utilities)	29,023	30,463	8.8%	1,440	5.0%
Debt Costs	10,979	10,954	3.2%	(25)	(0.2%)
<i>Subtotal Base Operating Expenditures</i>	<b>\$ 320,001</b>	<b>\$ 331,504</b>	<b>96.0%</b>	<b>\$ 11,503</b>	<b>3.6%</b>
<b>STRATEGIC INVESTMENT &amp; RESERVE FUNDS</b>					
Strategic Investment Funds	\$ 8,208	\$ 5,598	1.6%	\$ (2,610)	(31.8%)
Reserve Funds	7,800	8,200	2.4%	400	5.1%
<i>Subtotal Strategic Investment &amp; Reserve Funds</i>	<b>\$ 16,008</b>	<b>\$ 13,798</b>	<b>4.0%</b>	<b>\$ (2,210)</b>	<b>(13.8%)</b>
<b>TOTAL EXPENDITURES</b>	<b>\$ 336,009</b>	<b>\$ 345,302</b>	<b>100.0%</b>	<b>\$ 9,293</b>	<b>2.8%</b>
<b>BASE OPERATING POSITION</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>0.0%</b>	<b>\$ 0</b>	<b>100.0%</b>

## APPENDIX B: 2023/24 PROVINCIAL GRANTS

	2022/23 RECLASSIFIED BUDGET (\$000s)	2023/24 PROPOSED BUDGET (\$000s)	% OF TOTAL 2023/24 BUDGET	\$ INCREASE/ (DECREASE) TO 2022/23 (\$000s)	% INCREASE/ (DECREASE) TO 2022/23
<b>PROVINCIAL GRANT</b>					
Core Operating Grant (COG)	\$ 45,634	\$ 36,545	10.6%	\$ (9,089)	(19.9%)
Performance (Differentiation) Grant	47,444	56,534	16.4%	9,090	19.2%
Sub-Total	\$ 93,078	\$ 93,079	27.0%	\$ 1	0.0%
Special Purpose Grants	\$ 1,435	\$ 1,453	0.4%	\$ 18	1.3%
Collaborative Nursing	5,500	5,500	1.6%	0	0.0%
Other Provincial Brants	372	372	0.1%	0	0.0%
International Student Recovery	(3,720)	(3,720)	(1.1%)	0	0.0%
<b>TOTAL PROVINCIAL GRANTS</b>	<b>\$ 96,665</b>	<b>\$ 96,684</b>	<b>28.0%</b>	<b>\$ 19</b>	<b>0.0%</b>

## APPENDIX C: 2023/24 ABB FACULTY NET POSITION CALCULATION

	Faculty of Arts, Humanities & Social Sciences	Odette School of Business	Faculty of Education	Faculty of Engineering	Faculty of Human Kinetics	Windsor Law	Faculty of Nursing	Faculty of Science
	(\$000s)	(\$000s)	(\$000s)	(\$000s)	(\$000s)	(\$000s)	(\$000s)	(\$000s)
<b>OPERATING REVENUE</b>								
Student Fees	\$ 30,576	\$ 29,431	\$ 8,667	\$ 84,970	\$ 4,856	\$ 12,554	\$ 6,082	\$ 54,739
Government Operating Grant	31,015	8,457	6,334	13,537	6,219	4,491	8,227	20,627
Other Revenue	709	104	1,095	700	56	152	21	1,603
<b>TOTAL BUDGETED REVENUE</b>	<b>\$ 62,300</b>	<b>\$ 37,992</b>	<b>\$ 16,096</b>	<b>\$ 99,207</b>	<b>\$ 11,131</b>	<b>\$ 17,197</b>	<b>\$ 14,330</b>	<b>\$ 76,969</b>
<b>OPERATING EXPENDITURES</b>								
Direct Faculty Expenses	\$ 46,820	\$ 19,092	\$ 9,009	\$ 32,511	\$ 6,276	\$ 12,261	\$ 9,006	\$ 36,527
Other Direct Expenses	368	1,080	148	4,072	40	1,701	8	3,721
Allocation of Shared Service Cost Pools	31,022	13,624	5,809	37,993	5,429	4,557	5,750	35,978
Initial Contribution to University Fund	1,457	1,631	393	5,321	278	185	300	2,855
<b>TOTAL BUDGETED EXPENDITURES</b>	<b>\$ 79,667</b>	<b>\$ 35,427</b>	<b>\$ 15,359</b>	<b>\$ 79,897</b>	<b>\$ 12,023</b>	<b>\$ 18,704</b>	<b>\$ 15,064</b>	<b>\$ 79,081</b>
<b>ABB NET POSITION</b>	<b>\$ (17,367)</b>	<b>\$ 2,565</b>	<b>\$ 737</b>	<b>\$ 19,310</b>	<b>\$ (892)</b>	<b>\$ (1,507)</b>	<b>\$ (734)</b>	<b>\$ (2,112)</b>

**University of Windsor  
Senate**

**5.8: Report of the Provost**

Item for: **Information**

Forwarded by: **Patti Weir**

**1. Office of Experiential Learning – J. Bornais**

a) Hire UWindsor:

Co-operative Education and Workplace Partnerships and Career Development and Experiential Learning, in partnership with the alumni relations department launched a new program aimed at spreading awareness around the benefits of hiring University of Windsor graduates: Hire UWindsor on Wednesday, March 22. The launch event included remarks from representatives of partner businesses Valiant TMS, Vista, and TD Bank Group as well as computer science graduate Noah Campbell (BSc 2020).

Hire UWindsor highlighted the benefits of hiring University of Windsor graduates and engaging with the co-operative education program. It will connect local, provincial, and national employers with the University while delivering to them unique perks. For program updates and opportunities see [uwindsor.ca/hireuwindsor](http://uwindsor.ca/hireuwindsor).

b) Co-op Employer of the year and Rising Star Student Awards:

Co-operative Education and Workplace Partnerships announced their Co-op & Internship Employer of the Year Award for 2023 which was TD Bank Group. Hosting 62 UWindsor co-op students in 2022 and 60 more in 2023, TD's commitment to the University of Windsor and believing in the benefit of hiring our students make them a worthy recipient. Geraldine Ymana, Team lead for early talent acquisition at TD Bank Group accepted the award on Campus. Geraldine is also a proud UWindsor Alumni!

Rising Star Awards recognizing the outstanding achievements, contributions, and performances of co-op and internship students and their employers, went to:

- Selina Pescara, business co-op student and three-time intern working in both advisor sales and exchange traded funds at Fidelity Investments Canada;
- Celia Liburdi, electrical engineering co-op student and former distribution design engineer at Entegrus Inc.;
- Angel Grace Salomi Richard Samuel, a graduate of the Master of Applied Computing program and former developer for RBC Canada;
- Julie Israel, kinesiology co-op student and former student therapist at Schlegel Villages who will be completing her final co-op work term this summer as a student ergonomist with Hotel Dieu Grace Healthcare; and
- Brandon Mailloux, a computer science co-op student, former programmer with Health Canada and active member of Students Helping Students, an open learning organization on campus.
- 

c) Nursing Career Fair:

A collaborative effort between the Faculty of Nursing and Career Development and Experiential Learning (CDEL), Friday March 31<sup>st</sup> we hosted our first in-person Nursing Career Fair since 2019 today! 100 students had the opportunity to meet with over 30 hospitals and organizations on campus with many students being interviewed and even hired while at the fair.

## **2. Search – Dean of the Odette School of Business**

The Odette Dean search has been completed, and unfortunately did not result in the identification of a new Dean. An Acting Dean will be named in accordance with Bylaw 10.

## **3. Pronoun Project**

The pronoun project complete by Fei Qin is now live on the Provost's website:

<https://www.uwindsor.ca/provost/415/understanding-pronouns>

## **4. Black Scholars**

12 faculty searches are shortlisted and the library search has commenced.

## **5. UWill Discover – Dr. T. Brunet**

Top UWill Discover Sustainable Futures students celebrated!

After a successful week-long conference, the UWill Discover Sustainable Futures project celebrated the gold medalists and then ranked three presenters for the top honours of the conference week. UWill Discover facilitators selected three among the group to have the top honours:

- Leah Levy - Faculty of Arts, Humanities and Social Sciences, Constraint Poetry on Disability and Disability as Constraint.
- Lila Iriburiro Happy - Faculty of Arts, Humanities and Social Sciences for her presentation on African Indigenous Knowledge at the Intersect of Environmental Sustainability and Legal Precedent.
- Emmanuel Boujeke - Faculty of Science - for his presentation titled: Spy1-Mediated Cell Cycle Effects Enhance Oncogenic Transformation by Selected Drivers in Human Glioblastoma

The full roster of award winners is posted at the [UWill Discover Sustainable Futures website](#). With over 160 presentations given during the conference week, it was extraordinarily competitive to be among the top presenters.

Lila Iriburiro Happy was able to connect multiple Sustainable Development Goals through her presentation titled African Indigenous Knowledge at the Intersect of Environmental Sustainability and Legal Precedent. "Who we consider as experts starts to diversify when intersectional approaches are encouraged. My research centers African Indigenous Knowledge Systems at the intersection of environmental sustainability and legal precedent. To bridge the current gap in achieving the SDGs, I recommend inclusive consultations to partner for intergeneration, sustainable, and equitable solutions. The UWill Discover conference epitomizes how effective education can be from theory-based to practical application," says Lila Iriburiro Happy, Law & Politics student).

The next exciting steps in the UWill Discover Sustainable Futures project include launching the first UWill Discover journal and selecting four participants from the conference to lead a team to the Model United Nations experience in Washing DC in November of 2023. The team's participation is funded through the UWill Discover Sustainable Futures project.

## **6. Graduate Studies – Dr. D. Kane**

Ontario Graduate Scholarships (OGS) have been awarded for 2023-2024. 95 scholarships were awarded across all Faculties. 81 OGS (including 3 awarded to Indigenous students), 10 QEII-GSST, 4 International. The allocation for Indigenous students (minimum of 2) and International students (n=4) is defined by the Ministry.

The Canada Graduate Scholarships for Masters students from the Tri-Agencies have been distributed (NSERC - 9; SSHRC - 10; CIHR - 2).

Doctoral award announcements have not been made.

**University of Windsor  
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5.8.2:           **Enrolment Management Update**

Item for:       **Information**

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

**[1] Events: Spring Open House and Virtual Transfer Week**

Despite slightly less than ideal weather conditions, the University held another successful Spring Open House (SOH23) on Saturday, April 1<sup>st</sup>, 2023.

SOH23 provided an opportunity to attract and engage future Lancers still deciding where to apply by showcasing our university's academic programs, extracurricular activities, campus facilities, and student services, or converting those who have already been admitted.

Kicking off from the Toldo Lancer Centre, prospective students attended presentations by faculty and staff, participated in student-led campus tours (even in the rain), talked to current students to get a sense of what life is like at the university, and held one-on-one conversations with faculty in the information fair – together creating a positive impression on future students and encouraging them to choose UWindsor for their post-secondary education.

A series of live, online information sessions were held March 20-23, showcasing UWindsor study options for students already having some post-secondary credits. With support from our UG Faculties, the *Transfer Week* series highlighted academic pathways and included campus partners from Academic Advising, Admissions, and Recruitment. Recordings will be shared with transfer prospects and applicants, and the videos are hosted at [Transfer to UWindsor](#).

**[2] Plan your Program**

Incoming first-year students are often unfamiliar with the registration process, which can be confusing and overwhelming. Providing extra support can help them understand the process, ensure that they register for the classes they need, ease their anxieties, and make the transition smoother, enabling them to make informed decisions about which courses to take and avoid making mistakes that could delay their progress toward graduation.

Work is underway with academic programs and the Office of the Registrar to support first-year students in planning their first term of classes to ensure they get off to a good start and stay on track toward their academic goals, including an intentionally designed website, revised registration guide, resources, and options for connecting directly with recruitment, admissions, and academic advising.

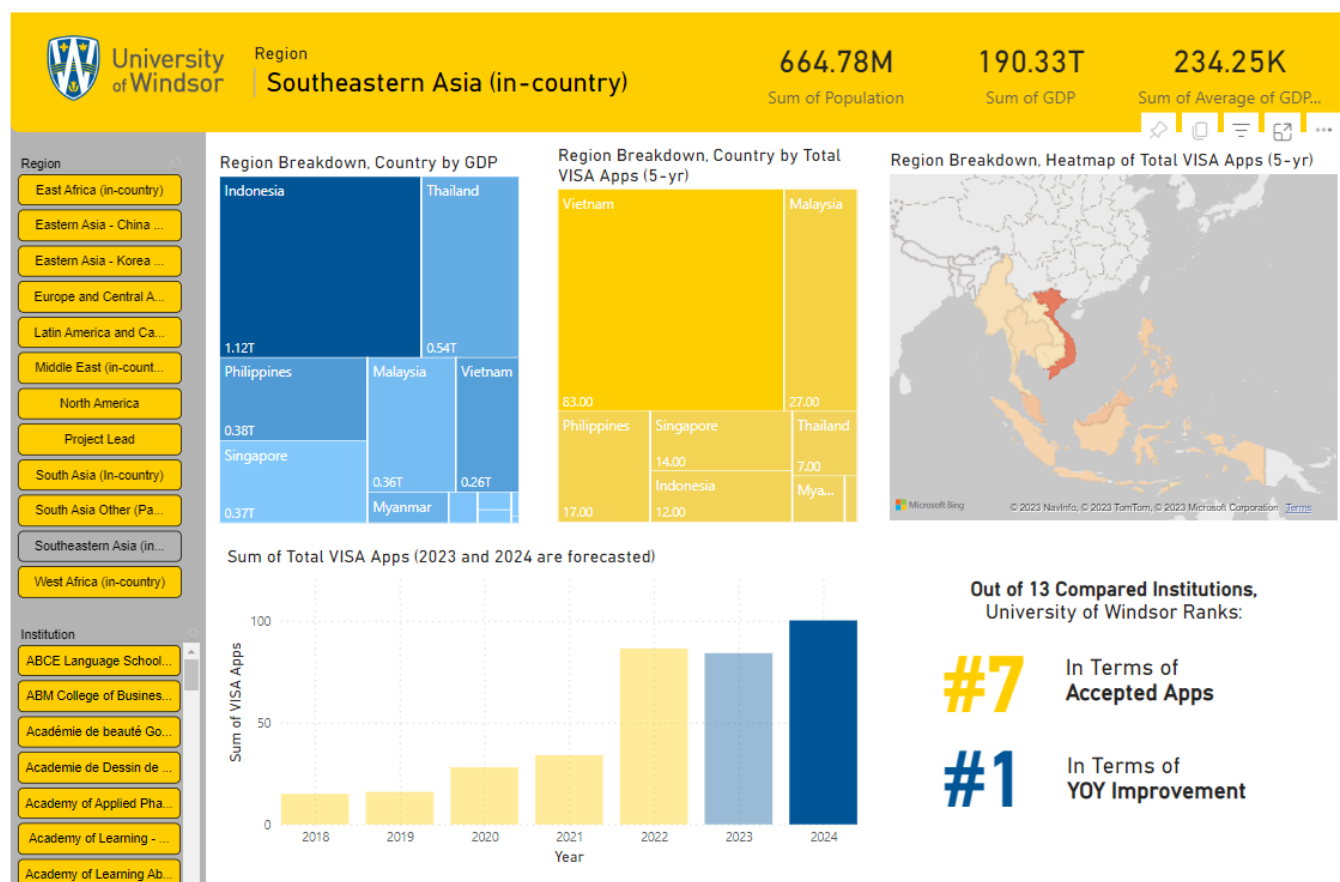
The Plan Your Program site for Fall 2023 entry will launch on May 1st and will be supported by an entire marketing campaign to drive planning and commitment.

For more information, visit: [future.uwindsor.ca/plan-your-program](http://future.uwindsor.ca/plan-your-program)

### [3] International Enrolment Intelligence

A new International Study Permit Dashboard has been developed utilizing historical study permit issuance data from Immigration, Refugee, and Citizenship Canada overlaid with UWindsor application and financial data. Studying study permit data can help develop strategies and tactics to diversify international enrolment. By analyzing this data, universities can gain insights into the countries and demographics they need to target and develop strategies to attract a more diverse range of students.

This dashboard identifies the top source countries for Canadian universities and colleges, compares our performance against other Canadian institutions, and pinpoints regions and countries where we are well-established or have the potential for growth or, in the case of our course-based graduate programs, diversification.



### [4] “Aspire for Student Success\*” – The University of Windsor’s 2023 – 2038 Strategic Enrolment Management Plan - Update

The next phase in developing the institution’s next strategic enrolment management plan is an enrolment visioning workshop, to be held in person on May 18<sup>th</sup>, 2023 and facilitated by Dr. Jim Black.

An enrolment visioning workshop with academic leaders is a valuable tool to support the development of a strategic enrolment management plan. By bringing together academic leaders and enrolment management professionals, this workshop provides an opportunity for collaboration, communication, and strategic planning. This workshop aims to create a comprehensive enrolment plan that aligns with the institution's strategic goals and objectives while improving student success and retention rates.

\* - A potential name for the plan only

## [5] Fall 2023 Enrolment

Overall applicant numbers are stable compared to last year, with noticeable growth in Greater Toronto Hamilton Area and International undergraduate applicants, which includes those attending an Ontario Secondary School. Undergraduate confirmations are up by over 100 compared to Fall 2022, attributed to the higher number of first-choice applicants to UWindsor. While it is still early, graduate confirmations are up for domestic and slightly down for international.

Category (new entrants)	Applicants				Admits				Confirmations			ΔF23-F22
	F23	F22	F21	ΔF23-F22	F23	F22	F21	ΔF23-F22	F23	F22	F21	
Undergraduate, Domestic												
Tri-County Region	2,819	2,812	2,751	0%	2,279	2,300	2,206	-1%	625	594	688	5%
GTHA	2,742	2,504	2,348	10%	1,735	1,709	1,437	2%	53	30	48	77%
Ontario (Other)	1,994	2,130	2,171	-6%	1,357	1,497	1,353	-9%	95	83	95	14%
Outside Ontario	271	483	562	-44%	1,12	193	161	-42%	12	26	28	-54%
Undergraduate, Domestic Total	7,826	7,929	7,832	-1%	5,483	5,699	5,157	-4%	785	733	859	7%
Undergraduate, International	2,660	2,188	1,402	22%	1,277	918	699	39%	220	166	124	33%
Graduate, Domestic	1,282	1,287	1,261	0%	388	358	385	8%	335	262	304	28%
Graduate, International	6,689	5,840	5,983	15%	2,529	2,757	2,648	-8%	1,994	2,049	2,071	-3%

\*Excludes Returning Student Applications (as of April 4, 2023; UWinsite Student data)



**University of Windsor  
Senate**

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

Item for: **Information**

Forwarded by: **Clinton Beckford**

### **1. Employee Engagement Survey Results (2022)**

#### University Wide Action Planning

- The recommended actions emerging from the work of the Employee Engagement Survey Action Group were presented to the Executive Leadership Team in March 2023.
- Communication materials are currently under development with a goal to share with faculty and staff in April – May 2023.

#### Faculty/Department Specific Action Planning

- March 30, 2023 was the deadline for faculties/departments to send action plans to their respective Vice-President.

### **2. Mental Health Strategy for Employees**

- The Campus Mental Health Advisory Committee has completed drafting the Purpose, Vision, and Guiding Principles to guide the overarching way in which we approach mental health.
- The Employee Mental Health Strategy Steering Committee has completed an organizational review/assessment. This process was grounded on the 13 factors that are part of the National Standard of Canada for Psychological Health & Safety. The assessment was informed by the data gathered through the University's strategic planning process, Employee Engagement Survey, and review of policies and programs. This process resulted in the identification of areas of strengths and opportunities for improvement.
- Next steps include the identification of key actions to address emerging opportunities.
- A comprehensive website is under development to keep faculty and staff informed and engaged. More details to follow.

### **3. Equity, Diversity and Inclusion Awards**

- On March 30<sup>th</sup>, over 150 faculty, staff, students came together to celebrate inspiring students, faculty, staff, and alumni who have gone above and beyond their roles to advance equity, diversity, and inclusion at the University of Windsor and beyond.
- Awards were presented to the following individuals/teams:
  - Faculty – Dr. Richard Douglass-Chin, Associate Professor, Departments of English and Women's & Gender Studies
  - Staff – Jaimie Kechego, Learning Specialist, Indigenization, Centre for Teaching and Learning (nominated for her former staff role)
  - Student – Tyrone Sequeira, Dual JD student, Faculty of Law
  - Alumni – Jermain Franklin, Anchor, SportsCentre, TSN, Alumnus BA '99
  - Team/Committee – UWindsor Pride
- The Equity, Diversity, and Inclusion Committee will be meeting later this month to evaluate the awards program and identify any required changes to enhance the program for 2024.

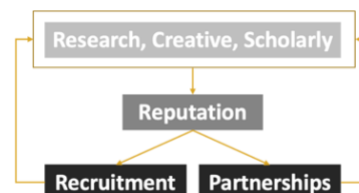
University of Windsor  
Senate

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.

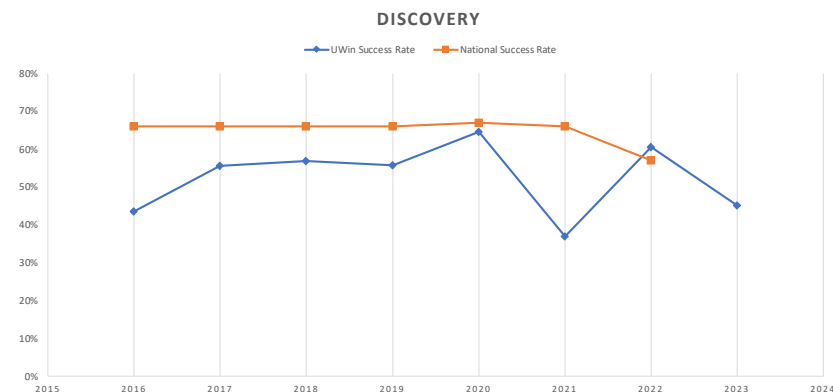


**SAVE THE DATE: May 9, 2023, for the Indigenous Research and Scholarship Forum**

The focus of this forum is to educate the university campus about Indigenous Research, Scholarship, and Methodologies, and to highlight the work of Indigenous Scholars and Students on campus. Keynote addresses will include “Two-eyed seeing” (Elder Albert Marshall), “Indigenous Ways of Coming to Know” (Dr. Kathleen Absolon), and “Decolonizing the Academy: Indigenous Knowledge and Research” (Dr. Marie Battiste). The agenda for the event is attached to this report - please watch for an email with information on how to register for this important forum.

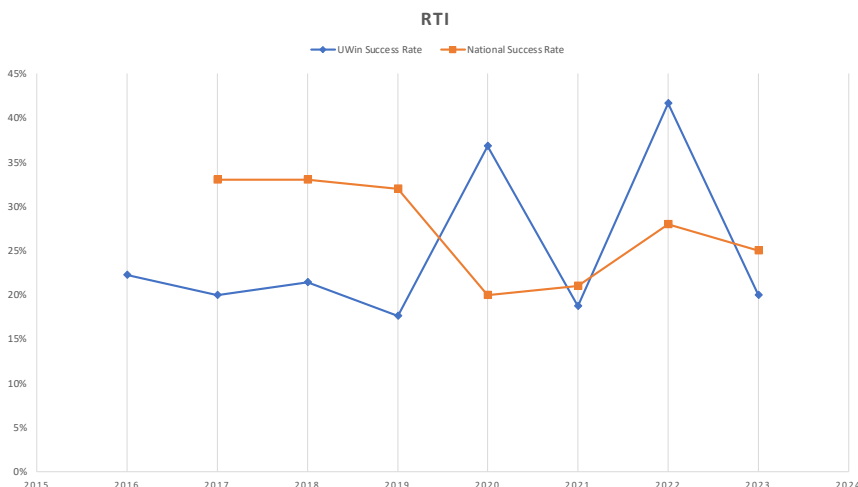
**NSERC Discovery Grant Results**

Results from this year’s NSERC Discovery Grant competition were announced at the end of March. While the results are still embargoed, we wanted to share institutional statistics on our success rate.



**NSERC Discovery Grants Results April 1 2023**

<b>Overall</b>	
Submissions	31
Awarded	14
Percent success	45%
<b>Science</b>	
Submissions	17
Awarded	8 1 ECR
Percent success	47%
<b>Engineering</b>	
Submissions	14
Awarded	6 0 ECR
Percent success	43%

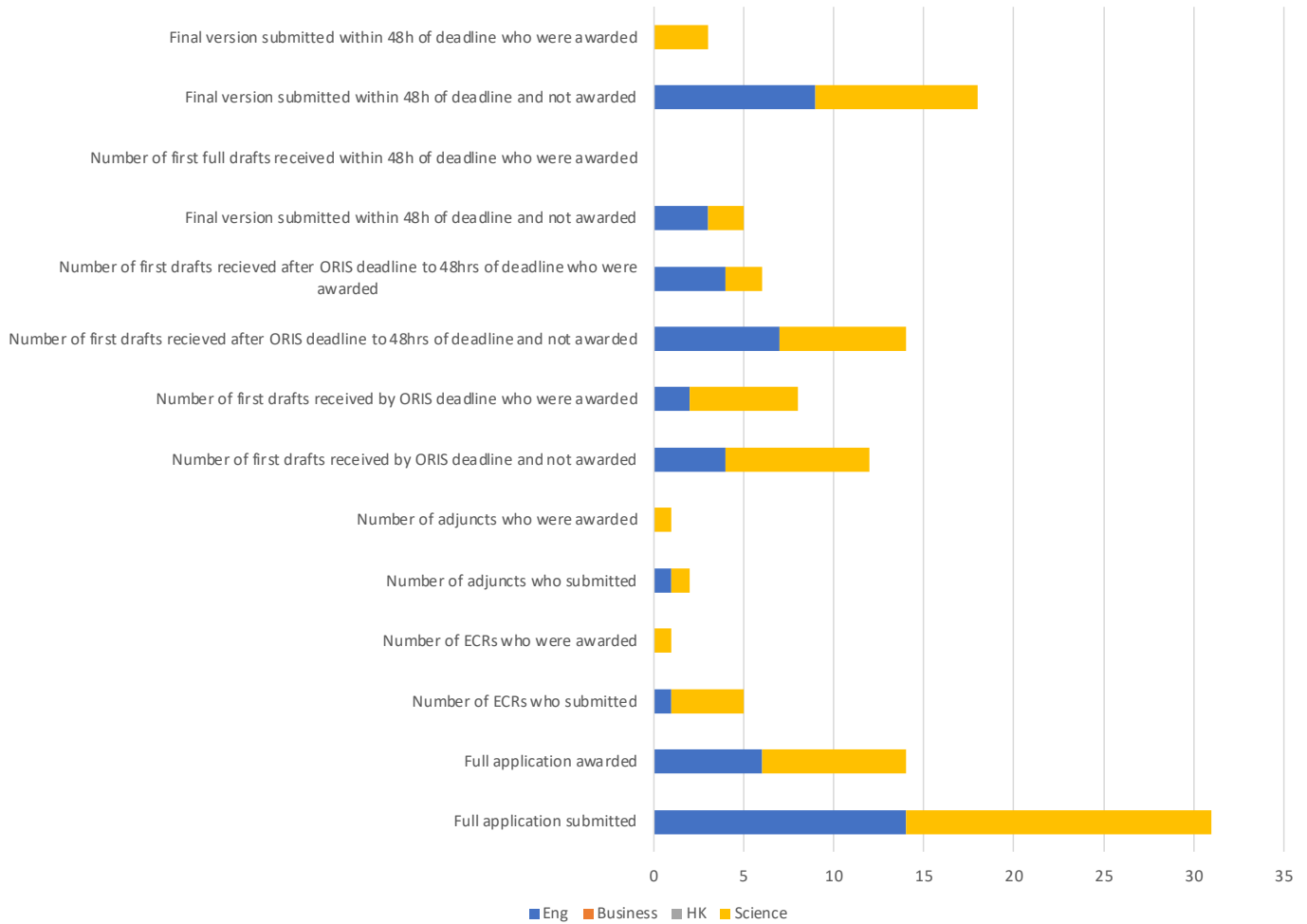


**NSERC RTI Results Competition April 1 2023**

<b>Overall</b>	
Submissions	5
Awarded	1
Percent success	20%
<b>Science</b>	
Submissions	2
Awarded	1
Percent success	50%
<b>Engineering</b>	
Submissions	3
Awarded	0
Percent success	0%

While individual success is partly dependent on the proposed research (discovery versus applied), success is largely dependent on whether a faculty member participates in the internal (Faculty-based) and ORIS reviews of their application. As shown in the chart below, it is important to submit your proposal early to ORIS and participate in internal review programs:

- Only 14% success rate for proposals submitted to ORIS within 48 hours of the application deadline
- Only 30% success rate for proposals submitted after the internal ORIS deadline and 48 hours of the application deadline
- 60% success rate for proposals that were reviewed by ORIS before the internal deadline
- 80% success rate for proposals that were reviewed by ORIS and were part of a Faculty-based internal review program



Indigenous Research and Scholarship Forum

AGENDA

May 9, 2023

**The focus is to educate the university campus about Indigenous Research, Scholarship and Methodologies.  
This forum will also highlight the work of Indigenous Scholars and Students on campus.**

Sunrise Ceremony – Light the Sacred Fire

Breakfast Immediately following Sunrise Ceremony

8:30 AM - 9:00 AM	OPENING ADDRESS AND WELCOME Elder – Myrna Kicknosway Opening President Rob Gordon Chris Houser, VP Research, and Innovation Beverly Jacobs, Senior Advisor to the President on Indigenous Relations and Outreach
9:00 AM – 9:45 AM	Keynote Address #1 – Virtual – Elder Albert Marshall “Two-Eyed Seeing”
9:45 AM – 10:00 AM	Q&A
10:00 am – 12:00 PM	Scholarship from Indigenous Faculty, Staff & Students Part 1 (Each Indigenous faculty/staff member/Student will explain their own Indigenous research, scholarship and/or methodology)
12:00 PM – 12:30 PM	LUNCH BREAK
12:30 PM – 1:15 PM	Keynote Address Recording Dr. Kathleen Absolon “Indigenous Ways of Coming to Know”
1:15 PM – 1:30 PM	Q&A
1:30 PM – 3:00 PM	Scholarship from Indigenous Faculty, Staff & Students Part 2 (Each faculty/staff member/student will explain their own Indigenous research, research scholarship and/or methodology)
3:00 PM – 3:15 PM	BREAK
3:15 PM – 4:00 PM	Keynote Address #3 – Dr. Marie Battiste “Decolonizing the Academy: Indigenous Knowledge and Research”
4:15 PM – 4:30 PM	Q & A
4:30 PM – 4:45 PM	CLOSING REMARKS - Beverly Jacobs, Senior Advisor to the President on Indigenous Relations and Outreach
4:45 PM – 5:00 PM	CLOSING PRAYER – Elder Myrna Kicknosway