



NOTICE OF MEETING

There will be a meeting of the Senate
on **Friday, January 10, 2020 at 2:30 pm**
Room 203 in the Anthony P. Toldo Health Education Centre

AGENDA

- 1 **Approval of Agenda** (Unstarring agenda items)
- 2 **Minutes of the meeting of December 13, 2019** SM191213
- 3 **Business arising from the minutes**
- 4 **Outstanding Business/Action Items**
- 5 **Reports/New Business**
 - 5.1 **Report from the Student Presidents (UWSA, GSS, OPUS)** UWSA/GSS/OPUS-Information
 - 5.2 **Report of the President** Robert Gordon
 - 5.3 **Report of the Academic Colleague** Philip Dutton
Sa200110-5.3
 - 5.4 **Senate Student Caucus** Katherine Quinsey
 - 5.5 **Program Development Committee**
 - *5.5.1 **Program/Course Changes** Greg Chung-Yan-Approval
Sa200110-5.5.1a-e
 - *a) **Bachelor of Commerce (Honours Business Administration)**
Degree Completion Pathway - Chitkara University, Punjab (From C1)
 - *b) **Business – New Course Proposal**
 - *c) **Categories of Courses (Undergraduate) – Minor Program Changes (Form C)**
 - *d) **Communication, Media and Film – Minor Program Changes (Form C)**
 - *e) **Forensics – Minor Program Changes (Form C)**
 - 5.5.2 **Master of Engineering Management (MEM) Online Offering** Greg Chung-Yan-Approval
Sa200110-5.5.2
Major Program Changes (Form B)
 - *5.5.3 **Learning Outcomes** Greg Chung-Yan-Information
 - *a) **School of Creative Arts – BA Honours Media Arts and Culture** Sa200110-5.5.3a-c
 - *b) **Communication Media and Film – Program Learning Outcomes**
 - *c) **Human Kinetics – Program Learning Outcomes**
 - 5.6 **Academic Policy Committee**
 - *5.6.1 **Information Technology Annual Report** Antonio Rossini-Information
Sa200110-5.6.1
 - 5.7 **Senate Governance Committee** Robert Gordon
 - 5.8 **Report of the Provost** Douglas Kneale
 - 5.9 **Report of Vice-President, Research and Innovation** K W Michael Siu
- 6 **Question Period/Other Business**
- 7 **Adjournment** Page 1 of 52

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**

5.3: **Report of the Academic Colleague**

Item for: **Information**

Forwarded by: **Dr. Philip J. Dutton, Academic Colleague.**

Academic Colleagues met in Toronto on December 10 and 11, 2019.

1. Dinner Meeting, December 10, 2019.

**Conversation with Michele Mastroeni, Assistant Professor, OCAD and Leah Zaidi, a former student in the Foresight program:
The evolving role of Ontario universities – A futurist perspective.**

Michele is the director of the Strategic Foresight and Innovation program at OCAD University. Foresight is also known as futurism or futurology. Futurism looks at the whole “system” and looks for small signals and what-ifs to build ideas about possible futures. Such thought is sought after in considerations of machine learning and artificial intelligence and plays a role in military and corporate thinking for the long term. Futurism differs from strategic planning as it builds *possible* futures in the long term, ten to twenty years, rather than the short term of three to five years.

The relevance of futurism to the academic colleagues’ discussions is to consider what universities will look like in twenty years. Will we be colleges? What will the funding situation look like? What has been sustained? What will happen to curiosity driven research? Futurism also looks at “mapping back” and explores how we got to where we are.

Thoughts also include *Future proofing*. Considerations of climate change, democracy, diversity and preservation, and artificial intelligence and algorithms, and how they need to be built into future thinking.

Models outside the university that account for “collision” can be taken into account. PIXAR is an example. How can we generate interdisciplinarity through creative infrastructure and building design that leads to organic meetings and creative synergy?

Considering the Universities’ future, it is not only important to look at the institutions but also to consider the system around them and the system influences.

The above comments to set the scene were abstracted from various areas of the informal discussion. The conversation was wide ranging and beyond the scope of this report.

2. Academic Colleagues Meeting, December 11, 2019.

Dinner debrief

Colleagues had a long discussion, revisiting aspects of the previous evening's conversation.

Summit Debrief

A report on the Universities Summit held in September was provided to academic colleagues by the two academic colleagues present at the Summit. The Summit was a gathering of the major affiliate groups of the COU including executive heads, provosts and vice-presidents academic, vice-presidents of research, chief financial officers, and COU staff. Two academic colleagues were allowed to attend based upon their membership on the executive committee. Academic colleagues as a group were not invited to the summit. The colleagues did, however, have an excellent discussion with the executive heads the day prior to the Summit and perhaps had more influence on thinking in that context.

The Summit itself was mostly a series of brainstorming and discussion sessions on perceptions of society and government and the role of universities now and into the next two decades. The goal was to guide the COU on advocacy matters. A brief synopsis of the agenda is included.

2019 Ontario's Universities Summit Thursday, September 26

Welcome and Introductions

Franco Vaccarino, Guelph and David Lindsay, COU

Understanding Public Opinion

Sean Simpson, Ipsos: A variety of public polling data was presented setting the context for the day's discussions. This confidential information has not been circulated in any reports.

Advocacy Opportunities

Brad Griffin, Ipsos: This session was an Ipsos-research-on-the-fly session gathering information from the participants at the Summit on advocacy priorities. A report to executive heads is expected.

Political Context Panel Discussion

Amanda Galbraith, Principal, Navigator; Rob Leone, Principal, Earncliffe; Martin Regg Cohn, Columnist, Toronto Star; Moderator: Anne Marie Owens, McMaster

The primarily conservative panelists generated much discussion around the current government context, in particular highlighting the departure of the Premier's Chief of Staff, Dean French, and the appointment of Jamie Wallace (former Post Media Vice-President) and turnover in the senior advisor's office. There was a lot of discussion of government perceptions from the panel's perspective.

Keynote Lunch with The Honourable

Ross Romano, Minister of Training, Colleges and Universities

Minister Romano presented a very heartfelt story of his motivations and goals. Unlike previous ministers he has repeatedly reached out to executive heads and gives the impression he is willing to listen. He left a very good impression on the Summit participants.

Panel Discussion on Advocacy Priorities

Benoit-Antoine Bacon, Carleton; Charmaine Dean, Waterloo; Carol McAulay, York; Heather Murchison, Lakehead; Richard Seres, Ontario Tech; Andrew Thomson, Toronto; Charlotte Yates, Guelph; Moderator: David Lindsay, COU

This session focussed on how we communicate our story and what do we need to do as a sector to communicate with the government.

Interactive Discussion on Thought Leadership Priorities

Moderator: Sara Diamond, OCADU

This session was one in which the academic colleagues had significant interaction with the executive heads the previous day. The discussion focussed on *thought leadership* and eight areas of priority. Interactive participation led to prioritization (priority weight in parentheses)

- The value of the University in today's changing world (51)
- the role of government in the postsecondary sector (23)
- the future of postsecondary education (27)
- meeting the needs of a changing student body (33)
- deepening university-business collaboration (colleagues stressed community) (37)
- mitigating risks and increasing efficiencies through system-wide initiatives (18)
- international strategies (29)
- the future of work (30)

Affiliate Consultation Update and Discussion

Eva Busza, COU

This session covered the various affiliate groups and reported on a survey of their priorities and communication. There was clear differentiation of institutions. Although institutions are highly internally differentiated, there is a lot of convergence. Affiliate groups highly value the role of COU in convening them and providing the foundation for policy and advocacy development.

3. COU update

Student Choice Initiative

On November 21, 2019 the Ontario Divisional court struck down the Student Choice Initiative. The government will appeal the decision.

Bill 132 – Better People Smarter for Business Act.

Bill 132 changes two acts. Both Algoma and OCADU have had their degree granting abilities broadened. Algoma can now provide degrees in any area of arts and science, while OCAD is now able to offer BA, MA and PhD programs.

Free Speech Reporting

The Higher Education Quality Council of Ontario reports about 40k campus events and that twenty-one formal complaints were received relating to Free Speech. All complaints were reviewed and none were sent to the Ombudsperson. The conclusion is that there is not a Free Speech problem on campuses in Ontario. Some changes are planned in the reporting template around the area of civility to remove ambiguity.

Collaborative Nursing Programs

Provosts and Deans of Nursing have been working hard on this matter. Expansion of programs is linked to continuing collaboration.

Math Proficiency Test

A change to the College of Teachers act has resulted in requirement for a standardized math test. COU's position is that the policy is both unfortunate and unnecessary. This is under review by COU and presumably Faculties of Education.

4. Overview of the Indigenous Faculty Survey

An overview of preliminary data on the Indigenous faculty survey was provided. A draft will be selectively circulated prior to formal release of the report on the survey.

5. Committee Updates

- *Executive Committee*

Three searches are upcoming. David Lindsay, CEO of the Council of Ontario Universities has decided not to seek reappointment and there will therefore be a search initiated for a new CEO. This is the final year of appointment for the both the Chair, Dr. Franco Vaccarino (Guelph), and Vice-Chair, Dr. Sara Diamond (OCADU), so searches will need to proceed to fill those two positions.

- *Quality Assurance*

Following the Review of the Quality Assurance Framework in 2018, the final version of a revised document, Part I: Quality Assurances Principles for Ontario Universities and the Quality Council, has now been approved by the Review Implementation Committee, OCAV, and the Quality Council. It can be found here:

<https://oucqa.ca/implementation-committee-and-three-expert-panels/>

The amended Membership of the Quality Council no longer includes two representatives selected from among Academic Colleagues. These positions have been replaced with “Two representatives from COU member institutions not otherwise represented on the Quality Council.”

Annual Report on Major Modifications

Each university provides an Annual Report on Major Modifications (*i.e.*, program changes that are approved internally and do not require QC approval). These are typically reviewed at our August meetings, and sometimes result in further information being sought from universities.

We have worked to augment the details listed in the template for these annual reports, to provide a clearer explanation of what prompted the modification and if there are any changes to program learning outcomes. We hope that this will reduce the amount of back-and-forth with universities.

- *Budget and Audit Committee*

COU and OUAC have been audited and there were no identified problems.

6. Other business

The colleagues discussed possible topics for the meeting with the Executive Heads in the spring. Faculty Workload in relation to SMA3 is a topic that can encompass a range of concerns around teaching and student issues and is a likely topic.

In light of colleagues not being invited to the Universities Summit in September and the newly announced removal of academic colleagues from the Quality Council the work and value of academic colleagues again comes into question. This will likely be a topic for a dinner meeting depending on the availability of appropriate guest speakers/mentors. We are considering sending invitation to former colleagues, former Chairs of COU, or perhaps a current Executive Head who can advise us.

Respectfully Submitted,

P.J. Dutton, Academic Colleague.

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*5.5.1a: **Bachelor of Commerce (Honours Business Administration) Degree Completion Pathway - Chitkara University, Punjab (From C1)**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the degree completion pathway for students from Chitkara University, Punjab leading to the Bachelor of Commerce (Honours Business Administration) programs (any specialization and with/without thesis and co-op) be approved. ^

^Subject to approval of the expenditures required.

Rationale/Approvals:

- The proposal has been approved by Faculty Council and the Program Development Committee.
- Supporting documentation for the proposal can be accessed by contacting the University Secretariat at ext. 3325, or through the December 16, 2019 Combined Program Development Committee PDF meeting file posted on the PDC website at: <http://www.uwindsor.ca/secretariat/59/pdc-agendas-and-minutes>. To access this particular item go to 5.2.

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*5.5.1b: **Business – New Course Proposal (Form D)**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the following course addition be approved:*
MSCI-2250. Introduction to Project Management ^

^Subject to approval of expenditures required.

Rationale/Approvals:

- The proposed new course has been approved by Departmental Councils, Faculty (Coordinating) Council, and the Program Development Committee.
- Supporting documentation for the proposed new course can be accessed by contacting the University Secretariat at ext. 3325, or through the December 16, 2019 Combined Program Development Committee PDF meeting file posted on the PDC website at: <http://www.uwindsor.ca/secretariat/59/pdc-agendas-and-minutes>. To access this particular item go to 5.3.

**University of Windsor
Program Development Committee**

*5.5.1.c: **Categories of Courses (Undergraduate) - Minor Program Change (Form C)**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the undergraduate Categories of Courses be changed in accordance with the program/course change forms.^

^Subject to approval of the expenditures required.

Rationale/Approvals:

- The proposed changes have been approved by Faculty (Coordinating) Council(s) 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 December 16, 2019 Combined Program Development Committee PDF meeting file posted on the PDC website at: <http://www.uwindsor.ca/secretariat/59/pdc-agendas-and-minutes>. To access this particular item go to 5.4.

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*5.5.1d: **Communication, Media and Film – Minor Program Changes (Form C)**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION 1: That the degree requirements for the General Communication, Media, and Film, the Honours Communication, Media, and Film, the Combined Honours Communication, Media and Film, the Concurrent General Bachelor of Arts (Communication, Media and Film)/Bachelor of Education, the Minor in Communication, Media, and Film, and the Major and Minor Concentrations - Bachelor of Interdisciplinary Arts and Science (IAS) - Communication, Media and Film be changed in accordance with the program/course change forms.^

MOTION 2: That the Bachelor of Arts (Honours Drama and Communication, Media, and Film) be discontinued.^

^Subject to approval of the expenditures required.

Rationale/Approvals:

- The proposed changes have been approved by the appropriate Departmental Councils, the FAHSS Faculty 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 December 16, 2019 Combined Program Development Committee PDF meeting file posted on the PDC website at: <http://www.uwindsor.ca/secretariat/59/pdc-agendas-and-minutes>. To access this particular item go to 5.5.

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*5.5.1e: **Bachelor of Forensic Science - Minor Program Change (Form C)**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the degree requirements for the Bachelor of Forensic Science be changed according to the program/course change forms.^

^Subject to approval of the expenditures required.

Rationale/Approvals:

- The proposed changes have been approved by the appropriate Committee and Faculty (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 December 16, 2019 Combined Program Development Committee PDF meeting file posted on the PDC website at: <http://www.uwindsor.ca/secretariat/59/pdc-agendas-and-minutes>. To access this particular item go to 5.6.

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5.5.2: **Master of Engineering Management (MEM) - Major Program Change (Form B)**

Item for: **Approval**

Forwarded by: **Program Development Committee**

MOTION: That the Online Master of Engineering Management (MEM) program be approved. ^

^Subject to approval of the expenditures required.

Rationale/Approvals:

- The proposal has been approved by the Odette School of Business Council, the Faculty of Engineering Coordinating Council, the Faculty of Graduate Studies Council, the Provost, and the Program Development Committee
- *See attached.*

**PROGRAM DEVELOPMENT COMMITTEE
MAJOR PROGRAM CHANGES
FORM B**

A. Basic Program Information

| | |
|---|--|
| Faculty(ies) | Odette School of Business and the Faculty of Engineering |
| Department(s)/School(s) | Odette School of Business and the Faculty of Engineering |
| Name of Program as it Will Appear on the Diploma (e.g., Bachelor of Arts Honours Psychology with thesis) | Master of Engineering Management |
| Proposed Year of Offering* [Fall, Winter, Spring]: <i>*(subject to timely and clear submission)</i> | Winter 2021 |
| Mode of Delivery: | Mostly online |
| Planned steady-state Student Enrolment (per section B.4.2) | 100 students |
| Normal Duration for Completion: | Six (6) semesters or 24 months of study |
| Will the program run on a cost-recovery basis? | Yes |

B. Major Program Changes - Overall Plan

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

Please provide a rationale for the proposed change, including a brief statement about the direction, relevance and importance of the revised program. Describe the overall aim and intended impact of the revised program. Describe the consistency of the revised program with the institution's mission, goals and objectives as defined in its strategic plan. (to view the strategic plan go to: www.uwindsor.ca/president)

The objectives remain unchanged from the original program: "This program aims to provide engineering students with skills and knowledge to manage projects, resources, people and processes within technical environments. By utilizing appropriate business practices, engineers can become managers and administrators within their field of practice. As such, the curriculum will provide business and management foundation within a technical context to allow students to understand all aspects of engineering management. Graduates from this program will have completed sufficient courses that will allow them to take on senior roles in project, operations, manufacturing and facility management. As well, given the diversity of non-core courses within the program, students may be able to occupy marketing and product management roles and fulfill duties that combine sales, finance and economics within technology enterprises. Furthermore, those who are interested in pursuing entrepreneurial career, the program offers basic foundation to conduct essential feasibility studies, business planning and financial modeling tasks. This program is also aligned with the university's strategic plan to offer quality education and encourage independent learning by allowing students to apply business practice to solving practical problems."

B.2 Changes to Program Content (QAF Section 2.1.4)

Evidence that the revised curriculum is consistent with the current state of the discipline or area of study.

In addition to offering the current MEM program on campus, a revised MEM program with online classes is to be offered as well. The following table highlights the differences between the two program offerings.

| | Current On-campus MEM | Proposed Online MEM Option |
|---------------------------------|--|---|
| Class time and frequency | Friday evenings and Saturdays all day every second weekend (total 6 sessions a semester) | Workshops and first session of classes to be offered on-campus (mandatory residency period), all day Saturday and Sunday. The remaining 5 sessions to be delivered entirely online each term. |
| 4 Workshops | First weekend of each term | |
| Exams (if any) | On-campus | Online |

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| | |
|--|-----------|
| Program duration (2 years) | No change |
| Curriculum/course sequence | No change |
| Admission/graduation requirements | No change |

Students can complete all degree requirements of the revised program, and only need to attend 4 weekend sessions on campus.

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

State the unique or innovative curriculum, program delivery, or assessment practices distinguishing the revised program from existing programs elsewhere.

The program curriculum and learning outcomes remain the same; however, the delivery mode will change to mostly online delivery and assessment. This unique approach will allow higher degree of flexibility and attract larger segments of full-time working engineers who strive to upgrade their background and aim of managerial roles. This will certainly cater to the growing need of this program outside the Windsor-Essex region.

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

The University of Windsor is committed to building stronger, more meaningful partnerships with Indigenous students, scholars and communities. In developing or revising this program, how has consideration been given to incorporating Indigenous (First Nations, Métis, or Inuit) content, perspectives, or material into the curriculum?

Based on ongoing discussions and access to resources provided to members of standing committees at the Odette School of Business, a process is being undertaken to inform faculty engaged in the MEM program of how to systematically incorporate First Nations, Metis and Inuit (FNMI) perspectives into the program. In consultation with FNMI partners, ongoing consideration is being given to opportunities such as innovation and design to solve real world problems and sound business management practices in an FNMI environment. Collaborative efforts are ongoing between the Faculty of Engineering and the Odette School of Business to determine how best to incorporate an FNMI pedagogy and content (e.g., CTL's Nanadagikenim Grant Application). In addition, consideration is being given to how to recruit, retain and deliver online courses to overcome limitations imposed by the current infrastructure to provide equal access to qualified students.

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

Explanation of the appropriateness of the proposed new name and degree designation for the program content and current usage in the discipline

No changes to program/degree name. The current program name "Masters of Engineering Management" uniquely distinguishes its holders as those with technical and management skillset and academic foundation.

B.4 DEMAND FOR THE MODIFIED PROGRAM

B.4.1 Expected Impact of the Proposed Changes to Student and Market Demand

Describe the tools and methodology used to conduct the market assessment in support of the proposed program revisions. Provide Quantitative evidence of student and market demand for the revisions to the program, both within and outside the local region (e.g., responses/statistics from surveys, etc.).

Interest and demand for the proposed program changes have been demonstrated by means of surveys via the Qualtrics web-based survey tool. The survey was sent to 5,000 email addresses of University of Windsor engineering alumni since 1990. Approximately 200 valid responses were collected (~4% response rate). The findings strongly support the hypothesis that engineering students are interested in pursuing graduate studies prefer an online delivery mode. We expect to attract larger population than we did previously for the on-campus program as students reside outside the region (within driving distance) will find this program convenient and unique. The market survey results are attached in Appendix C. The following was found in summary:

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- Participants (69% aged 25-34 years, 82% males, 60% reside in Windsor-Essex, 36% possess Master’s degree)
- Of those that only have a Bachelor’s Degree, 73% plan to enrol in a graduate program in the next 3 years
- 80% of participants have taken at least 1 online course in the past
- 89% of participants would likely be interested in enrolling in an online Master’s program
- 60% of participants preferred to enrol in a program that offers synchronous (live) lectures online (compared to asynchronous recorded lectures)
- 72% of participants thought an online Master’s program would probably deliver the same value as conventional on-campus programs
- The top reasons why participants would prefer an online delivery are: convenience and ability to travel for work while studying

It is expected that the online offering of the MEM program to attract as many as the on-campus offering at least.

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

Expected proportion (percentage) of domestic and international students. For graduate programs, identification of undergraduate or master’s programs from which students would likely be drawn.

The program will mainly target domestic students. However, up to 25% of enrolment may be international students.

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

Provide details on projected enrolments for the revised program in the following tables.

For Co-op programs: normally an annual intake of a minimum of 20 students is required for new co-op programs or programs with other experiential learning component.

| <i>Projected enrolment levels for the first five years of operation of the revised program. (If the program is in operation, use actual and projected data.)</i> | First Year of Operation | Second Year of Operation | Third Year of Operation | Fourth Year of Operation | Fifth Year of Operation (Steady-state enrolment overall) |
|--|-------------------------|--------------------------------|--------------------------------|--------------------------------|--|
| <i>In the regular program (non-co-op)¹</i> | 50 new | 50 new + 50 2 nd yr |
| <i>In the co-op/experiential learning stream (if applicable)</i> | N/A | N/A | N/A | N/A | N/A |
| <i>For co-op options: projected number of international students enrolled in the co-op stream</i> | N/A | N/A | N/A | N/A | N/A |
| <i>Annual projected student intake into the first year of the revised program:</i> | | | | | 50 new students every year |
| <i>Annual projected student intake into the first year of the co-op/experiential learning version of the revised program:</i> | | | | | N/A |

B.4.3 New Involvement in a Collaborative Program/Changes to Collaborative Program (QAF section 1.6)

If this is a new collaborative program with another college/university, or revision to a collaborative program, identify partners and institutional arrangements for reporting eligible enrolments for funding purposes.

N/A

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B.4.4 Evidence of Societal Need for the Revised Program (Ministry section 6)

Describe the tools and methodology used to assess societal need.

Elaborate on the

*1) dimensions of (e.g., socio-cultural, economic, scientific, or technological),
2) geographic scope of (e.g., local, regional, provincial, or national), and
3) anticipated duration of, and trends in,
societal need for graduates of the modified program*

Provide evidence that the proposed program revisions respond to societal need for graduates of the revised program and/or changes in the field, including sources of data and expert input or feedback collected to support this change in direction.

In addition to the evidence provided by the survey results as reported in B.4.1 are other evidence includes the following: recent trends in academia in offering online programs (see section B.4.5). Also, within our region, the proposed online MEM program will be competitive as it is offered in this flexible and practical format, and uniquely caters to the needs of engineers with busy schedules. In addition to surveys, continuous support for the MEM program is exhibited through recent information sessions and conversations at the following companies:

- **CenterLine (Windsor) Ltd.:** coordinated by Jim Komar, Vice President of Human Resources
- **ENWIN Utilizes Ltd:** coordinated by Rosana Kemsley, Manager Human Resources Services
- **FCA Canada Inc.:** coordinated by Marie Mills, P.Eng, Canadian Strategic Research & Collaboration
- **Valiant Corp.:** coordinated by Mike Van Nie, Senior Human Resources Manager

The above sessions created awareness about the MEM program and sense the demand for a potential online offering of the program. In addition, and with the aid of the Centre for Career Education of the University of Windsor, the need for the original on-campus MEM program was endorsed by a labour market analysis to highlight various socio-cultural and economic dimensions justifying the need for a graduate program in engineering management. The report also assesses the national and provincial employment outlook for graduates of the Masters of Engineering Management Program. The report noted an **Above Average** likelihood of finding stable work in the following related occupations: manufacturing managers, computer manager, engineering management, utilities managers, etc.

B.4.5 Duplication (Ministry section 7)

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

There is no duplicate program in Ontario to the one proposed here.

B.4.5.1 Demonstrate that Societal Need and Student Demand Justify Duplication (Ministry section 7)

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

There is no duplicate program in Ontario to the one proposed here. However, the variety of other online programs demonstrate the need for online offering region. According to eCampusOntario, there are 13 Master degree programs offered entirely online, and 19 Master degree programs offered mostly online in Ontario, including the following degrees:

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| Education/Art/Social | Business/Management | Engineering/IT | Health/Science | Interdisciplinary |
|---|--|---|--|--|
| <ul style="list-style-type: none"> • Master of Education • Master of Mathematics for Teachers • Master of Social Work • Master of Public Safety • Master of Arts in Leadership | <ul style="list-style-type: none"> • Master of Business Administration • Master of Management Sciences | <ul style="list-style-type: none"> • Master of Computer Science • Master of Power Engineering | <ul style="list-style-type: none"> • Master of Science in Nursing • Master of Science in Aging and Health • Master of Public Health • Master of Health Informatics • Master of Health Evaluation • Master of Science in Healthcare Quality | <ul style="list-style-type: none"> • Master of Environment and Business • Master in Health Systems Leadership and Administration |

The above diversity and quantity of online programs demonstrates the recent demand for online programming and flexible distant education in Ontario. The total number of online Master degrees and post-graduate certificate programs across Canada is 136 according to DistanceLearningPortal.com.

Similar Online Programs:

- **Master of Management Sciences (University of Waterloo):** offered entirely online by the Faculty of Engineering and the Department of Management Science. The program is not uniquely designed to enrol students with engineering background as applicants with any quantitative background (math, etc.) can apply. Also, the program curriculum does not include a capstone project.
- **Master of Science in Engineering Management (University of Michigan-Dearborn):** the program is offered on campus as well as offline. The structure is similar. The tuition fees for the online offering is around \$22,000 USD, which makes it more expensive than the proposed online MEM program here.

Similar On-Campus Programs:

The following two programs validate the need for engineering management education in Ontario but neither are offered online:

- **Master of Engineering Management (Concordia University):** this program will launch in fall 2020 and is offered on campus only. This program is offered by the John Molson School of Business and the Gina Cody School of Engineering and Computer Science, jointly. Course to be offered during the day mainly.
- **Master of Engineering in Engineering Management (University of Ottawa):** this program is offered by the Faculty of Engineering and the Telfer School of Management, mainly on campus but a few courses can be taken online. Most courses are offered during the day and the program is not specifically designed to attract full-time working engineers.

B.5 RESOURCES

*[The resource impact of a proposal is almost never neutral. Note: Proposers must also complete and submit the attached **Budget Summary** (Appendix A) with the revised program proposal.]*

B.5.1 Resources Available

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

Describe, in general terms, all faculty and staff resources (e.g., administrative, teaching, supervision) from all

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affected areas/departments currently available and actively committed to support the program change(s). Please do not name specific individuals in this section.

Currently, there is sufficient faculty/staff resources to teach/administer the current MEM program on campus. In discussion with the deans from engineering and business, there are currently enough resources to support the current and an online version of the MEM program for a pilot offering for one year. To facilitate resource allocation and program administration, the proposed revised MEM program will have a Winter (January) start only, while the current on-campus MEM program continues to accept students in the fall only. This will allow the same current faculty members to teach again in the revised program, in the following term. Using the same faculty resources will ensure consistency in program quality.

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

Complete the following table listing faculty members in the AAU offering the program as well as faculty members from other AAUs who are core to the delivery of the revised program. Indicate in the table the involvement of each faculty member in the revised and existing program(s) offered by the AAU.

| Faculty Name and Rank (alphabetical) | Graduate Faculty member (for graduate programs only) | Program Affiliation: indicate faculty affiliation to the EXISTING program(s) | Program Affiliation: indicate faculty affiliation to the REVISED program |
|--|--|--|--|
| Category 1: Tenured Professors teaching exclusively in the AAU offering the program | | | |
| Dr. Talal Al-Hayale BUSI-8310: Financial & Managerial Accounting | Odette School of Business | Accounting | |
| Dr. Zbigniew Pasek INDE-8390: Work Organization: Analysis and Design | Faculty of Engineering | Mechanical, Automotive and Materials Engineering | |
| Dr. Peter Frise BUSI-8400/MECH-8040: Engineering Management Capstone | Faculty of Engineering | Industrial and Manufacturing Systems Engineering | |
| Category 2: Tenure-track Professors teaching exclusively in this AAU | | | |
| Dr. Beth-Anne Schuelke-Leech INDE-8430: Product Innovation and Design Management | Faculty of Engineering | Industrial and Manufacturing Systems Engineering | |
| Dr. Mahmood Mohebshahedin BUSI-8300: Applied Finance | Odette School of Business | Finance | |

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| | | | |
|--|---------------------------|--|--|
| Category 3: Ancillary Academic Staff such as Learning Specialists Positions | | | |
| Mr. Ali AbdulHussein ELEC-8900: Technology Entrepreneurship | Odette School of Business | Strategy and Entrepreneurship | |
| Category 4: Limited-term Appointments teaching exclusively in this AAU | | | |
| Dr. Behnam Naderi GENG-8020: Engineering Project Management | Faculty of Engineering | Mechanical, Automotive and Materials Engineering | |
| Dr. Fouzia Baki INDE-8340: Engineering Design, Methodology & Applications | Faculty of Engineering | Mechanical, Automotive and Materials Engineering | |
| Category 5: Tenure or tenure-track or LTA professors involved in teaching and/or supervision in other AAUs, in addition to being a member of this AAU | | | |
| ... | | | |
| Category 6: Sessionals and other non-tenure track faculty | | | |
| Mr. Imran Abdool BUSI-8300: Applied Finance | Odette School of Business | Economics | |
| Dr. Alfie Morgan STEN-8980: Strategic Management | Odette School of Business | Strategy and Entrepreneurship | |
| Ms. Mary Meanwell BSMM-8130: Managing Employees | Odette School of Business | | |

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

Assess faculty expertise available and actively committed to supporting the revised program. Provide evidence of a sufficient number and quality of faculty who are qualified to teach and/or supervise in the revised program, and of the appropriateness of this collective faculty expertise to contribute substantially to the revised program.

Include evidence (e.g., qualifications, research/innovation/scholarly record) that faculty have the recent research or professional/clinical expertise needed to:

- *sustain the program*
- *promote innovation, and*
- *foster an appropriate intellectual climate.*

Faculty CVs are provided in Appendix B. CVs include evidence of faculty ability to sustain the program and demonstrate their qualification, research interests and scholarly record.

B.5.1.1c 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 revised program.

Sessional instructors will deliver several courses in this program. At steady states, it is expected that up to 3 course sections be delivered by sessional instructions.

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B.5.1.1d Graduate Faculty Qualifications and Supervisory Loads (FOR GRADUATE PROGRAMS ONLY)

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.

This is a non-thesis program and therefore, research supervision will not be required.

B.5.1.1e Financial Assistance for Graduate Students (where appropriate) (FOR GRADUATE PROGRAMS ONLY)

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.

Other than the entrance scholarship, which is granted to candidates admitted before a certain deadline on academic merit, no financial assistance to be offered to students.

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

Provide 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, including for example: staff support, library, teaching and learning support, student support services, space, equipment, facilities

- GA/TA

In addition to currently faculty/staff resources employed for the existing on-campus MEM program, new resources will be also drawn from the Office of Open Learning to support the development/re-design of certain courses to fit the online instruction setting. The OOF has committed to support up to 2 course buy-out to support course re-design.

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

Describe the reliance of the proposed program revisions on existing resources from other campus units, including for example: existing courses, equipment or facilities outside the proposer's control, external resources requiring maintenance or upgrading using external resources

Provide relevant details.

N/A

B.5.1.3 Anticipated New Resources (QAF sections 2.1.7, 2.1.8 and 2.1.9; Ministry section 4)

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

Support by the Office of Open Learning (OOL) has already been requested and committed.

B.5.1.4 Planned Reallocation of Resources and Cost-Savings (QAF section 2.1.7 and 2.1.9; Ministry section 4)

Describe all opportunities for 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

B.5.1.5 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 run the revised program.*

| | |
|-----------------|---|
| Faculty: | N/A |
| Staff: | To support/troubleshoot online classes. Technical support (1 part-time staff) is required to be available during class times to help instructors with online instruction and lecture live broadcasting. |

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| | |
|----------------|--|
| GA/TAs: | 1 GA unit for each course offering to assist instructors |
|----------------|--|

B.5.1.5b Additional Institutional Resources and Services Required by all Affected Areas or Departments

*Describe all **additional institutional resources and services** required by 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.*

| | |
|--|--|
| Library Resources and Services: | N/A |
| Teaching and Learning Support: | N/A |
| Student Support Services: | N/A |
| Space and Facilities: | N/A |
| Equipment (and Maintenance): | As classes are delivered online, instructors will need high quality headsets with microphones. |

C. Program Details

C.1 Admission Requirements (QAF section 2.1.2)

Describe new or changes to

- *program-specific admission requirements,*
- *selection criteria,*
- *credit transfer,*
- *arrangements for exemptions or special entry, and*
- *alternative admission requirements, if any, for admission into the program, such as minimum average, additional language requirements or portfolios, recognition of prior work or learning experience (and how this will be assessed), etc.*

Should read: Admission requirements remain unchanged as follows:

- Bachelor of Applied Science degree in engineering (or other undergraduate degree (or equivalent) with related technical background) with an average of at least B from an accredited university
- Proof of English language proficiency IELTS: 7.0 / iBT TOEFL: 100
- Two reference letters
- CV/Resume
- Statement of purpose letter
- Preference will be given to candidates who have at least two years of relevant work experience in engineering or a related field

Winter semester intake only.

C C.1.1 Admission Requirements and Attainment of Learning Outcomes (QAF section 2.1.2)

Demonstrate that admission requirements for the revised program are sufficient to prepare students for successful attainment of the intended learning outcomes (degree level expectations) established for completion of the program.

The admission requirements of the program didn't change from the original version. Graduates of the original, on-campus program have demonstrated strong ability to advance their career as 57% of them have secured jobs with higher ranks and salaries (according to program exit survey), which is the key objective of the program.

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

Provide evidence of a program structure and faculty research that will ensure the intellectual quality of the student experience.

NB: For graduate programs, provide evidence that each graduate student in the revised program is required to take a minimum of two-thirds of the course requirements from among graduate-level courses. Include course requirements with course numbers and course names.

*Identify in **BOLD** and **STRIKETHROUGH** the changes to program requirements.*

Degree requirements remain unchanged as follows:

Total courses: Students are required to complete 9 courses or a total of 30 credits for graduation. Courses will be divided into A) Core Courses (6 courses for a total of 18 credits), B) Non-core Courses (2 courses for a total of 6 credits), and C) Capstone Project Course (two semester course for a total of 6 credits)

Degree requirements:

A) Core Courses: all students need to complete the following 6 mandatory core business and engineering courses before taking any non-core courses. Students need to attend the first weekend/session of classes on campus, while the remaining 5 sessions are to be offered entirely online.

Core Business Courses:

BUSI-8310. Financial and Managerial Accounting
BUSI-8300. Applied Finance
STEN-8980. Strategic Management

Core Engineering Courses:

INDE-8430. Product Innovation and Design Management
INDE-8390. Work Organization: Analysis and Design
GENG-8020. Engineering Project Management

B) Non-core Courses: students select 1 non-core course from each of the following course groups. Students need to attend the first weekend/session of classes on campus, while the remaining 5 sessions are to be offered entirely online.

Non-core Business Courses (1 from):

MSCI-8040. Operations Management
BUSI-8050. Marketing Management
STEN-8820. Manufacturing Strategy
BSMM-8130. Managing Employees
STEN-8920. Special Topics (depending on semester)

Non-core Engineering Courses (1 from):

INDE-8340. Engineering Design, Methodology & Applications
INDE-8420. Supply Chain Management and Logistics
ENVE-8500. Sustainability: Principles and Practice
ELEC-8900-2. Electronic Commerce
ELEC-8900-40. Technology Entrepreneurship

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C) Capstone Project Course (entirely online at this time): all students must complete a capstone course offered jointly by the Faculty of Engineering and Odette School of Business. This new course, BUSI-8400/MECH-8040 Engineering Management Capstone allows students to practice their theory by completing one of: **1)** an engineering management report **2)** engineering feasibility study, or **3)** new venture business plan. Coordinators and associate deans from engineering and business will appoint instructors for this course. The teams and projects in this course should be managed in a manner similar to the existing corporate MBA project and with emphasis on student mentorship and project supervision by subject matter experts.

D) 4 Mandatory Workshops (to be delivered on-campus during the first weekend in each term): students are required to complete all the following workshops before the end of the program:

1. **Year 1 Winter Term:** Team building and development
2. **Year 1 Summer Term:** Intellectual property with focus on engineering/technology
3. **Year 1 Fall Term:** Negotiation skills and practices
4. **Year 2 Winter Term:** Pre-capstone camp

Courses used to calculate the major average are: all courses

Description of thesis option (if applicable): No thesis is required for the completion of this program.

Description of experiential learning components (if applicable): The Engineering Management Capstone project course will offer students the opportunity to work on solving practical problems through collaborating with industry or working on developing new venture plans.

Explanation of how credit will be awarded for the experiential learning component (length of component, credit weighting, etc.), if applicable: No experiential learning component is offered in this program.

Is the completion of the experiential learning/co-op component a requirement of the program? No experiential learning component is offered in this program.

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

C.3.1.1 Normal Duration for Completion

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

Normal duration of completion for the program is 6 semesters (24 months).

C.3.1.2 Program Research Requirements

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

No student research is conducted during this program.

C.3.1.3 New or Changes to Fields in a Graduate Program (optional)

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

N/A

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C.3.2 For All Program Proposals

C.3.2.1 New or Changes to Standing Required for Continuation in Program

*Minimum average requirements for continuation in the program.
Must conform to the regulations for standing required for continuation in the program as set out in Senate policy.*

Specify new or changes to standing required for continuation in the experiential learning option or co-op option of the revised program, where applicable.

No change. The proposed revised program will use the same GPA requirements for continuation as are presently in use in graduate programs in Engineering at the University of Windsor.

C.3.2.2 New or Changes to Standing Required for Graduation

*Minimum average requirement to graduate in the program.
Must conform to the regulations for standing required for continuation in the program as set out in Senate policy.*

Specify new or changes to standing required for graduation in the experiential learning option or co-op option of the revised program, where applicable.

No change. The proposed revised program will use the same GPA requirements for graduation as are presently in use in graduate programs in Engineering at the University of Windsor.

C.3.2.3 New or Changes to Suggested Program Sequencing

Provide suggested program sequencing for each year of the revised program, ensuring that all pre-requisites are met in the sequencing.

Where applicable, provide work/study/placement sequencing for each year of the experiential learning/co-op version of the revised program. Please ensure that all pre-requisites are met in the sequencing.

For Co-op programs: The proposed work/study sequence or alternative arrangement should allow for year-round availability of students for employers (if appropriate) and, wherever possible, should meet the guidelines for co-operative education as set out by the Canadian Association for Co-operative Education (see Policy on Co-op Programs).

The course sequence is the same as the original MEM program (below), with two key differences: 1) the program only offers a Winter (January) start, and 2) the first weekend of each of the first four semesters is to be delivered on-campus while all other 5 weekends, classes are delivered online. The capstone course is delivered entirely online.

| Year 1 | Semester 1 (Winter) | Semester 2 (Summer) | Semester 3 (Fall) |
|------------------|--|--|---|
| On-campus | First weekend of classes + workshop 1 | First weekend of classes + workshop 2 | First weekend of classes + workshop 3 |
| Online | 5 weekends of classes BUSI-8310: Financial and Managerial Accounting INDE-8430: Product Innovation and Design Management | 5 weekends of classes BUSI-8300: Applied Finance INDE-8390: Work Organization: Analysis and Design | 5 weekends of classes STEN-8980: Strategic Management GENG-8020: Engineering Project Management |
| Year 2 | Semester 4 (Winter) | Semester 5 (Summer) | Semester 6 (Fall) |
| On-campus | First weekend of classes + workshop 4 | N/A | |

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| | | |
|---------------|-----------------------------|--|
| Online | Non-core Business course | BUSI-8400/MECH-8040: Engineering Management Capstone |
| | Non-core Engineering course | |

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

There are no changes nor new learning outcomes.

| Program Learning Outcomes (Degree Level Expectations) <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i> | Characteristics of a University of Windsor Graduate | OCGS-approved Graduate Degree Level Expectations |
|---|---|--|
| <u>At the end of this program, the successful student will know and be able to:</u> | <u>A UWindsor graduate will have the ability to demonstrate:</u> | |
| A. Apply relevant theories, frameworks, analytical techniques and principles of business to resolve project management and commercialization issues. | A. the acquisition, application and integration of knowledge | 1.Depth and Breadth of Knowledge 2.Knowledge of Methodologies 3. Application of Knowledge 5.Awareness of Limits of Knowledge |
| B. Undertake research to define business issues associated with research, development, and commercialization. Locate and evaluate the relevant data to inform the resolution of specific business issues. | B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy) | 1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits Knowledge |
| C. Apply an evidence-based decision model to evaluate and recommend the best available alternative to resolve research, development, commercialization and project management business issues. | C. critical thinking and problem-solving skills | 1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge |
| D. Analyze both qualitative and quantitative data and findings by applying appropriate techniques to resolve strategic and operational issues arising from business activities of research, development and commercialization. | D. literacy and numeracy skills | 4. Communication Skills 5. Awareness of Limits of Knowledge |
| E. Recognize differences among the ethical and legal environments to evaluate and exercise responsible social behaviors in the context of project management and commercialization of applied technology ventures and projects. | E. responsible behaviour to self, others and society | 5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity |

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| Program Learning Outcomes (Degree Level Expectations) <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i> <u>At the end of this program, the successful student will know and be able to:</u> | Characteristics of a University of Windsor Graduate <u>A UWindsor graduate will have the ability to demonstrate:</u> | OCGS-approved Graduate Degree Level Expectations |
|--|--|---|
| F. Communicate persuasively and professionally through a variety of appropriate media to meet the information needs of various audiences who will decide on provision of resources to promote achievement of technology ventures and projects (e.g. research and development, commercialization etc.). | F. interpersonal and communications skills | 4. Communication Skills 6. Autonomy and Professional Capacity |
| G. Identify and apply appropriate team skills to constructively deploy diversity within teams to effectively and efficiently conduct research, development and commercialization activities in a business context. | G. teamwork, and personal and group leadership skills | 4. Communication Skills 6. Autonomy and Professional Capacity |
| H. Identify and convey effective, innovative and feasible alternatives to address issues arising from business activities of research, development and commercialization. | H. creativity and aesthetic appreciation | 2. Knowledge of Methodologies 3. Application of Knowledge 6. Autonomy and Professional Capacity |
| I. Apply acquired knowledge to resolving issues arising from innovative ventures and projects (e.g. research and development, commercialization of applied technology etc.). | I. the ability and desire for continuous learning | 6. Autonomy and Professional Capacity |

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

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

Learning outcomes will be assessed, and where appropriate, changes will be made based on evidence, to improve the achievement of learning outcomes in the same fashion as in the other graduate programs in Engineering and Business at the University of Windsor.

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

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

N/A

C.4.3 Mode of Delivery (QAF section 2.1.5)

Demonstrate that the proposed modes of delivery are appropriate to meet the new or revised program learning

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

Check section B.2 for details on on-campus/online delivery break-down. The online component to be delivered using Blackboard Collaborate Ultra (or similar application). As the coordinator of the Master of Engineering Management (MEM) program, I (Ali AbdulHussein), have delivered my usual course (ELEC-8900: Technology Entrepreneurship), both online and on campus, to two different cohorts, this term, Summer 2019. My findings indicate that students in both groups have performed equally strong and all earning outcomes are met. The used application (Blackboard Collaborate Ultra) proven viable as well.

C.5 Student Workload

Provide information on the expected workload per course credit (3.0) of a student enrolled in this revised program. (For assistance with this exercise, proposers are encouraged to contact the Centre for Teaching and Learning.)

| Expected Workload per 3.0 Course Credit/Week | Average Time per week the Student is Expected to Devote to Each Component Over the Course of the Program |
|--|---|
| Lectures | 3 hours/week |
| Tutorials | |
| Practical experience | |
| Service or experiential learning | |
| Independent study | 1 hours/week |
| Reading and work for assessment, including meeting classmates for group work/project assignments (essays, papers, projects, laboratory work, etc.) | 4 hours/week |
| Studying for tests/examinations | 2 hours/week |

Compare the student workload for this program with other similar programs in the AAU:
The students in the proposed program will experience a workload that is equivalent to that of students in any other graduate program in Engineering or Business at the University of Windsor.

D. MONITORING AND EVALUATION (QAF section 2.1.6)

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

The progress of students in the proposed program will be monitored in the same fashion as is presently done in the Masters of Engineering program at the University Windsor: this will include assessment of assignments based on pre-developed rubrics, as well as mid-term and final exam grades. When exams are used as an assessment tool, a 3rd party online proctoring service (such as Examity) may be use utilized in proctoring exams online.

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

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

AoL metrics will be used to measured student performance for each of the program’s learning outcomes.

E. NEW OR REVISIONS TO EXPERIENTIAL LEARNING/CO-OP COMPONENT ONLY (Senate Co-op Policy)

N/A. The proposed program does not include any experiential learning/co-op component.

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*5.5.3a: **School of Creative Arts – BA Honours in Media Arts and Culture – Program Learning Outcomes**

Item For: **Information**

Forwarded by: **Faculty of Arts, Humanities and Social Sciences**

PROGRAM TITLE: BA Honours in Media Arts and Culture (MAC)

DEPARTMENT/FACULTY: School of Creative Arts/Faculty of Arts Humanities and Social Sciences

| <p>Program Learning Outcomes (Degree Level Expectations) <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i> <u>At the end of this program, the successful student will know and be able to:</u></p> | <p>Characteristics of a University of Windsor Graduate <u>A UWindsor graduate will have the ability to demonstrate:</u></p> | <p>COU-approved Undergraduate Degree Level Expectations</p> |
|---|---|--|
| <p>A. -Identify, define, and examine the significance of key historical, cultural, aesthetic, and sociopolitical contexts that inform relationships between art, media and culture</p> <p>-Analyze the diversity of critical and social voices within traditions of art and creative media practices</p> | <p>A. the acquisition, application and integration of knowledge</p> | <p>1.Depth and Breadth of Knowledge 2.Knowledge of Methodologies 3. Application of Knowledge 5.Awareness of Limits of Knowledge</p> |
| <p>B.-Identify relevant topics and formulate questions for productive inquiry.</p> <p>-Identify and evaluate appropriate methods and sources for research, including textual, visual, and aural information.</p> | <p>B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)</p> | <p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits Knowledge</p> |
| <p>C. Compare their own ideas, as informed opinions, with a variety of critical and theoretical approaches in the history and theory of art, media and film.</p> <p>Develop specific and focused arguments supported with textual and visual evidence.</p> | <p>C. critical thinking and problem-solving skills</p> | <p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge</p> |
| <p>D. Analyze complex works of art, identifying key themes and raising questions about the relationship between form and content.</p> | <p>D. literacy and numeracy skills</p> | <p>4.Communication Skills 5. Awareness of Limits of Knowledge</p> |

| <p>Program Learning Outcomes (Degree Level Expectations) <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i> <u>At the end of this program, the successful student will know and be able to:</u></p> | <p>Characteristics of a University of Windsor Graduate <u>A UWindsor graduate will have the ability to demonstrate:</u></p> | <p>COU-approved Undergraduate Degree Level Expectations</p> |
|---|--|--|
| <p>E. Engage critical writing and research-creation practices as processes that incorporate and assess others' ideas respectfully.</p> <p>Produce constructive written and oral peer review.</p> <p>Demonstrate sensitivity to the aesthetics, ethics, and politics of representation, especially the intersectionality of gender, race, class, sexuality, religion, etc.</p> | <p>E. responsible behaviour to self, others and society</p> | <p>5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity</p> |
| <p>F. Write effectively in a variety of forms and for a variety of audiences.</p> <p>Prepare, organize, and deliver oral presentations.</p> | <p>F. interpersonal and communications skills</p> | <p>4. Communication Skills 6. Autonomy and Professional Capacity</p> |
| <p>G. Contribute to conversations that build knowledge collaboratively.</p> <p>Interact effectively with people from diverse backgrounds and cultural perspectives.</p> <p>Plan and manage individual and group projects.</p> <p>Develop self-directed and process-driven works across a range of media.</p> | <p>G. teamwork, and personal and group leadership skills</p> | <p>4. Communication Skills 6. Autonomy and Professional Capacity</p> |
| <p>H. Explain and evaluate how arts and media practices shape meaning in culture and society.</p> <p>Explain and assess major traditions of media, arts and culture including historical movements, issues or themes, and critical and aesthetic approaches.</p> | <p>H. creativity and aesthetic appreciation</p> | <p>2. Knowledge of Methodologies 3. Application of Knowledge 6. Autonomy and Professional Capacity</p> |
| <p>I.- Deploy their own critical voice as an artist or creative professional</p> | <p>I. the ability and desire for continuous learning</p> | <p>6. Autonomy and Professional Capacity</p> |

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*5.5.3b: **Communication, Media and Film – Program Learning Outcomes**

Item For: **Information**

Forwarded by: **Faculty of Arts, Humanities and Social Sciences**

This document contains the Learning Outcomes for the following programs:

General Communication, Media and Film

Combined Honours Communication, Media and Film

PROGRAM TITLE: General Communication, Media and Film

DEPARTMENT/FACULTY: Communication, Media and Film/ Faculty of Arts Humanities and Social Sciences

| <p>Program Learning Outcomes (Degree Level Expectations) <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i> <u>At the end of this program, the successful student will know and be able to:</u></p> | <p>Characteristics of a University of Windsor Graduate <u>A UWindsor graduate will have the ability to demonstrate:</u></p> | <p>COU-approved Undergraduate Degree Level Expectations</p> |
|--|--|---|
| <p>A. Explain the social, cultural, political and economic implications of current and emerging media technologies/platforms/institutions for communicative practices and everyday life (Also applies to I.)</p> | <p>A. the acquisition, application and integration of knowledge</p> | <p>1.Depth and Breadth of Knowledge 2.Knowledge of Methodologies 3. Application of Knowledge 5.Awareness of Limits of Knowledge</p> |
| <p>B. Define and explain key terms and concepts associated with the research process Explain ethical issues as they relate to the research process (Also applies to E.) Access databases and evaluate digital resources for credibility and relevance (Also applies to A.)</p> | <p>B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)</p> | <p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits Knowledge</p> |
| <p>C. Apply relevant theoretical/disciplinary concepts to interpretations of a variety of communicative practices, media institutions and media artefacts (Also applies to A.) Recognize competing claims of key theoretical approaches/frameworks (both historical and contemporary) in the discipline (Also applies to A.)</p> | <p>C. critical thinking and problem-solving skills</p> | <p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge</p> |
| <p>D. Analyze and integrate literary and numerical discourses as they apply to the field of communication</p> | <p>D. literacy and numeracy skills</p> | <p>4.Communication Skills 5. Awareness of Limits of Knowledge</p> |
| <p>E. Recognize ethical standards of behaviour in various communications contexts Explain and adhere to principles consistent with established standards of academic integrity Communicate and interact collegially in group/class settings (Also applies to F.)</p> | <p>E. responsible behaviour to self, others and society</p> | <p>5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity</p> |

| Program Learning Outcomes (Degree Level Expectations) <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i> <u>At the end of this program, the successful student will know and be able to:</u> | Characteristics of a University of Windsor Graduate <u>A UWindsor graduate will have the ability to demonstrate:</u> | COU-approved Undergraduate Degree Level Expectations |
|--|--|---|
| F. Apply effective oral and written (and visual, where applicable) communicative skills in the preparation of content for a range of audiences | F. interpersonal and communications skills | 4. Communication Skills 6. Autonomy and Professional Capacity |
| G. Demonstrate the ability to work creatively and collegially in teams, particularly on production projects, from conception to completion (Also applies to E, F.) Prepare individual and group projects (Also applies to C, E, F.) | G. teamwork, and personal and group leadership skills | 4. Communication Skills 6. Autonomy and Professional Capacity |
| H. Identify and apply aesthetic strategies/methods/techniques central to effective communication practices (Also applies to A, C.) Discuss different aesthetic approaches to the meaning-making process (Also applies to A, C.) | H. creativity and aesthetic appreciation | 2. Knowledge of Methodologies 3. Application of Knowledge 6. Autonomy and Professional Capacity |
| I. Explain and analyze the role of media in the framing and representation of contemporary issues and current events | I. the ability and desire for continuous learning | 6. Autonomy and Professional Capacity |

PROGRAM TITLE: Combined Honours Communication, Media and Film

DEPARTMENT/FACULTY: Communication, Media and Film/ Faculty of Arts Humanities and Social Sciences

| <p>Program Learning Outcomes (Degree Level Expectations) <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i> <u>At the end of this program, the successful student will know and be able to:</u></p> | <p>Characteristics of a University of Windsor Graduate <u>A UWindsor graduate will have the ability to demonstrate:</u></p> | <p>COU-approved Undergraduate Degree Level Expectations</p> |
|--|--|---|
| <p>A. Critically appraise the social, cultural, political and economic implications of current and emerging media technologies/platforms/institutions for communicative practices and everyday life (Also applies to I.)</p> <p>Apply and integrate knowledge of theory, research and communication practices to the contemporary media environment</p> <p>Integrate theories and perspectives from another discipline to the critical study of media and culture</p> | <p>A. the acquisition, application and integration of knowledge</p> | <p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge</p> |
| <p>B. Employ a range of qualitative and quantitative methods in original, independent and group research projects (Also applies to A.)</p> <p>Define and explain key terms and concepts associated with the research process</p> <p>Identify and explain the epistemological and ontological foundations of a range of quantitative and qualitative methods</p> <p>Evaluate the relevance and appropriateness of different methodological approaches, including those from another discipline, in specific contexts</p> <p>Explain ethical issues as they relate to the research process (Also applies to E.)</p> <p>Access databases and evaluate digital resources for credibility and relevance (Also applies to A.)</p> <p>Collect, analyze and interpret data (Also applies to C, D.)</p> | <p>B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)</p> | <p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits Knowledge</p> |

| <p>Program Learning Outcomes (Degree Level Expectations) <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i> <u>At the end of this program, the successful student will know and be able to:</u></p> | <p>Characteristics of a University of Windsor Graduate <u>A UWindsor graduate will have the ability to demonstrate:</u></p> | <p>COU-approved Undergraduate Degree Level Expectations</p> |
|--|--|---|
| <p>C. Apply relevant theoretical concepts to interpretations of a variety of communicative practices, media institutions and media artefacts (Also applies to A.) Compare and assess competing claims of interdisciplinary theoretical approaches/frameworks (both historical and contemporary) (Also applies to A.)</p> | <p>C. critical thinking and problem-solving skills</p> | <p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge</p> |
| <p>D. Analyze and integrate abstract literary and numerical discourses as they apply to the field of communication</p> | <p>D. literacy and numeracy skills</p> | <p>4. Communication Skills 5. Awareness of Limits of Knowledge</p> |
| <p>E. Recognize and apply ethical standards of behaviour in various communications contexts Explain and adhere to principles consistent with established standards of academic integrity</p> | <p>E. responsible behaviour to self, others and society</p> | <p>5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity</p> |
| <p>F. Apply effective oral and written (and visual, where applicable) communicative skills in the preparation of content for a range of audiences</p> | <p>F. interpersonal and communications skills</p> | <p>4. Communication Skills 6. Autonomy and Professional Capacity</p> |
| <p>G. Work creatively and collegially in teams, particularly on production projects, from conception to completion (Also applies to E, F.) Prepare and implement individual and group projects (Also applies to C, E, F.)</p> | <p>G. teamwork, and personal and group leadership skills</p> | <p>4. Communication Skills 6. Autonomy and Professional Capacity</p> |
| <p>H. Identify and apply aesthetic strategies/methods/techniques central to effective communication practices (Also applies to A, C.) Assess, evaluate and integrate different aesthetic approaches to the meaning-making process (Also applies to A, C.)</p> | <p>H. creativity and aesthetic appreciation</p> | <p>2. Knowledge of Methodologies 3. Application of Knowledge 6. Autonomy and Professional Capacity</p> |

| <p>Program Learning Outcomes (Degree Level Expectations) <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i> <u>At the end of this program, the successful student will know and be able to:</u></p> | <p>Characteristics of a University of Windsor Graduate</p> <p><u>A UWindsor graduate will have the ability to demonstrate:</u></p> | <p>COU-approved Undergraduate Degree Level Expectations</p> |
|---|---|--|
| <p>I. Explain and analyze the role of media in the framing and representation of contemporary issues and current events</p> <p>Explain the centrality of media literacy skills in relation to critical citizenship and participation in democratic processes (Also applies to D.)</p> | <p>I. the ability and desire for continuous learning</p> | <p>6. Autonomy and Professional Capacity</p> |

**University of Windsor
Senate**

*5.5.3c: **Human Kinetics – Program Learning Outcomes**

Item For: **Information**

Forwarded by: **Faculty of Human Kinetics**

This document contains the Learning Outcomes for the following programs:

Bachelor of Human Kinetics - Movement Science Major

Bachelor of Human Kinetics - Sport Management Major

PROGRAM TITLE: Bachelor of Human Kinetics Movement Science Major

DEPARTMENT/FACULTY: Human Kinetics

| <p>Program Learning Outcomes (Degree Level Expectations) <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i> <u>At the end of this program, the successful student will know and be able to:</u></p> | <p>Characteristics of a University of Windsor Graduate <u>A UWindsor graduate will have the ability to demonstrate:</u></p> | <p>COU-approved Undergraduate Degree Level Expectations</p> |
|--|--|---|
| <p>A. identify and describe current concepts and issues in Movement Science.</p> <p>identify, measure and evaluate appropriate movement patterns and functioning across multiple settings including: the workplace, sport, health, and rehabilitation.</p> <p>explain the importance of Movement Science research and the application of knowledge gained from such inquiry.</p> <p><i>For CO-OP: apply Movement Science concepts in a practical context.</i></p> | <p>A. the acquisition, application and integration of knowledge</p> | <p>1.Depth and Breadth of Knowledge 2.Knowledge of Methodologies 3. Application of Knowledge 5.Awareness of Limits of Knowledge</p> |
| <p>B. locate research through library databases.</p> <p>appraise, interpret and summarize Movement Science research, relating the findings to relevant literature and industry practice.</p> <p>define research questions relevant to the study of human movement.</p> <p>utilize applicable laboratory equipment, software and scientific principles to collect and report research data.</p> | <p>B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)</p> | <p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits Knowledge</p> |
| <p>C. identify and apply appropriate Movement Science concepts, theories and methodologies to improve human functioning and well-being.</p> <p>utilize academic knowledge and critical thinking skills to analyze problems within the field of Movement Science.</p> <p><i>For CO-OP: utilize academic knowledge to solve practical problems relevant to Movement Science</i></p> | <p>C. critical thinking and problem-solving skills</p> | <p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge</p> |

| <p>Program Learning Outcomes (Degree Level Expectations) <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i> <u>At the end of this program, the successful student will know and be able to:</u></p> | <p>Characteristics of a University of Windsor Graduate</p> <p>A UWindsor graduate will have the ability to demonstrate:</p> | <p>COU-approved Undergraduate Degree Level Expectations</p> |
|---|--|--|
| <p>D. use appropriate statistical analysis techniques as required by the research design.</p> <p>interpret quantitative and qualitative data to solve questions related to the description and cause of human movement.</p> | <p>D. literacy and numeracy skills</p> | <p>4. Communication Skills 5. Awareness of Limits of Knowledge</p> |
| <p>E. recognize and follow the University of Windsor ethics guidelines and academic integrity standards when conducting scholarly, professional and/or research work.</p> <p><i>For CO-OP: recognize and follow professional etiquette standards specific to the workplace.</i></p> | <p>E. responsible behaviour to self, others and society</p> | <p>5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity</p> |
| <p>F. communicate Movement Science concepts, methods and research effectively, in both oral and written formats.</p> <p><i>For CO-OP: reflect on work-related requirements, duties and outcomes, in both oral and written formats.</i></p> | <p>F. interpersonal and communications skills</p> | <p>4. Communication Skills 6. Autonomy and Professional Capacity</p> |
| <p>G. work successfully and respectfully with peers, university personnel and community organizations, both independently and as a team member.</p> | <p>G. teamwork, and personal and group leadership skills</p> | <p>4. Communication Skills 6. Autonomy and Professional Capacity</p> |
| <p>H. identify and apply innovative solutions to current Movement Science issues.</p> <p>recognize and assess human movement patterns and development across the lifespan and within different settings, including the workplace, sport, and rehabilitation.</p> | <p>H. creativity and aesthetic appreciation</p> | <p>2. Knowledge of Methodologies 3. Application of Knowledge 6. Autonomy and Professional Capacity</p> |
| <p>I. identify relevant academic and non-academic sources to remain current with research and popular trends in Movement Science.</p> | <p>I. the ability and desire for continuous learning</p> | <p>6. Autonomy and Professional Capacity</p> |

PROGRAM TITLE: Bachelor of Human Kinetics Sport Management

DEPARTMENT/FACULTY: Human Kinetics

| <p>Program Learning Outcomes (Degree Level Expectations) <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i> <u>At the end of this program, the successful student will know and be able to:</u></p> | <p>Characteristics of a University of Windsor Graduate <u>A UWindsor graduate will have the ability to demonstrate:</u></p> | <p>COU-approved Undergraduate Degree Level Expectations</p> |
|---|--|---|
| <p>A. identify and describe current concepts and issues in Sport Management. identify, measure and evaluate effective management practices across multiple sport and recreation settings. explain the importance of Sport Management research and the application of knowledge gained from such inquiry. <i>For CO-OP: apply Sport Management concepts in a practical context.</i></p> | <p>A. the acquisition, application and integration of knowledge</p> | <p>1.Depth and Breadth of Knowledge 2.Knowledge of Methodologies 3. Application of Knowledge 5.Awareness of Limits of Knowledge</p> |
| <p>B. locate research through library databases. appraise, interpret and summarize Sport Management research, relating the findings to relevant literature and industry practice define research questions relevant to the study of Sport Management. utilize applicable software and scientific principles to collect and report research data.</p> | <p>B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)</p> | <p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits Knowledge</p> |
| <p>C. identify and apply appropriate Sport Management concepts, theories and methodologies to improve organizational functioning. utilize academic knowledge and critical thinking skills to analyze problems within the field of Sport Management. <i>For CO-OP: utilize academic knowledge to solve practical problems relevant to Sport Management.</i></p> | <p>C. critical thinking and problem-solving skills</p> | <p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge</p> |
| <p>D. use appropriate statistical analysis techniques as required by the research design.</p> | <p>D. literacy and numeracy skills</p> | <p>4.Communication Skills 5. Awareness of Limits of Knowledge</p> |

| <p>Program Learning Outcomes (Degree Level Expectations) <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i> <u>At the end of this program, the successful student will know and be able to:</u></p> | <p>Characteristics of a University of Windsor Graduate</p> <p><u>A UWindsor graduate will have the ability to demonstrate:</u></p> | <p>COU-approved Undergraduate Degree Level Expectations</p> |
|---|---|--|
| <p>interpret quantitative and qualitative data to solve questions related to the functioning of sport-related organizations.</p> | | |
| <p>E. recognize and follow the University of Windsor ethics guidelines and academic integrity standards when conducting scholarly, professional and/or research work. <i>For CO-OP: recognize and follow professional etiquette standards specific to the workplace.</i></p> | <p>E. responsible behaviour to self, others and society</p> | <p>5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity</p> |
| <p>F. communicate Sport Management concepts, methods and research effectively, in both oral and written formats. <i>For CO-OP: reflect on work-related requirements, duties and outcomes, in both oral and written formats.</i></p> | <p>F. interpersonal and communications skills</p> | <p>4. Communication Skills 6. Autonomy and Professional Capacity</p> |
| <p>G. work successfully and respectfully with peers, university personnel and community organizations, both independently and as a team member.</p> | <p>G. teamwork, and personal and group leadership skills</p> | <p>4. Communication Skills 6. Autonomy and Professional Capacity</p> |
| <p>H. identify and apply innovative solutions to current Sport Management issues. recognize and assess management and leadership practices within and across sport-related settings.</p> | <p>H. creativity and aesthetic appreciation</p> | <p>2. Knowledge of Methodologies 3. Application of Knowledge 6. Autonomy and Professional Capacity</p> |
| <p>I. identify relevant academic and non-academic sources to remain current with research and popular trends in Sport Management.</p> | <p>I. the ability and desire for continuous learning</p> | <p>6. Autonomy and Professional Capacity</p> |

**University of Windsor
Senate**

*5.6.1: **Information Technology (IT) Services Annual Report (2019-2020)**

Item for: **Information**

Forwarded by: **Academic Policy Committee**

See attached.

Information Technology Services Fiscal 2019 / 20

1. Executive Summary

A. Introduction

The [mission](#) of the Information Technology (IT) Services Department is to ensure that University systems, applications, and processes are designed, implemented and operated both effectively and efficiently, and serve the Mission and Strategic Priorities of the institution.

For additional information regarding how the strategic direction of IT Services supports the Strategic Priorities of the University, please refer to the [IT Services IT Strategic Plan](#).

B. Goals and Objectives of Reporting Year

In alignment with the Strategic Priorities of the University, IT Services has established a set of Departmental goals and supporting initiatives for the fiscal 2019/20 year:

| Ref. | Goals and Objectives | What Will Success Or Completion Look Like? | Supported Strategic Priorities |
|----------|---|--|--------------------------------|
| 19-IT-01 | IT Client Service Enhancement | Finalization and continued refinement of the "one-stop" IT client service model to provide enhanced technical support services to the campus community | 1,2,3,4,5 |
| 19-IT-02 | Desktop Modernization | Development and implementation of project plans to upgrade all University devices to current versions of Windows and Office 365 systems | 1,2,3 |
| 19-IT-03 | IT Services Strategic Plan | Completion of identified action plans and development of technology and service roadmaps to support implementation of the IT Services Strategic Plan | 1,2,3,4,5 |
| 19-IT-04 | IT Sustainment Plan | Completion of a review of existing financial resources and development of refined business and technical sustainment plans | 1,2,3 |
| 19-IT-05 | <u>IT Initiatives</u> <i>Cybersecurity, Data Governance, Documentation, IAM, ITS Website, Service Excellence, Team Dynamix, Web Governance</i> | Completion of identified objective(s) for respective initiatives as per plans | 1,2,3,4,5 |

IT Services has also identified a number of additional goals and objectives for respective areas within the Department that further reinforce the priorities of the institution and provide areas of focus for supporting staff.

As IT related projects are identified and considered, IT Services works to ensure that they are aligned to the University's Strategic Priorities. Some specific examples of this alignment can be referenced in the projects and initiatives highlighted below:

1. ***Provide an exceptional undergraduate experience:***
 - Supported implementation of several new features and functions for key student systems including UWinsite, Blackboard and Office 365
 - Continued modernization of the campus wireless network infrastructure and classroom technologies
2. ***Pursue strengths in research and graduate education:***
 - Supported initiation of campus Research Data Management (RDM) in collaboration with the Leddy Library and Office of Research Services
 - Initiated efforts to support the upgrade of the eRSO system (research portal) that will include migration to cloud based service
3. ***Recruit and retain the best faculty and staff:***
 - Supported on-going campus professional development and training activities for faculty and staff for core University systems including UWinsite, Windows 10 and Office 365 applications
 - Supported upgrade of Lynda.com to the new LinkedIn Learning platform to deliver new features including an updated look, personalized course recommendations, shareable multi-media collections and social curation
4. ***Engage and build the Windsor and Essex County community through partnerships:***
 - Continued active participation in the [Connecting Windsor-Essex \(CW-E\)](#), a non-profit organization comprised of over 40 local stakeholder members, that provides the University with high-speed internet access, smartphone programs and other collaborative benefits
 - Worked with CW-E, City of Windsor and other partner organizations to complete the successful relocation of the existing network Point of Presence (PoP) from the former Windsor Public Library site to 500 Ouellette
5. ***Promote international engagement:***
 - Supported continued enhancement of UWinsite Engage to improve outreach and communications capabilities with international students
 - Completed integration between UWinsite Student and AAMS (Agent Management System for international recruitment)

IT Services actively monitors progress against identified goals and objectives during the fiscal year to ensure performance against established milestones, as well as to determine where any additional actions are necessary to support achievement. Current status on these goals and objectives can be found at [IT Services Goals & Objectives](#).

C. Successes

In collaboration with campus partners, IT Services has completed and continues to support several key University projects and initiatives including:

Major Campus Projects / Initiatives

- New Facilities and Renovation Projects
 - Provided technical support for required network infrastructure and classroom technologies for the Essex Centre of Research (CRe), as well as for on-going planning and development of Lancer Sport and Recreation Centre (LSRC) and Transforming Window Law (TWL) projects
- NSSE Survey
 - Provided technical resources to support the development and issuance of the solution used to conduct the National Survey of Student Engagement (NSSE) survey

Major IT Services Projects / Initiatives

- Infrastructure
 - In coordination with Facility Services and other key stakeholders, IT Services has supported the implementation of several major IT infrastructure upgrades / updates to improve user experience including:
 - Network
 - Completed updates to the campus wireless infrastructure to deliver improved network performance for end users, most notably for Toldo Health Education Centre, Essex Hall South, Essex Hall (1st floor), Erie Hall (1st and 2nd floors) and Welcome Centre
 - Classroom Technology
 - Supported the upgrade of classroom technology as part of renovation work for Erie Hall (Room 1118) and Toldo Health Education Centre (2nd floor)
- Applications
 - Significant upgrades / updates have been made to key University systems including:
 - Microsoft
 - Office 365
 - Participated in a collaborative procurement process through the Council of Ontario Universities (COU) to renegotiate the existing Microsoft Campus Agreement
 - Through this process, a new licensing model was established that will provide expanded licensing for campus users and result in a cost avoidance of over \$225,000 over the next three years
 - Windows 10
 - Initiated an implementation plan to migrate all University owned PC's from non-current versions of Windows to Windows 10
 - Continued implementation, promotion and support of upgrade to new Microsoft Office suite and deployment of new tools including Teams, Intune Device Management and Company Portal
 -
 - UWinsite (ERP)
 - Continued provision of technical expertise and support to the respective Student, Finance and Engage systems:
 - Implementation of several system fixes during the post-go-live period, most notably for application (OUAC), course search and grade related issues
 - Incorporation of a number of system enhancements including:
 - Infosilem - exam scheduling
 - iApply - graduate application portal
 - Student Services - T4A updates, self-service features
 - Triage and resolution of service requests
 - Development of reports, queries and other analytical tools

- Performance Metrics

- Continued regular review of key metrics related to the technologies, systems and services supported by IT Services to assess and improve Departmental performance
- Metrics that are currently being monitored include:

- Service Requests (Tickets)

- Volumes
 - Overall number of tickets continues to increase year-over-year

| Year | Ticket Volume | Variance (YOY) |
|------------------------|---------------|----------------|
| 2019 (through Nov 30*) | 18,131 | 6.8% |
| 2018 | 16,895 | 7.8% |
| 2017 | 15,576 | 7.2% |
| 2016 | 14,463 | - |

- Resolution Rates

- Average number of days to resolve a ticket has improved slightly since 2018, has been impacted significantly by launch of UWinsite systems over past two years

| Year | Number of Days | Variance (YOY) |
|------------------------|----------------|----------------|
| 2019 (through Nov 30*) | 9.5 | 1.0% |
| 2018 | 9.6 | -5.5% |
| 2017 | 9.1 | - |

- Client Satisfaction

- IT Services TDX Survey
 - Overall satisfaction of survey respondents has decreased slightly, largely attributed to initial launch of UWinsite Student

| Year | Average Score | Variance (YOY) |
|------------------------|---------------|----------------|
| 2019 (through Nov 30*) | 4.62 | -3.85% |
| 2018 | 4.8 | - |

- System Availability

- Average uptime of core systems (monitored) has improving slightly

| Year | Average Uptime | Variance (YOY) |
|------------------------|----------------|----------------|
| 2019 (through Nov 30*) | 98.6 | 1% |
| 2018 | 97.6 | - |

- E-Mail

- Volumes
 - Total campus e-mail volumes continue to increase

| Year | E-Mail Volume | Variance (YOY) |
|------------------------|---------------|----------------|
| 2019 (through Nov 30*) | 249M | 28% |
| 2018 | 194M | - |

- Spam Control
 - Total volume of spam e-mails blocked has increased

| Year | Spam Volume | Variance (YOY) |
|------------------------|----------------------------|----------------|
| 2019 (through Nov 30*) | 183M (70% of total e-mail) | 19% |
| 2018 | 148M (76% of total e-mail) | - |

- Security
 - Several existing and new security related metrics are being monitored including:

| Metric | Performance (2019 through Nov 30*) |
|--|------------------------------------|
| Incoming Connections Blocked at Firewall | 98% |
| Known Comprised Accounts | 75 |
| Encrypted University Devices | 610 |
| Centrally Managed University Devices | 3,091 |
| Accounts Utilizing MFA (pilot) | 73 |

- Network
 - Performance of the University network system is also being monitored

| Metric | Performance (2019 through Nov 30*) |
|--------------------------|------------------------------------|
| Average Inbound Traffic | 24.82 Mbit per second |
| Average Outbound Traffic | 2.03 Gbit per second |

- Training
 - Several client orientation and training sessions are regularly being delivered to the campus community by members of the IT Services team

| System | Sessions Completed (2019 through Nov 30*) | Number of Attendees |
|--------------|---|---------------------|
| Office 365 | 16 | 297 |
| Web (Drupal) | 10 | 70 |

- Virtual Desktop Infrastructure (VDI)
 - In collaboration with the Leddy Library, supported process to procure and initiate set up of a new virtual desktop infrastructure (VDI) to replace aging public workstations within the Library, with planned future deployment across campus
- Desktop Technologies
 - Implemented a new preferred PC agreement (Dell) that encompassed streamlined procurement and deployment processes and has resulted in:
 - Increased standardization of supported PC devices and more options for high-powered computing hardware
 - Improved pricing and lead times

- Security
 - Continued efforts to build the University's cybersecurity program through a number of activities:
 - Launched a successful [Cybersecurity Awareness Campaign](#) to promote awareness of cybersecurity related issues including phishing, spam, passwords and safe browsing that affect faculty, staff and students
 - Participated in number of external cyber-assessment exercises, including those from CUCCIO, and ORION partner organizations, to assess program against relevant benchmarks and identify potential opportunities for improvement
 - Maintained planned progress on the IT Services Action Plan associated with the prior PwC Cybersecurity Review to address identified audit recommendations and other opportunities for cybersecurity improvement

- Governance
 - Based on needs identified by the campus, efforts have been undertaken to initiate processes to formalize governance in the following areas:
 - IT Governance
 - In 2018, IT Services completed a review to assess the campus IT governance framework and instituted some revisions to support a disciplined and transparent process for decisions related to information technology, as well as to facilitate an affordable, aligned, secure and sustainable technology strategy
 - Additional information on the updated campus IT Governance model can be referenced at [IT Governance](#)
 - Data Governance
 - Continued efforts to collect feedback and input from key campus stakeholders through the established Data Governance Steering Committee in order to further inform related data governance initiatives
 - Supported efforts of the Data Analytics Working Group to initiate an LMS Data Governance pilot project to further develop a data governance framework for future adoption
 - In collaboration with the Leddy Library and the Office of Research Services, supported the development of a proposed framework to address pending Research Data Management (RDM) requirements
 - Security Governance
 - IT Services has initiated a Security Governance Advisory Committee, comprised of stakeholders from key University areas including the School of Computer Science, Legal Services and Campus Community Police, to:
 - Support the development and implementation of cybersecurity governance / management policies and procedures
 - Propose new / revised solutions, best practices, tools, processes in order to enable related initiatives on campus
 - Web Governance
 - IT Services has also initiated a Web Advisory Committee provide oversight to the development, implementation and management of the University website
 - This Committee is also comprised of members from across the campus community including Leddy Library, Office of the Provost, Office of Strategic Enrolment Management, Office of Student Experience and Public Affairs & Communications

- IT Services Strategic Plan
 - IT Services is continuing efforts to review and refine the IT Strategic Plan that it instituted in 2018
 - This Plan is intended to serve as the foundation for supporting the creative use, application and provisioning of technologies and services to the campus, as well as to provide direction on how this process will be accomplished
 - Further information regarding on this Plan can be found at [IT Services IT Strategic Plan](#)

D. **Challenges**

There are a number of challenges that IT Services continues to face in supporting increasing service and technology expectations from the campus community primarily in the following areas:

- Resources
 - Several new and growing systems, most notably UWinsite and Office 365, combined with increasing information security requirements, continue to consume significant IT Services resources in order to appropriately support operational needs. These escalating support needs, combined with pressures to maintain other campus systems and technologies, are tasking the Department's ability to provide expected levels of service. As this landscape continues to evolve and grow, so too will expectations for support, thus placing further constraints on the Department's finite resources.
 - In order to help address this challenge, IT Services has developed an operational resource plan to ensure staffing requirements are appropriately identified and can be strategically executed to extent possible. In terms of priority, resource focus will primarily be in key client-facing and security areas within the Department.
- Financial Sustainment
 - With increasing capital (i.e. technology infrastructure) and operational (i.e. software, licensing) costs, the current budget of IT Services will be challenged, thus forcing some difficult decisions involving technologies, systems and supporting services
 - As a result of these financial pressures, IT Services has developed a business plan that identifies and projects anticipated capital and operational expenses, as well as planned activities to ensure that these costs remain aligned with established Departmental budgets
- Information Security
 - The University continues to face an information security landscape filled with increasing risks and potential threats that reinforce the need for a robust and reliable security infrastructure
 - To help address this situation, IT Services has established a Cybersecurity Program to increase general awareness within the campus community and provide related opportunities for education
- Professional Development
 - As technologies and systems continue to evolve at an increasing pace, the necessary skills to appropriately support these assets are also expanding, despite current limited budgets for professional development
 - To help mitigate this challenge, IT Services continues to review professional development needs and opportunities and strategically fund these where possible, on a case-by-case basis

- Governance
 - Given recent changes to the overall IT Governance framework, most notably the introduction of new Advisory Committees for Security and Web, IT Services continues to be challenged in terms of time and resources to appropriately support this framework and ensure that it is effective
 - To help alleviate this challenge, IT Services has sought to engage others from within the campus community to contribute to these initiatives, thus reducing some of the burden on the Department and move this framework forward

2. Report

A. Goals and Objectives and the University's Strategic Plan

Additional details on the goals and objectives that have been established for IT Services for the 2019/20 fiscal year and how these support the University's Strategic Plan can be found at [IT Services Goals & Objectives](#).

B. Future Actions/Initiatives

- Microsoft
 - Windows 10
 - Continued phased deployment of Windows 10 platform via the [Y2K20 Project](#) to faculties and departments that will improved and more efficient processes to manage and update campus PC's
 - Office 365
 - Initiate phased migration of student e-mail from Google G-Mail to Office 365 Outlook to standardize campus e-mail platforms
- UWinsite (ERP)
 - Continued review and refinement to the IT Services sustainment model
 - Completion of planned system enhancements including:
 - Infosilem – deployment of course scheduling
 - SNAP – replacement of existing solution
 - GT Forms – development of additional student self-service forms to improve experience
 - On-going efforts to plan, develop and deploy required system reports and queries
- Blackboard (LMS)
 - Continued implementation of planned updates to Bb Learn (May 2020) to ensure new system features and capabilities are available to faculty, staff and students
 - Maintain efforts to support development of a phased deployment plan for Bb Analytics (A4L) that will include both the Odette School of Business and Faculty of Nursing in the short term, as well as other campus areas with accreditation requirements as a priority
 - Re-assess long-term solution renewal strategy considering potential future collaboration opportunities (eCampus Ontario)
- VIP (HRIS)
 - As part of the established VIP Optimization Plan, IT Services, in collaboration with the Office of the Provost, Human Resources and Finance, will re-engage efforts to implement new system modules:
 - e-Recruitment – replacement of Authorization for Hire, ARAC and Form 1 processes
 - Time & Attendance – establishment of a standardized, enterprise solution
 - Completion of a pre-requisite core upgrade of VIP to support implementation of the above noted modules

- Website
 - Support continued enhancement of the University website, more specifically as it relates to:
 - Deployment of a new Events Calendar
 - Maintaining accessibility compliance
 - Completion of migration of remaining University websites from Drupal version 6 to 7, as well as plan development for pending migration to v8
- Desktop Technologies
 - Finalize integration of a new PC procurement system to UWinsite Finance in order to streamline the financial transaction process
 - Continue refinement to the current automated deployment process for new PC's to achieve service efficiencies and improve user experience
- Network Infrastructure
 - Continue efforts to update the campus wireless network to improve performance and ultimately enhance user experience
 - As part of this initiative, IT Services is planning to:
 - Complete upgrades of all remaining network closets
 - Continue updates to identified campus wireless access points
 - Finalize planning to replace core network technologies, including existing solutions for DHCP, DNS and IP address management in order to create operational efficiencies and to build additional capacity and flexibility for future network demands
- Unified Communications
 - Undertake process to investigate potential replacement options for existing telephony solution
 - Develop a preliminary project plan for future implementation of a new solution
- Enterprise Print Solution
 - Complete investigation of potential enterprise print solution(s) that will standardize network print management and improve user experience through new features such as:
 - Mobile printing
 - Automated toner replenishment and service notifications
 - Determine potential project scope and develop plan for implementation
- Virtual Desktop Infrastructure
 - Support efforts to complete current pilot project with the Leddy Library
 - Develop a potential future (phased) plan for other identified computer lab spaces across campus
- Software Depot
 - Replacement of the existing Software Depot with a modernized solution that will improve user experience through potential expanded service offering and streamlined administration process
- Innovative Learning Spaces
 - Finalize comprehensive inventory of existing classroom technology related assets
 - Review existing classroom technology standards and update as necessary
 - In alignment with on-going and planned campus renovations, establish a prioritized classroom technology modernization schedule

- Business Intelligence / Data Analytics
 - Complete efforts to determine potential enterprise-class data analytics solutions that can serve as a primary and standardized tool for the campus to better support institutional decision making and reporting requirements
 - Identify the tool, or set of tools, that will support development of required reports and queries

- IT Services Management
 - Undertake a process to review and renew current IT Service Management (ITSM) system licensing
 - Finalize development of a balanced scorecard that can be used to assess overall Departmental performance and effectively communicate status of identified key performance indicators (KPI's) including:
 - Financial
 - Budget versus actual
 - Customer
 - Client satisfaction, service quality
 - Service
 - SLA compliance, system uptime, ticket aging, incident / problem mean time to resolution
 - Security
 - Spam volume, security incidents, cybersecurity training learning outcomes, managed / compliant devices
 - Organizational capacity
 - Professional development, resource efficiency

C. Recommendations for Senate consideration (if any)

Continue efforts to support IT Services through the following activities:

- Providing regular feedback on current campus technologies, systems and services that will support further enhancement of the student experience
- Fostering awareness and promoting the value of information technology related services within the broader University community
- Reinforcing the need to be compliant with applicable policies, protocols, recommendations and best practices to ensure the protection of University information technology related assets