

# Blueprint for Action:

By Eagles' Longhouse: Engineering Indigenous Initiatives Steering Committees

Report to Dean Amon, Faculty of Applied Science and Engineering, University of Toronto

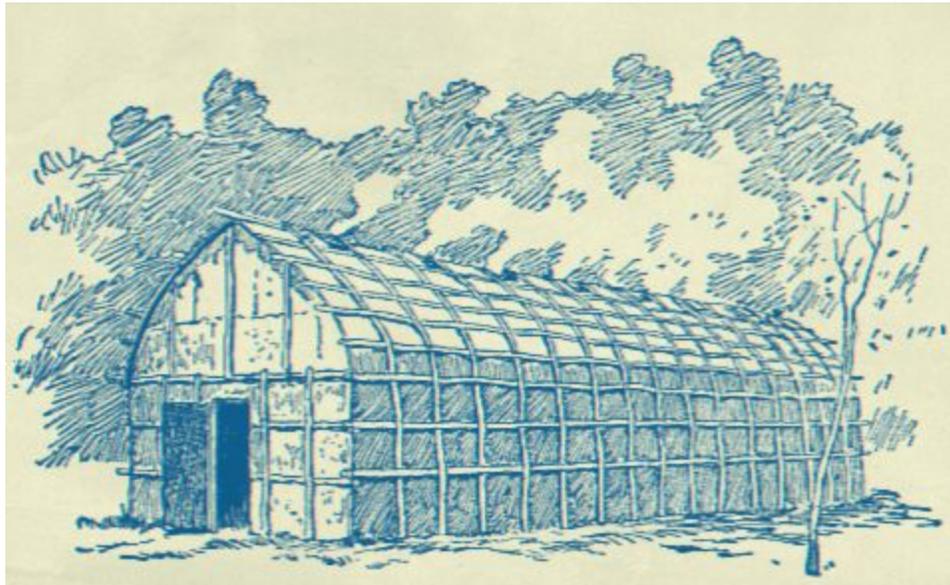


Figure adapted from: Gordy, Wilbur F. *Stories of American History*. New York: Charles Scribner's Sons, 1913. Page 20.

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## 1.0 Eagles' Longhouse Background

In the recently released Answering the Call report, the University of Toronto Steering Committee expounded on the University's primary responsibilities derived from the Truth and Reconciliation Commission's 94 Calls to Action to contribute to reconciliation between Canada and Indigenous Peoples. Building on this the Faculty of Applied Science and Engineering (FASE) wrote their own Calls to Action in the Wecheehetowin report. In the spring of 2017, Dean Cristina Amon formed the Engineering Indigenous Initiatives Steering Committee. Her mandate was to generate a plan for the FASE to meet and exceed their responsibilities to these Calls to Action. Specifically they were to:

- Consult broadly across FASE to identify Calls to Action within the Answering the Call report for which FASE has a key role.
- Engage key Indigenous representatives and engineering educators (faculty and staff) in a participatory design approach to planning the FASE response.
- Design a Blueprint for Action to effect immediate and ongoing improvements in the relationship between FASE and Indigenous communities.

Members of the committee were chosen because of their Indigenous heritage, or because they had experience that provided them with some knowledge of Indigenous issues. An external Elder, recommended by Elder-in-residence Andrew Wesley of First Nations House, was also invited to be a full member of the committee.

Other Steering Committee members were sought out within existing Indigenous FASE faculty and staff, and allies with extremely strong ties to and experience with Indigenous communities. The steering committee membership was:

- Prof Jason Bazylak - Mechanical and Industrial Engineering  
Dean's Advisor on Indigenous Initiatives  
Metis Nation of Saskatchewan
- Wendy Mortimer  
Director, Engineering Pathways and Indigenous Partnerships  
*Initial member of the steering committee, Wendy retired from the committee in October 2017 prior to the writing of this report.*
- Elder Kim Running Bear McDougall  
Oneiada Nation
- Joan DaCosta - University of Toronto Institute of Aeronautical Studies  
Manager - Directors Office  
Mixed non-Indigenous, Mohawk (Kahnawà:ke), and Metis

- Prof Erin Bobicki - Material Science Engineering / Chemical Engineering and Applied Chemistry / Lassonde Institute of Mining  
Family ties to Labrador Inuk Community

The committee met every two weeks, and at times more frequently, from the beginning of May to the end of October 2017.

Through consultation with Elder Kim, the committee chose the name Eagles' Longhouse. The committee wanted to have a name that, while descriptive, also served the purpose of increasing cultural awareness. We recognize that it would be impossible in a short title to represent all of the rich diversity within the Indigenous people; we wanted the title be a conversation starter. A conversation about respect and honoring Indigenous traditions and the past, present and future connections between Indigenous People and U of T engineering.

The intended meanings of the two symbols chosen are:

#### *Longhouse*

For many Indigenous People the longhouse at its most basic level was a multi-family dwelling. Symbolically however it represents community and a place of gathering and learning. This means that the physical buildings of FASE could be considered longhouses. More so, all of FASE could be seen as a metaphoric longhouse because our focus on sharing knowledge.

#### *Eagle*

Eagles are sacred in many Indigenous cultures and are seen as the animal closest to the Creator. This means that they often served as messengers of the creator, or in other words, bringers of knowledge. The term Eagles in our committee name has multiple symbology:

- 1) The members of the community could be seen as Eagles as we are bringing knowledge to the Dean.
- 2) Alternatively you could look at it holistically and say that all Faculty and Staff in FASE are Eagles in our delivering / sharing of knowledge with our students and the world.

In summary Eagles' Longhouse is symbolic of FASE. The importance of representing FASE through Indigenous traditional symbolism is to illustrate the union of FASE and the Indigenous People on this journey we are embarking on together.

The first steps of the Eagles' Longhouse was to identify for which of the original 34 Calls to Action from the Wecheehetowin report the FASE is best situated to lead and/or participate in. For instance there is little that the FASE could do to directly participate in the expansion of Indigenous language offerings, however there is a key role for us to play in building linkages between the many college engineering technician diplomas and degrees.

The committee then divided these FASE critical calls to action into four areas, each of which became the focus of a working group:

- Indigenous Spaces Working Group – headed by Jason Bazylak
- Indigenous Curriculum Working Group – headed by Jason Bazylak
- Indigenous Student Access Working Group – headed by Erin Bobicki
- Indigenous Faculty and Staff Recruitment and Hiring Working Group – headed by Joan DaCosta

Of the original 34 Calls to Action listed in the Wecheehetowin report, the Eagles' Longhouse identified 17 for which the FASE should play a direct role. These 17 Calls to Action are listed below divided into four categories. Each of these categories were formed into a working group. The numbers below for each Call to Action correspond to the UofT TRC Report Calls to Action.

The focus of the committee then turned to the formation of the working groups with the intention of including many Indigenous voices both internal and external to the University of Toronto community as well as stakeholders from FASE and U of T. The resulting participants for each working group are listed in [Appendix A](#).

The working groups began meeting in the latter part of the summer and continued into the fall. The steering committee continued to meet during this time as well in order to discuss the issues coming out of the working groups. When problems arose, the committee proved to be an excellent place to develop solutions and overcome hurdles. A common issue was when there was not a shared understanding of terms between the Indigenous communities and the U of T. A major point of discussion around the suggested use of the word “mandatory” in reference to cultural awareness training.

During this period, the committee invited Vernon Douglas, a cultural awareness trainer for the Ontario Federation of Indigenous Friendship Centres (OFIFC), and a retired Indigenous cultural advisor from Trent University, to meet with the committee. Vernon has impressive knowledge of Indigenous issues and of trying to effect change at academic institutions. He advised that FASE would need to develop a vision statement. He cautioned that these changes take a long time, and he also talked about the importance of creating Indigenous spaces in order to help create an environment that is inclusive of the Indigenous students at FASE.

The committee was invited by Prof. Jennifer Drake to meet with Clynt King, an Indigenous Environmental Technician with the Six Nations Council who applies traditional ecological knowledge to climate change issues in First Nations communities, especially pertaining to water. Clynt talked about using observations of nature and pattern recognition in nature to determine what nature is telling us. Our meeting with Clynt made it clear that our interaction with the Indigenous community will be richly reciprocal and has the potential to offer our students methods hitherto not offered at FASE.

Both Vernon Douglas and Clynt King provided a dimension to our deliberations that we had not thought about. It underlined that the work of this committee was just the beginning of a conversation with Indigenous Peoples and in order to accomplish the goals that the Eagles' Longhouse recommends, the conversation must be ongoing and must expand to include more Indigenous voices at every level. There were recommendations that came out of the committee's work that were separate from the working group recommendations and these include:

1. The formation of a network of Indigenous advisors from across Canada that will include First Nations, Metis, and Inuit people.
2. A seminar series to be presented at FASE, and open to all, that will include Indigenous speakers in areas that will help to broaden cultural knowledge of Indigenous Peoples.
3. Develop a vision statement for answering the calls to action.

## 2.0 Indigenous Faculty & Staff Recruitment and Hiring (F&S) Working Group Recommendations

As was made painfully evident during the search for the Steering Committee, Indigenous People are severely underrepresented in FASE. To the best of the Steering Committee's knowledge there is only one self-identified Indigenous faculty member in FASE and one self-identified staff member. The five Calls to Action below need to be addressed if we are to take our first steps in this long journey. The task of the F&S working group was to develop recommendations in response to the five Calls to Action (see below) from the Wecheehetowin report related to faculty and staff hiring. The recommendations of the working group are divided into actions to take place Immediately, in the Short-Term (2-3 years) and over the Long-Term (5 years).

*6. The Provost should launch a University-wide initiative to support the hiring of Indigenous faculty by making available targeted funds that could be accessed by divisions on a competitive basis. The aim should be to facilitate the hiring of a significant number of Indigenous faculty members over the next three years. To begin the needed process of inclusion, divisions and departments should consider specifically targeting Indigenous hiring. Discussion should occur around a range of ways to create incentives for divisions and departments both with and without current Indigenous scholars to ensure Indigenous participation in these hiring processes, especially on hiring committees.*

*9. The Provost's Office should review existing anti-discrimination training materials for hiring committees to ensure that the materials are sensitive to specific issues related to Indigenous peoples.*

*11. Each division should actively consider the creation of an Indigenous leadership position within the Office of the Dean. Such positions would have to be meaningful, and targeted to*

*real opportunities that are different across the divisions. They would also have to be properly supported by the entire Decanal team.*

*14. The University should work actively to increase the number of Indigenous staff members who support important programs, especially those designed to revitalize and strengthen Aboriginal languages, and those that support Indigenous students. Over time, the positions should be funded from core budgets, and not merely as year-to-year add-ons.*

*15. The Provost's Office, working with the divisions, should seek to expand the current financial support for Elder services, which should be made available to broader segments of the University community.*

## Immediate Actions (2018)

**F&S 1. Create an Indigenous administrative position to begin the process of taking responsibility for the calls to action of the TRC.** The position should be a full time, continuing, senior position that will allow enough room in the job description for the person to define in Indigenous terms what needs to be done. The position would support the initiatives at FASE to hire Indigenous faculty and staff and to recruit Indigenous students. All the activities of this position will work towards supporting these three groups. It is critical that the person who is hired be an Indigenous person with connections to community so that they bring an existing knowledge base and provide a sense of trust for Indigenous communities.

**F&S 2. Support a program focused on the recruitment and hiring of Indigenous Faculty and staff.** The FASE Indigenous administrative employee (See F&S1) will open new avenues of discovering Indigenous faculty candidates. Actively recruit Indigenous graduate students as a possible stream for future faculty candidates. Develop an understanding of cultural factors for interviewing Indigenous candidates. Provide support for the application processes for faculty and staff positions. Identify and find solutions for the barriers to entry that Indigenous people encounter at FASE.

***Progress:** A three person delegation will be representing UofT FASE at MAANOMATAPOYAH: First Steps conference. This conference will have dozens of current Indigenous Undergraduate STEM students who have strong potential to become our graduate students, and then faculty and staff.*

**F&S 3. Offer Indigenous Cultural Awareness seminars to all employee groups.** These seminars are being developed in the Provost's Indigenous Initiatives office and will be made available across U of T. The suggestion is that leadership be used to encourage participation, i.e., issuing the invitation from the Dean and Chairs and Directors. Include a seminar as part of the orientation for new faculty members and new staff members.

***Note:** This action strongly overlaps with the ["Implement ongoing cultural competency training"](#)*

*[for all staff and faculty](#)” action generated by the Indigenous Student Access Working Group. As such the progress items for that action are repeated here.*

***Progress:** A specific workshop is being designed by a respected member of the Indigenous community with strong ties to post-secondary education institutions. This workshop will be run for senior members of the FASE, including the Dean, Vice-Deans, and department Chairs. The workshop will include demonstration / participating in Indigenous cultural traditions, historic overview of the Indigenous people of Canada, and a facilitated brainstorming session on what the FASE can do.*

***Progress:** Key facilitators will undergo training to run Blanket Exercises for all FASE Faculty, Staff and Students interested in attending. A Blanket Exercise is an active learning exercise designed to educate non-Indigenous people on the history of the Indigenous People of Canada including the ways education has been used as a weapon against Indigenous people.*

## Short-Term Actions (2019-2021)

- F&S 4. **Work towards making U of T an employer of choice for the Indigenous community.** Use Indigenous faces and languages in our messaging. Model the jobs at U of T by showcasing the existing Indigenous employees at U of T so that Indigenous people can envision being in this space. Discover what Indigenous people can take back to their communities from their interaction with FASE (not just material value).
- F&S 5. **Provide support for Indigenous employees.** Support the creation of an Indigenous affinity group, which would include all Indigenous administrators working in similar positions within U of T, and perhaps across universities. Support a similar affinity group for Indigenous faculty. Support the creation of a mentorship program and the development of specific training programs for Indigenous staff across the university. Help to create Indigenous staff leaders. Investigate Indigenous employers and see what they are doing to attract and retain Indigenous employees.
- F&S 6. **Community outreach.** Expand and develop relationships with communities. Create community partnerships. Establish connections with Indigenous professionals in the community, such as Aboriginal Professionals Association of Canada.
- F&S 7. **Provide financial support for Elder services.** Work with First Nations House and the Provost’s Office of Indigenous Initiatives to determine how best to provide Elder support at FASE.

## Long-Term Actions (2022-2023)

- F&S 8. **Take a Seven Generations approach to the FASE relationship with Indigenous Peoples.** We were advised by Vern Douglas to remember the Anishinabe ( Ojibwa) seven generation teaching that states the decisions we make today will be fully realized in seven generations, so we need

to begin and we need to work together. The working group would like to stress that all of the proposed steps are only the beginning of a long journey. We must work on outreach at all levels of education so that we can develop a stream of Indigenous candidates as future students, staff and faculty, and we need to have a particular focus on the technical education for students that can feed into FASE.

## 3.0 Indigenous Spaces (IS) Working Group Recommendations

The task of the IS working group is to recommend actions to create a welcoming environment for current and future Indigenous students; to educate the non-Indigenous population of UofT FASE on the Truth before the Reconciliation; and finally to highlight the mutual value of building a positive ongoing relationship between the UofT FASE and Indigenous communities. Four Calls to Action (see below) were the focus of the IS working group. The numbers of these Calls to Action match from the Wecheehetowin report. The recommendations of the Working Group are divided into actions to take place Immediately (2018), in the Short-Term (2019-2021) and over the Long-Term (2022-2023).

- 1. The University should actively explore the creation of significant dedicated Indigenous space on the St. George campus – possibly as part of the St. George Front Campus redesign process – and include Indigenous stakeholders in all discussions on this issue. This space could include a First Nations House that is sensitively designed to express Indigenous values and aesthetics. It could also include outdoor space appropriate for Indigenous spiritual needs.*
- 2. A strategy for the funding and placement of more Indigenous public art across all three campuses should be developed, in close consultation with local Indigenous communities.*
- 4. The University should launch a process to identify and name appropriate spaces on the three campuses using Indigenous languages.*
- 5. All renovation and new construction on campus should take smudging into consideration in the design process.*

### Immediate Actions (2018)

- IS 1. **Ensure the existence of plentiful spaces for Smudging Ceremonies.** Smudging Ceremonies are a critical aspect of many Indigenous cultures. Support for and encouragement of and NOT just allowances for these ceremonies would go far towards demonstrating the importance of the Indigenous people in FASE. The FASE should conduct an inventory of multiple FASE spaces within each FASE building suitable for Smudging. This survey should start with the assumption that all spaces are suitable unless concrete reasons are given otherwise. The individuals conducting the survey must witness and have participated in a Smudging ceremony. There is concerned that

currently too many “No” decisions are being made by default simply because we are dealing with an entity unknown to many non-Indigenous people. Education and a shift in assumptions are key to implementing this recommendation.

**Note:** *There is a long running initiative to create Fire Safety Guidelines for Smudging Ceremonies. It is recommended that FASE NOT wait for these guidelines to emerge, but rather leverage our expertise in safety, codes, HVAC, and building systems to be a leader in this initiative.*

**Anecdote:** *One Indigenous storyteller recalled finally getting permission to Smudge on the condition that a Fire Safety Marshall be present. That Marshall showed up with an extra large handheld fire extinguisher that if used would have “blown the abalone [shell] right out of my hands.” The Marshall was surprised that they were dealing with a small smouldering fire no bigger than the tip of a cigarette with no visible flame.*

IS 2. **Use a participatory design approach, with key members of Indigenous communities, to (re)develop existing spaces as Indigenous spaces.** The purpose of these developments are to create permanent visual spaces within FASE for Indigenous people. They are symbolic of the Engineering community being recognized as an equal partner, including all the responsibilities that that entails, in building strong and prosperous Indigenous communities. Suggested existing locations:

- *Bahan Centre for Information Technology - Outdoor Patio*

This outdoor space is currently being redesigned. This prominent space could feature the close connection between Indigenous people and the land. Additionally the water feature could be used to highlight the importance of water in Indigenous culture and/or bring attention to the failing of the engineering infrastructure to supply safe drinking water to Indigenous communities.

**Progress:** *Ron Venter is heading up the redesign. We are in the process of meeting to discuss design alternatives.*

- *Mechanical Building - Lobby/Rm102 Crush Space:*

In many Indigenous cultures the entrance of a structure is extremely important. The MC lobby, just outside of the highly visible MC102 classroom, is currently undergoing a redesign and expansion. The FASE should take this opportunity to honor Indigenous People in this highly visible location. (See Figures 5 & 6) Construction on this renovation has already begun so any added features would need to be added immediately.



Figure 1: Mechanical and Industrial Engineering lobby panorama



Figure 2: Mechanical and Industrial Engineering lobby entrance on King's College Road

IS 3. **Use a participatory design approach, with key members of Indigenous communities, to commission Indigenous artwork.** The purpose of this artwork is to celebrate the future of the union of Engineering and Indigenous communities in the effort for build strong and prosperous Indigenous communities. Suggested locations for the artwork:

- *Sandford Fleming - East facing entrance:*  
The large wall space on the landing (See Figure 3) is in a prominent location and currently underutilized. Additionally an east facing entrance is important in Indigenous culture.
- *Galbraith Building - Michael E. Charles Council Chamber, GB202:*  
This room is the symbol of leadership for our faculty and it exudes a feeling of traditional colonialism. We need to make a room for Indigenous people in that space ideally by celebrating Indigenous leadership in engineering.

- *Centre for Engineering Innovation & Entrepreneurship - East facing entrance:*  
Again an east facing entrance is important within Indigenous culture. This would be an excellent space to include a permanent representation of the Land Acknowledgement. (See IS 7.)



Figure 3: Wall in Sandford Fleming building near an East facing entrance on which an Indigenous Art installation is recommended

IS 4. **Use a participatory design approach, with key members of Indigenous communities, to establish educational installations located within FASE space.** The purpose of these installations will be to teach about Indigenous history and culture, and to celebrate the union of Engineering and Indigenous Knowledge.

- *Centre for Engineering Innovation & Entrepreneurship - Lobby / Crush space:*  
It is recommend to include a larger representation of the connection between Indigenous culture and engineering. A suggestion is to include a life sized (if possible) Red River Cart (See Figures 4 & 5). This was a transportation innovation by the Metis people and includes aspects of Design for: Limited Resources, Repairability, Multi-functionality.

## THE RED RIVER CART



*No iron was used. The frame was held together with wooden pegs. The tires were bound round with strips of 'Shaganhappi', raw fresh skin of buffalo or cattle, which as it dried, shrank & held them tightly, forming a hard & durable rim. These carts followed the Métis hunting parties & carried the meat of the slain buffalo. They were also employed in transporting freight. Sometimes they were fitted with a round-topped hood of hide or canvas.*

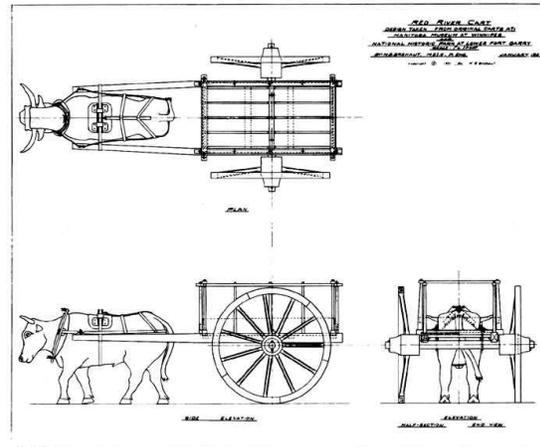
← Figure 4: Red River cart and description

Source: Jefferys, Charles W. 1945 *The Picture Gallery of Canadian History Vol. II*, p.177

↓ Figure 5: Red River Cart Engineering Drawing

Source:

<http://www.mhs.mb.ca/docs/transactions/3/redrivercart.shtml>



IS 5. **Form an ongoing Indigenous Space committee, with Indigenous community members, with ongoing funding tasked to identify additional spaces for naming and/or (re)development as Indigenous spaces, locations for Indigenous artwork and educational installations.** For Indigenous People to have a permanent place in FASE there needs to be an ongoing effort to fund, maintain, and develop new Indigenous spaces. Therefore this report cannot be the last of the recommendations on Indigenous space.

IS 6. **Work with Indigenous Language experts to identify and display Indigenous names for locations in FASE where appropriate.** While this is important to do, FASE is not the expert here. The FASE should consult with the many excellent Indigenous Language experts here at the University to decide when an Indigenous name is appropriate and if so what languages to use. Prof Alex McKay is one such expert that should be consulted.

IS 7. **Create a prominent, permanent physical representation of the land acknowledgement.** The land acknowledgement is a voluntary verbal recognition that the land on which the FASE operates every day has a long history of Indigenous habitation. This physical representation should be design through a participatory process between representative of the local Indigenous communities and the FASE community. Possible design could include: painted acknowledgement on the eastern facing door of the CEIE, an outdoor plaque, or a painted mural.

## Short-Term Actions (2019-2021)

- IS 8. **Create an Indigenous Office within the FASE.** This office will host the transition program and services for Indigenous engineering students, including an Elder-in-Residence and support services such as funding, housing and childcare supports. Given the many aspects of the relationship between the FASE and Indigenous communities it is important that this office have a voice heard directly by the Dean and not filtered through a third party. Therefore this office should report directly to the Dean. Additionally this office should have dedicated funding to address these uniquely Indigenous aspects and not pooled funding with other diversity and inclusion initiatives. If this office is housed under a general FASE diversity office the name of that umbrella office should reflect not only diversity, but also the rebuilding of community relationship and use the word “reconciliation.”  
([duplicated in the Indigenous Student Access Working Group recommendations](#))

## Long-Term Actions (2022-2023)

- IS 9. **Spearhead the call for the Front Campus redesign to incorporate prominent Indigenous space.** The current four final design proposals for the \$20 million redesign of the Front Campus (the area around King’s College Circle) currently incorporate no component of Indigenous culture. (see Figures 6 & 7) This project is at the university level and under the domain of Scott Mabury, U of T Vice-President of Operations. However given our campus location and areas of expertise, the FASE could take a leadership role in calling for a revisit of the design in order to incorporate Indigenous components. Examples include the Brock University Healing Gardens or our own Kahontake Kitikan Garden created by our Native Students' Association (See Figure 8 & 9).



Figure 6: Conceptual art of Front Campus redesign - New pedestrian walkways

Source: <https://landmark.utoronto.ca/docs/the-landmark-project-brochure.pdf>



Figure 7: Conceptual art of Front Campus redesign - Medical science district

Source: <https://landmark.utoronto.ca/docs/the-landmark-project-brochure.pdf>



Figure 8: Brock University Healing Gardens

Source: <https://brocku.ca/brock-news/2016/09/oct-4-will-be-a-day-of-special-dedications/>



Figure 9: Kahontake Kitikan Garden - Native Students' Association U of T.

Source: <https://www.facebook.com/NSAGarden/>

IS 10. **Create a symbol of Indigenous Engineering Positive Space.** The Engineering Positive Space movement has been highly successful in creating a visual representation of the LGBTQ+ presence within the engineering community and identifying engineering as as a positive space for everyone (See Figures 10 & 11). Key members within the community should work towards creating a similar visual representation for Indigenous Positive Space, something similar to the American Indian Science and Engineering Society rainbow logo (See Figure 12). The desire is NOT to simply design something for this purpose, but rather in the long term create the Indigenous spaces talked about above. Place the Indigenous art and installations. Then when those have become part of the engineering culture use those images to create the visual representation. Let the representation be something that develops organically.

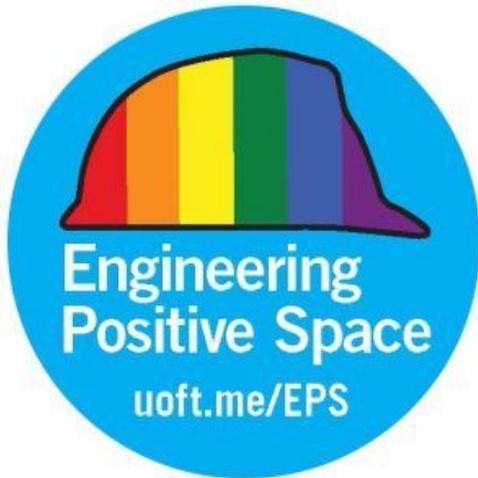


Figure 10: Engineering Positive Space logo

Figure 11: Advertising poster created by Engineering Positive Space

Source: <http://undergrad.engineering.utoronto.ca/skule-life/engineering-positive-space/>



## 4.0 Indigenous Student Access (ISA) Working Group Recommendations

Despite having a diverse student population and high representation from other groups traditionally underrepresented in engineering, such as women, FASE is failing the Indigenous population. To the best of the committee's knowledge there is only one self-identified Indigenous undergraduate student. The task of the SA working group is to recommend actions to increase Indigenous student access to engineering education at UofT, and in the broader context of Turtle Island. The Working Group recognizes there is great diversity, including diversity of needs and barriers to education, within the Indigenous peoples of Turtle Island, and that UofT must work to decolonize the path to engineering education for urban, reserve and remote Indigenous communities. The recommendations for action on the six Calls to Action below are divided into actions to take place Immediately, in the Short-Term (2-3 years) and over the Long-Term (5 years).

*24. The University should consider the creation of a more visible, single Indigenous web portal to provide one stop for key information for Indigenous students, expanding and diversifying the existing Aboriginal Student Services web page. That portal could also be extended over time for faculty and staff.*

*25. The Provost should strike a working group to investigate barriers to access for Indigenous students, examining undergraduate, graduate, and professional programs. The working group should draw on the experiences of divisions that already have targeted admissions programs for Indigenous students. The University might want to consider areas where targeted admissions initiatives are most warranted, seeking to diversify access for Indigenous students into a wider range of academic fields. Given the University's strong research profile, a major focus on Indigenous graduate admissions and retention might be sensible.*

*26. The University should invest more in publicising existing college pathway programs, and in actively recruiting into those programs and into the existing, targeted Indigenous access and bridging programs.*

*27. The Provost should charge the working group on barriers to access for Indigenous students (which is recommended above) with examining issues related to Indigenous student housing.*

*28. The Provost should commission a detailed study of existing funding mechanisms across the University that could be better deployed to support Indigenous students. The Vice-President, Advancement should design a targeted fundraising initiative to build support for both scholarships and needs-based bursaries for Indigenous students in undergraduate, graduate, and professional programs.*

30. The Vice-Provost, Students should establish a working group to design a sustainable mentoring program for Indigenous students, drawing on volunteer Indigenous faculty, staff, and students to serve as mentors for first year undergraduate Indigenous students. The program might be expanded to upper-year students as resources allow.

## Immediate Actions (2018)

ISA 1. **Implement ongoing cultural competency training for all staff and faculty.** This training is necessary to educate members of the FASE community, to create a welcoming space for Indigenous students (as well as faculty and staff), and to lay the groundwork for the building of long-term relationships with Indigenous communities.

**Note:** This action strongly overlaps with the [“Offer Indigenous Cultural Awareness seminars to all employee groups”](#) action generated by the Indigenous Faculty & Staff Recruitment and Hiring Working Group. As such the progress items for that action are repeated here.

**Progress:** A specific workshop is being designed by a respected member of the Indigenous community with strong ties to post-secondary education institutions. This workshop will be run for senior members of the FASE, including the Dean, Vice-Deans, and department Chairs. The workshop will include demonstration / participating in Indigenous cultural traditions, historic overview of the Indigenous people of Canada, and a facilitated brainstorming session on what the FASE can do.

**Progress:** Key facilitators will undergo training to run Blanket Exercises for all FASE Faculty, Staff and Students interested in attending. A Blanket Exercise is an active learning exercise designed to educate non-Indigenous people on the history of the Indigenous People of Canada including the ways education has been used as a weapon against Indigenous people.

ISA 2. **Begin targeted recruiting for Indigenous students.** This includes a website with specific content for Indigenous students, scholarships (5 x \$20,000 each) that do not depend on attaining and maintaining a certain GPA, and advertising what UofT has to offer (flexible options, minor program, etc).

**Progress:** Multiple U of T Engineering Entrance Scholarships for Indigenous Students (Domestic Tuition plus stipend) have been created. They are renewable for four years. The details of the qualifications and application process are still being developed with representatives of the Student Access Working Group.

ISA 3. **Create a full-time position, to be held by an Indigenous hire,** to coordinate cultural competency training and outreach and recruitment of Indigenous students. This individual will seed the effort to increase Indigenous participation in engineering at UofT and will be the first of several

hires necessary to support programs essential to increase Indigenous access over the next 5 years.

- ISA 4. **Create a separate Access Pathway to FASE for Indigenous students.** Indigenous students should not compete with the larger pool of applicants. Indigenous students who meet FASE basic admission requirements should be admitted.
- ISA 5. **Begin building relationships with Indigenous communities** and create a network of Indigenous engineers and educators to support mentorship and outreach programs.
- ISA 6. **Determine if a process is needed to verify student applicants claim for Indigenous background.** One of the stumbling blocks encountered was how best to determine the validity of Indigenous student applicants. This is an issue that we did not find a clear solution to and one that will need input from more Indigenous advisors.

## Short-Term Actions (2019-2021)

- ISA 7. **Initiate a pilot engineering outreach program for Indigenous high school students.** Outreach is essential to generate interest in engineering in Indigenous communities. We should start with one program each in an urban environment, on reserve and in a remote community. Culturally relevant content must be created for the program in collaboration with the host communities. The program should consist of hands-on activities and long-term mentoring, which includes pathfinding, for students who express interest in engineering. Funding for this program needs to be allocated separately or generated through Advancement to ensure the ongoing nature of this program and not just the allocation of additional duties to existing Outreach staff. This program can also serve as a starting point to advocate for equitable funding for education in the sciences on reserves and in remote communities.
- ISA 8. **Create a transition program for Indigenous students** with Grade 10 math to enter engineering, and potentially other STEM programs, at UofT. The transition program should consist of condensed courses designed for entry to the engineering program, instruction on time management and study skills, mentorship, as well as counselling and other supports such as access to housing and childcare. The program must accommodate students just out of high school, as well as mature students.
- ISA 9. **Expand the Indigenous Outreach program** to additional communities and to younger age groups building on experience from the pilot program and relationships built with communities. Funding for this program needs to be allocated separately or generated through Advancement to ensure the ongoing nature of this program and not just the allocation of additional duties to existing Outreach staff.
- ISA 10. **Create an Indigenous Office within the FASE.** This office will host the transition program and services for Indigenous engineering students, including an Elder-in-Residence and support services such as funding, housing and childcare supports. Given the many aspects of the

relationship between the FASE and Indigenous communities it is important that this office have a voice heard directly by the Dean and not filtered through a third party. Therefore this office should report directly to the Dean. Additionally this office should have dedicated funding to address these uniquely Indigenous aspects and not pooled funding with other diversity and inclusion initiatives. If this office is housed under a general FASE diversity office the name of that umbrella office should reflect not only diversity, but also the rebuilding of community relationship and use the word “reconciliation.”

[\(duplicated in the Indigenous Spaces Working Group recommendations\)](#)

- ISA 11. **Work with colleges in northern and remote areas to increase engineering programming in colleges** (such as first year engineering design), and **facilitate the transfer of college credits**, including Engineering Technology diplomas, to UofT engineering.

***Progress:** Discussions are underway regarding a Diploma to Degree program being developed for the Sciences at UofT. It is possible that FASE could participate in this program as a first step towards a transition program. The pilot is tentatively scheduled for September 2019. While this specific program is not targeting a northern or remote area, it could generate expertise in FASE that could then be extended to northern and remote areas.*

## Long-Term Actions (2022-2023)

- ISA 12. **Establish a pilot engineering program in a remote community.** At present, engineering education is not available in northern Canada, and geography is a large barrier to post-secondary education for many Indigenous communities. Further, many specialized engineering problems exist in the north, as does specialized knowledge regarding these problems. The University of Toronto, in partnership with other academic institutions, Indigenous groups and industry, should build a pilot program, following the cohort model, to educate engineers in the North. This program should be Northern-focused and northern-led, and incorporate traditional Indigenous knowledge into the programming. Upon successful implementation, the pilot program can be expanded to be offered continuously or in other remote communities.

***Progress:** Significant preliminary work and has gone into a proposed program for UofT FASE to participate in the creation of an engineering program in remote Labrador. A report on this work has already been submitted to the FASE prior to the release of this recommendation. The Eagles’ Longhouse Steering Committee greatly supports this proposal as a strong step towards achieving this recommendation.*

## 5.0 Indigenous Curriculum (IC) Working Group

To demonstrate the value that FASE places on Indigenous ways of knowing and to better educate our students, staff and faculty to work in a participatory way with Indigenous Communities, FASE needs to

design Indigenous content into their curriculum. The two Calls to Action below cover educating both students and staff/faculty (emphasis from the working group).

*17. The University should work to **integrate** significant **Indigenous curriculum content** in all of its divisions by 2025. The Provost should work with the divisions to ensure that specific steps are being taken to launch (or in some case continue) the needed curriculum reform initiatives. Each division should be **evaluated regularly**, beginning in 2017, on Calls to Action Linked to Working Groups curriculum reform initiatives. Each division should be evaluated regularly, beginning in 2017, on its progress towards integrating Indigenous content into the curriculum.*

*18. The Provost should launch an initiative to develop and offer Indigenous learning opportunities for faculty, instructors, staff and teaching assistants. In addition, the University should create and fund a pool of **Indigenous curriculum developers**, who would ideally be of Indigenous heritage. The curricula they work to develop, **in close collaboration with divisions**, should be based on Indigenous knowledge and protocols.*

The working group took careful note of the word “integrate” and the phrase “in close collaboration with divisions” in these Calls to Action. We interpreted this as a clear indicator that the Indigenous curriculum content should be carefully selected to be embedded into existing engineering curriculum. Engineering has previous experience with integrating content once seen as outside of traditional engineering skill set.

The Engineering Communications Program (ECP) has 20 years experience teaching communication skills to engineering students. Likewise ILead has over a decade experience teaching self, team, organizational and societal leadership to engineering students. Both programs have recognized that engineering students, whether due to their intense programs or simply due to a shared mindset, are practical learners. They learn early in their academic careers to prioritize their time and thereby their learning. To address this both programs have spent significant resources to integrate themselves into existing engineering course.

A first example was the replacement of a dedicated first year communications course by a design and communications course with heavy involvement from ECP. A second example is the ILead infusion lectures series whereby ILead faculty and staff give guest lectures on leadership throughout all years of the engineering program. Both programs found that stand alone courses run the risk of being dismissed by engineering students as extraneous and factored out due to their time prioritization. When the content however was integrated into traditional engineering courses, given an obvious engineering context, students were much more receptive.

There are examples at other universities where mandatory Indigenous studies courses were added to the curriculum, but given what we know of the engineering program and students this route would limit the true learning of Indigenous content. Therefore:

IC 1. ***The FASE should take an integrated approach to bringing Indigenous content to the engineering curriculum, and NOT add additional courses. The content should be embedded in at least one course in each year and each program of study. It is strongly recommended that the first courses to do so be the first year design courses (Engineering Strategies and Practice and Praxis). [Short-Term Action (2019-2021)]***

A major challenge for the working group was understanding what was meant by “Indigenous content.” Through discussion the working group, which included the co-chair of the university-wide Indigenous curriculum content working group, the four examples below are how Indigenous content could be integrated as an enhancement to the standard engineering curriculum.

**Example 1 - Cultural Awareness / Safety Training:** Our engineering student body is vastly non-Indigenous. Our domestic non-Indigenous students will likely have had some contact with Indigenous culture, a percentage that is rising every year given the changes to the public school curriculum, but most will not have a deeper level of understanding of Indigenous culture. Our international students, which make up nearly a third of our undergraduate students, will likely have no knowledge of Indigenous culture or worse will have an image generated by international mass media stereotypes.

This path will be about educating all of our students on the history of the Indigenous People of Canada (Topics to Include: Indian Act and Treaties, Residential Schools, the 60’s Scoop, etc). As well it will include how this history relates to the modern day Indigenous experience, such as Indigenous self-governance, and skill training on working with Indigenous communities.

**Example 2: Indigenous Technology:** This is intended to link engineering knowledge with Indigenous knowledge through illustrative examples of Indigenous ingenuity. A primary result will be debunking the myth that Indigenous cultures did not use technology.

- *Audience:* All engineering students.
- *Examples:* Snowshoes (Design for extreme environments), Tipi (Design for Portability), Birch bark canoes (Design for Limited Resources), Red River Cart (Design for Limited Resources and Design for Unique Environment).

**Example 3: Indigenous Perspectives:** Critical thinking is a key skill for the skeptical engineer. Part of critical thinking is having the ability to look at a problem, situation, or event, from multiple perspectives. The Indigenous way of viewing the world is by seeing it as a collection of renewal cycles; as circles rather than straight lines. The union of people and the land are inseparably linked due to the intertwined nature of people and nature spirits. Encouraging students to use these different perspectives will make them better engineers. It also has the side benefit of communicating the value of Indigenous ways of knowing not traditionally valued in engineering.

- *Audience:* All engineering students.
- *Example:* Sustainability / Industrial Ecology => Indigenous Efficiency in the Hunt; Biomimicry (Design by Observing Nature)

**Example 4: Indigenous Skills:** With the implementation of the new graduate outcomes engineering accreditation system the importance of skills not purely technical have become a topic of interest. The vast majority of these graduate outcomes are inherently more difficult to teach and evaluate. So much so that it has been driving a significant portion of engineering education research in Canada. Some of these skills are those for which Indigenous people have a long, successful history with, such as: Team dynamics and Oral Storytelling / presenting.

- *Audience:* All engineering students
- Example: Team strategies => Sharing circles, Talking stick; Persuasive presentations => Oral storytelling

IC 2. **Run regular Blanket Exercise events for FASE students, staff and faculty.** The Blanket Exercise is a powerful active learning workshop to educate non-Indigenous people on the history of the Indigenous People in Canada. [Immediate Action (2018)]

IC 3. **Create an Indigenous culture infusion lecture series.** The general learning objectives will be common for each year, but each lecture will be customized for the specific course. [Long-Term Action (2022-2023)]

IC 4. **Better communicate engineering as a community builder.** For many Indigenous People the ability to contribute back to their home community is a driving factor in their post-secondary decision making. We must make it clear in our curriculum how engineering is what enables and builds communities. It is engineering infrastructure, processes, and products that make large scale communities possible. [Short-Term (2019-2021)]

IC 5. FASE to **hire one or more Indigenous curriculum developers**, who would ideally be of Indigenous heritage, to develop and support instances of Indigenous content in the existing curriculum. [Short-Term (2019-2021)]

## Next Steps

It was a great privilege and a great learning experience for the committee to participate in this consultative process with members of Indigenous communities. The conversations were, at times, difficult, but we expected no less because of the nature of the issues that we were discussing. It became apparent to the committee that for the FASE to answer the calls to action there needs to be a change in our current institutional thinking and methods.

The TRC was the beginning of non-Indigenous inhabitants of Turtle Island recognizing the voices of Indigenous Peoples. This has continued, though not without encountering barriers. The idea that the FASE, as part of the University of Toronto, can contribute to including Indigenous Peoples and Knowledge at our institution is a goal worth striving for. The complexity of the issues are great, but if our willingness is greater, we will overcome the barriers and help to craft a new form of institution that is inclusive of all who inhabit Turtle Island.

We recommend the critical first next step be the hiring of a full time, continuing status Indigenous staff member whose duties will cover at least part of those detailed in recommendations F&S1, ISA3, and IC5. This person, with support from existing members of the UofT Indigenous community, will establish the FASE Indigenous office recommended in IS8 and ISA10. Models for this position can be found within UofT in the Faculties of Law and Medicine and outside of UofT in engineering faculties at Queen's University and University of Saskatchewan.

The first duty of this new person will be the formation and leadership of an implementation committee to begin realizing recommendations in this report as soon as possible and the annual reporting of the progress towards these recommendations. As well as this new Indigenous leader, this implementation committee must have strong Indigenous representation including at least one Elder.

# Appendix A Composition of the Working Groups

The committee leadership identified two tradeoffs when considering committee composition. These tradeoffs were between keeping membership small and agile and ensuring extensive consultation. A compromise was struck by using the Truth and Reconciliation Steering Committee model of a lean Steering Committee supported by larger Working Groups. The four working groups and their membership are detailed below.

## A.1 Indigenous Faculty and Staff Recruitment and Hiring Working Group

- Krystal Abotossaway, Indigenous Community Representative; TD Bank Group, Diversity Sourcing Partner; President Aboriginal Professional Association of Canada
- Grant Allen, Professor & Chair, Chemical Engineering & Applied Chemistry
- Markus Bussmann, Professor & Chair, Department of Mechanical & Industrial Engineering
- Joan DaCosta, Indigenous Staff, Eagles' Longhouse Representative
- Chris Damaren, Professor & Director, Institute for Aerospace Studies
- Vernon Douglas, Indigenous Community Representative; Cultural Advisor, Department of Indigenous Studies, Trent University (retired) (participated in first meeting and contributed advice via email)
- Farid Najm, Professor & Chair, Electrical & Computer Engineering
- Jun Nogami, Professor & Chair, Materials Science & Engineering
- Emma Scully, Manager, Human Resources, Faculty of Applied Science & Engineering
- Shannon Simpson, Director, First Nations House (participated in first meeting only)
- Verne Ross, Indigenous PhD student, OISE (participated in first meeting only)
- Michael White, Indigenous Community Representative; Ontario Federation of Indigenous Friendship Centres (O.F.I.F.C.)<sup>1</sup>

## A.2 Indigenous Spaces Working Group

- Elder Kim McDougall (Member of Eagles' Longhouse Steering Committee)
- Steve Miszuk (Retired - Director, Facilities and Infrastructure Planning - FASE; Centre for Engineering Innovation and Entrepreneurship)
- Thomas Saint-Ivany (Director, Facilities and Infrastructure Planning - FASE)
- James Bird (Indigenous Architecture Student)
- Paige Clarke (Undergraduate Engineering Student with Indigenous Studies Minor)
- Jason Bazylak (Indigenous Faculty; Eagles' Longhouse Steering Committee)

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<sup>1</sup> Since participating in this working group Michael White has accepted the role as Special Projects Officer, Indigenous Initiatives, Office of the Vice-President & Provost, at the University of Toronto.

### A.3 Indigenous Student Access Working Group

- Elder Kim McDougall (Member of Eagles' Longhouse Steering Committee)
- Michael White (Indigenous Community Representative; Trainer with the Ontario Federation of Indigenous Friendship Centres)
- Jill Carter (Indigenous UofT Faculty)
- Oke Maracle (Practicing Indigenous Engineer)
- Jennifer Sylvester (President of the Indigenous Studies Student Union)
- Stephen Johns (Engineering Student Recruitment)
- Micah Stickel (Vice-Dean First Year Engineering)
- Don Macmillan (Faculty Registrar - FASE)
- Erin Bobicki (Eagles' Longhouse Representative)

### A.4: Indigenous Curriculum Working Group

- Elder Kim McDougall (Member of Eagles' Longhouse Steering Committee)
- Elder Grafton Antone (Indigenous UofT Faculty - Retired)
- Elder Eileen Antone (Indigenous UofT Faculty - Retired)
- Brittany Carter (Indigenous Undergraduate Engineering student)
- Paige Clarke (Undergraduate Engineering Student with Indigenous Studies Minor)
- Bonnie Maracle (Indigenous UofT Staff; Aboriginal Learning Strategist)
- Evan Bentz (Chair Faculty Curriculum Committee - FASE)
- Chirag Variawa (Director of First Year Curriculum - FASE)
- Jason Bazylak (Indigenous Faculty; Eagles' Longhouse Steering Committee)

## Appendix B Summary of FASE Calls to Action

Of the 34 Calls to Action identified in the Wecheehetowin report the following 17 were identified as being most applicable to the FASE.

*6. The Provost should launch a University-wide initiative to support the hiring of Indigenous faculty by making available targeted funds that could be accessed by divisions on a competitive basis. The aim should be to facilitate the hiring of a significant number of Indigenous faculty members over the next three years. To begin the needed process of inclusion, divisions and departments should consider specifically targeting Indigenous hiring. Discussion should occur around a range of ways to create incentives for divisions and departments both with and without current Indigenous scholars to ensure Indigenous participation in these hiring processes, especially on hiring committees. [F&S]*

*9. The Provost's Office should review existing anti-discrimination training materials for hiring committees to ensure that the materials are sensitive to specific issues related to Indigenous peoples. [F&S]*

*11. Each division should actively consider the creation of an Indigenous leadership position within the Office of the Dean. Such positions would have to be meaningful, and targeted to real opportunities that are different across the divisions. They would also have to be properly supported by the entire Decanal team. [F&S]*

*14. The University should work actively to increase the number of Indigenous staff members who support important programs, especially those designed to revitalize and strengthen Aboriginal languages, and those that support Indigenous students. Over time, the positions should be funded from core budgets, and not merely as year-to-year add-ons. [F&S]*

*15. The Provost's Office, working with the divisions, should seek to expand the current financial support for Elder services, which should be made available to broader segments of the University community. [F&S]*

*1. The University should actively explore the creation of significant dedicated Indigenous space on the St. George campus – possibly as part of the St. George Front Campus redesign process – and include Indigenous stakeholders in all discussions on this issue. This space could include a First Nations House that is sensitively designed to express Indigenous values and aesthetics. It could also include outdoor space appropriate for Indigenous spiritual needs. [IS]*

*2. A strategy for the funding and placement of more Indigenous public art across all three campuses should be developed, in close consultation with local Indigenous communities. [IS]*

*4. The University should launch a process to identify and name appropriate spaces on the three campuses using Indigenous languages. [IS]*

5. All renovation and new construction on campus should take smudging into consideration in the design process. **[IS]**

24. The University should consider the creation of a more visible, single Indigenous web portal to provide one stop for key information for Indigenous students, expanding and diversifying the existing Aboriginal Student Services web page. That portal could also be extended over time for faculty and staff. **[ISA]**

25. The Provost should strike a working group to investigate barriers to access for Indigenous students, examining undergraduate, graduate, and professional programs. The working group should draw on the experiences of divisions that already have targeted admissions programs for Indigenous students. The University might want to consider areas where targeted admissions initiatives are most warranted, seeking to diversify access for Indigenous students into a wider range of academic fields. Given the University's strong research profile, a major focus on Indigenous graduate admissions and retention might be sensible. **[ISA]**

26. The University should invest more in publicising existing college pathway programs, and in actively recruiting into those programs and into the existing, targeted Indigenous access and bridging programs. **[ISA]**

27. The Provost should charge the working group on barriers to access for Indigenous students (which is recommended above) with examining issues related to Indigenous student housing. **[ISA]**

28. The Provost should commission a detailed study of existing funding mechanisms across the University that could be better deployed to support Indigenous students. The Vice-President, Advancement should design a targeted fundraising initiative to build support for both scholarships and needs-based bursaries for Indigenous students in undergraduate, graduate, and professional programs. **[ISA]**

30. The Vice-Provost, Students should establish a working group to design a sustainable mentoring program for Indigenous students, drawing on volunteer Indigenous faculty, staff, and students to serve as mentors for first year undergraduate Indigenous students. The program might be expanded to upper-year students as resources allow. **[ISA]**

17. The University should work to integrate significant Indigenous curriculum content in all of its divisions by 2025. The Provost should work with the divisions to ensure that specific steps are being taken to launch (or in some case continue) the needed curriculum reform initiatives. Each division should be evaluated regularly, beginning in 2017, on Calls to Action Linked to Working Groups curriculum reform initiatives. Each division should be evaluated regularly, beginning in 2017, on its progress towards integrating Indigenous content into the curriculum. **[IC]**

18. The Provost should launch an initiative to develop and offer Indigenous learning opportunities for faculty, instructors, staff and teaching assistants. In addition, the University should create and fund a pool of Indigenous curriculum developers, who would ideally be of Indigenous heritage. The curricula they work to develop, in close collaboration with divisions, should be based on Indigenous knowledge and protocols. **[IC]**

# Appendix C Summary Recommendation by Immediacy

## Immediate Actions (2018)

- F&S 1. Create an Indigenous administrative position to begin the process of taking responsibility for the calls to action of the TRC. [Closely linked to ISA3.]
- F&S 2. Support a program focused on the recruitment and hiring of Indigenous Faculty and staff.
- F&S 3. Offer Indigenous Cultural Awareness seminars to all employee groups. [Also identified by the ISA working group in ISA1.]
- IS 1. Ensure the existence of plentiful spaces for Smudging Ceremonies.
- IS 2. Use a participatory design approach, with key members of Indigenous communities, to (re)develop existing spaces as Indigenous spaces.
- IS 3. Use a participatory design approach, with key members of Indigenous communities, to commission Indigenous artwork.
- IS 4. Use a participatory design approach, with key members of Indigenous communities, to establish educational installations located within FASE space.
- IS 5. Form an ongoing Indigenous Space committee, with Indigenous community members, with ongoing funding tasked to identify additional spaces for naming and/or (re)development as Indigenous spaces, locations for Indigenous artwork and educational installations.
- IS 6. Work with Indigenous Language experts to identify and display Indigenous names for locations in FASE where appropriate.
- IS 7. Create a prominent, permanent physical representation of the land acknowledgement.
- ISA 1. Implement ongoing cultural competency training for all staff and faculty. [Also identified by the F&S working group in F&S3]
- ISA 2. Begin targeted recruiting for Indigenous students.
- ISA 3. Create a full-time position, to be held by an Indigenous hire, to coordinate cultural competency training and outreach and recruitment of Indigenous students. [Closely linked to F&S1.]
- ISA 4. Create a separate Access Pathway to FASE for Indigenous students.
- ISA 5. Begin building relationships with Indigenous communities and create a network of Indigenous engineers and educators to support mentorship and outreach programs.

- ISA 6. Determine if a process is needed to verify student applicants' claim of Indigenous background.
- IC 2. Run regular Blanket Exercise events for FASE students, staff and faculty. [Closely linked to ISA3. and F&S3. It is listed separately because implementation has already started.]

## Short-Term Actions (2019-2021)

- F&S 4. Work towards making U of T an employer of choice for the Indigenous community.
- F&S 5. Provide support for Indigenous employees.
- F&S 6. Community outreach.
- F&S 7. Provide financial support for Elder services..
- IS7. Indigenous naming and integration of Indigenous culture in the new Mechanical Engineering Building (MC) lobby.
- IS8. Create an Indigenous Office within the FASE.
- ISA 7. Initiate a pilot engineering outreach program for Indigenous high school students.
- ISA 8. Create a transition program for Indigenous students
- ISA 9. Expand the Indigenous Outreach program
- ISA 10. Create an Indigenous Office within the FASE.
- ISA 11. Work with colleges in northern and remote areas to increase engineering programming in colleges (such as first year engineering design), and facilitate the transfer of college credits, including Engineering Technology diplomas, to UofT engineering.
- IC 1. *The FASE should take an integrated approach to bringing Indigenous content to the engineering curriculum, and NOT add additional courses.*
- IC 4. Better communicate engineering as a community builder.

## Long-Term Actions (2022-2023)

- F&S 8. Take a Seven Generations approach to the FASE relationship with Indigenous Peoples.
- IS 9. Spearhead the call for the Front Campus redesign to incorporate prominent Indigenous space.
- IS 10. Create a symbol of Indigenous Engineering Positive Space.
- ISA 12. Establish a pilot engineering program in a remote community.

IC 3. Create an Indigenous culture infusion lecture series.