College of Engineering Review:
Response to External Review Report

Prepared by:
College of Engineering
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ACKNOWLEDGEMENTS

The College of Engineering wishes to thank Professors Michael Isaacson, Douglas Ruth, David Barnes, and Vikram Misra for their time and insight. The college also appreciates the support of both the Provost and Institutional Planning & Assessment (IPA) offices during the review process. The insight and recommendations in the external review report offer the college an opportunity to reflect more wholesomely and inform our planning as we move forward.

COLLEGE OF ENGINEERING RESPONSE

Overall, the College of Engineering was not surprised by the observations and recommendations of the external review team. The Review of the College of Engineering includes specific recommendations and presents additional analysis that will be useful for developing college plans going forward. This document responds to the specific recommendations outlined in the external review report.

The Review of the College of Engineering provides twelve recommendations across eight themes: leadership, planning, organizational structure and governance, research, teaching, partnerships, people, and resources and infrastructure.

The College recognizes that the first three recommendations made by the external review team are directed towards the university. These recommendations involve the review process, the search for a dean, and the qualities of the next dean. The response to recommendations 4 through 12 are as follows:

4. STRATEGIC PLANNING

Recommendation: “[…]to establish a clear strategic plan. This needs to be based on a broad and inclusive consultation process, consistent with the University’s vision statement, […] increased emphasis on research; […] followed by a deliberate operational plan to assure its implementation.”

The College of Engineering will embark in developing its five-year strategic plan with the institution in 2017 that will emphasize a more research intensive culture. Our planning efforts will be aligned with the Institutional Planning and Assessment office and will rely on a defined institutional budgeting model in order to understand the resources available to support the goals within the plan.

The five-year plan will be completed by December 2017. In order to support and complete this process effectively, the College anticipates allocating some resources which will be considered one-time costs.

As in the past, this process will be a “broad and inclusive consultation process” with our college community and will include a comprehensive “operational plan to assure its implementation”.

5. ORGANIZATIONAL STRUCTURE

Recommendation: “[…]review the reporting structure […] in order to address the various inconsistencies […] and assure an organizational structure is widely supported.”

In early 2016, the College of Engineering leadership team identified that a review of the organizational structure was required. In an effort to respect the unit review process, this work was paused. The College will be initiating an organizational structure review and revision for some administrative staff positions in early 2017. It is
important to note that this work will be coordinated with the institutional Service Design & Delivery initiative, which continues to evolve.

The review and revisions will be complete in 2017. The financial resources required are unknown until a plan has been developed.

The new organizational structure for administrative staff positions will ensure uniformity across all units and tools will be developed to support managers under the new model.

6. RESEARCH

**Recommendation:** “[...]Associate Dean Research [...] articulates research expectations and facilitates the College’s participation in large university initiatives.”

The Associate Dean Research established a research planning group in December 2016. This group is comprised of a diverse set of faculty and has been asked to inform the College’s research agenda and strategy going forward.

This group will develop a plan by May 2017. The financial resources required are unknown until the plan has been developed.

This planning group will identify the opportunities present and develop a plan with specific strategies or initiatives that will assist the college moving forward. At this time, it is envisioned that this group will respond to the short term research agenda, whereas the strategic plan noted in recommendation #4 will address the holistic research plan for the College.

The College appreciates the external reviewer comments on the nature of research in engineering and their positive view of the potential for engineering to participate in major institutional research initiatives. The College looks forward to working with University leadership to inform how engineering can contribute to the institution’s research agenda. Our research planning group will balance the benefits of institutionally-driven research priorities with organic, curiosity-driven research.

7. GRADUATE TEACHING

**Recommendation:** “The planning and delivery of graduate courses requires improvement. Specifically, the graduate teaching loads of faculty members needs to be recognized more formally, there needs to be a greater clarity and communication with respect to graduate course cancellations and course planning by students, and a minimum set of graduate courses each year for some specializations need to be assured.”

The College acknowledges the areas for improvement as it pertains to graduate teaching. The College academic leadership will work directly with the graduate program chairs and department heads in order to create a unified approach among programs in delivering a minimum set of graduate courses annually and addressing the communication gaps with regard to course cancellation and course planning. Also, department heads will incorporate graduate teaching loads more formally through the assignment of duties process.

The assignment of duties will reflect the graduate teaching loads formally as of March 31, 2017. This information will then be communicated appropriately in advance of the 2017-18 academic year.
The College hopes that these changes will provide more clarity to graduate students and faculty supervisors as they plan individual programs of study.

8. RON & JANE GRAHAM SCHOOL OF PROFESSIONAL DEVELOPMENT

Finding: “[…] there is a disparity with respect to views of the [School’s] roles and responsibilities internal to the School and across the College, its name appears to be a misnomer with respect to its role, and its faculty have anxieties with respect to their tenure and promotion.”

The College understands the confusion regarding the School’s name. However, the College has significant investments supporting the realization of the School and we anticipate the LaBorde and Seaman chair vacancies to be filled by July 2017. Once the faculty complement in the School is complete, they will be able to meet their mandate as originally envisioned when the School was created in 2012. More importantly, the College leadership affirms the value that members of the School presently bring and will play in the future development of the College overall.

9. FUNDRAISING

Recommendation: “[…] the new dean will need to articulate a fundraising strategy and specific funding needs and will need to develop a strong relationship with the University’s central fundraising organization.”

The interim dean is currently developing an external engagement plan for the College based on a list of priorities that have been developed by the College leadership team. The College will then seek the support of University Relations so that appropriate fundraising strategies can be developed in order for the Dean and other College leaders to secure philanthropic support.

This plan and list of priorities is anticipated to be complete in early 2017. The human resources required to implement this external engagement plan are substantial as the Dean and other College leaders’ time will be required in order to execute the plan effectively. The financial resources required are unknown until the external engagement plan has been completed.

The College aims to effectively engage all of its partners and grow our relationships beyond the mission of fundraising alone. However, as it pertains to this particular recommendation, the College intends to increase its opportunities to secure external funding to support the mission of the College, contributing to our overall success.

10. BUDGET PROCESS

Recommendation: “The University has moved to an activity-based approach for its budget allocations. While this is very welcome, the College needs to affirm that the new budget model does not entail unintended negative impacts on it, and it should seek to optimize its revenues and expenses based on the model. [......].”

The college leadership is working closely with IPA and Financial Services; Budgets & Special Projects office, to ensure full understanding of the TABBS/RCM model. As this becomes clear, we will convey our understanding to the college community. During the ongoing development of the model, the college will continue to advocate that the relevant drivers for the college of engineering are represented appropriately. In parallel with this, we will certainly strive to gain a thorough understanding of how our activities influence our budget allocation through this model. We target July 1, 2017 for this analysis.
11. DEPARTMENT BUDGETS

Recommendation: “There is a need for greater clarity with respect to the relationship between department budgets, including salaries, and budget drivers, notably student enrollments. A suggested approach involves reference to the budget (including salaries) per weighted FTE student. Such an analysis may reveal the need for budget adjustments to assure reasonable uniformity across departments. In the case of Civil, Geological and Environmental Engineering, teaching loads are unduly heavy so that there may need to be a curriculum and teaching resource review so as to rationalize teaching offerings and teaching loads. Similarly, in the case of Electrical and Computer Engineering, such a rationalization may also be needed, although in this case this may be through approaches to increasing student enrollments.”

The College leadership agrees with the importance of equitable resource allocations to enable delivery of high quality programs across the college.

With regard to faculty positions, the College’s approach has been to encourage development of faculty complement plans by the departments. These plans are developed in light of trends in the discipline, resources required to maintain quality undergraduate program offerings, and strategic research directions. These individual plans are then brought to the College Executive Committee (CEC) for discussion and prioritization. The ultimate decision regarding hiring priority rests with the Dean. However, these decisions are strongly influenced by the discussion at CEC. The College sees a benefit in extending this same complement planning process to technical staff. The College commits to reviewing the collective set of faculty and technical staff complement plans and developing a prioritised list of recruitments after the new strategic plan has been set.

With regard to non-salary budget, the College’s current allocation method is based on metrics agreed to by unit heads. The College will continue to work with unit heads to ensure these metrics fairly distribute this portion of the budget. This work will be completed by March 1, 2017 to match the 2017-18 budget cycle.

The approach outlined here stops short of blending salary and non-salary budgets into a single allocation to units. While we agree that this may be an informative metric to shed light on possible variations between units, we feel that a robust faculty complement plan is the best way to make principle-based budget allocation decisions.

12. SPACE

Recommendation: “[...] a detailed space audit needs to be conducted in order to anticipate needed space changes.”

In their report, the Review Team acknowledged that they heard many comments regarding shortages of space in the Engineering Building. They went on to recommend that a detailed space audit needs to be conducted. Unfortunately, during their brief visit, the significant work that has been done in this area did not come to light. Over the last five years, the following documents have been produced that thoroughly assess the current and future space needs of the college.

3. BE Beck & Associates, University of Saskatchewan Natural Resources Innovation Complex, Functional Program (Draft), December 5, 2013.
4. aodbt architecture + interior design & Flad Architects, Engineering Master Plan (Draft), August 31, 2016.

Only the first of these documents was provided to the external review team in the information package. The self-study document did contain the main finding of the space needs analysis which was a 3,000 m² shortfall in space, primarily in the research laboratories. It is important to note that this shortfall is based on 2010-11 student numbers and is exacerbated by growth since that time (7.6% increase in enrolment). The shortfall is also severely restricting any ambitions for growth of our undergraduate, graduate, and research programs. The Engineering Master Plan will move towards addressing these issues. Unfortunately, due to the timing of the external review, the master plan had not been finalized before the visit.

The reviewers positively commented on the effective use currently made of our space but also commented that more can be done in this area. The College agrees and has actively pursued significant upgrades that address bottlenecks in our ability to deliver programs (e.g. high-voltage power lab, undergraduate structures lab, undergraduate geotechnical lab, undergraduate chemical engineering lab). As the College awaits the next steps in response to its building expansion requirements, we will continue to use college reserve funds to more efficiently use our existing space.