Proposed MEng Program Improvements

Sept 22, 2021
**Proposed Improvements to the MEng**

This document provides a summary of the program improvements the Faculty of Engineering is proposing to the Government of Alberta in the request for an exceptional tuition increase. The proposed improvements have been determined in part through the input provided by current students of the Masters in Engineering program during the consultation process.

**Consultation Results**

We are committed to understanding the challenges our students face and building a program that provides the learning experience that meets or exceeds their expectations. Consultation with students began in April 2021 and included meetings with representatives from the Graduate Students’ Association (GSA) of the University of Alberta, GSA of the engineering departments, a town hall, and a survey of all MEng students. In all, 28 of 368 students (7.6%) engaged through survey responses, with additional students engaging through in-person town halls and focus group meetings.

**MAIN FINDINGS**

The consultation process identified five improvement areas. These included:

- **Course Content**, including industrial relevance of course and laboratory material.
- **Interaction with Industry**, including networking events, mentorship programs, and other industry-focused activities.
- **Improved Communication** between MEng students and their home department and with the Faculty of Engineering.
- **Online Delivery**, to facilitate remote learning.
- **Ongoing Consultation**, including mechanisms to ensure effective and continuous feedback from the student body.

These were consistently reported as priorities at the town hall and through the survey. Students also requested that the consultation process be continued beyond the submission of the proposal as a means of communicating their changing priorities to the Faculty of Engineering in the future.
Proposed Investments in Program Quality

The additional revenue raised through the tuition increase being requested will be used to fund specific initiatives in each of the five improvement areas identified through student consultations. Proposed investments are detailed as follows:

MEEng PROGRAM COORDINATOR

The divergent (and sometimes competing) goals of MEng and MSc students, together with the growing number of MEng students, has made coordinating both graduate programs using existing shared resources challenging. To address this gap, the proposed tuition increase will be used to support a dedicated MEng Program Coordinator.

The MEng Program Coordinator will liaise with the Associate Chairs (Graduate) and MEng Advisors in the departments, acting as a primary point-of-contact and providing effective communication (ranked 3rd) between MEng students and the Faculty of Engineering. The MEng Program Coordinator would support the modernization of course content (ranked 1st) by soliciting group projects from industry, recruiting guest lecturers and speakers, assisting instructors with the packaging of new course material, and coordinating capstone projects. The MEng Program Coordinator would also be responsible for increasing interaction with industry (ranked 2nd) by organizing networking events, recruiting project judges from industry, and assisting students with identifying a suitable capstone project if needed.

INCREASING TEACHING ASSISTANTS

The revenue from the proposed tuition increase will support hiring additional teaching assistants. Eight Teaching Assistant (TA) positions will begin in the 2022-2023 academic year and an additional eight TA positions will be added in the 2023-2024.

These TAs will be involved with the modernization of course content (ranked 1st) by compiling and preparing background and supplementary materials, assisting students with questions about the course material and activities, and providing detailed feedback on submitted work. Teaching assistants will also be responsible for assisting MEng students with completion of their capstone projects and will assist instructors with online delivery (ranked 4th).

ONLINE DELIVERY

Online delivery was among the top three priorities for more than 42.9% of respondents and was a commonly requested improvement in the open-ended survey responses.
To increase online delivery, funds will be used to support Audio Visual technicians needed to broadcast, record, and assist instructors with the preparation of high-quality online instruction (ranked 4th) and to facilitate remote learning for students. The proposed tuition increase will provide funding for the online delivery of 20 courses per year.

**INCREASED BURSARIES AND SCHOLARSHIPS**

More than 28% of students selected “Bursaries and Scholarships” as one of their top three priorities for improvement in the MEng program.

Through the proposed tuition increase, we will be able to achieve our goal of expanding financial opportunities to students for which academic-based scholarships may not be accessible. This includes students from underrepresented demographics, students with families, or students from lower socioeconomic strata.

Twenty percent (20%) of the proposed tuition increase will be allocated to the development of hybrid awards for MEng students. These awards will require satisfactory academic performance and other eligibility criteria that would differ for specific awards, some focused on students from underrepresented demographics and others for students with family obligations.

**EMERGING INITIATIVES**

Students requested that the consultation process be continued beyond the submission of the proposal as a means of communicating their changing priorities to the Faculty of Engineering in the future. We are committed to maintaining and enhancing student engagement in decision-making processes.

Understanding that the priorities of students may change over time, approximately 5.0% of the proposed tuition increase will be allocated to address emerging priorities of the student body beginning in the 2023-2024 academic year. Improvement areas to which these funds will be allocated will be determined based on feedback from student consultations.

**SUMMARY OF INVESTMENT**

In the proposal to government for the tuition increase we have identified the following allocation of the revenue:

- Teaching and Program Administrative support: 61.4%
- Student Awards and Bursaries: 20.1%
- Supporting Online Delivery: 8.8%
- Emerging Initiative’s: 5.0%
- Planning/Materials: 4.7%
Students are invited to provide their feedback on these proposed funding allocations through this survey. The survey will close at noon on Friday, September 24 and the results will inform the final proposal that is due to the Government of Alberta on September 29.