Strategic Plan 2020-2024

Create. Collaborate. Innovate.

Motto

Educating engineers who combine the best of technical excellence with social compassion.

Vision

To become a sought-after, gender and culturally diverse engineering institute with a compassionate, "systems-approach" to learning that inspires the kind of critical thinking and creativity needed to address today's engineering challenges.

We value

- **Student Engagement**: we fully support our students, student enrichment, student services, a dynamic and modern curriculum, and enhanced student experiences.
- **Integrity:** we stand for Personal and Professional Integrity, Safety, Ethics, Accountability and Competence.
- **Excellence**: we stand for Innovation, Service, Student Success, Research Success, Impact and Difference.
- **Relationships and Trust**: We strive for Inclusion, Respect, Collaboration, and Openness.

Our Mission:

- We **educate engineers** by combining strong technical knowledge with a holistic, social conscience, incorporating the principles of systems engineering (combining classes from disciplines such as business, economics, the humanities and the environment), with values such as Indigenous-centred knowledge, to ensure engineering focuses on sustainability in conjunction with growth (*Student Success, Sustainability, Indigenization).*
- We **engage in research** that supports learning through collaborations with industry, which is enhanced by external funding and the contributions of high-quality graduate students (*Research with Impact, Sustainability*).

- We **pursue all kinds of entrepreneurship** opportunities in our research, infrastructure, resources and learning to ensure maximum impact throughout the community and beyond (*Student Success and Research with Impact*).

- We **pursue engineering knowledge that will** s**erve our communities** such as through the practical applications of engineering designs and products developed by fourth-year engineering students through their capstone projects (*Commitment to Our Communities, Sustainability and Indigenization*).

Our Priorities:

- **Expand our teaching space** as vacated floors and new office space become available, allowing for the addition of more dry labs, as well as the co-location of 3D printers, which will ultimately strengthen and enhance our student experience, not only for undergrads and graduates, but also for young people in Grades 3-9 taking advantage of summer EYES programs (Educating Youth in Engineering and Science). While recent renovations and expansions of lab spaces have aided several programs and made new labs possible, expanded space is critical for the Faculty's growth and ongoing success.

- **Improve the Faculty's visibility** so that the Faculty can develop a proactive **recruitment** strategy – one that is gender and culturally inclusive – for new students, staff, and research partners, as well as engage our **alumni** to play an active role in the leadership and financial success of the Faculty.

- **Develop a Faculty-specific research plan** that sets the institution apart from its competition and endeavors to attract leading scientists and industry partners to help foster and promote an environment of ongoing excellence and innovation.

- **Revamp the Faculty's** c**urriculum** in engineering design to be creative, collaborative, and entrepreneurial – one that is open-ended and iterative (delivered digitally so changes are less expensive than bulk printed curriculum), and one that allows opportunities to explore new pedagogical methods (innovative ways of interacting between **teachers** and **students**) to enhance experiential learning. This new curriculum revamp will strengthen the attributes of our graduates, particularly when it comes to gender equity in the profession. It will also enhance co-op and internship programs and independent learning.

- **Enhance student advising, tutoring, and mentoring** opportunities to ensure every student has the best possible chance of success, and increase the involvement of practicing **professional engineers** as advisors, engineers-in-residence, instructors and mentors. Continue to build on the success of our permanent, full-time lab instructors – unique amongst many institutions which must rely on graduate students. This environment fosters an environment of stability, continuity and innovation.

- **Encourage ongoing collaboration** with marketing and business students, as well as **forge important bonds with industry** through mentoring and co-op opportunities, in order to provide students with a holistic education that offers real-world experience to help launch promising careers.

- **Encourage ongoing innovation** to produce the kinds of engineering products and services that have wide-scale impact, which elevates research and enhances overall student success.

Our Areas To Continue To Improve:

- Our **recruitment of under-represented groups** including women and First Nations by expanding our search ads to entice new faculty who can focus on Indigenization and research related to First Nations issues, particularly water and sustainability.

- Our **integrity and safety culture** based on best practices, accomplished by advocating for enhanced safety and wellness for our faculty and staff, developing general safety documents for all labs as standard information, and creating a uniform safety approach.

- Our **communication and collaboration**, both within the Faculty and the University at large, as well as with industry and the private sector.

- Our **teaching and research space, equipment and facilities**, while continuing to aim for a **new engineering building**.

- Our **presence on University Committees** to increase opportunities for collaboration, learning and overall visibility.

- Our **ability to hire more research faculty**, which in turn enhances our ability to bring more graduate students into the program to assist with this research.

- Our **overall numbers of academic and support staff** in order to match student enrollment and sustain our programs, as well as our **ability to attract more externally-funded chairs**.

- Our **ability to pursue more Canada Research Chairs (CRC) research positions** and to be able to fund this research through various discovery grants under NSERC (Natural Sciences and Engineering Research Council of Canada).

- Our **relationships and engagement within the Faculty and beyond**, including the University as a whole, Faculty alumni, the engineering profession, professional associations such as APEGS (Association of Professional Engineers and Geoscientists), HVAC companies, the National Association of Academic Advisors (NACADA), along with the federal, provincial and municipal governments, and the community at large, particularly the ***Indigenous*** communities.

- Our **collaboration with Sask Polytech, industry and the private sector** to ensure more opportunities exist for fourth year capstone projects and those projects moving into entrepreneurial opportunities.