Innovation by Design at the Faculty of Engineering!

On August 23, Dean Jim Nicell welcomed almost 500 newly-admitted students to the Faculty of Engineering’s Discover McGill orientation session. During his introductory speech, he highlighted the Faculty’s goal to help our students develop both as unique persons and as professionals, and to help them connect their technical training to the changing needs of our larger community and society.

“In many ways, how we do things now is so different from when the disciplines of engineering, urban planning and architecture were first conceived. And they are always changing. The Faculty has evolved dramatically since 1871 when it was called Applied Sciences and it continues to evolve. Today,” he emphasized, “as well as teaching you the specific skills required of your discipline, we prepare you to learn how to learn in an ever-changing world, and how to pursue and execute ideas within the context of our broader society.”

The Dean went on to describe how the Faculty strives to achieve this goal through the Innovation by Design strategy, which is composed of four key initiatives:

**Empower** – Leadership is not necessarily about hierarchy, but is often about leading from the middle, and motivating others to work toward a common purpose. Empower creates opportunities that focus on developing the personal and professional characteristics of the leaders of tomorrow. This includes many extracurricular, experiential activities, such as the [Summer Undergraduate Research in Engineering (SURE) awards](#), supporting student-led initiatives through our [Student Initiatives Funding (SIF)](#), and our recently-established [Global Challenges Awards (GCA)](#), which create opportunities for students to work in collaboration with external organizations which are serving an important societal need.
**E-IDEA** – Our teams across the Faculty are expected to work on complicated global problems, and diversity is essential to solving these problems in an effective and meaningful way. Through the Engineering Inclusivity, Diversity and Equity Advancement initiative, the Faculty is committed to fostering an inclusive community so we can design solutions to the problems that matter most.

**ELATE** – The Enhanced Learning and Teaching in Engineering initiative is designed to build a community of teachers and students who are working to develop evidence-based strategies that put the student at the centre of the learning experience, that are adapted to new pedagogical methods and tools, and, most importantly, lead to better learning outcomes.

**Engine** – The Innovation & Entrepreneurship centre in the Faculty is where undergraduate and graduate students and professors can test ideas and find out more about what it takes to grow an idea and translate it into the public sphere, whether it be through direct transfer to industry, the establishment of a new business, or the founding of a social innovation initiative.

Dean Nicell encouraged students to actively engage with these initiatives and pursue experiential opportunities that go beyond the classroom to develop their full potential. He reinforced the support and strength of our alumni: “These programs come to you, funded by our international alumni -- you are on your way to being inducted into this important and influential community.”

He concluded his message with words of acknowledgement and optimism. “It used to be that a Dean of the Faculty of Engineering might have faced students at orientation and told them to look to their left and their right, because one of those students would not graduate with them.”

“But that’s not what we’re here for,” said Dean Nicell. “You have made it through McGill’s tough selection process. You’ve proven that you have what it takes to succeed in our challenging academic programs. Our job is to make sure you have the learning experience and the support and resources you need to reach your full potential. Our job is to make sure that you get the most out of your time with us.”

When Dean Nicell said he wants students to thrive, not just survive, the auditorium burst into applause. The session moved on to share the many services that are available to help. Afterwards, as everyone filed out into a Montreal summer day, students chatted with each other, the mood buoyant.