

1. Executive Summary

Five years ago, our Faculty approved our Academic Plan 2011-2016, which outlined strategic goals in key areas of: culture of excellence; positioning; educating future engineers; student experience; research foci; outreach, collaboration and influence; and resource allocation. We have made tremendous progress in achieving, and surpassing, these goals and are pleased to present an overview of our accomplishments in this final report.

As the top Canadian engineering school in all international rankings, we continue to attract high calibre students to our programs. Through strategic recruitment events, outreach activities, and targeted communications, we are building an awareness of the essential role engineers play in the world today including among underrepresented groups. Applications to our undergraduate programs increased by 65 per cent in the past five years, with one place now available for every 12 applicants. Graduate enrolment rose to 2,364, surpassing our goal of 2,000 three years ahead of schedule. Our cultural and gender diversity grew at a remarkable rate. International students now comprise 27.9 per cent of undergraduates and 33.7 per cent of graduate students compared to 19.1 per cent and 19.3 per cent, respectively, in 2011-2012. While female student growth was modest in our master's and PhD programs, 26.1 per cent compared to 24.9 per cent in 2011-2012, we have had tremendous growth in our incoming undergraduate cohorts. Women make up 40.1 per cent of our first-year class in 2016-2017, up from 23.2 per cent in 2011-2012, and they now comprise 30.0 per cent of total undergraduates. We have also made significant progress in increasing gender diversity in our professoriate, adding 18 talented women professors to our ranks in the past five years and bringing us to 21.0 per cent, compared to 9.5 per cent a decade ago.

Our Faculty has developed a number of pathways to enhance multidisciplinary collaboration in education and to further integrate professional competencies, such as global engineering and cultural fluency, entrepreneurship, leadership and communication into undergraduate and graduate curricula. We expanded the number of undergraduate minor and certificate options to 15, and added 11 graduate certificates/emphases since the creation of the Entrepreneurship, Leadership, Innovation & Technology in Engineering (ELITE) in 2007. Several of these are cross-disciplinary, including: the Engineering Business Minor, Renewal Resources Engineering Certificate, Sustainable Energy emphasis and Advanced Technologies & Process Design emphasis. Entrepreneurship has played an increasing role in our Faculty within the past five years with the launch of The Entrepreneurship Hatchery and Start@UTIAS, our two in-house incubators that provide mentoring, networking, seed funding and other resources to undergraduate and graduate

students who are interested in developing technology businesses. Since 2013, the Hatchery has helped launch 37 start-ups.

We surpassed, three years early, our original goal of increasing annual Tri-Council funding to \$25 million by 2015 and are approaching our revised goal of \$32 million. According to the most recent complete data (2014-2015), we have reached \$31.8 million. This has enabled us to increase our allocation of Canada Research Chairs to 29. We also made tremendous advances in furthering multidisciplinary research collaborations both within Engineering and with Faculties across UofT. We established a number of new centres and institutes such as the University of Toronto Transportation Research Institute, Toronto Institute of Advanced Manufacturing, and Institute for Sustainable Energy bringing our total to 25. Engineering faculty also lead two major research initiatives, the Translational Biology and Engineering Program (TBEP), a key component of the Ted Rogers Centre for Heart Research, and Medicine by Design (MbD), that partner several UofT Faculties with our affiliated hospitals.

Strong resources in areas such as personnel, space, budget, and infrastructure have been critical enablers of our ability to achieve our Academic Plan goals. We have increased revenues and empowered our departments and institutes, through the implementation of our Faculty budget allocation model, to make strategic financial decisions while advancing academic priorities. We also invested heavily in initiatives that will further our goals through the Dean's Strategic Fund, Engineering Instructional Innovation Fund, and Dean's Infrastructure Improvement Fund. Since the launch of Boundless: The Campaign for the University of Toronto in 2011, we have raised over \$180 million of our \$200 million goal, including \$29.3 million in 2015–2016.

While we have made important investments in infrastructure improvements, the most significant has been towards building the Centre for Engineering Innovation & Entrepreneurship (CEIE). The CEIE will further enrich student experiential learning and heighten opportunities for cross-disciplinary research, and will launch the beginning of a new era in U of T Engineering. This, along with over \$48 million in investments through both the federal government's Post-Secondary Institutions Strategic Investment Fund (SIF) and the Dean's Infrastructure Improvement Fund (DIIF) to improve over 90 laboratory and high impact facilities, will enable us to bring our facilities in line with our reputation as the premier engineering school in Canada.