We prepare the next generation of global engineering leaders to pursue their passions, discover their strengths and grow in new directions. Through curricular and co-curricular initiatives, we provide rich pathways for engineering students to develop competencies in cross-disciplinary collaboration, leadership and entrepreneurship.

Our students work in multidisciplinary teams and engage with industry starting in their first year through design courses such as Engineering Strategies & Practice and Praxis. This continues into upper years through projects facilitated by the Institute for Multidisciplinary Design & Innovation. Students may also choose to gain industry exposure through our Professional Experience Year Co-op Program (PEY Co-op). In 2017–2018, 779 students held PEY Co-op positions, including 66 outside of Canada.

In addition to working with existing companies and research organizations, many of our students are inspired to start their own businesses. U of T's rich entrepreneurial ecosystem includes our two campus-linked accelerators, Start@UTIAS and The Entrepreneurship Hatchery. Over the last five years, we have launched more than 65 startups, which have collectively raised approximately \$10 million in seed funding.

Whether our students choose to work in established industries or to create new ones, they all benefit from programs that enable them to maximize their leadership potential. Our Troost Institute for Leadership Education in Engineering draws on expertise from education, social science, business and engineering to support self-discovery among more than 1,000 students each year.

Several new programs and initiatives launched this year will expand the opportunities available to our students. Starting in 2018, we will offer a new cross-disciplinary minor in Music Performance and a certificate in Music Technology. We also created the Institute for Studies in Transdisciplinary Engineering Education and Practice (ISTEP) to bring together existing faculty, programming and initiatives in a number of areas, including technical communication, leadership, global fluency, business and multidisciplinary design. ISTEP will further strengthen our position as an innovator and leader in pedagogical innovation and engineering education.

## Undergraduate Engineering Minors and Certificates, Complementary Courses and Inter-Divisional Collaboration

Our nine minors and 10 certificates enable students to customize their degrees and hone their technical and professional competencies in the areas of their personal interest. Minors and certificates are open to undergraduate students in any engineering discipline. When they come together around their shared interests, our students spark new and unexpected interactions that drive innovation.

Students must complete six half-courses to earn a minor, and three half-courses for a certificate. Our current offerings include:

#### Minors

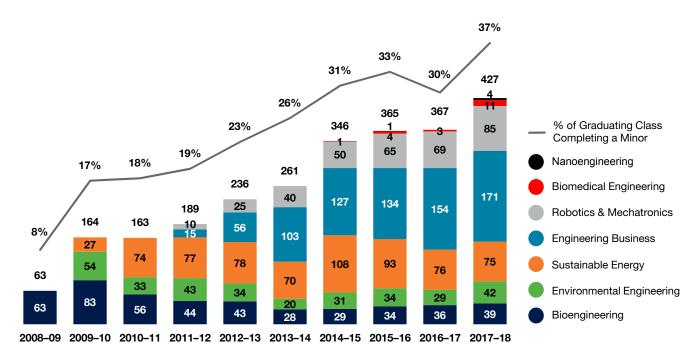
- Advanced Manufacturing (new in 2017)
- Bioengineering
- Biomedical Engineering
- Engineering Business
- Environmental Engineering
- Music Performance (starting in 2018, collaboration with Faculty of Music)
- Nanoengineering
- Robotics & Mechatronics
- Sustainable Energy

### Certificates

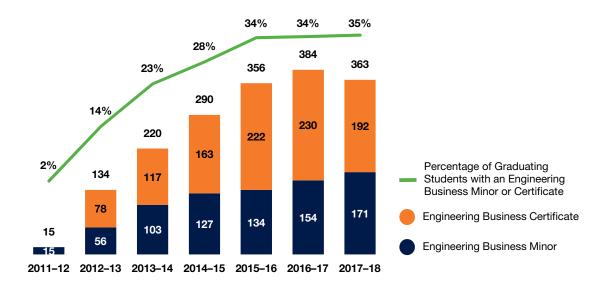
- Communication
- Engineering Business
- Engineering Leadership
- Entrepreneurship
- Forensic Engineering (new in 2017)
- Global Engineering
- Mineral Resources
- Music Technology (starting in 2018, collaboration with Faculty of Music)
- Nuclear Engineering
- Renewable Resources

Engineering students may also complete minors through the Faculty of Arts & Science in areas such as economics, math, sociology, philosophy and history, among others.

## Figure 4.1a Number of Engineering Minors Completed with Percentage of Graduating Class Completing an Engineering Minor, 2008–2009 to 2017–2018



Data and highlights in this chapter are presented for the period from July 2017 to June 2018. Note 4.1a: A total of 427 minors were completed by 390 students in 2017–2018, with many completing more than one minor.



## Figure 4.1b Students Graduating with an Engineering Business Minor or Certificate, 2011–2012 to 2017–2018

In 2017–2018, 309 undergraduate students earned 427 engineering minors, comprising 37% of the graduating cohort, our highest proportion to date. The Engineering Business minor continues to have the strongest demand. For the last three years, more than one third of our students have completed either a certificate or a minor in Engineering Business.

Our minor in Advanced Manufacturing, launched in September 2017, draws on the Faculty's strengths in several areas — including advanced materials, processing and logistics. The goal is to prepare tomorrow's engineering leaders to design the products of the future, and the systems for fabricating their components to deliver them to customers.

We also launched a new certificate in Forensic Engineering in September 2017, which features courses covering the principles of investigation into product failure, automobile and aircraft accident reconstruction, and fire and explosion. The courses also engage renowned guest experts from Canada's top forensic engineering firms and a mock trial, with lawyers from top firms participating in demonstrations of expert witness cross-examinations. Starting in 2018, we will offer two new crossdisciplinary programs, administered collaboratively by U of T Engineering and the Faculty of Music: a minor in Music Performance and a certificate in Music Technology. The minor includes courses in music theory and a newly created music performance course. Led by Faculty of Music professors and doctoral candidates in performance, the performance course features weekly individual and group instruction and can be completed either as a soloist or as part of a small ensemble. The certificate will focus on the intersection between the technical and artistic aspects of sound, and will prepare graduates to make an impact in areas such as digital music distribution, music production or hardware/software development.

## **Undergraduate Design and Research**

We embed engineering design throughout our undergraduate curriculum, enabling students to work with external partners, gain experience in building and testing prototypes and develop competencies in teamwork, leadership and effective communication.

## **First-Year Courses**

All first-year students take engineering design courses: Praxis I and II are for students in Engineering Science, while Engineering Strategies & Practice I and II are for students in our TrackOne and Core 8 programs.

In 2017–2018, Praxis students were challenged to improve daily life in communities around the Greater Toronto Area. Designs presented at the Praxis showcase in April 2017 included:

- A new design for kits that can deliver naloxone, a drug that can reverse the effects of an opioid overdose, more quickly than current versions;
- A design to improve the privacy of a rooftop ceremony space at Native Child and Family Services of Toronto; and
- An improved system for tracking the usage of non-circulating materials at the Toronto Reference Library.

## **Upper-Year Courses**

In their final year, all engineering undergraduate students complete design challenges as part of their capstone courses. Students may take discipline-specific capstone courses, or enrol in *APS490 Multidisciplinary Capstone Design Project (MCP)* through the University of Toronto Institute for Multidisciplinary Design & Innovation (UT-IMDI). In just five years since MCP's inception, more than 450 students from across the Faculty have collaborated on over than 100 projects for a wide range of industry clients.

In 2017–2018, 23 student teams worked with companies and organizations such as the Hospital for Sick Children, Drone Delivery Canada and Defence Research & Development Canada. Projects presented at the annual MCP Showcase in March 2018 included:

- A system of Internet of Things (IoT) sensors that can identify empty parking spots and allocate them via a mobile interface;
- A method to optimize the distribution of wave energy converters, devices that can create clean electricity by harvesting ocean waves; and
- A drone landing system that can be mounted on the roof of a delivery truck, enabling the use of UAVs for delivery of goods.

The Innovation, Hammers & Nails program connects students at the Institute of Biomaterials & Biomedical Engineering (IBBME) with clinicians, nurses, staff and fellows to design engineering solutions to challenges identified by experts at the Hospital for Sick Children. This initiative is available to undergraduate and graduate students through a range of courses and degree programs, including *BME498 Biomedical Engineering Capstone Design, BME 489 Biomedical Systems Engineering Design* and the MHSc clinical internship.

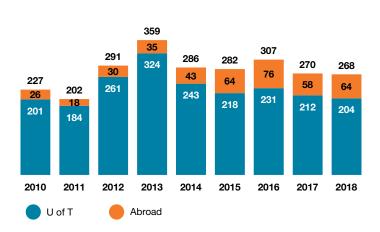
In 2017–2018, a total of 30 students and eight IBBME faculty and SickKids researchers were involved in five *BME498/489* projects, including:

- A device to incentivize spirometer use in children recovering from surgery;
- A non-invasive device to train parents how to properly use a Pavlik harness to ensure infants do not suffer from hip dysplasia;
- An innovative control mechanism for a minimally invasive surgical tool;
- A device to measure the body mass of children in developing countries accurately; and
- A device to monitor and correct slouching and abnormal spinal posture.

## **Undergraduate Research Opportunities**

We create rich opportunities for undergraduates across all years to engage in research that advances the frontiers of engineering, both within the Faculty and around the world. Through the Engineering Science Research Opportunities Program (ESROP), first- and second-year Engineering Science students work with faculty members each summer on research collaborations. In the summer of 2016, we created the First-Year Summer Research Fellowship, which provides \$5,000 in support to students seeking to gain research experience immediately after their first year of study. Nine students participated in this program in the summer of 2017.

In August 2017, undergraduates across all programs presented their summer research findings at the Undergraduate Engineering Research Day (UnERD), which celebrated its 10th anniversary this year. The event featured more than 100 posters and podium presentations and, new this year, a video competition which challenged students to creatively capture the essence of their research in 90 seconds or less. The winners described how they used a driving simulator to study how additional tasks and information screens, including smartphones, impact driving behavior. U of T Engineering students also have opportunities to conduct research abroad through programs administered by the Division of Engineering Science and U of T's Centre for International Experience. Partner institutions include the National University of Singapore, Hong Kong University of Science & Technology and the University of Stuttgart.



Summer Research Opportunities,

Figure 4.2a Undergraduate Participation in

2010 to 2018

### Figure 4.2b Undergraduate Participation in Summer Research Opportunities, by Academic Area, 2018

Research Participation:	U of T	Abroad	Total
ChemE	20	2	22
CivMin	24	2	26
ECE	45	8	53
EngSci	68	36	104
MIE	28	12	40
MSE	19	4	23
Total	204	64	268

## **Professional Experience**

We provide a number of pathways for our undergraduate students to gain valuable work experience and enhance their technical and professional competencies before they graduate.

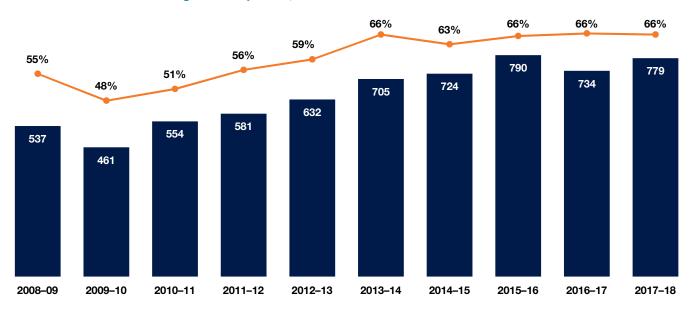
For 40 years, our flagship Professional Experience Year Coop Program (PEY Co-op) has enabled the next generation of engineering talent to spend 12 to 16 months working for a wide range of companies around the world, from local startups such as ModiFace to global brands such as Airbus.

In 2017–2018, 779 engineering undergraduates held PEY Co-op positions, including 66 who worked outside of Canada. More than 300 employers hired through with the program, and the average annual salary for 2017–2018 was \$48,620 with individual salaries reaching as high as \$89,895. PEY Co-op students who recently completed their work terms in August 2017 had the opportunity to share their insights and lessons learned at the inaugural PEY EDGE Engineering Student Conference in September 2017. U of T Engineering students gained new perspectives from 23 recent PEY Co-op students from across all disciplines who worked in various engineering industries. Topics of discussion included leadership development, corporate culture and preparation for working abroad, among others. These insights were collected and published in the June 2018 PEY edition of the *Galbraith Society Undergraduate Engineering Journal*.

Students also participate in the Engineering Summer Internship Program (ESIP), a paid, four-month summer work term that is open to second- and third-year U of T Engineering undergraduates. In summer 2017, 51 students pursued ESIP opportunities. The Engineering Career Centre (ECC) provides professional development opportunities to students, facilitating the employment process and a positive transition to the workplace. The ECC is currently reviewing its programming to enhance industry relations and services to students. Some current initiatives include:

- Establishing employer relationships to access innovative student work opportunities at industry-leading companies and niche areas of the market;
- Exploring internship services for graduate students;
- Developing a strategy for international employment opportunities;
- Enhancing the market presence of the ECC through targeted outreach and industry engagement; and
- Building a student development program that leverages relationships with industry, alumni, students and academic units.

## Figure 4.3a Number of Engineering Undergraduate Students Participating in PEY Co-op with Percentage Participation, 2008–2009 to 2017–2018



## Figure 4.3b Number of Canadian and International PEY Co-op Positions, 2008–2009 to 2017–2018

	Canadian Positions	U.S. Positions	Other International Positions	Total Positions
2008–09	490	31	16	537
2009–10	426	24	11	461
2010–11	530	11	13	554
2011–12	547	26	8	581
2012–13	592	24	16	632
2013–14	644	36	25	705
2014–15	663	42	19	724
2015–16	711	50	29	790
2016–17	669	49	16	734
2017–18	713	48	18	779

## Figure 4.3c **PEY Co-op Employers,** 2008–2009 to 2017–2018

PEY Co-o	op Employers who Hired Engineering Students
2008–09	193
2009–10	158
2010–11	185
2011–12	221
2012–13	241
2013–14	304
2014–15	317
2015–16	310
2016–17	337
2017–18	318

**Note 4.3a:** Percentage participation is calculated by dividing the number of completed PEY Co-op positions by the number of eligible students (i.e. the third-year cohort from the previous year).

## **Student Entrepreneurship**

Our Faculty is an essential component of U of T's rich entrepreneurial ecosystem. Through both curricular and cocurricular programs, our students, researchers and faculty members have access to mentorship, fabrication facilities, seed funding and space, enabling them to bring their ideas from the lab to the marketplace.

## **Curricular Programs**

Entrepreneurship is embedded into our undergraduate programs. Students in our Core 8 streams can complement their technical studies with an Engineering Business Minor or Certificate, or a Certificate in Entrepreneurship, Innovation & Small Business. For MEng students, the Entrepreneurship, Leadership, Innovation & Technology in Engineering (ELITE) emphasis prepares students to lead in business and entrepreneurial activities.

## **The Entrepreneurship Hatchery**

The Entrepreneurship Hatchery, established in 2012, provides a comprehensive suite of programs and services to nurture a culture of entrepreneurship across the Faculty. Events such as the weekly Idea Markets, Hatchery Speaker Series, Accelerator Weekend and the Hatchery Hackathon enable students with a passion for startups to meet and interact with each other and with experienced mentors from a variety of fields. These experiences spark collaborations and help form teams that enter the Hatchery Nest.

#### **Hatchery Nest**

This rigorous summer program helps teams of students turn their business ideas into companies, including, where applicable, the creation of prototypes or minimum viable products. Over four months, students receive mentorship and advice from seasoned professionals in intellectual property, marketing, finance and other areas of business development. They also have access to seed funding, office or lab space and prototyping facilities such as 3D printers. Over the last five years, the Hatchery has launched more than 65 startups, including many based on U of T Engineering research. To date, these companies have collectively raised more than \$10 million in seed funding.

In 2017, Hatchery Nest received 152 applications and accepted 35 teams, 12 of which competed at the Hatchery Demo Day in September 2017, where they pitched their startups to investors and the U of T community. The winners included:

• **Genecis:** This company's technology is based on proprietary cultures of microorganisms capable of breaking down food waste from restaurants and turning them into a form of biodegradable plastic.

- Xpan: Laparoscopic or "keyhole" surgery depends on devices called trocars, which create an opening into the body that can accommodate cameras and surgical tools. Xpan has developed an expandable trocar that can be made smaller or larger during surgery. By eliminating the need to remove one trocar and insert a larger one, the company aims to reduce the risk to patients.
- **Tejo:** Combining machine learning with retail and marketing, Tejo enables customers to quickly select the brand of makeup that is right for them. Users simply take a selfie, which is then fed into a proprietary algorithm that accounts for ambient lighting conditions and determines a user's precise skin tone, recommending the appropriate brand. If the customer chooses to buy, Tejo collects a small commission on the sale.
- enginehire: This company is built around an online database that uses artificial intelligence to match the profiles of young engineers to potential employers.

#### Hatchery LaunchLab

Established in fall 2016, the Hatchery LaunchLab provides support for graduate student- and faculty-led researchbased startups. Teams benefit from enriched support, including legal counsel, accounting and marketing services, an advisory board comprised of experts in technical and business development, mentors with experience in the industries in which the startups hope to compete and funding for an extended incubation period of one to two years. The goal is to enable these teams to sustain themselves while they complete the steps necessary to provide proof-of-concept for their technology and attract investment from venture capitalists.

Two teams are currently part of Hatchery LaunchLab:

- **Aurorem:** Provides lighting solutions that mimic the spectrum of natural sunlight, with the goal of improving the physical and mental health of people who work indoors.
- **Trexo Robotics:** Builds robotic exoskeletons that could be used to ease physiotherapy treatment for children with cerebral palsy or other physical disabilities.

## Start@UTIAS

Start@UTIAS was established in 2014 with a \$1-million donation from entrepreneur Francis Shen (EngSci 8T1, UTIAS MASc 8T3). It provides UTIAS graduate students with mentorship, networking opportunities, seed funding and other resources to translate the knowledge and competencies they have gained through their education into successful startups.

# Institute for Studies in Transdisciplinary Engineering Education and Practice (ISTEP)

Created July 1, 2018, the Institute for Studies in Transdisciplinary Engineering Education and Practice (ISTEP) is our newest extra-departmental unit. It brings together faculty members, programing and initiatives to:

- Deliver existing graduate and undergraduate academic programming in technical communication, leadership, business, multidisciplinary design and engineering education;
- Provide leadership through the development of innovative models of effective teaching in engineering;
- Engage in the scholarship of teaching and learning;
- Enhance understanding of how the practice of engineering is changing and adapt classroom practice to instill competencies that graduates will need to be successful; and,
- Bring together colleagues within and beyond U of T Engineering to foster community and inter-disciplinary scholarly conversation.

ISTEP also helps strengthen cross-departmental collaboration, and promote our Faculty's reputation as an innovator and leader in engineering education and related scholarship. Professor Greg Evans (ChemE) serves as ISTEP's interim director. Existing initiatives that will be incorporated into ISTEP include:

- Engineering Business Minor (see earlier section on Undergraduate Engineering Minors and Certificates, Complementary Courses and Inter-Divisional Collaboration)
- Engineering Communication Program (ECP)
- Troost Institute for Leadership Education in Engineering (Troost ILead)
- Collaborative Specialization in Engineering Education (EngEd)

## **Engineering Communication Program (ECP)**

ECP provides support to all students and is a hub for teaching, research and professional communication in engineering best practices. Its programming is integrated into courses across the curriculum from first to fourth year. Writing and communication workshops and one-to-one tutoring are also available to students through ECP.

The ECP team includes five teaching-stream faculty members, 21 sessional lecturers and writing instructors, and 18 teaching assistants. ECP collaborates with many other units across the Faculty, including ESIP and PEY Co-op, the Engineering & Computer Science Library, the Educational Technology Office, the Collaborative Program in Engineering Education and Troost ILead. In 2017–2018, 1,065 students received communication support through ECP's tutoring service, an increase of 12% from the previous year. ECP also coordinates the undergraduate Certificate in Communication, launched in 2015–2016, which leverages eight humanities and social sciences electives offered by ECP faculty since 2008.

ECP continues to develop our professional language support for multilingual students. In 2015–2016, we piloted the Diagnostic English Language Needs Assessment (DELNA) for all incoming first-year students, enabling us to identify those who may experience challenges participating in their lectures, tutorials or team projects. We developed a suite of assignment-specific workshops, increased the capacity of the Tutoring Centre to work with multilingual students and began to track student progress in second and third year. Together with Queen's University, the DELNA project received a \$15,000 grant from the Engineering Information Foundation to develop additional resources for multilingual engineering students.

ECP's commitment to engineering education is highlighted by its leadership in running the highly successful Canadian Engineering Education Association conference in June 2017. ECP also hosted the IEEE Professional Communication Conference in July 2018. Attendees came from all over North America and Europe to participate in sessions on plain language, communication in the workplace, research and practice, communication in project management, women in engineering and the evolution of writing across the curriculum.

## **Troost Institute for Leadership Education in Engineering (Troost ILead)**

Troost ILead prepares students to maximize their impact as engineers, innovators and leaders by providing transformative curricular and co-curricular learning opportunities. Troost ILead also conducts academic and industry-focused research and outreach to engineering leadership educators and engineering-intensive enterprises.

In August 2017, Troost ILead hosted the second annual meeting of the National Initiative on Capacity Building and Knowledge Creation for Engineering Leaders (NICKEL). Nearly 40 professors and instructors from engineering schools across Canada, as well as representatives from industry and Engineers Canada, came to U of T to discuss best practices and continue building a strong community of practice dedicated to engineering leadership education. Troost ILead offered eight undergraduate and nine graduate courses in 2017–2018, in areas ranging from leadership in project management to the science of emotional intelligence. One of the newest is a complementary studies course open to students in any discipline called *The Art of Ethical and Equitable Decision-Making*, which launched in winter 2018. This course draws on case studies from the careers of Canadian engineers, allowing students to gain exposure to the legal context of engineering ethics and practice in applying a range of ethical theories, decision-making frameworks and the Professional Engineers Ontario (PEO) code of ethics.

MEng students can count these courses toward the Entrepreneurship, Leadership, Innovation & Technology in Engineering (ELITE) certificate, while undergraduate students can earn credits toward the Minor in Engineering Business or the Certificate in Engineering Leadership. Demand for these courses was strong, with overall enrolment reaching 591, a 24% increase from the previous year.

In 2017–2018, instructors from Troost ILead partnered with other faculty members to offer team-based learning and leadership activities in 18 courses across the Faculty, including:

- APS100 Orientation to Engineering
- APS111 Engineering Strategies & Practice I
- APS112 Engineering Strategies & Practice II
- APS305 Energy Policy
- APS490 Multidisciplinary Capstone Design Project
- ESC101 Praxis I
- ESC102 Praxis II
- ESC203 Engineering and Society
- CHE210 Heat and Mass Transfer
- CHE222 Applied Differential Equations
- CHE230 Environmental Chemistry
- MIE191 Mechanical and Industrial Engineering Seminar
- MIE240 Human-Centred Systems Design
- MIE243 Mechanical Engineering Design
- MIE303 Mechanical and Thermal Energy Conversion
  Processes
- MIE315 Design for the Environment
- MIE350 Design and Analysis of Information
- BME498 Biomedical Engineering Capstone Design

Engineering students also have opportunities to hone their leadership competencies and self-development through Troost ILead's innovative co-curricular programs:

• Leadership Labs: Experiential workshops ranging from evening sessions on project management, team conflict, public speaking, team culture, emotional intelligence and feedback to full-day labs on teamwork development and workplace readiness. In 2017–2018, Troost ILead offered 24 co-curricular labs that reached more than 1,000 students. Attendance at four Leadership Labs is recognized on students' Co-Curricular Records. These labs also provided work experience for five students who were trained as co-facilitators.

- **The Game:** A six-month program that challenges student teams to hone their leadership competencies by developing solutions to large-scale social problems. The program, which begins in September and culminates in a project showcase in March, attracted seven teams in 2017–2018. This year's projects addressed issues such as bicycle theft in the Greater Toronto Area and the high number of dogs euthanized at shelters across the city.
- **Troost ILead Summer Fellowship:** A 16-week program for highly engaged engineering students who want to increase the impact of their student organizations and their leadership competencies. The program includes strategies for organizational development, peer learning and individual coaching. Troost ILead had 13 summer fellows in 2017.
- Faculty-wide Summer Leadership Program: The eightweek course provides students with opportunities to better understand their strengths and values, gain new perspectives on engineering and its impact on society, and be part of a vibrant and diverse community. Forty students participated in the program in the summer of 2017.
- OPTIONS Program (Opportunities for PhDs: Transitions, Industry Options, Networking and Skills): An initiative led jointly by the Vice-Dean, Graduate Studies and Troost ILead, which prepares PhD students and postdoctoral fellows for careers outside academia, from industry research and development to government policy. Twenty-six students enrolled in the first cohort starting in September 2017, and 30 enrolled in the winter semester, starting January 2018. (For more information on OPTIONS, see Chapter 2: Enriching the Graduate Student Experience)

Troost ILead's research efforts for the 2017–2018 academic year have involved three different project types: insight research, pedagogical and programmatic innovation research, and secondary analyses of large-scale data sets.

#### Insight Research:

- Engineering Leadership Project: Examines how engineers think about leadership, how they lead and how they learn to lead at all stages of their careers. In 2017–2018 the Troost ILead team completed its analysis of the school-to-work transition phase and began examining the leadership learning experiences of senior engineers.
- **PEY Co-op Project:** In collaboration with the Engineering Career Centre, this project aims to enhance the PEY Co-op Program, starting with a review of the academic and progammatic literature, learning objectives and student evaluation data.

#### Pedagogical & Programmatic Innovation Research:

- Ethics and Equity in Engineering: Involves generating and testing case studies on ethical and equity-based dilemmas faced by engineers, and using the completed resources to support ethics education in the faculty. Fifteen case studies have been analyzed, with results presented at workshops to several engineering classes as well as industry and academic audiences.
- Research on Engineering Leadership Programs: This project includes the development of a comparative framework for analyzing engineering leadership programs in universities across Canada.
- **Teamworks:** Following the continued success of the Teameffectiveness Learning System developed in 2014, Troost ILead partnered with Cherniak Software to commercialize the technology and make it available to instructors at other universities. Teamworks has now been piloted at two other universities across Canada and is in the process of being refined for a full launch to other sites in the Fall.

#### Secondary Analyses of Large-scale Data:

- Examining Trajectories: Using the most recent data set of Statistics Canada's National Graduates Survey (NGS), Troost ILead is examining career and education trajectories of engineering graduates across disciplines, genders, ethnicities and provinces. The study aims to provide a national perspective on the transition of engineering graduates from university to the workforce.
- Collaboration with Engineers Canada: Troost ILead has collaborated with Engineers Canada to include in its Final Year Student Exit Survey a set of questions assessing leadership skills and traits of engineering students. The project aims to provide a national snapshot of the leadership competencies of engineering graduates.

## Student Clubs and Teams

Our students nurture their passions and interests through more than 100 U of T Engineering student clubs and teams, from the Spark Design Club to the University of Toronto Aerospace Team. Students can document their co-curricular activities in the U of T Co-Curricular Record, an official report that offers recognition for competencies gained through athletic teams, student government, cultural clubs, design teams and other campus organizations. The Centralized Process for Student Initiative Funding (CPSIF) allows student groups to apply to various funding sources within the Faculty via a single application. For 2017– 2018, 103 undergraduate and graduate engineering student groups and initiatives received \$331,896 through CPSIF.

A complete list of student clubs and teams is provided in Appendix B.