

# An update on the 2017-2022 FASE Academic Plan



## 5 key pillars to the Academic Plan

- *Transformative Teaching & Learning*
- *Student Experience*
- *Innovative Research and Entrepreneurship*
- *Collaborations and Partnerships*
- *Strategic Resources*

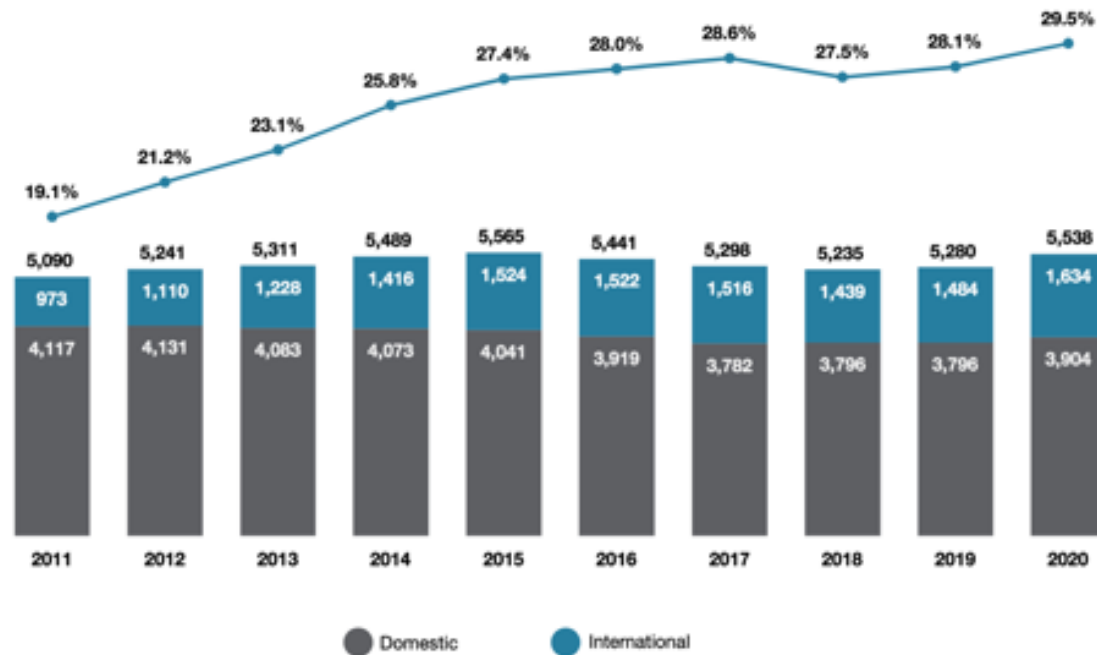
# *Transformative Teaching & Learning*

- global leader in pedagogical development and teaching innovation in engineering education.
- build rich experiential learning and professional development opportunities for undergraduate and graduate students
- prepare students to resolve global challenges
- integrate active learning pedagogies to encourage life-long learning



# Transformative Teaching & Learning

Figure 3.3c: Undergraduates with Percentage of International Students, 2011 to 2020



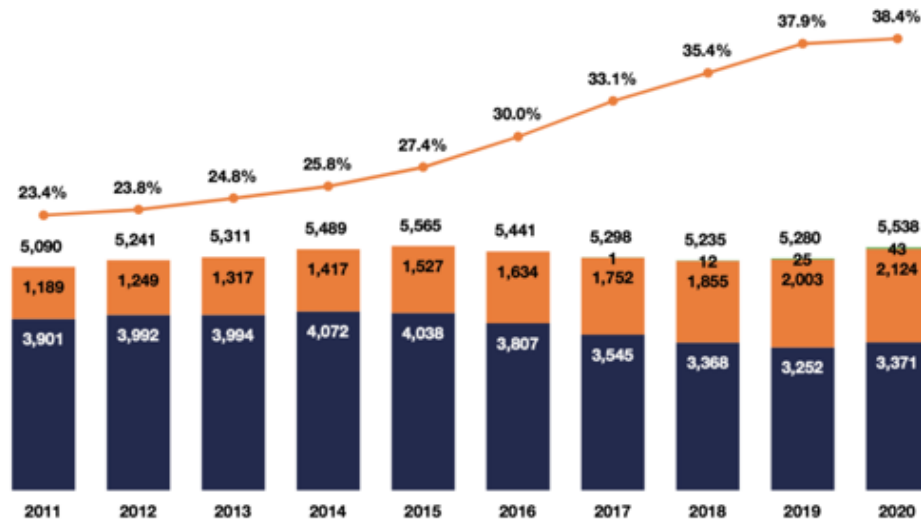
Target: 30% in 2022  
Current: ~ 29.5%

- Increasing diversity of source countries:  
2017: 43 countries  
2021: 59 countries

# Transformative Teaching & Learning

- Enhance the diversity of the learning environment

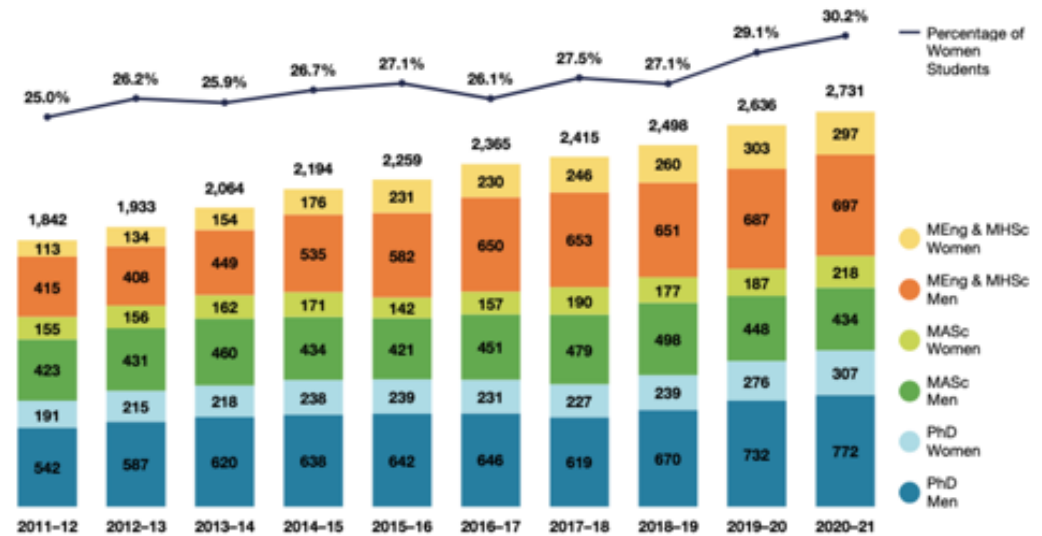
Figure 3.3a Undergraduate Enrolment with Percentage of Women, 2011 to 2020



Target: 50% by 2022

Current: ~ 38.4% - highest in Canada

Figure 3.6a Graduate Students by Degree Type and Gender with Percentage of Women Students, 2011–2012 to 2020–2021



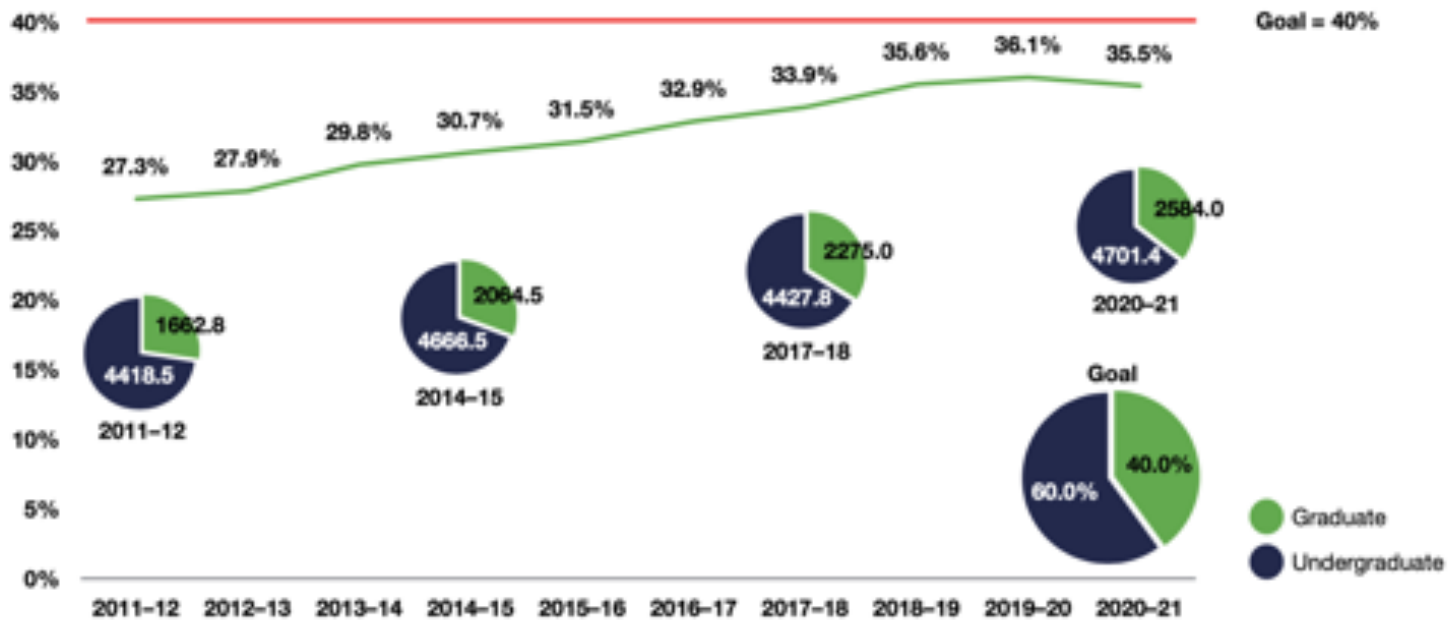
Target: Grow graduate student enrollment by 15%

Current: ~ 13% since 2017

# Transformative Teaching & Learning

- Enhance the diversity of the learning environment

Figure 2.3c Ratio of Undergraduate to Graduate Full-Time Equivalent Students, 2011–2012 to 2020–2021

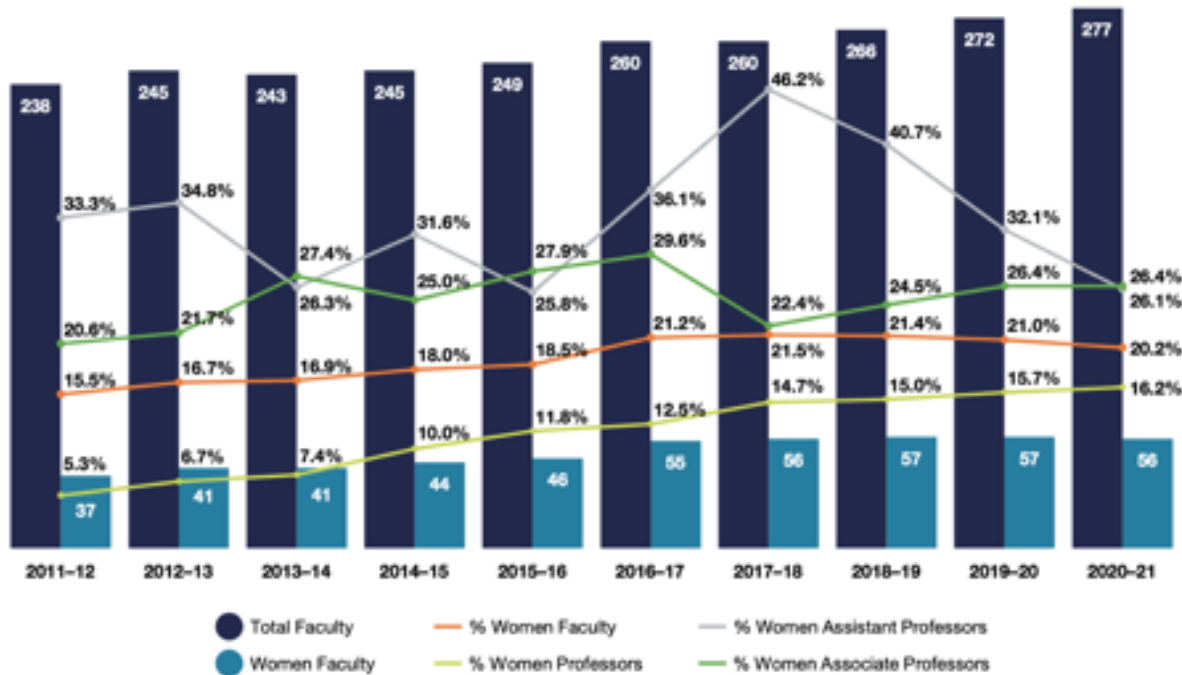




# Transformative Teaching & Learning

- Enhance the diversity of the learning environment

Figure 3.11 Total Number of Faculty with Percentage of Women Overall and by Academic Rank, 2011–2012 to 2020–2021



Professor Sarah Haines  
Civil



Professor Myrte de Alfred  
MIE

# Student Experience

- improve the quality, accessibility and delivery of academic advising services
- encourage co-curricular opportunities and grow undergraduate professional development



Engineering Academy helps first-year students hit the ground running



'My dream job' – Designing autonomous space robotics



Self-driving vehicle earns fourth straight victory



Synthetic 'soil' for hydroponic root vegetables

- Assistant Dean - Diversity, Inclusion and Professionalism
- Critical Incident Coordinator role
- Mental Health Programs Officer





# Student Experience

## FIRST-YEAR ADVISORS

[www.uoft.me/fyo](http://www.uoft.me/fyo)

## LEARNING STRATEGIST

Shahad Abdunour

[www.uoft.me/englearningstrategist](http://www.uoft.me/englearningstrategist)

## INCLUSION & TRANSITION ADVISOR

Mikhail Burke

[www.uoft.me/inclusionadvisor](http://www.uoft.me/inclusionadvisor)

## MENTAL HEALTH PROGRAMS OFFICER

Melissa Fernandes

[www.uoft.me/MHPO](http://www.uoft.me/MHPO)

## EQUITY, DIVERSITY & INCLUSION (EDI) INITIATIVES

[www.uoft.me/EDI](http://www.uoft.me/EDI)

Provides resources and raises awareness to realize our commitment to equity, diversity and human rights. The Faculty's incident disclosure form can be accessed at [uoft.me/engdisclosure](http://uoft.me/engdisclosure)

## SKULE MENTAL WELLNESS

[www.wellness.skule.ca](http://www.wellness.skule.ca)

Student group that advocates for mental health and wellness within U of T Engineering. They create student resources, events, workshops and activities.

## GECoS MENTAL WELLNESS COMMISSION

[www.uoft.me/gecoswellness](http://www.uoft.me/gecoswellness)

The Graduate Engineering Council of Students (GECoS) Mental Wellness Commission provides advocacy, education and socials.



Faculty-in-Residence

# *Innovative Research and Entrepreneurship*

## FACTS AND FIGURES

**100+**

U of T Engineering spinoff companies over the past two decades.

**125**

U of T Engineering research chairs and professorships, held by 115 individual chairholders.

**253.8%**

Increase in industry research funding over the past five years, reaching a total of \$20.3M for 2019–2020.

**\$104.7M**

Total research infrastructure and research operating funding for 2019–2020, an increase of 38.9% over the previous year.

CRC Target : 47  
Actual : 49

Target : \$13.2 M / year

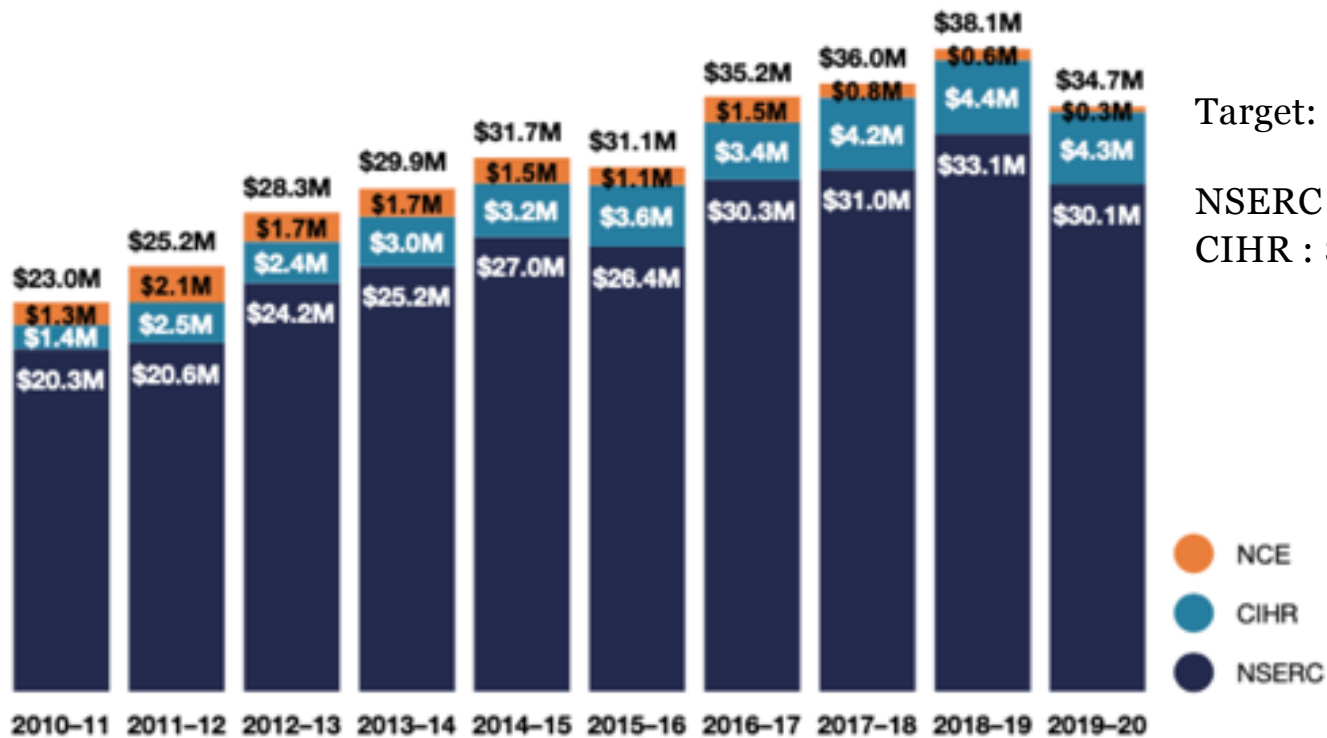
# *Innovative Research and Entrepreneurship*

Figure 4.1a Total Research Funding (Infrastructure + Operating), 2010–2011 to 2019–2020



# Innovative Research and Entrepreneurship

Figure 4.4a Tri-Agency and NCE Support: CIHR, NSERC and NCE Funding, 2010–2011 to 2019–2020



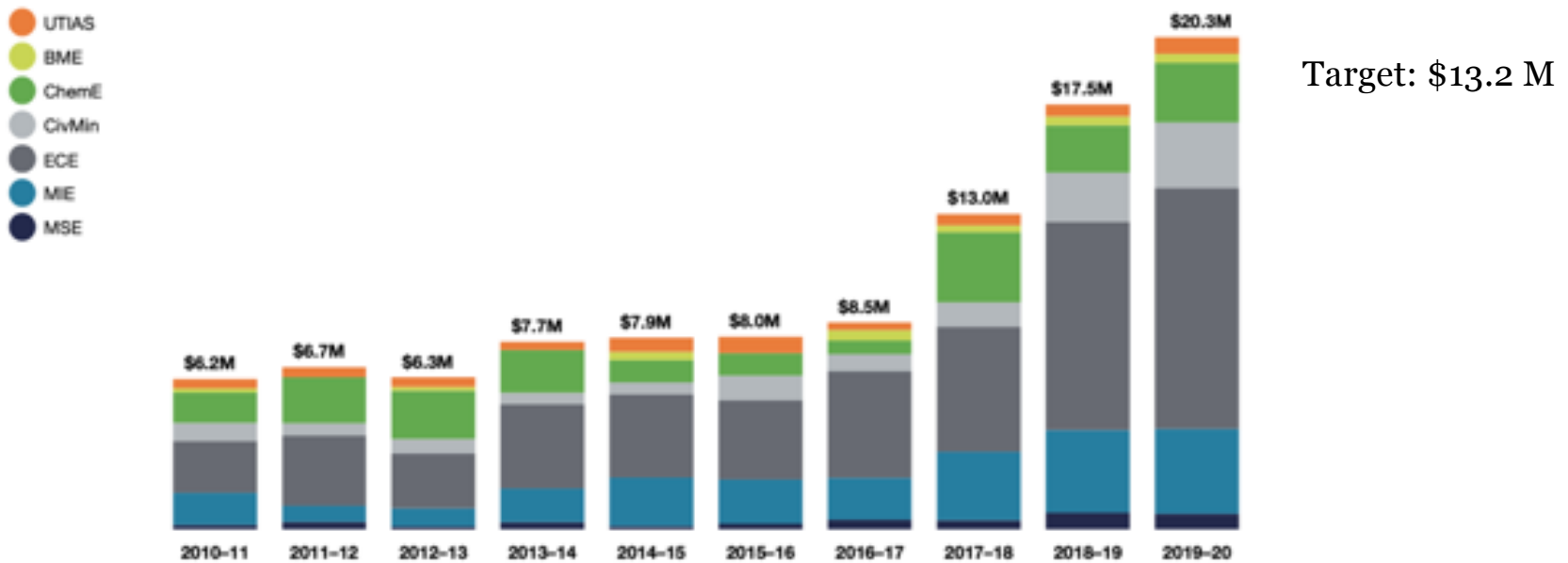
Target:

NSERC : \$35.5M per year  
 CIHR : \$5M per year.

- growing opportunities for SSHRC

# *Innovative Research and Entrepreneurship*

Figure 4.6a Industry Research Funding by Academic Area, 2010–2011 to 2019–2020



# *Innovative Research and Entrepreneurship*

- Increase our support for transformative cross-disciplinary collaborative research that inspires innovation.
  - Institutional Strategic Initiatives
    - Data Sciences Institute
    - NRC-partnerships (CRAFT / CC-GEN)
    - Acceleration Consortium
    - and others...
  - Dean's Strategic Fund (<https://hub.engineering.utoronto.ca/deans-strategic-fund/>)
    - catalytic towards our Academic Plan : teaching, research, student experience, and partnership.
    - emphasis on cross-divisional, cross-campus, collaborative
    - 2021-2022: 32 proposals with total ask of > \$10M
    - to date investment by DSF : \$49M since 2012
  - expanding partnerships team
    - Project 27 Strategic Research Officer
    - co-funded MITACS officers
  - stronger synergies cross-division / cross-campus



# Collaborations and Partnerships



Blueprint: A new STEM community at U of T Engineering



Blanket Exercise — Raising awareness of Indigenous issues

- > 1,200 alumni took on volunteer roles in 2020–2021, about 20% more than the previous year.
- Exciting new opportunities to expand our minor and certificate offerings, outside FASE
  - public health
  - building science
  - ...
- Despite COVID – international partnerships continued to flourish



**Joint Translational Centre for Digital Health**

# Strategic Resources



- 203 College St – Experiential Learning Centre



- Looking towards expanding our footprint

# *Strategic Resources*

