Undergraduate Enrolment
November 1 Full-Time Headcounts
Excludes Students on Co-op

<table>
<thead>
<tr>
<th>Year</th>
<th>Eng 1</th>
<th>Eng Lvl 2-5</th>
<th>iBioMed</th>
<th>Comp Science (All levels)</th>
<th>B Tech (All levels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-Nov</td>
<td>165</td>
<td>306</td>
<td>377</td>
<td>2208</td>
<td>123</td>
</tr>
<tr>
<td>2009-Nov</td>
<td>866</td>
<td>2350</td>
<td>2278</td>
<td>2350</td>
<td>123</td>
</tr>
<tr>
<td>2010-Nov</td>
<td>971</td>
<td>1037</td>
<td>135</td>
<td>2264</td>
<td>123</td>
</tr>
<tr>
<td>2011-Nov</td>
<td>861</td>
<td>2379</td>
<td>161</td>
<td>2650</td>
<td>123</td>
</tr>
<tr>
<td>2012-Nov</td>
<td>992</td>
<td>2675</td>
<td>170</td>
<td>768</td>
<td>123</td>
</tr>
<tr>
<td>2013-Nov</td>
<td>974</td>
<td>2805</td>
<td>197</td>
<td>248</td>
<td>123</td>
</tr>
<tr>
<td>2014-Nov</td>
<td>871</td>
<td>2815</td>
<td>236</td>
<td>1106</td>
<td>123</td>
</tr>
<tr>
<td>2015-Nov</td>
<td>1099</td>
<td>216</td>
<td>248</td>
<td>1106</td>
<td>123</td>
</tr>
<tr>
<td>2016-Nov</td>
<td>803</td>
<td>216</td>
<td>248</td>
<td>1106</td>
<td>123</td>
</tr>
<tr>
<td>2017-Nov</td>
<td>2962</td>
<td>124</td>
<td>248</td>
<td>1106</td>
<td>123</td>
</tr>
</tbody>
</table>
Undergraduate Enrolment November 1 Headcounts
November 2013 vs November 2017

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering 1</td>
<td>992</td>
<td>803</td>
<td>222</td>
<td>1106</td>
</tr>
<tr>
<td>Chemical Eng</td>
<td>22</td>
<td>10</td>
<td>136</td>
<td>410</td>
</tr>
<tr>
<td>Civil Eng</td>
<td>7</td>
<td>4</td>
<td>10</td>
<td>733</td>
</tr>
<tr>
<td>Computing &amp; Software</td>
<td>61</td>
<td>593</td>
<td>10</td>
<td>609</td>
</tr>
<tr>
<td>Electrical &amp; Comp Eng</td>
<td>798</td>
<td>145</td>
<td>2</td>
<td>157</td>
</tr>
<tr>
<td>Eng Physics</td>
<td>41</td>
<td>21</td>
<td>18</td>
<td>165</td>
</tr>
<tr>
<td>Materials Sci &amp; Eng</td>
<td>7</td>
<td>2</td>
<td>124</td>
<td>570</td>
</tr>
<tr>
<td>Mechanical Eng</td>
<td>136</td>
<td>145</td>
<td>0</td>
<td>570</td>
</tr>
<tr>
<td>IBIOMED</td>
<td>10</td>
<td>7</td>
<td>0</td>
<td>124</td>
</tr>
<tr>
<td>BTECH</td>
<td>24</td>
<td>509</td>
<td>0</td>
<td>570</td>
</tr>
</tbody>
</table>

Note: FT = Full Time, PT = Part Time
Student Quality: Entrance Averages 2010 - 2017

[Graph showing entrance averages for BTECH, COMP SCI, ENGINEERING 1, and IBEHS (new program 2017) over the years 2010 to 2017]
Graduate Enrolment November 1 FTE Counts

(FT = 1 FTE, PT = .3 FTE)
Graduate Enrolment November 1 FTE Counts
2013 vs 2017 (FT = 1 FTE, PT = .3 FTE)
Departmental Distribution of Student FTE
(Graduate & Undergraduate)

- **Eng1**, 887, 18%
- **Chem**, 387, 8%
- **Civil**, 404, 8%
- **CAS**, 669, 14%
- **ECE**, 650, 13%
- **EngPhys**, 194, 4%
- **MSE**, 216, 5%
- **Mech**, 417, 9%
- **SEP**, 85, 2%
- **Biomed**, 43, 1%

Growth:
- Eng1, 3%
- Chem, 2%
- Civil, 6%
- CAS, 19%
- ECE, 5%
- EngPhys, -5%
- MSE, -9%
- Mech, 18%
- SEP, 21%
- Biomed, 39%
- Btech, -4%
- Overall, 6%
B.Tech: 2017 Achievements

- DCP Software Engineering Technology:
  - McMaster's first fully online Undergraduate Degree

- Opening of the Learning Factory
  - A cyberphysical systems learning lab that simulates an actual shop floor with multiple stations that imitate the various production stages

- Record enrolment in DCP programs

- Record enrolment in M.Eng. Programs in the School of Engineering Practice and Technology
Co-op and Career Programs:
Fostering student success

- From Sept 2016 to Aug 2017, there was an upward trend in students accessing co-op, compared to last year
  - 1,524 students participated in co-op programs
  - 2,421 work terms completed

- 16% increase in co-op work term postings resulting from enhanced employer engagement.

- 47% increase in the provision of 1:1 career and co-op support undergraduate meetings. 1,504

- 2,221 students were seen in 2016/17 compared to 1,504 in 2015/16.
  - 47% increase in the provision of 1:1 career and co-op support undergraduate meeting
## Women in Engineering 2016/2017

<table>
<thead>
<tr>
<th>Location</th>
<th>Undergraduate Students</th>
<th>Graduate Students</th>
<th>Faculty FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>20.7</td>
<td>24.8</td>
<td>16.6</td>
</tr>
<tr>
<td>% Change from prior year</td>
<td>1.6</td>
<td>0.8</td>
<td>2.8</td>
</tr>
<tr>
<td>Ontario</td>
<td>21.2</td>
<td>24.7</td>
<td>15.3</td>
</tr>
<tr>
<td>% Change from prior year</td>
<td>1.6</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>McMaster</td>
<td>20.2</td>
<td>23.4</td>
<td>14.5</td>
</tr>
<tr>
<td>% Change from prior year</td>
<td>2.6</td>
<td>-3.1</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Source: Engineers Canada
Engineering Recruitment: Centralization of Undergraduate Recruitment Function

- Portfolio consists of all Level 1 programs:
  - Engineering
  - Integrated Biomedical Engineering & Health Sciences
  - Computer Science
  - Bachelor of Technology

- Reconstituted team of two dedicated full-time Recruitment & Promotion Coordinators
Engineering Recruitment: Centralization of Undergraduate Recruitment Function

- Operational efficiencies, including:
  - Eliminated duplication by consolidating staffing and processes into a single unit
  - Online scheduling system for Engineering Ambassador work shift assignments, payroll tracking
  - Standardization of tours to accommodate higher volume of visitors, and ease of training on key talking points

- Improved coordination with McMaster’s Central Recruitment & Admissions Office:
  - Single point of contact for admissions, scholarships, major events & publications
  - Shared online chat function (Lucky Orange) *integration with Central Recruitment coming in 2018
  - Shared online tour booking form *coming in 2018
  - Collaborative International Recruitment initiatives

- Improved responsiveness and consistency of messaging through newly designed:
  - Tours
  - Inquiry handling protocols (phone, e-mail etc.)
  - Online & off-line promotional material
  - Single point of contact for communication with Influencers including Guidance Counsellors, teachers etc.
# Engineering Recruitment:
## Undergraduate Recruitment (select events)

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.Tech: Day in the Life</td>
<td>March – various dates</td>
<td>&lt;20</td>
</tr>
<tr>
<td>March Break Events: Shadow Days, Tours etc.</td>
<td>March 16-20</td>
<td>~125 (snow day)</td>
</tr>
<tr>
<td>May@Mac</td>
<td>May 12</td>
<td>-</td>
</tr>
<tr>
<td>Ontario Universities’ Fair</td>
<td>September 22-24</td>
<td>139,912 total attendance</td>
</tr>
<tr>
<td>Fall Preview #1</td>
<td>October 28</td>
<td>-</td>
</tr>
<tr>
<td>Science Teacher Association of Ontario Conference</td>
<td>November 9 &amp; 10</td>
<td>-</td>
</tr>
<tr>
<td>Fall Preview #2</td>
<td>November 18</td>
<td>-</td>
</tr>
<tr>
<td>Scholars Interview Day</td>
<td>April 14</td>
<td>&gt;300</td>
</tr>
<tr>
<td>May@Mac</td>
<td>May 12</td>
<td>-</td>
</tr>
<tr>
<td>Scholars Reception</td>
<td>May 12</td>
<td>-</td>
</tr>
</tbody>
</table>
Engineering Recruitment: Building the Graduate Recruitment Function

- Established full-time dedicated Recruitment & Promotion Coordinator role with recruitment portfolio for:
  - Graduate research programs
  - Professional programs
  - Works in partnership with SGS, program faculty & staff

- Dedicated FTE enables:
  - Review of existing recruitment and application processes to identify & address barriers
  - Benchmarking against comparator graduate programs
  - Improved data collection and analysis
  - Active relationship building with prospective students
Engineering Recruitment: Graduate Recruitment Events

- Established full membership in the Canadian Graduate Engineering Consortium
- 2017 Canadian Graduate Engineering Consortium Recruitment Tour, held fairs at each member campus:
  - McGill
  - Queen’s
  - McMaster
  - UWaterloo
  - University of Toronto
  - University of Alberta
  - University of British Columbia
- North American Online Graduate Engineering Fair – October 2017
- YorkU Lassonde School Grad Fair – November 2017
- Online Webinars – January onwards
- Grad ‘Coffee House’ Fair – February 2018
# Marketing & Communications

## Attracting Top Students: Recruiting exemplary young scholars

1. Enhancing social media, support production of undergraduate and graduate program guides, oversee promotional recruitment videos, run ads in top university rankings issues, i.e. Macleans, Globe and Mail
2. Run and support digital recruitment campaign

## Improving Gender Diversity: Promoting gender equity

2. Deliberate gender balance in all promotional content, photos, video, stories. Maximize visibility through key opportunities.

## Enhancing Student Retention: Supporting student success

3. Created video highlighting key scholarship winners
4. Internal communications, promoting student events and activities (TV screens)
5. Enhance reputation to attract the best students
Marketing & Communications

Professional Development: Educating the whole engineer

- Working with Associate Dean Graduate studies on suite of professional skills development modules
- Support key student events in entrepreneurship and experiential learning

Community: Improving climate

- Promote internal community through Welcome Week campaigns, ex. #FireballFamily
- Launched ‘In the Lab’ Instagram series featuring undergraduate and graduate students

Research & Innovation: Finding innovative solutions

- Managed advertising campaign to recruit top faculty member garnering more than 500 applications
- Ran strategic articles in advance of big government funding decisions, i.e. aerospace, advanced manufacturing
- Launched new website for Faculty and all departments
- Created Annual Report for Faculty
Marketing & Communications: Newsletter Results

- Open Rate
- Click rate

Graph shows trends from January to November.
Eng.McMaster.ca News Visits

<table>
<thead>
<tr>
<th>Year</th>
<th>News Site Visits</th>
<th>Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>23705</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>39671</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>47263</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>50393</td>
<td>45147</td>
</tr>
</tbody>
</table>

Legend:
- News Site Visits
- Projection
Engineering Alumni: 2017 Overview

Our Graduates

20,557 Engineering Alumni, a 5.5% increase from last year.

1,771 more than one Engineering Degree, 87 more than last year.

22,439 B.Eng., B.A.Sc. (Computer Science) and B.Tech. degrees conferred

- 16,593 Undergraduate
- 5,695 Graduate
- 151 Other
**Engineering Alumni Engagement**

- **22** Total Events
- **2,823** Total Attendees
- **409** Total Eng. Alumni Attendees
- **337** Total Male Alumni Attendees
- **72** Total Female Alumnae Attendees
- **95** Total Faculty Attendees
- **12** Total Female Faculty Attendees

**Event Attendance**

**Male vs. Female Alumni Attendance**
Engineering Alumni Status

17,530  
**Active Alumni**  
*Have a mailing address on file.*

1,897  
**Lost Alumni**  
*Unknown mailing address.*

14,102  
**Email able Alumni**  
*Have an email address on file.*

---

Engineering Alumni Record Updates

<table>
<thead>
<tr>
<th>Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,427</td>
<td>Engineering Alumni records were updated</td>
</tr>
<tr>
<td>428</td>
<td>Email addresses where added or updated</td>
</tr>
<tr>
<td>514</td>
<td>Address records added/updated</td>
</tr>
<tr>
<td>492</td>
<td>Employment information</td>
</tr>
<tr>
<td>345</td>
<td>Records added to activity screen</td>
</tr>
<tr>
<td>14</td>
<td>Entity updates</td>
</tr>
<tr>
<td>6</td>
<td>Records added/updated on the name screen</td>
</tr>
</tbody>
</table>

---

[Bar charts for active, lost, and emailable alumni with data for years 2014, 2015, 2016, 2017.]

---

[Bar charts for total updates with data for years 2014, 2015, 2016, 2017.]

---
Social Media

Social Media is essential for keeping our Alumni connected with each other and with the Faculty of Engineering. These platforms give us the opportunity to stay connected and engage our Alumni, no matter where they are.

Top Tweet earned 7,528 impressions

Two-time Leacock winner Terry Fallis (Mech Eng.'83) shortlisted for 2016 for his 5th novel! bit.ly/1SZba4m
pic.twitter.com/LYFQoDXiH8

LinkedIn

7,904 Followers
97 Published Posts
4,910 Views

205 Tweets
232 Followers
187 Retweets
156 Tweets Liked
The MacEngineer

The Faculty of Engineering’s news magazine keeps our alumni community informed of the latest distinctions and achievements of the Faculty and keeps our grads in touch with one another. Published three times a year, The MacEngineer highlights accomplishments of our notable researchers, news in the department and schools, and information about upcoming alumni events.

62 issues of the MacEngineer Magazine have been published since 1985.

19,024 E-Magazine reads on ISSUU since May, 2011.
In Summer 2017, the LEAP Program offered 11 streams catering to different disciplines and aspects of engineering, science, technology and management.

Programs Offered:
- Bioengineering and Biomedical
- B-Tech 101
- Business 101
- Civil & Environmental Engineering
- Codemakers++
- Computer Science
- Electrical and Mechatronics
- Engineering 101
- Engineering Physics
- Mechanical & Materials Engineering
- Science 101
L.E.A.P. broke records in 2016/17:

LEAP enrolled 479 students in 2017.

Efforts geared toward inspiring young women to pursue STEM fields resulted in 47% Female enrolment.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>70</td>
<td>62</td>
<td>132</td>
</tr>
<tr>
<td>10</td>
<td>78</td>
<td>55</td>
<td>133</td>
</tr>
<tr>
<td>11</td>
<td>83</td>
<td>58</td>
<td>141</td>
</tr>
<tr>
<td>12</td>
<td>24</td>
<td>47</td>
<td>71</td>
</tr>
<tr>
<td>Total</td>
<td>256</td>
<td>223</td>
<td>479</td>
</tr>
</tbody>
</table>
L.E.A.P: International Reach

International Enrollment

- Canada
- China
- Czech Republic
- Italy
- Japan
- Moldova
- Pakistan
- Saudi Arabia
- Singapore
- Taiwan
- Turkey
- United Arab Emirates
- United States of America
L.E.A.P Community Engagement

LEAP connected with 5,703 students (3,171 across the Greater Hamilton-Toronto Area), through travelling workshops and outreach initiatives.

<table>
<thead>
<tr>
<th>Conference</th>
<th>Number of Students Reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glenforest STEM Conference</td>
<td>225</td>
</tr>
<tr>
<td>Innovation 150</td>
<td>1700</td>
</tr>
<tr>
<td>Discovery Day</td>
<td>50</td>
</tr>
<tr>
<td>Girls Conference</td>
<td>35</td>
</tr>
<tr>
<td>Jacob Hespeler</td>
<td>50</td>
</tr>
<tr>
<td>Take Your Kids to Work Day</td>
<td>15</td>
</tr>
<tr>
<td>Go CODE Girl*</td>
<td>19</td>
</tr>
<tr>
<td>Go ENG Girl*</td>
<td>85</td>
</tr>
<tr>
<td>Women in Engineering Overnight</td>
<td>36</td>
</tr>
<tr>
<td>Engineering and Science Olympics</td>
<td>100</td>
</tr>
<tr>
<td>RISE Conference</td>
<td>22</td>
</tr>
<tr>
<td>More Gems Event</td>
<td>75</td>
</tr>
<tr>
<td>Global Engineering Conference</td>
<td>8</td>
</tr>
<tr>
<td>BASEF</td>
<td>500</td>
</tr>
<tr>
<td>STAO Conference</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2532</strong></td>
</tr>
</tbody>
</table>

*Girls in Gr. 9 - 12

Provided co-op opportunities for 28 Undergraduate McMaster Engineering and Science students
LEAP: Impact

- Expanded program to engage 5,703 students through travelling workshop and outreach initiatives
- Expanded our summer program to reach 479 high school students
- Provided co-op opportunities for 28 Undergraduate McMaster Engineering and Science students
- Developed 3 new programs, Computer Science, Business 101, and B-Tech 101; increasing our program capacity by 225 students
- Awarded 15 bursaries to female students to attend L.E.A.P.
- Awarded 13 scholarships to attend L.E.A.P. from various engineering departments
- Awarded 9 entrance scholarships to McMaster Engineering for exceptional students who participated in L.E.A.P.
- Organized two educational conferences for 71 girls total in grades 9 through 12 and awarded 10 entrance scholarships from the Dean to attend McMaster Engineering
- Featured on CHCH Hamilton News to promote STEM projects and L.E.A.P.
- Increased international country enrollment by 150%
Venture

Free curriculum-based travelling workshops for youth grades K - 8

Fast Facts

- Reached 14,856 students
- Engaged 1,706 Indigenous Students
- Traveled to 662 Classrooms
- Awarded 60 volunteer placements for area high school students
- Awarded 23 bursaries including 12 for Indigenous students in summer programs
- Presented 20 scholarships for girls Gr. 7 – 8
Venture: Indigenous Outreach

The STEM conference gives students the opportunity to come and spend two days at McMaster and experience life on a university campus. This initiative has continued to grow and excel through the years and in 2017 welcomed 246 students to campus accompanied by over 40 teachers and parents.

<table>
<thead>
<tr>
<th>Year</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>87</td>
</tr>
<tr>
<td>2014</td>
<td>108</td>
</tr>
<tr>
<td>2015</td>
<td>136</td>
</tr>
<tr>
<td>2016</td>
<td>187</td>
</tr>
<tr>
<td>2017</td>
<td>246</td>
</tr>
</tbody>
</table>
Indigenous Summer Program

Alongside Venture, our Outreach Team delivers two weeks of programming for Indigenous youth in grades 5 – 8 and provides transportation to and from Six Nations and New Credit. The curriculum links Traditional teachings with Western engineering and science practices to inspire youth to pursue STEM.
## Venture: Outreach

**Out in the Community**

<table>
<thead>
<tr>
<th>Event</th>
<th># Reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>YMCA Beyond the Bell</td>
<td>282</td>
</tr>
<tr>
<td>Mohawk Career Fair</td>
<td>65</td>
</tr>
<tr>
<td>Healthy Eco Fair</td>
<td>135</td>
</tr>
<tr>
<td>Central Public Day of Code</td>
<td>171</td>
</tr>
<tr>
<td>March Break Camp</td>
<td>97</td>
</tr>
<tr>
<td>BASEF*</td>
<td>1,100</td>
</tr>
<tr>
<td>STAO</td>
<td>50 Teachers</td>
</tr>
<tr>
<td>Moms Who Code</td>
<td>14 Parents</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1914</strong></td>
</tr>
</tbody>
</table>

*For Grade 7 & 8

---

**Bringing Schools to Campus**

<table>
<thead>
<tr>
<th>Event</th>
<th># Reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homeschool</td>
<td>75</td>
</tr>
<tr>
<td>Balaclava</td>
<td>238</td>
</tr>
<tr>
<td>Ecole Forest Trail</td>
<td>298</td>
</tr>
<tr>
<td>Cathy Wever</td>
<td>52</td>
</tr>
<tr>
<td>Codemakers Club</td>
<td>15</td>
</tr>
<tr>
<td>Eng Experience Club 1-4</td>
<td>51</td>
</tr>
<tr>
<td>Eng Experience Club 5-8</td>
<td>36</td>
</tr>
<tr>
<td>Robot Experience Day</td>
<td>24</td>
</tr>
<tr>
<td>Gifted Program</td>
<td>32</td>
</tr>
<tr>
<td>Grad Track Event</td>
<td>75</td>
</tr>
<tr>
<td>St. Michaels</td>
<td>36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>932</strong></td>
</tr>
</tbody>
</table>
Faculty and Staff Transitions

**Faculty Retirements**
Ghani Razaqpur, Civil Engineering
Thomas Maibaum, Computing and Software
Jeffrey Zucker, Computing and Software

**Faculty Appointments**
Kamil Khan, Chemical Engineering
Jacob Nease, Chemical Engineering
Moataz Mohamed, Civil Engineering
Asghar Bokhari, Computing and Software
Peter Robinson, Computing and Software
Matiar Howlader, Electrical & Computer Engineering
Matthew Minnick, Engineering Physics
Elizabeth Hassan, Mechanical Engineering and Engineering Level 1
Allan Mackenzie, Walter G. Booth School of Engineering Practice and Technology
Staff Retirements
Jeanne Hopkins, Academic Advisor, Associate Dean’s Office, 2017-Jun
Lynn Stewart, Director, Outreach, 2017-Apr

Staff Appointments
Hannah Abram, Academic Advisor, Associate Dean’s Office, 2017-May
Delcia Aguiar, Administrative Asst (Academic), Computing and Software, 2017-Aug
Sarah Anstett, Research Support Co-ordinator, Outreach. 2017-March
Jennifer Anderson, Institute Administrator, MMRI, 2016-Dec
Ghada Badawy, Principal Research Engineer, Mechanical Engineering, 2016-Nov
Lynda Bruce, Operations Manager, McSCert (CAS) – 2017-May
Brennan Conry, Academic Advisor, Associate Dean’s Office, 2017-May
Joy Coomber, Accounting Assistant, Dean’s Office, 2017-Feb
Tracey Coop, Accounting and Academic Assistant, ECE, 2017-Oct
Alaine Coschi, Recruiting and Promotions Coordinator, Outreach, 2017-Nov
Arlene Dosen, Director, Outreach and Community Engagement, 2017-Jun
Katharine Gadawski, Recruitment Assistant, Career Services, 2017-Oct
Chelsea Gregory, Administrative Assistant (Academic), Materials Sci and Eng, 2017-May
Valerie Hillman, Career Development & Relations Manager, Career Services, 2017-Jul
Staff Appointments Cont’d

Alexa Huang, Program Manager, Integrated Biomedical Eng & Health Sci., 2017-Feb
Rachelle Ireson, Career Development & Relations Manager, Career Services, 2017-Jul
Siobhan Koch, Recruiting and Promotions Coordinator, Outreach, 2017-Sep
Robert Laidler, Administrator, Engineering Physics, 2017-May
Victoria Larke, Manager, Outreach, 2017-Jan
Fran Lasowski, Network Manager C20/20, Chemical Engineering, 2017-Feb
Sinah Lee, Instructional Coordinator, Integrated Biomedical Eng & Health Sci., 2017-May
Kathryn Leistner, Manager, Career Services, 2017-Sep
Matthew Lukas, Workshop Technologist, Engineering, 2017-May
Morgan Macdonald, Administrative Assistant (Academic), ECE, 2017-Apr
Yvonne Maidment, Business Administrator, School of Eng. Practice & Tech, 2016-Nov
Heera Marway – Research Engineer, MMRI, 2017-Oct
Ciara McCann, Social Media & Digital Content Coordinator, Outreach, 2017-May
Souvik Pal, Principal Research Engineer (CIRC), 2017-Jan
Melissa Pyefinch, Camp Coordinator, Alumni, 2017-Jun
Steve Remilli, Research Engineer, MMRI – 2016-Dec
Christine Rich, Administrative Assistant (Academic), School of Eng. Practice & Tech, 2017-Apr
Approved Faculty FTE (including CLA)

- Engineering
- Eng Vacancy
- SEPT
- SEPT Vacancy

<table>
<thead>
<tr>
<th>Year</th>
<th>Engineering</th>
<th>Eng Vacancy</th>
<th>SEPT</th>
<th>SEPT Vacancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006/7</td>
<td>145.5</td>
<td></td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>2007/8</td>
<td>147.0</td>
<td></td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>2008/9</td>
<td>144.0</td>
<td></td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>2009/10</td>
<td>138.0</td>
<td></td>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td>2010/11</td>
<td>136.5</td>
<td></td>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td>2011/12</td>
<td>142.5</td>
<td></td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>2012/13</td>
<td>144.5</td>
<td></td>
<td>15.5</td>
<td></td>
</tr>
<tr>
<td>2013/14</td>
<td>153.0</td>
<td></td>
<td>19.5</td>
<td></td>
</tr>
<tr>
<td>2014/15</td>
<td>158.0</td>
<td></td>
<td>20.5</td>
<td></td>
</tr>
<tr>
<td>2015/16</td>
<td>151.0</td>
<td></td>
<td>20.5</td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td>156.0</td>
<td></td>
<td>19.0</td>
<td></td>
</tr>
<tr>
<td>2017/18</td>
<td>160.5</td>
<td></td>
<td>21.0</td>
<td></td>
</tr>
</tbody>
</table>
Faculty FTE by Department
(2013/14 actual vs 2017/18 projected)
Faculty FTE by Dept - Projected to Apr/30/2018
Engineering Advancement: Major Gifts

There were 1,069* recorded gifts for a total of $2,531,259**

Major Gift Breakdown:

- Scholarships/Bursaries/Academic Grants: 85%
- Department Funds: 3%
- Faculty Fund: 3%
- Student Innovation Fund: 5%
- Gerald Hatch Centre Pledge Donations: 4%

*Includes 757 alumni donations ($50) to macLAB from class of 2016

**Sponsorships not included in the total:
- $66,750, FIRST Robotics Competition
- $187,000, Global Engineering Deans Council
Engineering Advancement: Major Gifts

**Doug Barber**
$269,000 to Building Thinkers
$100,000 Peter George Living and Learning Centre Priorities Fund

**ArcelorMittal Dofasco**
$200,000 Advanced Manufacturing Policy Chair
$90,000 FIRST Robotics Scholarship

**McMaster Engineering Society**
$242,850 MACLAB: McMaster Laboratory Advancement Benefaction Fund
$300,000 Hatch Student Fund

**Hatch Ltd.**
$40,000 Annual Hatch Scholarship
$40,000 Annual Aboriginal Scholarship

**P. Thomas Jenkins**
$55,000 Dr. Chris Bart Scholarship Endowment Fund
$55,000 Professor David Thompson Scholarship Endowment Fund
$55,000 Edward Jenkins Award Endowment Fund
$55,000 Elizabeth Jenkins Academic Grant Endowment Fund

**S. Schulich Foundation:**
$180,000 Schulich Leader Scholarships Fund (Engineering) $180,000

**Joseph W. Ip:**
$100,000 Engineering Physics Capstone

**Ontario Professional Engineers Foundation for Education:**
$40,000 ON Prof. Engineers Fdn for Educ. Undergrad Scholarship Fund

**Dean Chambers:**
$50,000 Chambers Experiential Learning & Discovery Fund

**Cameron M. Crowe:**
$25,000 Dr. Cameron M. Crowe Endowment Fund

**Nikola Tesla Educational Corporation:**
$50,000 Nikola Tesla Educational Corporation Scholarship Fund

**Walker Wood Foundation:**
$25,000 Walker Wood Foundation Academic Grant Fund

**Anthony E. James:**
$25,000 Emmanuel & Gertrude James Bursary Fund

**Michael E. Pley:**
$25,000 Faculty of Engineering Innovation Fund

**Roy M. Verstraete:**
$25,000 Faculty of Engineering Innovation Fund

**Leo Seto:**
$55,000 Scholarship in Engineering Physics
Research Funding 2016/17
Research Funding* Breakdown

*Source: Mosaic pre-awards research funding database. This database tracks “funded” values, not what was actually received or spent. The funded data is as per the Sponsor notice of award/agreement and marked as funded when all agreements are fully executed.
## Major Research Initiatives

**CFI JELF/MRI ORF RI**

<table>
<thead>
<tr>
<th>Name</th>
<th>Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gianluigi Botton</td>
<td>Advanced Electron Spectroscopy Tools</td>
</tr>
<tr>
<td>Kathryn Grandfield &amp; Nabil Bassim</td>
<td>Plasma Focused Ion Beam for Mesoscale Tomography of Materials</td>
</tr>
<tr>
<td>Jennifer Bauman</td>
<td>Electrified Powertrain Modeling Laboratory: The Optimization of Efficiency, Cost, and Lifetime of Electrified Vehicles</td>
</tr>
<tr>
<td>Zeinab Hosseinidoust</td>
<td>Building a Bacteriophage Biotechnology Platform</td>
</tr>
<tr>
<td>Thia Kirubarajan</td>
<td>Computational Suite for Emerging Concepts in Target Tracking and Information Fusion</td>
</tr>
</tbody>
</table>
## NSERC Competition Success Rate

### NEW DISCOVERY GRANTS

<table>
<thead>
<tr>
<th>YEAR</th>
<th>McMaster Engineering</th>
<th>McMaster University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL # requested</td>
<td>AWARDED #</td>
</tr>
<tr>
<td>2010</td>
<td>27</td>
<td>20</td>
</tr>
<tr>
<td>2011</td>
<td>35</td>
<td>26</td>
</tr>
<tr>
<td>2012</td>
<td>36</td>
<td>28</td>
</tr>
<tr>
<td>2013</td>
<td>42</td>
<td>35</td>
</tr>
<tr>
<td>2014</td>
<td>34</td>
<td>25</td>
</tr>
<tr>
<td>2015</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>2016</td>
<td>33</td>
<td>24</td>
</tr>
<tr>
<td>2017</td>
<td>35</td>
<td>28</td>
</tr>
</tbody>
</table>

### RTI GRANTS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Requested</td>
<td>Total Awarded</td>
<td>Success Rate</td>
</tr>
<tr>
<td></td>
<td>#</td>
<td>$</td>
<td>#</td>
</tr>
<tr>
<td>Engineering</td>
<td>12</td>
<td>1626770</td>
<td>6</td>
</tr>
<tr>
<td>McMaster</td>
<td>26</td>
<td>3183167</td>
<td>12</td>
</tr>
<tr>
<td>National Average</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Engineering Operating Spending

2016 – 2017: CFI JELF/MRI ORF RI

- Academic Salaries & Benefits 55%
- Support Staff Salaries & Benefits 17%
- Student Support 6%
- Support Staff Salaries & Benefits 6%
- Equipment & Renovations 11%
- Supplied and Services 6%
- Direct Research Support 5%