Strengthening the Western Engineering Student Experience

2016
Destination of Choice

Western Engineering creates, disseminates and applies knowledge for the benefit of society through teaching, research and scholarship. Our graduates become global citizens whose education and leadership serves the public good.

Making an impact on complex global problems requires a diversity of skills, ideas and talents. To offer the environment and resources necessary to foster this development in our students, Western Engineering is committed to:

• Increasing opportunities for engineering students to be exposed to business and innovation;
• Increasing opportunities for more women and Indigenous students to pursue engineering education;
• Developing global-minded leaders through internationalization activities and experiential education outside the classroom; and
• Partnering with industry to provide hands-on learning experience.

Partnerships for Progress

Western Engineering is reaching out to alumni, friends and industry to help meet our goals of supporting students and strengthening the student experience. Our top priorities include:

• Entrance Scholarships—to help attract the best and brightest students to Western Engineering from across Canada and around the world.
• In-Course Scholarships and Awards—to help support hard-working students and provide meaningful financial assistance and recognition for outstanding achievement.
• Bursaries—to provide critical support to students based solely on their financial needs.
• Ontario Graduate Scholarships (OGS)—to recognize and support excellence in graduate studies.
• Western Engineering Student Endowment Laboratory (WESEL) Fund—to ensure that current and future undergraduate students have access to the necessary equipment and tools for their course work and group projects.
• Global Opportunity Awards (GO Awards)—to give both undergraduate and graduate students the opportunity to study at another university, participate in education abroad, or complete an international internship.

Some of the most promising students from across Canada and around the world are applying to Western Engineering for its small class sizes and unique learning opportunities. Western Engineering aspires to expand the value and quantity of its financial awards to attract and support the very best students who demonstrate exceptional academic abilities and leadership qualities.

Sourcing Sustainable Solutions

Sourcing new treatments for wastewater may not seem like the most glamorous line of research, but for 23-year-old Tarek Rashwan, BESc’13, the thrill is in the challenge of simplifying a complex issue.

“I really like the idea of taking a big environmental problem that encompasses a huge area and condensing it down to a simple problem on paper,” says Tarek, a master of engineering science student in the civil and environmental engineering program.

Tarek is the first recipient of the Eric and Ruby Chung Graduate Award in Geotechnical Engineering, an annual award established by Western alumni Eric and Ruby Chung to support engineering students whose research shows the promise of practical, industrial application.

“It generally takes a lot of energy to run a wastewater treatment plant. What we’re proposing is a more energy efficient way to manage the material,” says Tarek.

“We’re pushing the envelope and moving further towards energy recovery, as opposed to solely focusing on treatment of the wastewater.”

By working directly with industry partners, Western engineering students, like Tarek, are able to expedite the transfer of their lab-based research to real-world, industrial application.
**Ignite Discovery and Inspire Learning**

**Investing in the Future: Scholarships, Awards and Bursaries**

There are many different options for scholarships, awards and bursaries available at Western. A student award can be named and tailored to meet personal or corporate goals. To establish a named endowed student award a minimum donation of $25,000 is required. The University’s endowment policy allows for 4% of the income generated by an endowed fund to be spent each year, which would create an annual award of $1,000. This donation can be paid in one lump sum or pledged over a period of several years.

Donors also have the option to offer a term-funded award, which will be named for the duration of the funding period. To establish a named term-funded award, donors need to pledge a minimum award value of $1,500 for at least five years.

Every gift, whatever its value is important and appreciated. Individuals can choose to remain anonymous and can contribute to a general endowment fund that pools many gifts together to make an impact in the lives of undergraduate engineering students.

**Seeking Solutions: The Ontario Graduate Scholarships (OGS)**

The generous support of our alumni and friends help us deliver a post-graduate education supporting exceptional young researchers. Graduate scholarship support does not only allow for the expansion of the knowledge of a particular academic discipline; it rewards the academic excellence required at a master’s and doctorate level.

The OGS program recognizes and supports excellence in graduate studies. Recipients must be ‘A’ students who have passed a province-wide competitive review process based on their marks, references, research plans, and communication silks. A master’s student may hold an OGS for a maximum of two years and a doctoral student may hold an OGS for a maximum of four years.

OGS has a matching fund opportunity that allows private sector partners to participate in the creation of full $15,000 scholarships for exceptional students for only one-third of the cost.

Each expendable gift of $5,000 will leverage $10,000 from the provincial government to provide one student with $15,000.

A visionary investment of $125,000 endowed will generate $5,000 annually. This will leverage matching funds on a 2:1 basis to fully support one $15,000 award per year in perpetuity.
Develop Leaders

An Inspiring Learning Environment: WESEL Fund

In order to provide an experiential learning environment that is inspiring for students, the Undergraduate Engineering Society launched the WESEL Fund in September 2012. The WESEL Fund generates income to purchase equipment or upgrade facilities in undergraduate laboratories or design centres. Each year, 4% of annual endowment earnings are used to make these purchases.

In just over three years, WESEL is already paying dividends. Since 2012, engineering students have voluntarily donated $50 a year while studying at Western and would like alumni to consider supporting this initiative.

To date, the value of the WESEL Fund is more than $273,500. The funding has enabled new equipment to be purchased in several laboratories, including five Marcet Boilers, a Plate and Frame Filter Press, Data Loggers, MakerBot Replicator 3D Printer, MakerBot High Resolution 3D Printer, a Planetary Ball Mill, Sieve Shaker and a Classification Sieve. These purchases give students opportunities to gain valuable hands-on training that might not have happened without WESEL support.

The World as a Classroom: GO Awards

Western Engineering is committed to establishing a permanent series of GO Awards to offer increasing numbers of students the opportunity to attend university outside Canada; participate in exchange programs; build communities around the world; and learn new languages and perspectives.

In recognition of the importance of international programs for engineering students and their futures, Western is offering matching funds to our alumni and friends who choose to support the GO Awards.

<table>
<thead>
<tr>
<th>Gift Level</th>
<th>Western Match</th>
<th>Award Value</th>
<th>Customization</th>
</tr>
</thead>
<tbody>
<tr>
<td>$500</td>
<td>$500</td>
<td>1 at $1,000</td>
<td>No</td>
</tr>
<tr>
<td>$1,000</td>
<td>$1,000</td>
<td>1 at $2,000</td>
<td>No</td>
</tr>
<tr>
<td>$8,000 ($2,000 for 4-yrs)</td>
<td>$2,000</td>
<td>2 at $2,000</td>
<td>Yes</td>
</tr>
<tr>
<td>$9,000 ($3,000 for 3-yrs)</td>
<td>$3,000</td>
<td>3 at $2,000</td>
<td>Yes</td>
</tr>
<tr>
<td>$12,000 ($4,000 for 3-yrs)</td>
<td>$4,000</td>
<td>4 at $2,000</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Personal contributions to the fund are tax deductible and alumni also have the opportunity to double the value of donations if their employer offers a matching gift program.

With the help of our alumni, friends, and private partners, Western Engineering can offer an even richer experience and more diverse learning environment, providing our students with greater opportunities to learn from each other, industry, and the global community.

Virginia Daugharty
Alumni & Development Officer, Engineering
Western University
t. 519.661.4209  e. vdaughar@uwo.ca

Through the WESEL Fund, Western Engineering purchased and installed a new plate and frame filter press in a third-year chemical, biochemical and green process engineering lab. This new state-of-the-art equipment keeps the hands-on learning experience relevant for undergraduate students.

Mario Naric (pictured left), completed an eight-week research project at Tianjin University in China during his second year of studies at Western Engineering. Working in a chemical engineering lab in China for two months provided Mario with a richer learning experience and greater appreciation for other cultures.

Gift Level          Western Match | Award Value | Customization
-------------------|---------------|-------------|---------------|
$500               | $500          | 1 at $1,000 | No            |
$1,000             | $1,000        | 1 at $2,000 | No            |
$8,000 ($2,000 for 4-yrs) | $2,000        | 2 at $2,000 | Yes           |
$9,000 ($3,000 for 3-yrs) | $3,000        | 3 at $2,000 | Yes           |
$12,000 ($4,000 for 3-yrs) | $4,000        | 4 at $2,000 | Yes           |