

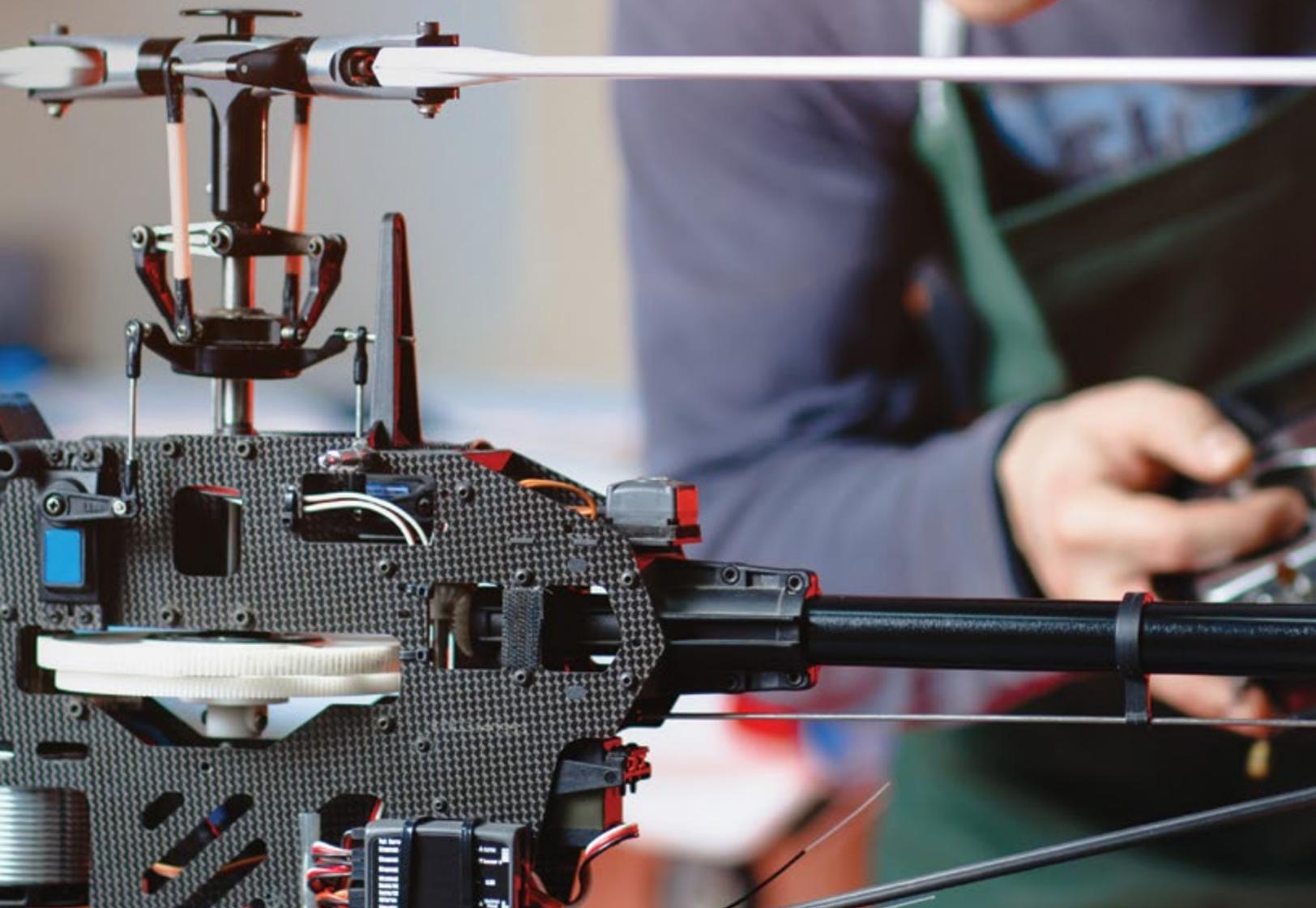
# Be Greater Than

Engineering Admissions 2023

Toronto  
Metropolitan  
University



Be  
greater  
than  
ordinary





# So much more than a symbol.

At Toronto Metropolitan University Engineering, to be greater than represents the drive to continuously improve yourself, your industry and the world. Here, our engineering students are always forging ahead, pushing the boundaries of innovation, and never ceasing to develop as well-rounded engineers, entrepreneurs and people.

**Join us and be greater than, too.**

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# Be immersed in a world-class city

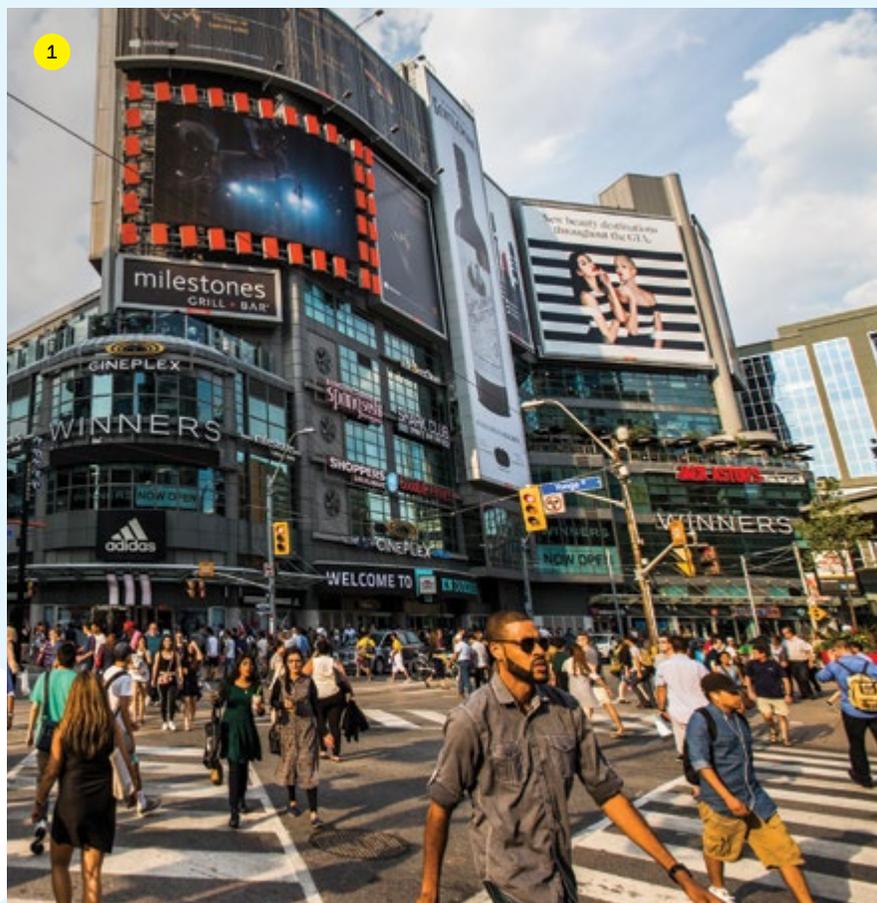
Embrace the energy of a global community from our campus in the heart of it all.



## Keep up with downtown.

Take in Toronto's illustrious food scene and rich tapestry of multicultural experiences. Here, you're just steps to the city's best restaurants, sporting events, festivals and more.

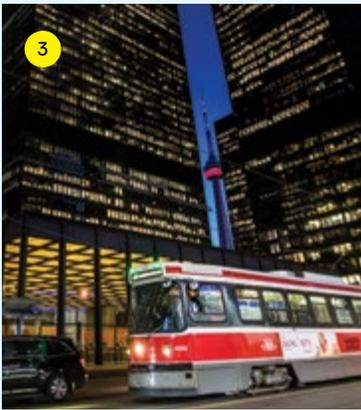
1. Experience the bustle of Yonge-Dundas Square.
2. Go for a whirl on our very own outdoor ice rink, Lake Devo.
3. Explore the city by streetcar or hop on the subway.
4. Stroll over to Allan Gardens, an indoor botanical garden.





**Toronto is in the “Dish With One Spoon Territory.”**

The Dish With One Spoon is a treaty between the Anishinaabe, Mississaugas and Haudenosaunee that bound them to share the territory and protect the land. Subsequent Indigenous Nations and peoples, Europeans and all newcomers have been invited into this treaty in the spirit of peace, friendship and respect.



# Engineering by the Numbers



As a distinctly urban university, we're driven by the most valuable aspect of innovation: diversity of thought and experience.

From our state-of-the-art facilities to our partnerships with industry professionals, hospitals and the community, you'll be equipped to bring ideas to the real world that improve the quality of life in Toronto and across the globe.

**#1**

TMU is first in Canada for research income and publications growth (Canada's Innovation Leaders 2021)

**9**

engineering programs

**60+**

minors to customize your degree

**5,200+**

undergraduate students

**5**

academic departments

**90+**

research labs

**47**

countries our students call home

**470+**

international students

**\$1.8M+**

awarded in scholarships to support first-year engineering students\*

**50+**

engineering student clubs and teams to explore

**8-16**

months of paid professional experience

**28,000+**

engineering alumni worldwide

\*2021



# Aerospace

## Invent the vehicles of the future.

If transportation is your passion, you'll graduate with the knowledge you need to reinvent how we travel across water, land, sky or space. You'll decide how fast we move, how safe and cost-effective transit can become, and just how much further we can travel beyond this world.

In first and second year, you'll advance your understanding of foundational engineering science and take courses specific to your program, such as aerospace design and flight mechanics. In third year, you'll study one of three streams: aircraft, spacecraft or avionics. In fourth year, you'll work in a student team to design and analyze your own aircraft or spacecraft, and present your final project to industry representatives.

[torontomu.ca/aerospace](http://torontomu.ca/aerospace)

### Degree:

Bachelor of Engineering

**Full Time:** Four Year;

Five Year Co-op Program

### Some career possibilities

- aerospace defence
- avionic instrumentation design
- electronic navigation systems design
- research
- satellite technology
- manufacturing, operations and maintenance of everything from jets and space-exploration vehicles to high-speed cars and hovercraft

### Some employers

- Air Canada
- Boeing
- Bombardier
- Canadian Space Agency
- Celestica
- CFN Precision
- Honeywell
- NASA
- National Research Council of Canada
- Pratt & Whitney
- Safran Electronics
- SpaceX
- SPP Canada Aircraft
- Transport Canada
- UTC Aerospace Systems + many more

> For information on co-op and internships, turn to page 20.



# Biomedical

## Make a difference to the health of humanity.

As a biomedical engineer, you'll blend the physical, chemical, mathematical and computational sciences with biology, medicine, physiology and health. The results? New medications, materials, devices and processes that prevent, diagnose and treat disease and injury.

In first and second year, you'll study the foundations of engineering science and explore topics specific to your program, such as biomedical physics. In third year, you'll focus on microprocessor systems, fluid mechanics, biomedical transducers, bioinformatics, biostatistics, signals and systems, control systems and instrumentation. In fourth year, you'll be a member of a student team tasked with developing, prototyping and proving your own design.

[torontomu.ca/biomedical](http://torontomu.ca/biomedical)

### Degree:

Bachelor of Engineering

### Full Time:

Four Year;  
Five Year Co-op Program

### Some career possibilities

- IT and software solutions
- medical research
- medical device design and manufacturing
- nanotechnology and micro-machine development
- rehabilitation technologies
- a TMU biomedical engineering education opens doors to medical, dental and veterinary schools

### Some employers

- Celestica
- Dräger
- Enbridge
- GE Healthcare
- Hydro One
- Johnson & Johnson
- Institute for Biomedical Engineering, Science and Technology (iBEST)
- Medtronic
- Sanofi Pasteur
- Siemens
- St. Michael's Hospital
- Canon Medical Systems + many more

> For information on co-op and internships, turn to page 20.

# Chemical Co-op

## Transform materials into everyday essentials.

Chemical engineering is an incredibly versatile discipline that combines engineering and the sciences of chemistry, biology and physics. Your career could take you in many exciting directions, from producing cleaner water and better-tasting food to developing microchips, beauty products and medicines.

Your program will begin with introductory courses in engineering principles and sciences, where you'll explore topics specific to your program, such as material and energy balances, fluid mechanics and thermodynamics. In the upper years of your program, you'll study specialized subjects such as wastewater treatment, biochemical engineering, air pollution control, food processing and process optimization.

Completion of three co-op work terms is a mandatory component of this program, enhancing your degree and helping you to make informed career decisions.

[torontomu.ca/chemical](http://torontomu.ca/chemical)

### Degree:

Bachelor of Engineering

### Full Time:

Five Year Co-op Program

### Some career possibilities

- cosmetics formulations
- environmental management
- industrial safety
- petrochemicals
- process design and development
- pollution control and waste management
- risk assessment
- semiconductor manufacturing
- water treatment
- leadership roles in business, education and entrepreneurship

### Some employers

- 3M
- AGAT Laboratories
- Apotex Canada
- Atomic Energy of Canada Limited (AECL)
- Dow Chemical
- DuPont
- Environment and Climate Change Canada
- Husky Energy
- Imperial Oil
- Maple Leaf Foods
- Sanofi Pasteur
- Suncor Energy + many more

> For information on co-op and internships, turn to page 20.

“My professors are very supportive. They want to make sure you're prepared for your future career and are happy to share their industry experience with you.”

– Emma Kelly, Chemical Engineering Co-op '22





# Civil

## Design eco-friendly structures and safer communities.

Can you imagine a world without buildings, bridges, water supply or power? Neither can we. Thank goodness for civil engineers. These highly trained and knowledgeable professionals design crucial facilities and infrastructure systems, as well as manage, operate and maintain them 24/7.

You'll learn the fundamentals in your first two years, and how environmental, geomatics, geotechnical, structural and transportation engineering come together. In upper years, you'll choose to specialize in structural, environmental or transportation engineering with courses in project management, structural design, transportation planning and solid waste management.

[torontomu.ca/civil](http://torontomu.ca/civil)

### Degree:

Bachelor of Engineering

**Full Time:** Four Year;  
Five Year Co-op Program

**Option:** Structural  
Engineering

### Some career possibilities

- city planning
- consulting
- infrastructure asset management
- power and water supply
- project management
- waste treatment facility design
- sustainable construction
- designing bridges, buildings, dams, roads and more

### Some employers

- AECOM
- Aecon Group
- Canadian Natural Resources
- CIMA +
- City of Toronto
- Dillon Consulting
- EllisDon
- EXP
- Golder Associates
- Hatch Group
- Hydro One Networks
- Lafarge
- Metrolinx
- Ministry of Transportation
- PCL Construction
- SNC-Lavalin
- Stantec
- The Boring Company
- The Walt Disney Company
- Worley + many more

> For information on co-op and internships, turn to page 20.

# Computer

## Design the next digital phenomenon.

As a computer engineer, you'll use your knowledge of software, hardware and firmware design to advance technology in our interconnected world. You'll build electronic systems and devices for an industry that is critical to our everyday lives, and that is at the centre of social and economic revolutions.

Throughout your program, you'll explore engineering fundamentals, plus computer architecture, microcomputer systems, digital electronics, real-time operating systems and control theory. You'll dive deeply into networks, circuits, microprocessors, software systems and more. In third year, you can focus on coding and software design with an option in software engineering. In fourth year, you'll be part of a student team tackling a hands-on project that includes developing, prototyping and testing your design.

[torontomu.ca/computer](http://torontomu.ca/computer)

### Degree:

Bachelor of Engineering

**Full Time:** Four Year;  
Five Year Co-op Program

**Option:** Software Engineering

### Some career possibilities

- big data
- communications
- health-care systems
- human-computer interaction
- intelligent and adaptive systems
- network security
- research and development
- social media analytics
- web mining
- developing computer chips, systems on a chip, circuit equipment and more

### Some employers

- AMD
- Apple
- Bell Mobility
- Celestica
- Electronic Arts
- Enbridge
- ESNA
- Hydro One
- Google
- IBM
- Intel
- Litens Automotive Group
- Microsoft
- Ontario Power Generation
- Sanofi Pasteur
- Siemens Canada
- Suncor
- Telus Digital
- Toronto Hydro + many more

> For information on co-op and internships, turn to page 20.





“The extracurricular activities offered by Toronto Metropolitan University Engineering enriched my professional development.”

– Anza Syed, Audio DSP Engineer at Ford Motor Company, Electrical Engineering '20



# Electrical

## Shape the technology that powers our world.

As an electrical engineer, you'll learn to design systems that use electricity, electronics and electromagnetics. Your in-demand expertise will be used to advance technology in industries ranging from health care to manufacturing to consumer electronics.

After you learn the first-year engineering fundamentals, you'll move on to core subjects such as analog and digital electronic circuits, signal and system theory, energy systems, and control theory. In fourth year, you'll study advanced topics such as digital signal processing, communications, power systems, artificial intelligence and image processing. You'll also be part of a student team tackling a hands-on project that includes developing, prototyping and testing your design.

[torontomu.ca/electrical](http://torontomu.ca/electrical)

### Degree:

Bachelor of Engineering

**Full Time:** Four Year;  
Five Year Co-op Program

### Some career possibilities

- artificial intelligence
- battery design
- electrical circuit relationship design
- integrated circuits
- Internet of Things
- medical imagery
- power generation, transmission and distribution
- quality control
- renewable energy
- robotics
- signal processing
- telecommunications and more

### Some employers

- AMD
- Apple
- Bell Mobility
- BMW Group
- Boeing
- Celestica
- Enbridge
- Esna
- GE
- Google
- Hydro One
- IBM
- Litens Automotive Group
- Lincoln Electric
- Ontario Power Generation
- Sanofi Pasteur
- Siemens Canada
- Suncor
- Tesla
- Toronto Hydro + many more

> For information on co-op and internships, turn to page 20.

# Industrial

## Mastermind solutions for processes, productivity and people.

As an industrial engineer, you'll focus on optimizing systems design by integrating human, information, equipment and specialized knowledge. While you may choose to work in "industrial" settings, you can apply your skills just about anywhere, from health-care management to business. No matter where you end up, you'll make processes faster, safer and more efficient.

In first and second year, you'll be introduced to engineering science basics, engineering design and the fundamentals of manufacturing. In third year, you'll gain more specialized knowledge, including management sciences, operations research, data science and facilities design. In fourth year, you'll work on team-based projects that focus on solving real-world problems.

[torontomu.ca/industrial](https://torontomu.ca/industrial)

### Degree:

Bachelor of Engineering

**Full Time:** Four Year;

Five Year Co-op Program

### Some career possibilities

- anything that combines people, machines, materials and technology
- ergonomics
- finance
- health care
- government
- human resources
- logistics
- manufacturing
- operations research
- plant management
- product development
- production planning and supervising
- productivity consulting
- systems design
- transportation and more

### Some employers

- Bombardier
- Canada Post
- Canadian Tire
- Celestica
- CIBC
- FedEx
- Hershey
- Home Depot
- Loblaw Companies
- Maple Leaf Foods
- NASA
- Pearson International Airport
- Royal Bank of Canada
- Sanofi Pasteur
- SCI
- The Walt Disney Company
- Toronto East General Hospital
- UPS + many more

> For information on co-op and internships, turn to page 20.



"The friendships and mentorships I fostered throughout my time at TMU significantly contributed to my personal and professional growth."

– Michael Cutrone, Replenishment Analyst at Canadian Tire Corporation, Industrial Engineering '20

# Mechanical

## Transform society through machines.

If it moves or makes a sound, a mechanical engineer was likely involved. Pursue this dynamic discipline and become an expert in the research, design, operations and maintenance of all kinds of machinery and technology. The multidisciplinary knowledge and problem-solving skills you gain will make you a standout professional.

In first and second year, you'll focus on the foundations of engineering science and design, plus you'll learn about the mechanics of materials and the fundamentals of manufacturing. You'll choose from a variety of technical electives like manufacturing and fabrication, thermal and fluid processes, or machine design. In fourth year, you'll work collaboratively on design projects addressing function, form, manufacturability, cost, environmental impact, safety, reliability and integrity.

[torontomu.ca/mechanical](http://torontomu.ca/mechanical)

### Degree:

Bachelor of Engineering

**Full Time:** Four Year;

Five Year Co-op Program

### Some career possibilities

- acoustics
- automotive
- biomechanical implants
- designing space vehicles, jet engines, power plants, heating and air conditioning systems and more
- health care
- manufacturing
- pharmaceuticals
- robotics
- sustainable energy
- technical sales
- textiles and more

### Some employers

- Apple
- Boeing
- Bombardier
- Celestica
- EllisDon
- GE Aviation
- General Motors
- Google
- Husky Energy
- Hydro One
- Lincoln Electric
- Maple Leaf Consumer Foods
- Ontario Power Generation
- Sanofi Pasteur
- Siemens Canada
- SpaceX
- Suncor
- Toyota Canada
- Walt Disney Imagineering
- Virgin Hyperloop + many more

> For information on co-op and internships, turn to page 20.





# Mechatronics\*

## Design robots and other intelligent devices to modernize technology.

In today's modern world, the demand for engineers with knowledge in mechanical, electronics and computer engineering is surging. As a mechatronics engineer, you'll prepare to meet that demand as you create technologically advanced products that make our day-to-day lives safer, smarter and more efficient.

In your first and second years of the program, you'll focus on the foundations of engineering science, plus you'll begin to explore topics specific to mechatronics like programming and electric circuit analysis.

In third year, you'll gain specialized knowledge in modern control theory, microcontrollers and robotics. In your final-year capstone design project, you'll work in a student team and collaborate with an industry partner to create a real-world solution to their existing technical problem.

[torontomu.ca/mechatronics](https://torontomu.ca/mechatronics)

### Degree:

Bachelor of Engineering

### Full Time:

Four Year;  
Five Year Co-op Program

### Some career possibilities

- aeronautics
- autonomous vehicles
- chemical processing
- computer, electronic and automotive manufacturing
- defence
- medical devices
- research and development

### Some employers

- 3M Company
- Axiom Engineering
- BWX Technologies
- Clearpath Robotics
- Eaton
- Gebo Cermex
- General Motors
- Google

- Immersion Corporation
- i-onCONNECT Technologies
- IPN Brainpower Consulting
- L3 Communications
- Magna International
- Merkur
- Metasense
- Microsoft
- Ontario Power Generation
- Photon Control
- Plexpack
- Siemens Canada
- SNC-Lavalin Group
- Synaptive Medical
- TRIUMF
- Voltera
- Woodbridge + many more

> For information on co-op and internships, turn to page 20.

\*Program subject to formal approval.

# Undeclared (entry option only)

## Still deciding which type of engineer you want to be? No problem.

Our Undeclared Engineering entry option is a good choice if you're unsure about which engineering discipline is right for you. There's no drawback whatsoever. All of our programs share a common first semester, so you won't be out of sync with your classmates, and you won't have to re-apply to engineering once you make your decision. The deadline for choosing your discipline is **December 1, 2023**.



**As an enrolled student, you'll have many resources to help you choose your discipline.**

**Introduction to Engineering (CEN 100).** You'll learn about the various disciplines through this compulsory first-semester course. Think of it as trying each program on for size.

**Academic advisors.** Professional engineers with years of experience, our advisors will help guide you. Book your appointment online at [torontomu.ca/fyeo/support](https://torontomu.ca/fyeo/support).

**Professors.** Our faculty take mentorship seriously. Contact them to arrange a meeting, or speak with them during office hours.

**Upper-year students.** Get to know students in second, third, fourth and fifth year, and pick their brains. If you need an intro, the First-Year Engineering Office can help. (See page 19 for more info.)

“I knew I wanted to study engineering in university but couldn’t decide which discipline was right for me. The undeclared option gave me the time that I needed to learn about each engineering program and which one was best suited for me.”

– Jeremy Lumbantobing, Mechanical Engineering ‘22



# Your First Year

## First Semester

- General Chemistry
- Calculus I
- Linear Algebra
- Physics: Mechanics
- Introduction to Engineering
- Liberal Studies elective course

## Second Semester

- Principles of Engineering Economics
- Calculus II
- Physics: Waves and Fields

*Plus, you’ll take the following courses depending on your program:*

### Aerospace

- Digital Computation and Programming
- Engineering Design and Graphical Communication
- Materials Science Fundamentals

### Biomedical

- Computer Programming Fundamentals
- Electric Circuit Analysis
- Introduction to Biomedical Engineering

### Chemical Co-op

- Chemical Engineering Fundamentals
- Digital Computation and Programming
- General Chemistry Laboratory

### Civil

- Digital Computation and Programming
- Graphics
- Materials Science Fundamentals

### Computer

- Computer Programming Fundamentals
- Electric Circuit Analysis

### Electrical

- Computer Programming Fundamentals
- Electric Circuit Analysis

### Industrial

- Computer Programming Fundamentals
- Engineering Graphical Communication
- Materials Science Fundamentals

### Mechanical

- Computer Programming Fundamentals
- Engineering Graphical Communication
- Materials Science Fundamentals

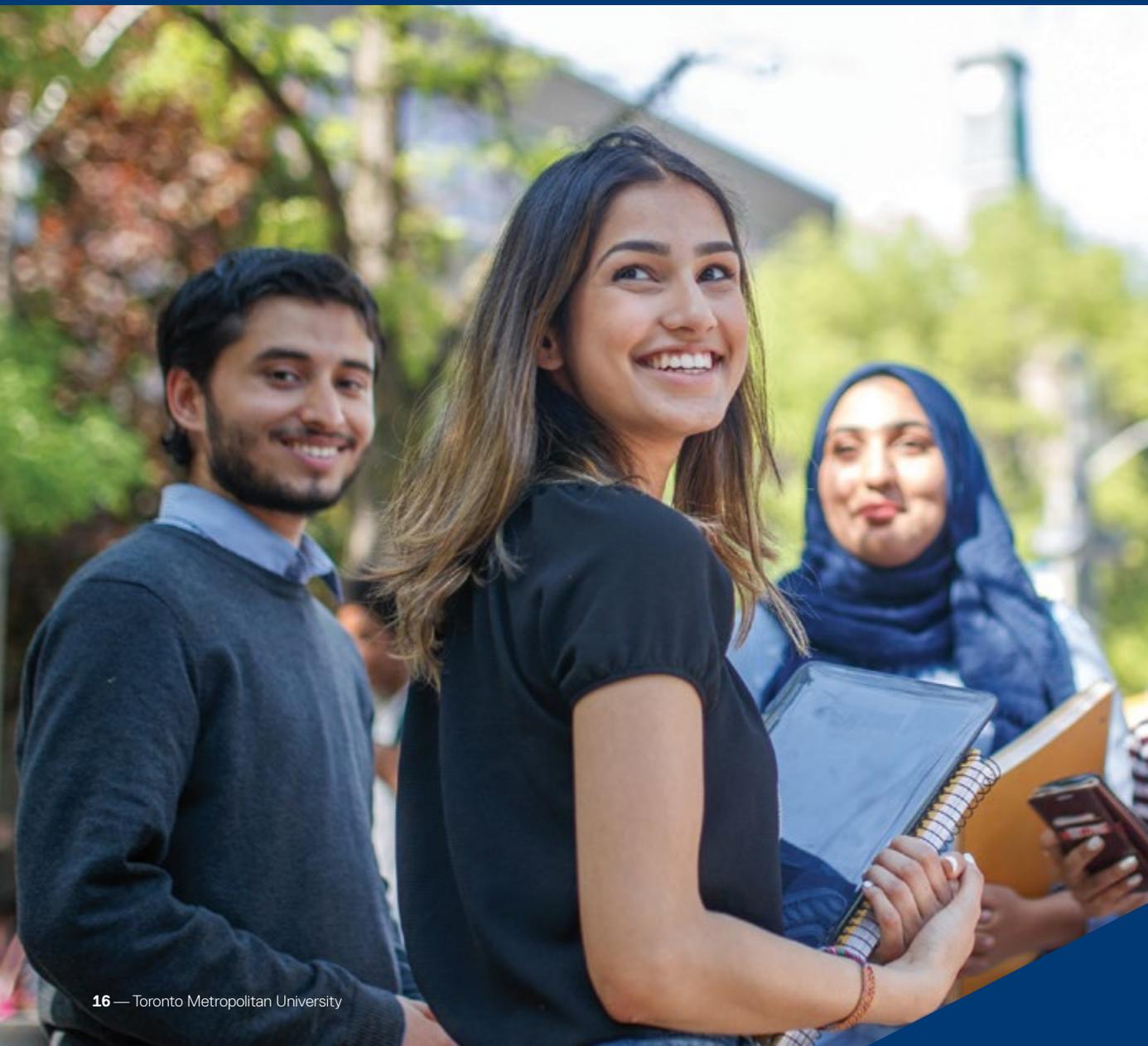
### Mechatronics

- Computer Programming Fundamentals
- Engineering Graphical Communication
- Materials Science Fundamentals



# Be All In

We asked employers, experts, alumni and current students what we can do to develop the most outstanding engineers possible. They told us loud and clear: The world doesn't just need engineers; it needs engineers who lead, think of others (and with others) and invent creative solutions for complex problems. The result of that feedback? Our four-facet, all-in approach to education.



## Community

There's power in numbers. At TMU, learning is a collaborative experience involving peers, faculty, staff, industry and the global community. Get connected through the following clubs and programs:

- Student design teams, clubs, government and societies
- Global learning opportunities to work, study and collaborate abroad
- International Student Support counselling for newcomers to Canada
- Student Experience Awards for leadership in culture, equity and inclusion

## Professional

We take professional development seriously. We'll help you prepare for the workplace with these career supports:

- Real-world workplace experience via paid co-op and internship opportunities as well as research positions through our undergraduate assistantship grants
- Training, funding and support for student-led tech startups through the Centre for Engineering Innovation and Entrepreneurship
- Communication skills and leadership development
- Toronto Met Career & Co-op Centre workshops and employment fairs

## Personal

We want you to enjoy your undergraduate experience. Our all-in approach to student development puts well-being and personal growth front and centre through the following services:

- Peer guidance and coaching via Tri-Mentoring and First-Year Ambassador programs
- TMU Leadership opportunities aimed at developing effective leadership skills
- Well-being workshops and tools offered by ThriveTMU
- Recreational programs and facilities, including sports clubs, intramural teams, mind-body activities, a fully equipped fitness centre

## Academic

We support your learning experience both in and out of the classroom. We encourage you to explore these academic supports that are designed to help you thrive:

- Academic counselling and drop-in study halls led by peer academic coaches
- Individualized academic accommodation support for students with disabilities
- Entrance scholarships for academic achievement and financial need
- Student Learning Support resources, including time management, math, studying, writing and note-taking skills development

**Our Equity and Community Inclusion Office** fosters inclusive spaces inside the classroom and beyond via training, community outreach opportunities, conferences and more.





“Virtual advising and study hall sessions hosted by the First-Year Engineering Office helped me succeed academically and connected me to the TMU Engineering community.”

—Christine Nguyen, Electrical Engineering



Be greater  
than book smart

# Be a First-Year All-Star

## The First-Year Engineering Office

This award-winning team will support you in your foundational year of engineering and help ensure that you make a successful transition from high school to university. From facilitating study halls to helping you understand university policies to advising you academically, the First-Year Engineering Office is with you every step of the way.

### Some first-year resources

- **Engineering Boost Program** – sharpen your skills in math, physics, programming and more before university starts
- **First-Year Ambassadors** – navigate year one with advice from upper-year students
- **Academic Advisors** – request personalized guidance according to your interests, strengths and goals
- **Early Intervention Program** – boost your success in core courses
- **Transition Program** – get more time to adapt to university curriculum
- **Engineering Orientation** – receive transition support and meet your peers via special events and programming

[torontomu.ca/fyeo](http://torontomu.ca/fyeo)

## Student Services & Support

From career-readiness skills to maintaining a healthy lifestyle, we're here to make you feel as comfortable and connected with the university as possible.

### Some university-wide resources

- **Academic Accommodation Support** (for students living with disabilities) – receive individualized plans
- **Career Centre** – empower yourself and your future with events, workshops and expertise
- **Centre for Student Development and Counselling** – access mental health support and resources
- **Math Support** – meet with tutors in person or online
- **Student Financial Assistance** – find all the info you need about government financial assistance, scholarships and awards
- **Student Life Programs** – get involved by taking part in campus events
- **International Student Support** – receive help as a newcomer to Canada

[torontomu.ca/studentaffairs](http://torontomu.ca/studentaffairs)

# Be Career-Ready

## All TMU engineering programs offer paid, full-time co-op and internship opportunities.

Build your resume, network and confidence. Co-op and internship experiences have transformed TMU students' education, careers and lives.

Graduate with up to 16 months of professional experience.

Last year, students earned an average 12-month salary of \$50,000.

Graduate with a co-op designation as part of your degree name.

The table below outlines your co-op and internship options in each engineering program. No matter how long your placement is, you will develop the skills and experience you need to succeed in your chosen field.

Program	Mandatory Co-op 12-16 month placement	Option to Switch to Mandatory Co-op 12-16 month placement	Optional Internship 8 month placement
Aerospace		✓	✓
Biomedical		✓	✓
Chemical	✓		
Civil		✓	✓
Computer		✓	✓
Electrical		✓	✓
Industrial		✓	✓
Mechanical		✓	✓
Mechatronics		✓	✓

## Position yourself for success

After completing the first three years of your program's curriculum, you'll have the option to continue in the regular program, apply for the co-op program or join an internship.

Studies have shown that co-op has vast benefits, including opportunities to:

- Develop crucial soft skills such as communication, teamwork and leadership
- Experience firsthand exactly what engineering employers expect
- Broaden your professional network and make lasting industry connections
- Gain an edge in today's competitive job market



“Resume workshops and mock interview sessions offered by the co-op program helped me prepare for and land my placement at Loblaw Companies Limited.”

– Anupreet Singh, Biomedical Engineering '22

“Working at Bombardier gave me the confidence and skills to work in a fast-paced and collaborative environment.”

– Sai Poosarla, Aerospace Engineering '21

## Resources and support

From day one, you'll have access to individualized career advising and programming to help you through all stages of your professional development. From writing your resume and cover letter to applying and interviewing, our career consultants are here to support you on your path to success.

For further information on work terms, eligibility, program support, placement opportunities and more, see [torontomu.ca/feas/coop](https://torontomu.ca/feas/coop).

## Boost your business skills

Gain a competitive edge and the attention of employers with our Optional Specialization in Management Sciences (OSMS). This business management option is designed specifically for engineering and science students and gives you a foundation in economics, project and operations management, investment analysis and more. Find the details at [torontomu.ca/osms](https://torontomu.ca/osms).

## Accelerated Master of Applied Science (MASc) Pathway

Did you know that engineers with graduate degrees (MEng, MASc, PhD) are not only eligible for more jobs but also have better job security?

For TMU students who show interest and aptitude in research, this prestigious program can fast-track your studies by up to one year.

Learn about all of the ways you can achieve grad school greatness at [torontomu.ca/amp](https://torontomu.ca/amp).

## Got a start-up idea?

Our Norman Esch Engineering Innovation and Entrepreneurship Awards support your projects' ideation, development and market-readiness stages with funding of \$5,000, \$8,000 and \$25,000, respectively. To learn more, visit [torontomu.ca/esch](https://torontomu.ca/esch).



With \$38,000 of Norman Esch prize money, my fellow TMU engineering alumni and I are using the power of artificial intelligence to help those living with diabetes. Glucose Vision is an app we co-founded that is aimed at reducing the burdens on hospitals while increasing the quality of life for people with long-term diseases.

– Liam Bell, Glucose Vision Co-Founder,  
Biomedical Engineering '22

# Be a Team Player



Want to put your skills to the test, travel to cool destinations and compete? Consider joining a student team or club. You can also join a chapter of a major society or organization, your course union or the Metropolitan Undergraduate Engineering Society.



## Design Teams and Interest Groups

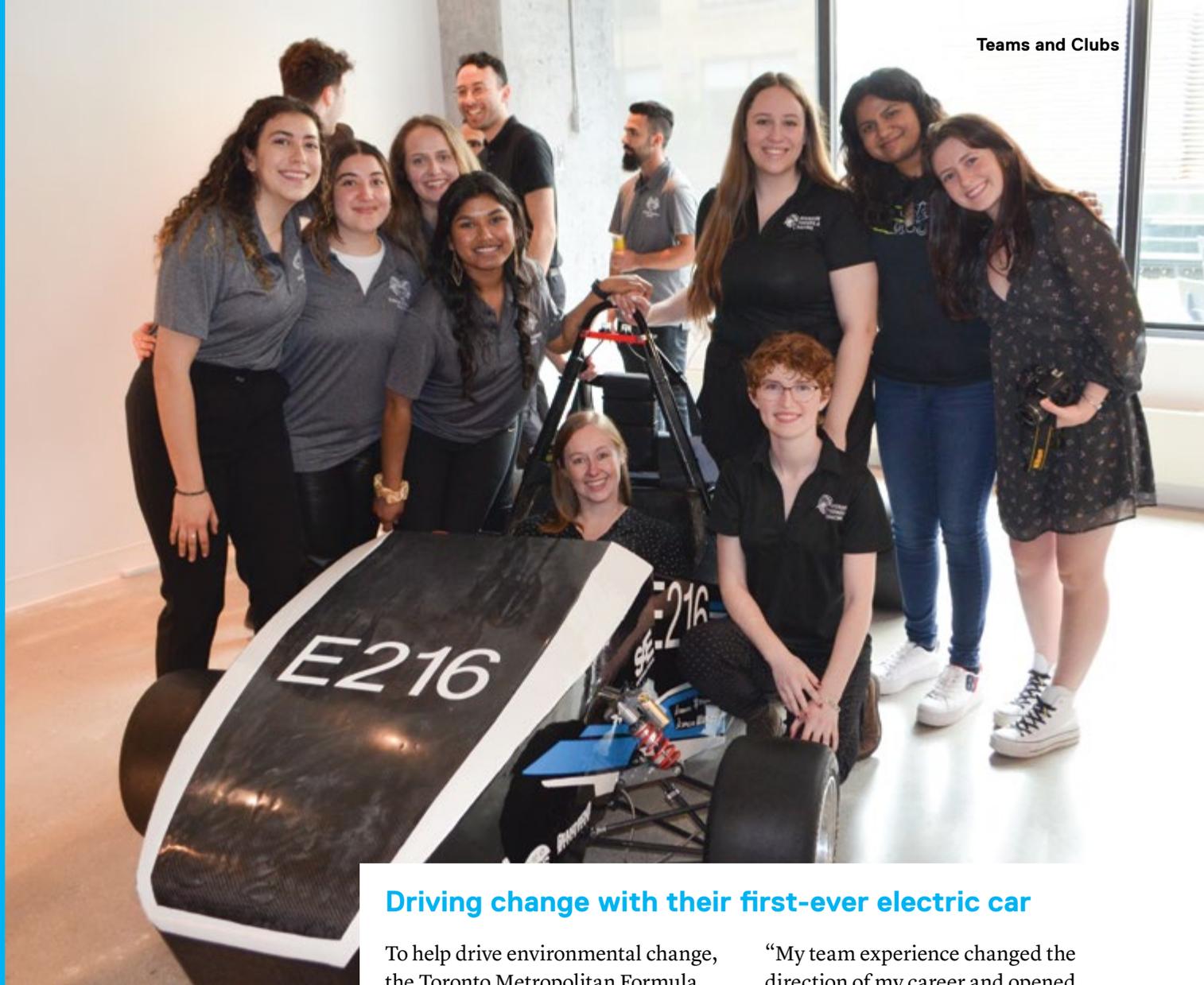
- Artificial Intelligence
- Aero Design Team
- Baja Racing Team
- ChemE Car
- Engineering Concrete Toboggan Team
- EngPlay
- Formula Racing Team
- Helium
- International Hyperloop Team
- Propulsion Group
- Robotics
- Rocketry Club
- Sustainable Engineers Association
- Unmanned Aerial Vehicle Team
- Women in Engineering + many more

## Chapters and Course Unions

- American Institute of Chemical Engineers (AIChE)
- Biomedical Engineering Society (BMES)
- Canadian Aeronautics and Space Institute (CASI)
- Canadian Society for Chemical Engineering (CSCHE)
- Canadian Society for Mechanical Engineering (CSME)
- Chemical Engineering Course Union
- Engineers Without Borders
- EngOUT
- Institute of Electrical and Electronics Engineers (IEEE)
- Institute of Industrial and Systems Engineers (IISE)
- Material Advantage
- Mechanical Engineering Course Union (MECU)
- National Society of Black Engineers (NSBE)
- Society for Civil Engineering
- Tetra + many more

Be greater  
than you  
ever thought  
possible





Above: Toronto Metropolitan Formula Racing team members apply classroom lessons to practical applications, creating a complete learning experience.

## Driving change with their first-ever electric car

To help drive environmental change, the Toronto Metropolitan Formula Racing (TMFR) team spent the past two years researching and building their first-ever electric car and entered it into its first competition this summer.

Although they had no previous mechanical experience, alumna Erica Attard Mechanical Engineering '22 and Claudia Bialkowski, a third-year biomedical student, were compelled to join TMFR in their first year because it emphasized teamwork and provided mentors for new members. TMFR's welcoming nature and willingness to develop students from all backgrounds also inspired Dion Matias, an electrical engineering undergrad, to join the team and stay long term.

"My team experience changed the direction of my career and opened valuable opportunities," said Attard, Team Captain, Engineering and Chassis Lead. According to Bialkowski, "the hardware design and assembly experience I obtained gives me a huge advantage when applying for internships." For Matias, the team provides endless opportunities to learn technical and soft skills. For all students, the chance to apply in-class theories to real-life applications creates a complete learning experience.



# Be Part of TMU Engineering



## Admission Requirements

You must have completed, or be currently completing, your Ontario Secondary School Diploma (OSSD) or equivalent, with a competitive average in your top six Grade 12 U/M courses and competitive grades\* in the following prerequisite courses:

- English (ENG4U/EAE4U preferred)
- Advanced Functions (MHF4U)
- Calculus and Vectors (MCV4U)
- Chemistry (SCH4U)
- Physics (SPH4U)

We encourage you to apply if you have an average of 80% or higher and at least 70–75% in each required course.

[torontomu.ca/admissions/undergraduate](https://torontomu.ca/admissions/undergraduate)

## How to Apply

Apply online by February 1 through the Ontario Universities' Application Centre (OUAC) at [ouac.on.ca](https://ouac.on.ca).

Watch for an acknowledgement email with your next steps and TMU ID number.

Track your application status via your ChooseTMU Applicant Portal.

Wait to hear from us. We make all of our admission decisions by the end of May.

Accept your Offer of Admission through OUAC.

## English-Language Requirements

If English is not your first language, you must present proof of English language proficiency prior to admission, unless you have completed four years of full-time study at an English language school in a country where the primary language of instruction is English. For details on required scores and acceptable tests, visit [torontomu.ca/admissions/undergraduate/requirements/english-language](https://torontomu.ca/admissions/undergraduate/requirements/english-language).

## Are you an international student?

Let us help you through every step of your university journey. For international undergraduate admission information and support, visit [torontomu.ca/international/admissions](https://torontomu.ca/international/admissions).



\*The number of applications we receive greatly exceeds the number of spaces available in each program. To be competitive, you should aim for averages/grades above the minimum.

## Entrance Scholarships

At TMU, we recognize the academic achievements of incoming engineering students. With more than \$7 million designated for scholarship support, including the President's Entrance Scholarship (up to \$40,000), the International Secondary School Merit Scholarship (\$5,000) and the Terence Grier Entrance Scholarship (full tuition for first year), you may be eligible for one of our many scholarships.



### George and Helen Vari Foundation Entrance Scholarships (\$10,000)

These scholarships are open to students who have a record of academic excellence, as exhibited by a final admission average of 85% or higher, and who demonstrate financial need.

### Pierre Lassonde Entrance Awards in Engineering (\$6,000)

These awards are open to students entering an engineering program with a minimum 85% overall average in their final year of high school, who exhibit characteristics of leadership through their extracurricular activities and who demonstrate financial need.

### Charles A. Root Scholarship (\$2,000)

This award is open to students entering their first year of full-time studies in an engineering program, who have attained a minimum 85% average in their final year of high school, are Ontario residents and demonstrate financial need.

### SHAD Entrance Award (\$2,000)

This award is open to students and SHAD program alumni entering an engineering program with a minimum 85% overall average in their final year of high school.

### Ontario Professional Engineers Foundation for Education Entrance Scholarships (up to \$1,500)

These scholarships are awarded to students entering an engineering program who have achieved academic excellence and exhibit characteristics of leadership through involvement in extracurricular activities related to the engineering profession.

### Guaranteed and Renewable Scholarships (up to \$16,000 over four years)

These scholarships are awarded to students based on their overall average in their final year at a Canadian high school. Terms and conditions apply.

As a TMU applicant, you'll have access to our AwardSpring platform, where you can view and apply for relevant scholarships based on your admission average and more. You can also apply for scholarships and awards before receiving an admission offer from the university.

For more information, check out [torontomu.ca/admissions/scholarships-awards](https://torontomu.ca/admissions/scholarships-awards).

# Contact Us

## Meet with an Engineering Admissions Officer

We're ready to help make the application process seamless. Schedule a one-on-one virtual meeting to learn about admissions requirements, degree options, transfer credits and more. They'll guide you every step of the way.

Book a virtual appointment at [torontomu.ca/askeng](https://torontomu.ca/askeng).

[askeng@torontomu.ca](mailto:askeng@torontomu.ca)  
416-542-5870

Virtual or in-person guided campus tours are led by current students and available throughout the year.

[torontomu.ca/visits](https://torontomu.ca/visits)

Our First-Year Ambassadors are happy to answer your questions about Toronto Metropolitan University Engineering.

[torontomu.ca/fya](https://torontomu.ca/fya)



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