SHAPE THE FUTURE

Challenge ideas, think of new solutions, collaborate, innovate and learn to create. You might just change the world.

Waterloo combines North America’s best engineering and architecture programs with hands-on learning that takes students beyond the classroom.

Gain work experience in the world’s largest co-op program. Develop your skills first-hand in state-of-the-art facilities using real-world processes and technology. Learn from the latest startups in the heart of Canada’s most entrepreneurial region. By graduation, you’ll be creating technologies of the future.
BROADEN YOUR STUDIES

RESEARCH OPPORTUNITIES
Are you driven by unanswered questions and passionate about new discoveries? Go deeper in your studies and pursue research with some of our leading experts. With both full-time (Undergrad Student Research Award to be conducted on a co-op term) and part-time (Undergrad Research Assistantship to be conducted on an academic term) opportunities, you can even be paid for your work.

INTERNATIONAL OPPORTUNITIES
Take part in Canada’s largest engineering exchange program. Expand your horizons and learn from other cultures by taking advantage of 81 exchange opportunities in 30 countries.

GRADUATE STUDIES: YOUR PROFESSIONAL EDGE
At Waterloo, you can tap into the world of graduate studies and speed up your academic career with an Accelerated Master’s program. You’ll take graduate-level courses and gain research experience before finishing your bachelor’s degree! Plus, you could shorten the time spent on a Master’s degree by up to a year. Your dedication will impress employers and give you a greater depth of knowledge within a specialized field.

YES, WE HAVE AN ENTREPRENEURIAL CULTURE
Waterloo Engineering students and alumni are known for confidently launching world-class ventures. If you are interested, we can help you achieve your aspirations through our values, policies, entrepreneurship programs, curriculum and funding opportunities — all of which equip you for success.

THE ENTREPRENEURSHIP OPTION
Gain fundamental knowledge in intellectual property, marketing and financing while pursuing your Engineering degree. Offered through the Conrad Business, Entrepreneurship and Technology Centre, the Entrepreneurship Option provides an E Co-op or Capstone design experience.

YOUR FIRST YEAR

DIRECT ENTRY
Unlike most universities, you’ll choose your program when you apply. Direct entry lets you tailor your studies right away, giving you a head start to build valuable skills within your field. In first-year courses, you’ll expand your knowledge in math and science and dive into the elements specific to the type of engineer you want to become.

COHORTS
We’re Canada’s largest Faculty of Engineering, but our class sizes — or cohorts — never exceed 150 students. From your first day of class, you’ll share all required courses with your cohort, building unbeatable friendships. They may even lead to future business ventures.

GET ADVICE FROM EXPERIENCED PROS
The First-Year Engineering Office is your all-access pass to academic and personal support, from study schedules to personal counselling services.

YOUR WORK, YOUR PROPERTY
100% of the ideas developed at Waterloo are owned by their creators.
CO-OP: EARN AS YOU LEARN

100% of Waterloo Engineering and Architecture students are in co-op.

CO-OP FOR ENTREPRENEURS

ENTREPRENEUR CO-OP (E CO-OP)

E Co-op, exclusively offered at Waterloo Conrad Entrepreneurship and Technology Centre, lets entrepreneurial students use a work term to start their own business. Gain full access to the University’s entrepreneurial ecosystem — including mentors, awards, and networking opportunities — while earning a co-op credit.

BRIDGING ENTREPRENEURS TO STUDENTS (BETS)

This specialized co-op program, also offered through the Conrad Business, Entrepreneurship and Technology Centre, brings together first year co-op students and early stage start-ups through 5-week micro placements.

Multiple micro placements, coupled with workshops and seminars offered by the Conrad Centre, help students develop valuable, transferrable employment skills over a total 16-week co-op placement.

GETTING YOUR FIRST JOB

Presenting your knowledge and skills to an employer is an art. That’s why we created the Co-op Fundamentals course. Before you jump into the hiring process, you’ll receive guidance on résumés, interviews, and our WaterlooWorks employment system.

HOW CO-OP WORKS

Alternate between school and work terms, supplementing academic study with high-quality, paid work. Your co-op schedule depends on your program. Here are the two most popular Engineering streams, or co-op sequences.

IMMEDIATE OPPORTUNITIES AFTER GRADUATION

Two of my past co-op employers have already reached out to me for full time employment and I have two years of work experience on my résumé already. Not many fresh grads can say that.

INVALUABLE, WORLDWIDE WORK EXPERIENCE

I got the chance to visit Shanghai twice during a single co-op term and see a part of the world I didn’t think I would, especially during my undergrad.

To see detailed co-op sequences visit uwaterloo.ca/future/programs
WHERE
YOU'LL
LEARN

Build your ideas

You’ll be “engineering” from the very start of your education at Waterloo. The one-of-a-kind Engineering Ideas Clinic will give you hands-on experience through group activities. You’ll reverse-engineer engines, construct a brushless DC motor from scratch and develop biomaterials. Your ideas matter! The Ideas Clinic will be the space to express them, and progressively build more challenging devices and products throughout your education — these activities will help you understand the essentials of engineering in a very new way, while giving you the opportunity to bring your visions to life.

A CULTURE OF INNOVATION

A SPACE TO CALL YOUR OWN

The Engineering 7 (E7) building will be a seven-storey, 230,000 sq. ft. facility dedicated to innovation. E7 will house our expanded Mechatronics Engineering program and Biomedical Engineering program. This building, and all that is in it, will ensure our educational leadership continues to prepare students to tackle difficult problems facing the real world.

SEDRA STUDENT DESIGN CENTRE

The Sedra Student Design Centre is dedicated to our student design teams and their projects. It’s 20,000 square feet of enhanced experiential education space under one roof. Join a student team as early as your first week, or wait until you decide which award-winning team interests you the most. The choices are plentiful and each offer unique opportunities.

The student-led teams span every aspect of engineering and encourage cross-discipline participation. You’ll get a real-world team experience that not only furthers your education, but also becomes a highlight of your Waterloo experience.

You will have engineering resources and tools readily available including: dedicated garages, sanding bay, paint room, CAD workstations, electronics assembly and test spaces, 3D print machines, meeting rooms, and the Engineering machine shop.

The new Engineering Ideas Clinic (left), is located in Engineering 7, now under construction, and will be ready for your use in September 2018.

uwaterloo.ca/engineering-ideas-clinic
GET IN ON THE ACTION

Believe us, you’ll do more than study!

Waterloo Engineering has a vibrant community of students who love to work hard and play harder. Sing with an a capella group, join a varsity team, become a leader — whatever your interests, you’ll be in good company.

CANADA’S MOST ACTIVE STUDENT SOCIETY

The Waterloo Engineering Society (EngSoc) represents your best interests, and offers endless ways to get involved. In your first week of classes, you’ll have access to EngSoc’s support with résumé critiques and mock interviews from upper-year students. Throughout your time at Waterloo, you’ll discover many EngSoc traditions as diverse as acting in theatre productions, hosting charity events, proudly wearing your coveralls, and celebrating the EngSoc mascot: The Tool.

A SUPPORTIVE COMMUNITY

The Waterloo Engineering Endowment Foundation (WEEF) collects donations each term to enhance lab equipment, purchase computer upgrades and other academic tools, and support student design teams. WEEF also hires upper-year teaching assistants, who dedicate a work term to teaching first-year students. They’ll be ready to guide you through projects and assignments.

AN EMPHASIS ON DIVERSITY

Waterloo’s Women in Engineering (WIE) aims to encourage and promote an environment where women can pursue scientific work and study, especially engineering. As a university, we are proud to have more females studying engineering than at any other university in Canada, with more than 1,700 women enrolled across all programs. As of this year, we are also home to the only WIE Living Learning Community in the country, a brand new female residence environment located at St. Paul’s University College. St. Paul’s is also home to the Waterloo Aboriginal Education Centre. This group facilitates the sharing of Indigenous knowledge and provides culturally relevant information and support services for all members of the University of Waterloo community.
ARCHITECTURE

DESIGNING OUR WORLD
At Waterloo’s internationally renowned School of Architecture, you’ll encounter design from day one. You’ll design at all scales; from small prototypes to high-rises. You will learn about architectural design, structures, materials and technologies, each understood within larger cultural transformations in the world. Beautifully set on Ontario’s Grand River in the historic centre of Galt in Cambridge, a 35-minute drive from Waterloo’s main campus, Architecture’s stunning historic building has all the tools to inspire you: design studios, computer labs and a fabrication workshop. Top students choose our program for its integrated design studios, strong student body, award-winning professors, collaborative culture and 6 co-op terms as well as our unique cultural history stream and Rome campus.

ONLY AT WATERLOO
You can work for distinguished international firms as early as second year.

AREAS OF LEARNING
› Architectural design
› Cultural history, and theory
› Technology and environment
› Urbanism and landscape
› Visual and digital media

CAREER POSSIBILITIES
› Architecture and urban design
› Construction industry and restoration
› World heritage and sustainable development

CONCENTRATIONS
› Engineering mechanics
› Geotechnical engineering
› Project management
› Structural engineering
› Transportation engineering
› Urban and municipal systems
› Water resources engineering

CAREER POSSIBILITIES
Architecture and urban design
Construction industry and restoration
World heritage and sustainable development

UP TO 41% of Architecture co-op jobs are outside of Canada

CIVIL

DESIGN AND BUILD A BETTER TOMORROW
Population growth, climate change, aging infrastructure and the need for sustainability are the challenges that civil engineers tackle as they lead the creation and management of the world’s built infrastructure. Waterloo provides you with the knowledge and skills needed to succeed in this exciting and challenging role by exposing you to Civil Engineering subjects and design projects in your first and second years. A wide range of advanced electives allows you to customize your education to suit your interests and career goals. By the end of your degree, you’ll be ready to design, analyze, construct and manage everything from airports and skyscrapers to bridges, transportation networks, municipal water systems and more.

CAREER POSSIBILITIES
Construction engineering and management for infrastructure projects
Design of buildings, bridges and other structures
Planning and implementation of public transportation systems
Design of municipal water networks

AREAS OF LEARNING
An effective co-op job search will
be most beneficial if a job is based in a
geographic area close to your
residence or if you already know
the company you want to work for.

SURVEY
BEYOND EXPERIENCE
### CAREER POSSIBILITIES

- Design and management of water, air and land treatment processes
- Protection and revitalization of ecosystems
- Public health engineering
- Industrial sustainability and compliance

### CONCENTRATIONS

- Environmental modelling
- Hydrology, water resources engineering and management
- River and lake restoration
- Water, wastewater, air and soil quality, treatment engineering and management

### CONCENTRATIONS

- Geomechanics
- Hydrogeology
- Resource exploration and development
- Natural hazard assessment
- Environmental monitoring and management

### CAREER POSSIBILITIES

- Exploration planning for mines and quarries
- Geotechnical consulting
- Resource exploration and risk management
- Earthquake and landslide risk assessment

### DOUBLE THE OPPORTUNITY!

Geological engineering grads qualify for both the professional engineering (p. Eng) and geologist (p. Geo) designations.

### HANDS-ON EXPLORATION

Geological Engineering merges an active understanding of geoscience with innovative engineering design, to guide humanity’s interaction with earth materials. In this program, you’ll build critical skills for the sustainable development and management of Earth’s vital mineral and energy resources, design building foundations and earth structures, such as dams and waterways, and learn ways to mitigate natural disasters. In your first 2 years, you’ll learn geological engineering concepts as they apply to engineering design, along with mathematics, science and communications. In your upper years, you’ll study advanced topics in geoscience (including field courses) and geotechnical engineering, and will select electives in earth science, as well as civil, environmental and chemical engineering that reflect your career plans and personal interests. Our experienced graduates are in demand in the fields of mining, infrastructure, energy, geohazards and environmental assessment.

### GLOBAL RESILIENCE IN INFRASTRUCTURE

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### #BEYONDIDEAS

With technical electives taught from the largest group of Environmental Engineering faculty in Canada and several bodies of water located directly on campus, you don’t have to travel far to put your knowledge to work in the field.

### ADAM

**THIRD-YEAR STUDENT**

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CHEMICAL ENGINEERING OPPORTUNITIES IN EVERY INDUSTRY

As a Chemical Engineering student, you’ll learn from some of the world’s leading experts in fuel cells and biodiesel, water purification, and air pollution. You’ll discover how to transform raw materials into useful products, with courses in materials science, chemical reaction engineering, process control and more. Plus, co-op will give you opportunities in a wide range of industries, including petrochemical, biomedical, alternative fuel and alternative energy. You’ll be inspired by the impact chemical engineers have on everything we touch, see, taste and smell.

CONCENTRATIONS

> Biochemical engineering/biotechnology
> Energy and environmental systems and processes
> Materials and manufacturing processes
> Process modeling, optimization and control

CAREER POSSIBILITIES

Design and control of chemical plants
Production of pharmaceuticals and bio-products
Polymer syntheses and processing

SOLVE REAL-WORLD PROBLEMS WORKING ACROSS TRADITIONAL DISCIPLINES

While immersed in a specialty that crosses boundaries between traditional disciplines, such as chemical and electrical engineering, chemistry, biology, materials science and quantum physics, you’ll use leading-edge technology and equipment to research, design and manipulate systems measured in billionths of a metre.

Discover the nanoscience and engineering skills that industry is incorporating into its research and product-development cycles. Co-op provides opportunities in a variety of industries and roles, leading to careers related to polymers and materials, health care, consumer products, semiconductor and electronics, industrial engineering and consulting.

Graduates pursue academic research, secure technical positions in a wide range of industrial sectors and start their own companies — often with the support of the University’s entrepreneurial ecosystem.

CANADA’S ONLY undergraduate nanotechnology engineering program.

NANOTECHNOLOGY

BEN, THIRD-YEAR STUDENT

Nanotechnology Engineering is a program at the crossroads between engineering and fundamental sciences. It gives us, as students, the know-how to address challenges on both of these fronts.

> CANADIAN ENGINEERING DEANS’ COUNCIL
> CANADIAN IMECH E ENGINEERING EDUCATION STANDARD
Applying knowledge learned in the classroom to real-world problems is the most rewarding part of Electrical Engineering, says fourth-year student Bonnie.

Lab work and hands-on learning in co-op placements helped me solidify the concepts learned in school. It helped me better understand the bigger picture and how all the different concepts learned in Electrical Engineering come together.

ANYWHERE YOU FIND ENERGY, INFORMATION OR AUTOMATION
Harness the power of electricity to create the next generation of electronics, sensors and information networks through engineering principles. In the Electrical Engineering program, you can specialize and gain experience in a range of fields, including power generators, hybrid cars, automation and robotics, radio frequency tracking systems, telecommunications devices and circuits, and green energy. You’ll learn from leaders in the future of energy systems and information transfer, and get more hands-on experience in state-of-the-art labs than any other program. By graduation, you’ll be up to speed with real industry knowledge, ready to jump into a challenging career.

COMPUTER
PROCESS, TRANSFER AND STORE THE WORLD’S INFORMATION
Become an expert in computer hardware-software interactions, and how to create systems that meet real-world performance needs. At Waterloo, you’ll discover multimillion-dollar labs that reflect cutting-edge research and development, such as embedded systems and wireless technology. A focus on design and a large variety of upper-year electives will let you apply your computer engineering knowledge to any industry relying on digital systems — including enterprise software, automotive and aerospace, automation and robotics, networks and databases, health care, and security.

LARGEST GROUP of Electrical Engineering professors in Canada, giving you more upper-year electives to choose from.

BONNIE, FOURTH-YEAR STUDENT

CONCENTRATIONS
> Control and robotics
> Digital communication systems
> Electronic devices, circuits and systems
> Energy distribution, motors/generators, power electronics and energy marketing
> Microwave (radio frequency) or photonic devices and systems
> Networks and distributed computing
> Signal processing

CAREER POSSIBILITIES
Design and fabrication of CPUs and GPUs
Design and maintenance of fiber optic networks
Development of medical sensors and imaging systems

CONCENTRATIONS
> Communications and wireless systems
> Computer architectures and embedded systems
> Control and robotics
> Networks and distributed computing
> Signal processing and computational intelligence
> Software design and architecture
> Software security and embedded software

CAREER POSSIBILITIES
Design of computer architecture
Creation of telecommunications devices
Development and analysis of application software

ELECTRICAL
THE BEST OF BOTH WORLDS

The software program pulls from world-renowned expertise in the Electrical and Computer Engineering department and Waterloo’s David R. Cheriton School of Computer Science.

Use computer programming and engineering problem-solving to create usable, affordable and faster software. Discover how to develop software systems that ensure the reliability, performance and usability demanded by today’s industrial and business applications. With this program, you’ll gain the skills to create software with the user in mind. Plus, our focus on teamwork and collaboration will enhance your communication, business and reasoning skills, preparing you for the workforce.

SOLVE REAL-WORLD PROBLEMS BY BUILDING SOFTWARE SYSTEMS

SOFTWARE

MANAGEMENT

ANALYTICS AND ENGINEERING FOR OPTIMIZED PERFORMANCE

In Canada’s first Management Engineering program, you’ll use industrial engineering principles, advanced analytics, math and computer programming to optimize and improve processes in any organization. You’ll gain the knowledge and skills to design and implement solutions to complex technical and management problems. Our confident grads are in demand, working in a wide variety of industries, including software, finance, supply chain, logistics and health care.

CAREER POSSIBILITIES

- Design of Internet-scale software systems
- Development of programming tools
- Development and analysis of application software
- Big Data analytics
- Operations management and optimization
- Logistics and supply-chain management
- Software and user experience
- People, organizations, and technology

CONCENTRATIONS

- Management consultant
- Business and data analyst
- Industrial engineer
- Project and product manager

#BEYONDIDEAS

In Management Engineering, you’ll learn about how to draw important insights from big data. In her co-op position at Tile, Pallavi is using data analytics to understand the metrics that make a community of Tile users effective, helping her company improve the design of their product.

THIRD-YEAR STUDENT

PALLAVI

PALLAVI

ENGINEERING | 19
MECHANICAL SYSTEMS THAT IMPROVE THE WORLD

Design and manufacture mechanical parts from the right materials with advanced manufacturing processes. In the Mechanical Engineering program, you’ll get hands-on experience right away, dissecting and building technologies that improve society. You’ll use a broad, multi-disciplinary set of skills, using in-depth knowledge of controls, fluids and energy systems, while combining a variety of factors, such as environment, public health and resources. With such a flexible program, your career possibilities are endless — from aircraft, to green energy to robotics.

CAREER POSSIBILITIES

- Development of satellite equipment
- Design of next-generation wind turbines
- Design and development of automotive systems

CONCENTRATIONS

- Robotics, automation, control, and vehicle systems
- Fluid mechanics and micro-fluidics, fire safety
- Materials engineering and processing, manufacturing processes, welding and joining
- Solid body mechanics and machine design
- Thermal engineering, heat transfer and combustion, green energy

ELECTRO-MECHANICAL DESIGNERS

Use a multi-disciplinary and systems-based approach to develop the “intelligent” electro-mechanical devices and integrated systems present in our daily lives — ATMs, anti-lock braking and other driving assistance systems, satellite systems, auto-pilot aircraft, and wearable devices. In Mechatronics Engineering, you’ll combine the powerful elements of machines, electronics, computers and software in the classroom, with hands-on labs and co-op. Our multi-faceted grads are prepared for the integrated nature of real-world engineering. Something employers love!

During his co-op jobs, Craig was able to travel the world and work for some of the top international tech companies.

My favourite part about Waterloo Engineering is the co-op. It’s unbelievable to me that I get to travel the world while earning my undergraduate degree. Even better, I get paid to work around the world and can use that money to fund my degree. The University of Waterloo has given me the opportunity to build robots in Germany with Siemens and develop new programs in Seattle with Microsoft. It’s an experience that’s hard to beat.

CRAIG, THIRD-YEAR STUDENT
AN INNOVATIVE APPROACH TO HEALTH

Combine biology with applied sciences and engineering to solve health-related problems and develop tools for diagnosis, treatment, and prevention. In the Biomedical Engineering program, you’ll develop knowledge in design, physiology, biomechanics, physics and instrumentation. You’ll have a broad base of knowledge, helping you communicate across the many areas of expertise used in this field. Hands-on labs will give you experience modelling and designing biomedical systems. By graduation, you’ll be ready to design innovative technologies and engineering solutions — from pacemakers and drug delivery systems, to the latest running gear.

AREAS OF LEARNING

- Biodevices
- Biomechanics
- Neuroscience
- Signal and image processing
- Sports engineering

CAREER POSSIBILITIES

- Biomedical data analysis
- Research and development of medical devices
- Product design of sporting equipment

Being the team lead of the Midnight Sun design team has provided Systems Design student Zack with an added appreciation for elements of his program.

A solar car needs to be lightweight, fast, safe, and meet regulations and guidelines. In order to build the best possible vehicle, a depth of knowledge is required and Systems Design Engineering has facilitated me to gain that depth in my studies.

ZACK, MIDNIGHT SUN TEAM LEAD

TACKLING INTERDISCIPLINARY PROBLEMS

Everything on our planet interacts — ecosystems, transportation networks, energy transfer and biological systems. In Systems Design Engineering, you’ll use design creativity, systems modelling and analysis tools to develop “big-picture” solutions to problems that span multiple engineering disciplines. Building on a solid engineering foundation, with a design course every term and access to more than 300 electives, you’ll graduate with skills in engineering design, project management and teamwork. By graduation, you’ll be ready to develop comprehensive, groundbreaking solutions for the toughest engineering problems.

CONCENTRATIONS

- Human systems engineering
- Intelligent systems engineering
- Socio- and environmental systems
- Systems modeling and analysis

CAREER POSSIBILITIES

- Design and creation of wearable tech
- Product design of medical devices
- Implementation of water treatment systems

PURSUE MINORS AND CONCURRENT DEGREES

Systems Design is our most flexible Engineering program, giving you more freedom with your courses.
**ADMISSION REQUIREMENTS**

<table>
<thead>
<tr>
<th>ENGLISH</th>
<th>OTHER CANADIAN PROVINCES AND TERRITORIES</th>
<th>INTERNATIONAL, MULTICULTURAL, AMERICAN SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Requirement</td>
<td>6-8 U/M-A courses</td>
<td>110 courses at the higher or 120 courses at the lower level</td>
</tr>
<tr>
<td>English</td>
<td>(minimum 60%)</td>
<td>(minimum 60%)</td>
</tr>
<tr>
<td>Architecture (Required Subjects)</td>
<td>Physics</td>
<td>Physics</td>
</tr>
<tr>
<td>Advanced Functions</td>
<td>Mathematics</td>
<td>Pre-Calculus</td>
</tr>
<tr>
<td>Calculus &amp; Vectors</td>
<td>Calculus</td>
<td>Calculus</td>
</tr>
<tr>
<td>Engineering Program (Required Subjects)</td>
<td>Physics</td>
<td>Physics</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Chemistry</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Advanced Functions</td>
<td>Mathematics</td>
<td>Pre-Calculus</td>
</tr>
<tr>
<td>Calculus &amp; Vectors</td>
<td>Calculus</td>
<td>Calculus</td>
</tr>
<tr>
<td>Minimum Grades in Each Course</td>
<td>65%</td>
<td>65%</td>
</tr>
</tbody>
</table>

*Applicants to Software Engineering must demonstrate experience in developing modular programs, through courses, on work.

**NOTE:** For other countries or educational system requirements, visit us online.

**ADMISSION AVERAGES**

| Biomedical, Software | 85-89 | 75% |
| Chemical, Civil, Environmental, Geomatics, Management, Nanotechnology, Systems Design | 85-89 | 75% |
| Computer, Electrical, Mechanical, Mechatronics | 85-89 | 75% |
| OUAC and submit your Residence Information Form with a deposit. | 90-96 | 75% |
| Engineering | 95+ | 95% |

**FINANCING YOUR EDUCATION**

If English is not your first language and your 4 most recent years of full-time education have not been taught in English, you’ll be required to submit a test of English language proficiency.

**ENGLISH LANGUAGE REQUIREMENTS**

<table>
<thead>
<tr>
<th>OPTION 1</th>
<th>OPTION 2</th>
<th>OPTION 3</th>
<th>OPTION 4</th>
<th>OPTION 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet-based TOEFL (IBT)</td>
<td>IELTS</td>
<td>HCLAB</td>
<td>CAEL</td>
<td>PTE (Academic)</td>
</tr>
<tr>
<td>90. 25 writing; 25 speaking</td>
<td>6.5 overall; 6.5 writing; 6.0 reading; 6.0 listening</td>
<td>60 per section; 3 speaking</td>
<td>70 overall; 60 per section; 70 writing</td>
<td>63 overall; 65 writing; 65 speaking</td>
</tr>
</tbody>
</table>

**ENGLISH LANGUAGE SCORE A LITTLE LOW?**

You may be eligible for admission through Waterloo’s Bridge to Academic Success in English (BASE) program or intensive summer iBASE program.

**WHAT IF I REPEAT A COURSE?**

Repeating a course may result in a penalty of up to 5% off your overall admission score. Seeing the material a second time will likely improve your grade, but it doesn’t help you prepare for university. Of course, life doesn’t always go as planned. If there are extenuating circumstances that impacted your studies, tell us on the AIF and the penalty may be reduced or waived. Results in courses taken outside regular school day may also be adjusted. This includes summer school, night school and online courses. Reasoning for taking courses in this manner must also be indicated on the AIF.

**ENGINEERING OPTIONS**

Expand your perspective and gain a secondary emphasis in another subject or career area. Our list of engineering options can be completed using your electives, and options will be recognized on your diploma upon graduation.

- Biomechanics
- OUAC and engineering
- Entrepreneurship
- Environmental Engineering
- International Studies in Engineering
- Life Sciences
- Management Sciences

Enhance your degree with an option, minor, or concentration.

**BROADEN YOUR STUDIES**

**SCHOLARSHIPS**

**ENGINEERING AND ARCHITECTURE CO-OP**

<table>
<thead>
<tr>
<th>PROGRAMS</th>
<th>ANNUAL EXPENSES</th>
<th>CANADIAN CITIZENS OR PERMANENT RESIDENT</th>
<th>INTERNATIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering (co-op)</td>
<td>$9,616</td>
<td>$30,091</td>
<td></td>
</tr>
<tr>
<td>Architecture</td>
<td>$4,000</td>
<td>$4,000</td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>$36,186</td>
<td>$36,794</td>
<td></td>
</tr>
<tr>
<td>Notes: Additional costs include co-op fee ($370) and incidental fees ($900-$2,000).</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SCHOOL OF ARCHITECTURE**

<table>
<thead>
<tr>
<th>PROGRAMS</th>
<th>STUDENTS</th>
<th>AWARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected academic strength</td>
<td>100%</td>
<td>$10,000</td>
</tr>
<tr>
<td>Architecture</td>
<td>90-95%</td>
<td>$3,000</td>
</tr>
<tr>
<td>Engineering</td>
<td>90-95%</td>
<td>$2,000</td>
</tr>
<tr>
<td>Scholarships</td>
<td>95%+</td>
<td>$0</td>
</tr>
</tbody>
</table>

**SCHOOL OF ENGINEERING**

<table>
<thead>
<tr>
<th>PROGRAMS</th>
<th>STUDENTS</th>
<th>AWARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrated academic strength and Admission Information Form (AIF) score</td>
<td>90%+</td>
<td>$10,000</td>
</tr>
<tr>
<td>Engineering</td>
<td>90-95%</td>
<td>$3,000</td>
</tr>
<tr>
<td>Scholarship</td>
<td>95%+</td>
<td>$2,000</td>
</tr>
<tr>
<td>Engineer</td>
<td>$0-1,000</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**

- All students are automatically considered for co-op.
- All students are automatically considered for admission.
- International Experience and Research Awards are available in upper years. You should consider claiming them. Students must complete their first-year courses with an 80% average. The International Experience Award is only available to Canadian citizens or Permanent Residents.

**BROADEN YOUR STUDIES**

- Mathematics
- Computer Sciences
- Physical Sciences
- Society, Technology, and Values
- Software Engineering
- Statistics
- Water Resources