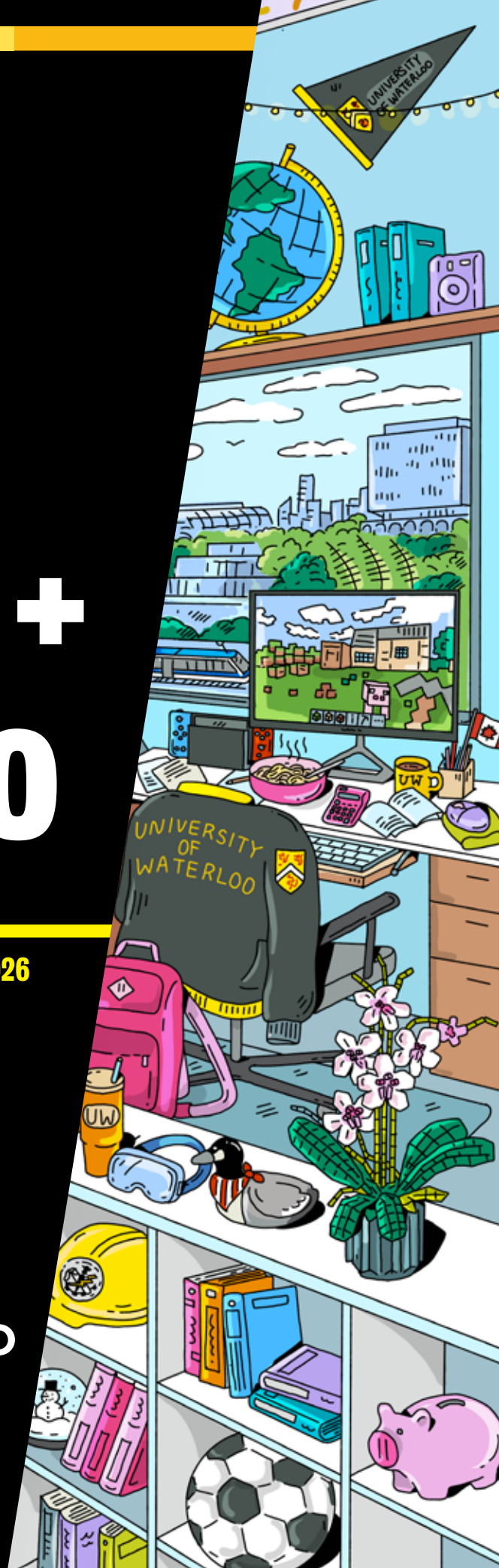
# You + Waterloo

Canadian admissions 2026

UNIVERSITY OF WATERLOO



# Welcome to your next chapter, Warrior

You're getting ready to embark on your biggest adventure yet, and you're looking for the right place to make it happen.

A place where your curiosity can thrive.

A place to find your passion through the world's leading co-op program.

A place to unleash your entrepreneurial spirit.

Discover your limitless potential in a community that supports your bright future. Let's explore the story of you and Waterloo.


UNIVERSITY OF WATERLOO
UW
UNIVERSITY OF WATERLOO
UW
UW


# 5 reasons to choose Waterloo

Love a challenge? Us too. Since the beginning, Waterloo has been a place where you can bring your passion, grit, and determination to explore and innovate – and have fun doing it. With our longstanding industry partnerships, focus on real-world solutions, and relentless spirit of entrepreneurship, there's a reason we're one of Canada's top universities.

## Ontario

uwaterloo.ca/future/rankings


### Acknowledgement of traditional territory

The University of Waterloo acknowledges that much of our work takes place on the traditional territory of the Neutral, Anishinaabeg, and Haudenosaunee peoples. Our main campus is situated on the Haldimand Tract, the land granted to the Six Nations that includes six miles on each side of the Grand River. Our active work toward reconciliation takes place across our campuses through research, learning, teaching, and community building, and is co-ordinated within the Office of Indigenous Relations.

# 1

## A top 100 university in the world

Earn a highly reputable degree at Waterloo. We're ranked 97th in the world* by more than 55,000 researchers and scholars from around the globe, and we've been the number one comprehensive research university in Canada for the past 17 years**.

**Times Higher Education World Reputation Rankings 2025*
***Research Infosource 2024*

# 2

## Home to the world's leading co-op program

Gain access to over 8,000 employers in more than 70 countries and graduate ready to step into your career. Test out jobs, build your résumé, and explore your interests in up to six co-op work terms. Plus, you can earn between $38,000 and $137,000 over the course of your degree.

# 3

## Canada's innovation and entrepreneurship university

Surrounded by game-changing ideas and people, it's easy to feel inspired at Waterloo. We're the number one university in Canada for founders and entrepreneurs, with 478 companies launched and $20 billion USD raised in capital over the last decade*. At Waterloo, learning and innovation go hand in hand.

**PitchBook 2024*


# 4

## Exceptional graduate success rate

Two years after graduation, over 94 per cent of Waterloo graduates are employed and working in jobs related to skills they developed at university. Bonus: they're also earning more on average than other Ontario grads*!

**Ontario University Graduate Survey of 2021 graduates*

# 5

## One of the most actively engaged student communities

In first year, 68 per cent of Waterloo students reported joining extracurriculars (higher than the average at other Canadian universities*). With over 200 student-run clubs covering everything from academics to culture to sports, there's something for everyone. Plus, the city is buzzing with energy, thanks to one of the youngest populations in Canada.

**National Survey of Student Engagement 2023*

THINK DIFFERENTLY. GREAT IDEAS ARE BORN W
BOLD QUESTIONS AND EMBRACE RISKS. IT TAKES
TO STAND OUT. WE SEEK OUT PERSPECTIVES AND
OWN. OPENNESS, DIVERSITY OF THOUGHTS, AN
WE DEFY CONVENTION, WE EXPLORE THE UNCH
UNCONVENTIONAL SPIRIT IS AT OUR CORE AND W
THE FUTURE. ACT WITH PURPOSE. WE MAKE A POS
AROUND THE WORLD. OUR IMPACT IS VAST, AND S
THE COMMUNITY, AND TO THE ENVIRONMENT. WE
DEEPLY UNDERSTAND, AND WE ASK, "WHAT PROB
OPPORTUNITIES BY ASKING "WHY?" AND "WHY NOT
THE PROCESS OF DOING. WE VALUE HANDS-ON
RESEARCH, AND WORK. WORK TOGETHER. WE ARE
RESULTS IN FRESH THINKING, INSPIRATION, AND I
A MINDSET EXTENDS BEYOND STUDENTS, FACULTY
MEMBERS, INDUSTRY PARTNERS, AND MORE. WE
ONE ANOTHER TO ADVOCATE FOR POSITIVE CHAN
INCLUSIVITY, EQUITY, ANTI-OPPRESSION, AND AN

HEN WE CHALLENGE THE STATUS QUO AND ASK
CURIOSITY TO BE **INNOVATIVE.** IT TAKES COURAGE
D EXPERIENCES THAT ARE DIFFERENT FROM OUR
ID **RECIPROCITY** ARE ESSENTIAL. AT WATERLOO
ARTED, AND WE CELEBRATE **UNIQUENESS.** THIS
WILL HELP US CONTINUE TO **DISRUPT** AND SHAPE
SITIVE **IMPACT** IN THE WATERLOO COMMUNITY AND
SO IS OUR RESPONSIBILITY – TO EACH OTHER, TO
E DON'T SIMPLY **SOLVE PROBLEMS** – WE SEEK TO
BLEMS SHOULD WE ADDRESS?" WE IDENTIFY NEW
?" WE VALUE ACTION BECAUSE WE LEARN THROUGH
**EXPERIENCES** THROUGH **LEARNING,** TEACHING,
AT OUR BEST WHEN WE WORK TOGETHER – WHICH
NNOVATIVE BREAKTHROUGHS. **COLLABORATION** AS
Y, AND STAFF – IT INCLUDES ALUMNI, **COMMUNITY**
ENCOURAGE OUR COMMUNITY TO STAND UP FOR
**GE** THROUGH DECOLONIZATION, INDIGENIZATION,
TI-RACISM. WE ASPIRE TO BE **"ONE WATERLOO."**

In Waterloo's co-op program, you'll add up to two years of paid professional work experience to your résumé, test-drive up to six different careers, and build a world-class professional network. You'll be future-ready and prepared to step into your dream job when you graduate. W


# World's leading co-op program

uwaterloo.ca/future/co-op

**"Co-op is a great opportunity to explore your interests and understand where you fit before you graduate and enter the workforce."**

**Jarett** (he/him)
Biomedical Engineering student
2024 Co-op Student of the Year, Engineering

# How does co-op at Waterloo work?

In co-op, you'll typically alternate between four months of full-time study and four months of full-time, paid work. Your dedicated co-op advisor is there to support you throughout your journey.

**Before each work term**

- Update your résumé
- Apply to jobs
- Interview with employers

**On the job**

- Gain real-world skills and work experience
- Adapt to different workplaces
- Take professional development courses
- Earn between $9,600-$22,800 per work term
- Grow in confidence, knowledge, and certainty about your future path

## Study. Work. Repeat.

Your co-op schedule depends on your program. Here are three common study/work sequences.

| Year | Term | Example 1 | Example 2 | Example 3 |
|---|---|---|---|---|
| 1 | Fall | Study | Study | Study |
| | Winter | Study | **Work** | Study |
| | Spring | Off | Study | **Work** |
| 2 | Fall | Study | **Work** | Study |
| | Winter | **Work** | Study | **Work** |
| | Spring | Study | **Work** | Study |
| 3 | Fall | **Work** | Study | **Work** |
| | Winter | Study | **Work** | Study |
| | Spring | **Work** | Study | **Work** |
| 4 | Fall | Study | **Work** | Study |
| | Winter | **Work** | Study | **Work** |
| | Spring | **Work** | **Work** | Study |
| 5 | Fall | Study | Study | **Work** |
| | Winter | Study | Study | Study |

Fall term: September to December
Winter term: January to April
Spring term: May to August

**26,000+**

**Waterloo students are enrolled in co-op**

This is more than twice as many co-op students as the next two largest Canadian co-op programs combined

**$137K**

**potential total co-op earnings over the course of your degree**

**8,000+**

**employers in more than 70 countries**

**97%**

**co-op employment rate (fall 2024)**

# #1 school for entrepreneurs

## Join 1,000+ ventures and counting

Are you ready to explore, build, or grow your big idea? No matter what stage of the process you're in – from dreaming to doing – our world-renowned innovation ecosystem unlocks your entrepreneurial potential. With unlimited access to free resources, you have everything you need to take your venture to the next level: coaching, mentorship, funding, for-credit courses and programs, workshops, pitch competitions, creator spaces, high-end tools and equipment – and, most importantly, people who believe in your potential.

## Support for every student

Everyone's path is different, and our specialized resources are with you all the way.

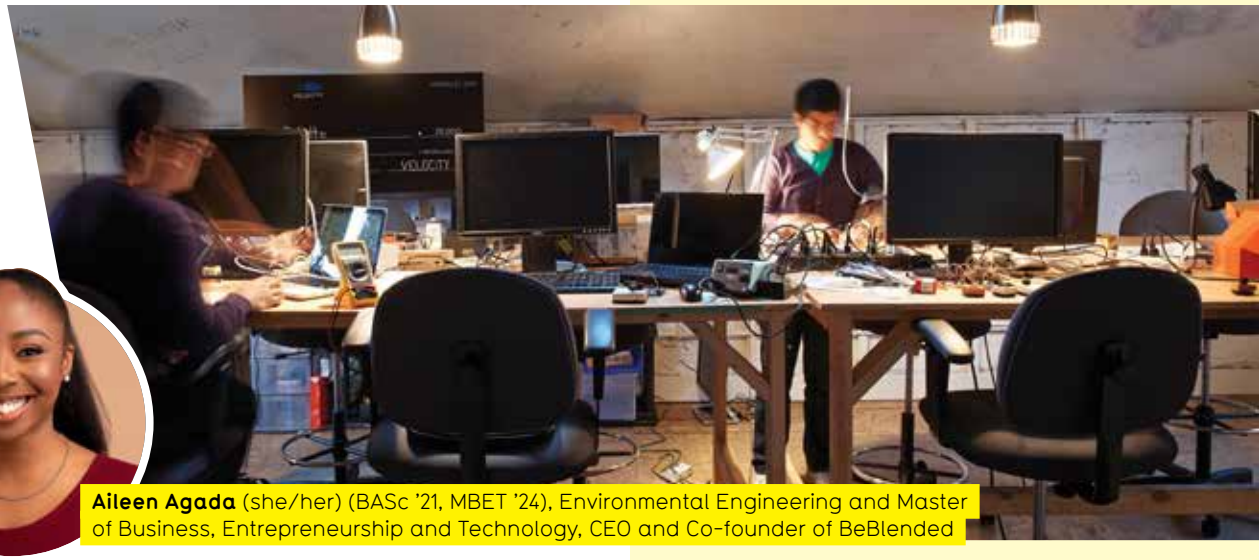
**Velocity**, our flagship entrepreneurship ecosystem, helps you grow your venture at every stage and level of experience.

**United College** supports Indigenous creators through the FlintHub Indigenous incubator and social innovators through the GreenHouse social impact incubator.

**Grebel Peace Incubator** helps you build a more just and peaceful world.

**The Problem Lab** will guide you through your first steps if you're just getting started.

**#1** in Canada for producing venture-backed entrepreneurs *(PitchBook 2024)*



**Aileen Agada** (she/her) (BASc '21, MBET '24), Environmental Engineering and Master of Business, Entrepreneurship and Technology, CEO and Co-founder of BeBlended

It all started with an innocent question while Aileen was on a co-op term in Ottawa: "Where can I get my hair done?" The Environmental Engineering student's search for a nearby hairstylist who knew how to work on afro-textured hair turned into a much bigger quest – a journey to entrepreneurship and the launch of her tech startup, BeBlended, an online marketplace that connects Black women to hairstylists worldwide. W

# A guaranteed place for you

uwaterloo.ca/future/residence

Living in residence puts you in the middle of the action. Thrive in an environment that fits your needs while making friends and memories that last long after graduation.

**100%**

**guaranteed spot in our on-campus residences for all first-year students**

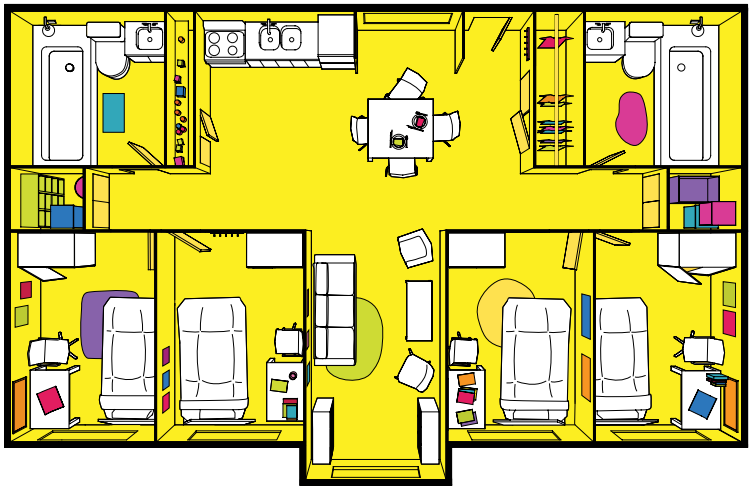
**24/7**

**supports, from front desk assistants to residence staff like your Don**

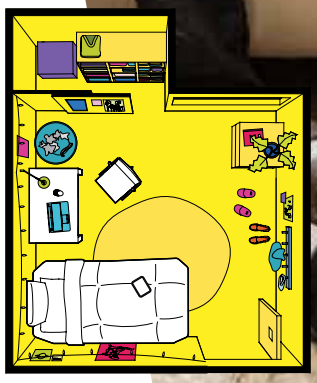
Rank your preference for traditional or suite-style residences depending on your budget and personality.

## Sample room floor plans*

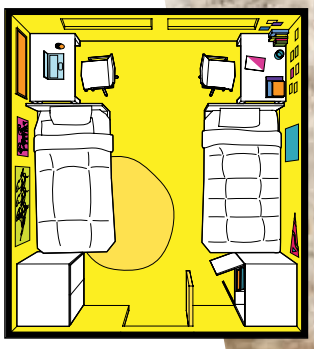
SUITE-STYLE ROOMS



SINGLE ROOM



DOUBLE ROOM



*The sample room floor plans are intended to give you an idea of what your residence room could look like. For specific room layouts, dimensions, and inclusions, visit our website.

## Live and learn with like-minded peers

Apply to a Living Learning Community to be grouped with students in your program, peers who share your passion, or fellow athletes.

## Food options for everyone

40+ on-campus eateries make it quick and affordable to enjoy fresh food and drinks, with halal, vegan, and made-to-order options if you have allergies or dietary restrictions.

## Looking for a smaller community?

The University Colleges (Conrad Grebel, Renison, St. Jerome's, and United), are small, tight-knit communities that offer residence and academic programs – right on campus.

- Form close connections with your classmates – classes are often capped at 50 or fewer students.
- Participate in college-wide activities like dinners, movie nights, workshops, and more.
- Enjoy all-inclusive meal plans steps away from your room. W

**200+**

**academic, supportive, social, religious, political, sports, and cultural student-run clubs to join**

**2,500+**

**fitness classes each year, including yoga, cycling, and Zumba**

# Live your best Warrior life

Waterloo Warriors love to explore outside the classroom. You'll find caring communities that support you through new experiences and fun challenges when you join clubs, events, activities, and more.

As home to one of the largest university recreation programs in Canada, we have lots of ways to get moving, from intramural leagues to sports clubs to weekly fitness classes.

uwaterloo.ca/future/student-life


## Varsity teams

● co-ed ■ men ○ women

- Badminton ●
- Baseball ■
- Basketball ■ ○
- Cheerleading ●
- Cross Country ■ ○
- Curling ■ ○
- Fencing ■ ○
- Field Hockey ○
- Figure Skating ●
- Football ■
- Golf ■ ○
- Hockey ■ ○
- Nordic Skiing ■ ○
- Rowing ■ ○
- Rugby ■ ○
- Soccer ■ ○
- Squash ■ ○
- Swimming ■ ○
- Tennis ■ ○
- Track and Field ■ ○
- Volleyball ■ ○

## Find support at every step

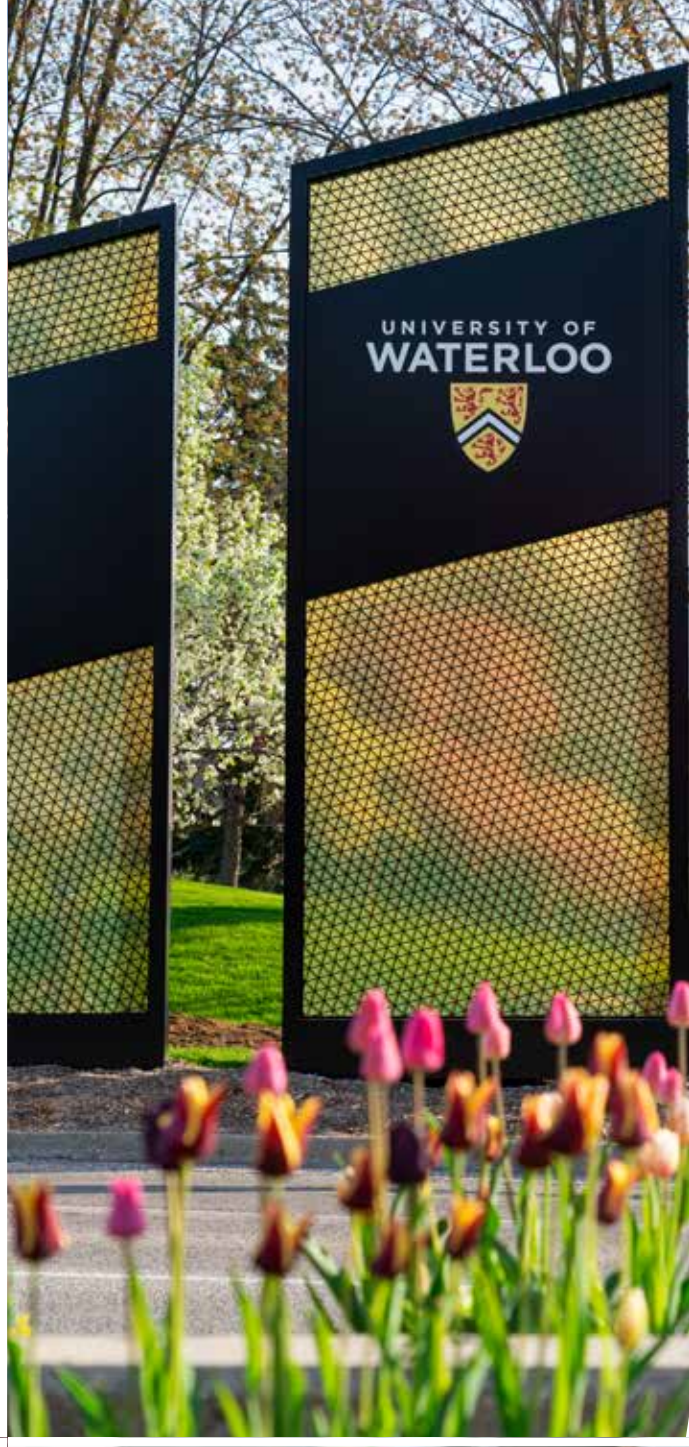
At Waterloo, we're committed to your success. Hundreds of people across campus are ready to help you achieve your goals. From mental health and well-being to academic and career success, there's support along the way.

uwaterloo.ca/future/support

**120+**

**Campus Wellness staff members to support you**

# Find your Warrior community




**Learn more by following us on Instagram**

@UofWaterlooFuture


# Program details

Use the program descriptions and admission charts to choose a program that suits your interests and academic strengths. Every program has minimum course and grade requirements you'll need to meet, so take your time, do your research, and always check the asterisks!

**uwaterloo.ca/future/programs**

Interested in customizing your degree with minors, certificates, and diplomas?

**uwaterloo.ca/future/customize**

**LEGEND**

✱ Only offered at the University of Waterloo

E = Entry-level program: apply directly through the Ontario Universities' Application Centre (OUAC)

M = Major: subject of major interest; apply through an entry-level program

● Sample courses

▲ Specializations

■ Career possibilities

★ Co-op job possibilities

**FACULTY OF ARTS / PAGES 18-21**
- Accounting and Financial Management
- Anthropology
- Classical Studies
- Communication Studies
- Computing and Financial Management
- Economics
- English
- Fine Arts
- French
- Gender and Social Justice
- Global Business and Digital Arts
- History
- Honours Arts
- Honours Arts and Business
- Legal Studies
- Liberal Studies
- Medieval Studies
- Music
- Peace and Conflict Studies
- Philosophy
- Political Science
- Psychology
- Religion, Culture, and Spirituality
- Science and Financial Management
- Sexualities, Relationships, and Families
- Social Development Studies
- Social Work
- Sociology
- Sustainability and Financial Management
- Theatre and Performance

**FACULTY OF ENGINEERING / PAGES 22-25**
- Architectural Engineering
- Architecture
- Biomedical Engineering
- Chemical Engineering
- Civil Engineering
- Computer Engineering
- Electrical Engineering
- Environmental Engineering
- Geological Engineering
- Management Engineering
- Mechanical Engineering
- Mechatronics Engineering
- Nanotechnology Engineering
- Software Engineering
- Systems Design Engineering

**FACULTY OF ENVIRONMENT / PAGES 26-29**
- Climate and Environmental Change
- Environment and Business
- Environment, Resources and Sustainability
- Geography and Aviation
- Geography and Environmental Management
- Geomatics
- Planning
- Sustainability and Financial Management

**FACULTY OF HEALTH / PAGES 30-33**
- Health Sciences
- Kinesiology
- Public Health
- Recreation and Leisure Studies
- Recreation, Leadership, and Health
- Sport and Recreation Management
- Therapeutic Recreation

**FACULTY OF MATHEMATICS / PAGES 34-37**
- Actuarial Science
- Applied Mathematics
- Applied Mathematics with Scientific Computing and Scientific Machine Learning
- Biostatistics
- Business Administration (Laurier) and Computer Science (Waterloo) Double Degree
- Business Administration (Laurier) and Mathematics (Waterloo) Double Degree
- Combinatorics and Optimization
- Computational Mathematics
- Computer Science
- Computing and Financial Management
- Data Science
- Information Technology Management
- Mathematical Economics
- Mathematical Finance
- Mathematical Optimization
- Mathematical Physics
- Mathematical Studies
- Mathematics
- Mathematics/Business Administration
- Mathematics/Chartered Professional Accountancy
- Mathematics/Financial Analysis and Risk Management
- Mathematics/Teaching
- Pure Mathematics
- Software Engineering
- Statistics

**FACULTY OF SCIENCE / PAGES 38-41**
- Biochemistry
- Biological and Medical Physics
- Biology
- Biomedical Sciences
- Chemistry
- Earth Sciences
- Environmental Sciences
- Honours Science
- Life Sciences
- Materials and Nanosciences
- Mathematical Physics
- Medical Sciences (Waterloo) and Doctor of Medicine (St. George's)
- Medicinal Chemistry
- Optometry
- Pharmacy
- Physical Sciences
- Physics
- Physics and Astronomy
- Psychology
- Science and Aviation
- Science and Business
- Science and Financial Management

**WAYS TO STUDY BUSINESS**
- Accounting and Financial Management
- Business Administration (Laurier) and Computer Science (Waterloo) Double Degree
- Business Administration (Laurier) and Mathematics (Waterloo) Double Degree
- Computing and Financial Management
- Environment and Business
- Global Business and Digital Arts
- Honours Arts and Business
- Information Technology Management
- Management Engineering
- Mathematical Finance
- Mathematics/Business Administration
- Mathematics/Chartered Professional Accountancy
- Mathematics/Financial Analysis and Risk Management
- Science and Business
- Science and Financial Management
- Sport and Recreation Management
- Sustainability and Financial Management

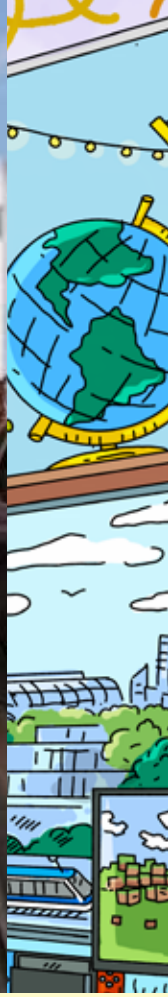
# Business programs

## We do business differently

You don't want just any business degree. You want one that gets you noticed. Working with employers, we created business programs that give you an edge in the marketplace, expand your portfolio, and let you explore your passions to help you define your industry niche. Find yourself working in paid co-op positions with top business leaders, while learning from a community of mentors and other self-starters.

Our business degrees give you two areas of expertise: a deep knowledge of a specific subject (your major) plus skills in marketing, finance, accounting, entrepreneurship, and more.

uwaterloo.ca/future/business



**TOP 10**

**in Canada for business and economics**
*(Times Higher Education World University Subject Rankings 2025)*

**in Canada for accounting and finance**
*(QS World University Subject Rankings 2025)*

**Meng knew Accounting and Financial Management (AFM) would give her the tools to turn big ideas into reality. She began her career in investment banking, then helped launch Uber Eats, scaling it across North America and securing major deals with McDonald's and Starbucks. Today, she's applying her AFM expertise to build Our Little Treasures, a sustainable baby clothing brand that's creating real impact.**

**Meng Wang** (she/her) (BAFM '12), Accounting and Financial Management, Founder of Our Little Treasures

**“My program gave me a holistic education that empowered me with the confidence, knowledge, and skills to thrive in both my personal and professional life.”**

**Lowenna Barungi** (she/her) (BA ’24), Honours Arts and Business, Communication Studies major, Marketing Co-ordinator at Smith + Andersen

# Faculty of Arts

## Where curiosity, creativity, and critical thinking thrive

With seven entry programs and 28 honours majors to choose from, you’ll discover diverse disciplines and a community that challenges you to dive deeper. Whether you pursue co-op, career-focused minors, study-abroad adventures, or experiential education certificates, you’ll build the skills and experience to succeed.

uwaterloo.ca/future/arts

**85+** partner universities offer international study exchanges to Arts students

**82%** of Arts students choose co-op

**"Arts' variety of courses and opportunities helped me engage with ideas from multiple perspectives and taught me to be a lifelong learner – open, curious, and always inviting opportunities to expand my world view."**

**Kirsten Mosey** (she/her) (BA '22), Honours Arts and Business, Political Science major, Policy Officer in the Non-Proliferation and Disarmament Division at Global Affairs Canada


## Co-op employers

Recent Arts co-op students have worked for employers such as

- KPMG,
- Canada Revenue Agency (CRA),
- AccqSleepLabs,
- Food Bank of Waterloo Region, and
- Desire2Learn (D2L).

LEGEND ✻ Only offered at the University of Waterloo E = Entry-level program: apply directly through the Ontario Universities' Application Centre (OUAC)

# Arts programs

**40%**

**of your courses in Honours Arts and in Honours Arts and Business will be in your chosen major**

## Entry programs

### ✻ ACCOUNTING AND FINANCIAL MANAGEMENT / FACULTY OF ARTS AND SCHOOL OF ACCOUNTING AND FINANCE

(E, Bachelor of Accounting and Financial Management) Co-op only

Use data and tech to make bold business decisions. Whether you're launching a startup or working on Bay Street, AFM shows you how to leverage AI and tech in accounting and finance to lead with confidence. Gain hands-on experience through co-op and work toward a Chartered Professional Accountant (CPA) or Chartered Financial Analyst (CFA) designation, so you're ready to succeed in a world driven by innovation.

● Financial Accounting; Global Financial Markets; Business Analytics Project Management

▲ Professional Accountant; Entrepreneurial Mindset; Enterprise Performance and Risk; Financial Markets; Business Analytics

■ Accountant, auditor, investment banker

★ Staff accountant, intermediate tax accountant, funding analyst

### ✻ COMPUTING AND FINANCIAL MANAGEMENT

See the Faculty of Mathematics section (page 36) for details.

### ✻ GLOBAL BUSINESS AND DIGITAL ARTS

(E, Bachelor of Global Business and Digital Arts) Co-op only

Explore your creative, technical, and business side at the Stratford School of Interaction Design and Business. At this innovative campus, you'll merge flexible thinking with an entrepreneurial spirit to solve real-world problems using emerging technologies. Hands-on learning, industry mentors, co-op terms, and an exchange option empower you to make an impact.

● Marketing in a Digital World; Introduction to User Experience Design; Data and Society

■ User experience designer, social media manager, digital marketing specialist

★ Marketing and communications specialist, UX/UI designer, business analyst, visual designer, web developer

### HONOURS ARTS

(E, Bachelor of Arts) Co-op available; available online

Use your first two terms to test the waters before choosing your major. Sample courses from the humanities, social sciences, fine and performing arts, and languages and cultures. Add co-op as an in-person student and get up to 20 months of paid experience. Also offered at St. Jerome's. Honours Arts Online is available for select majors.

★ Human resources assistant, gallery program assistant, teaching assistant, policy analyst

### HONOURS ARTS AND BUSINESS

(E, Bachelor of Arts) Co-op available

Combine the employable skills of business studies with one of 28 Arts majors to launch the career of a lifetime. Opt for co-op and earn nearly two years of paid work experience. Also offered at St. Jerome's.

★ Business and finance analyst, communications and events associate, small business digital advisor, legislative learner

### SCIENCE AND FINANCIAL MANAGEMENT

See the Faculty of Science section (page 41) for details.

### ✻ SUSTAINABILITY AND FINANCIAL MANAGEMENT

See the Faculty of Environment section (page 29) for details.

## Majors

### ANTHROPOLOGY

(M, Bachelor of Arts) Co-op available

Focus on what you're most curious about: archaeological, biological, or socio-cultural anthropology. Whether you're interested in examining relics, learning the evolution of long-distance running, or studying decolonization, you'll take lessons from life and shape the future.

● Skeletal Biology and Forensics; Human Evolution; Food as Culture

■ Archeologist, curator of natural property, heritage planner

### CLASSICAL STUDIES

(M, Bachelor of Arts) Co-op available

Gain a deep understanding of history, culture, literature, religion, art, philosophy, and society in ancient Greece and Rome – cultures that continue to shape thinking and society today. Take advantage of study-abroad opportunities in the Mediterranean. Choose Classics (includes learning Greek and Latin) or Classical Studies (languages optional) as your major.

● Classical Mythology; The Ancient Near East and Egypt; Astrology and Magic

■ Teacher, reference librarian, technical writer

### COMMUNICATION STUDIES

(M, Bachelor of Arts) Co-op available

Learn how people communicate effectively in speaking, writing, and navigating group dynamics (body language and listening skills). More of a visual or creative communicator? The Communication Arts and Design Practice major focuses on creative principles, allowing you to tell a story digitally.

● Designing Digital Presentations; Crisis Communication; Persuasion

■ Digital marketing specialist, product co-ordinator, UX/UI designer

### ECONOMICS

(M, Bachelor of Arts) Co-op available

Economics is more than data and money. You'll explore the dynamics of everyday lives and interpret today's news. Why do women earn less than men? Are the Olympics worth it for the host city? Cover micro- and macroeconomics while studying human behaviour and global financial trends.

● Economics of Sport; Business Cycles; International Finance

▲ Econometrics; Finance; Public Policy

■ Financial planner, marketing research manager, economist, financial analyst, international finance manager

### ENGLISH

(M, Bachelor of Arts) Co-op available

Explore the written word, whether as literature, professional writing, or digital media, in tight-knit classes. Choose one of four majors after first year: Creative and Professional Writing; Literature; Literature and Rhetoric; or Rhetoric, Media, and Professional Communication.

● Tolkien: From Book to Film; Manga; The Discourse of Advertising

▲ Communication Design; Creative Writing; Digital Media Studies; Global Literatures; Technical Writing

■ Communications manager, media relations specialist, technical writer, publisher

### FINE ARTS

(M, Bachelor of Arts) Co-op available

Choose from two paths: Studio Practice to make art or Visual Culture for history and theory. As an artist, you'll express yourself using ceramics, painting, print media, photography, and the newest technologies. Visual Culture combines courses from across the faculty.

● World Cinema and Visual Culture; Photography; Expressive Drawing

▲ Digital Art; Teaching Preparation

■ 3D visual effects artist, illustrator, teacher, web designer, curator, interior designer, art therapist

M = Major: subject of major interest; apply through an entry-level program ● Sample courses ▲ Specializations ■ Career possibilities ★ Co-op job possibilities

**FRENCH**
(M, Bachelor of Arts) Co-op available

*À Waterloo, les possibilités sont infinies.* A French degree gives you a valuable edge in almost any field. Live on the French-language residence floor on campus. If you choose our French Teaching Specialization, you're guaranteed a spot in teachers' college at Nipissing University.

● Introduction to Translation; Business French; Children's Literature in French

▲ Professional French; French Teaching; Intensive French and Francophone Literatures and Cultures

■ Director of international sales, immigration officer, translator, teacher

**GENDER AND SOCIAL JUSTICE**
(M, Bachelor of Arts) Co-op available

Be an advocate for equity, justice, and inclusive communities. Explore multi-layered marginalization and patterns of oppression based on gender, sexuality, race, class, and disability.

● Gender Issues; The Waves of Feminist Thought; Global Queer Cinema

■ Counselling co-ordinator, social worker

**HISTORY**
(M, Bachelor of Arts) Co-op available

Whether you focus on North American or international history, History provides tools to analyze the past and strengthen communities today. Learn vital skills: critical-thinking, analysis, and effective communication.

● Rock 'n' Roll and US History; History of Ancient Law; A Global History of Empires

▲ Global Interactions; International Relations; Revolution, War, and Upheaval

■ Government affairs manager, executive researcher, lawyer, director of government relations

**LEGAL STUDIES**
(M, Bachelor of Arts) Co-op available

Explore the law and court system from every perspective. This program is a foundation for law school and opens doors to careers in government, politics, business, and law enforcement.

● Criminal Profiling; Organized Crime; Legal Writing

■ Legal assistant, records clerk, executive researcher, probation and parole officer, lawyer

**LIBERAL STUDIES**
(M, Bachelor of Arts) Co-op available

Explore different subjects in the humanities, social sciences, languages and cultures, and fine and performing arts – plus courses you'd like to take from some of Waterloo's other faculties.

● Introduction to Microeconomics; Conflict Resolution; Introduction to Legal Studies

■ Publisher, digital marketing specialist, teacher, human resources manager, library technician

**MEDIEVAL STUDIES**
(M, Bachelor of Arts) Co-op available

We are Canada's longest-standing medieval studies program. By concentrating on this pivotal era, you'll gain insights into modern politics, gender norms, the connections between Islam and Christianity, and more.

● Medieval Society; Crusading in the Middle Ages; Medieval Monsters

■ Professional writer, librarian, historical site manager, teacher

**MUSIC**
(M, Bachelor of Arts) Co-op available

Learn about the importance of music in today's world through theory, composition, performance, and history. Combine your passion for music with other interests by taking courses that explore how music enriches culture.

● Music Cognition; Introduction to Jazz; Soundtracks: Music in Film

▲ Church Music and Worship; Composition; Cultural Context and Analysis; Performance

■ Teacher, performer, associate pastor of music, music store owner, recording studio owner

**PEACE AND CONFLICT STUDIES**
(M, Bachelor of Arts) Co-op available

Combine theory and practice to study the roots and impact of violence, marginalization, and oppression. Learn to transform conflict into positive change and gain experience with global co-ops or internships.

● Peace is Everybody's Business; Conflict Resolution; Fair Trade

▲ Restorative Justice

■ Community development officer, social services worker, mediation consultant, lawyer

**PHILOSOPHY**
(M, Bachelor of Arts) Co-op available

Learn to think deeply and rigorously about topics ranging from the nature of the human mind to the ethics of emerging technology. Learn to analyze other people's arguments and improve your own. You'll develop the critical-thinking skills valued in public policy, industry, and beyond.

● Ethics; Being and Existence; Introduction to Formal Logic; The Meaning of Life

■ Lawyer, public policy analyst, ethicist, corporate archivist

**POLITICAL SCIENCE**
(M, Bachelor of Arts) Co-op available

You'll analyze international relations and policy and explore how national and local politics change lives in Canada. You'll gain critical-thinking and problem-solving skills to understand news-making policies and social challenges, such as immigration, housing, and education.

● Politics of Indigenous Peoples; The Political Documentary; Foreign Policy

▲ International Relations

■ Civil servant, director of global programs, project manager, senior consultant

**PSYCHOLOGY** (M, Bachelor of Arts) Co-op available

In this internationally renowned program, you'll explore how people think, make decisions, and form emotions. Examine human behaviour through neuroscience, cognition, and clinical, developmental, industrial/organizational, and social psychology.

● Child Psychopathology; Psychology of Death and Dying; Research in Memory

■ Mental health worker, researcher, human resources manager

**RELIGION, CULTURE, AND SPIRITUALITY**
(M, Bachelor of Arts) Co-op available

Study faith-based beliefs to understand the world's complexities. Your degree builds critical-thinking skills, cultural awareness, and diversity appreciation.

● Love and Friendship; Spiritual Journeys; Anthropology of Religion

■ Clinical therapist, interfaith chaplain, international development agency director

**SEXUALITIES, RELATIONSHIPS, AND FAMILIES**
(M, Bachelor of Arts) Co-op available

A one-of-a-kind in Canada. Drawing upon critical, anti-oppressive, and social justice approaches, you'll study the latest research and theory about how sexualities, families, and relationships impact everyday life.

● Communication and Counselling Skills; Dynamics of Dating; Sexuality and Popular Culture

▲ Counselling; Human Services Practicum

■ Sexual health educator, couples and family therapist, youth support worker, mediator

**SOCIAL DEVELOPMENT STUDIES**
(M, Bachelor of Arts) Co-op available

Thinking of working in a helping profession? Explore human and social development through psychology, sociology, and social work. Customize your learning with specializations and practical experience. Available online or on campus.

● Social Work with Families; Disability and Society; Decolonization and Social Action

▲ Diversity and Equity; Education; Individual Well-being and Development; Social Policy and Social Action; Social Work

■ Child protection worker, teacher, social policy developer, counsellor

**SOCIOLOGY**
(M, Bachelor of Arts) Co-op available

Curious about how society works? Sociology helps you understand how social forces shape modern life. You'll study social interaction while learning to think and write clearly about complex issues.

● Terrorism; Juvenile Delinquency; Media and Crime

■ Youth justice advocate, justice policy analyst, research associate, ESL teacher

**THEATRE AND PERFORMANCE**
(M, Bachelor of Arts) Co-op available

Focus your studies in acting, directing, technical theatre, or theory, and then hone your skills in student-led productions each term. You'll graduate with a rich portfolio!

● Stage Management; Approaches to Directing; Collaborative Creation

■ Set designer, actor, floor director, stage manager, general manager

## Professional degree

**SOCIAL WORK / RENISON UNIVERSITY COLLEGE**
(E, Bachelor of Social Work) Regular only

Balancing compassion with in-class learning and an in-field practicum, you'll gain life-changing skills. Note: you must already have a BA or equivalent. For prerequisite courses, enrol in Social Development Studies first.

● Interviewing and Assessment; Mental Health Landscapes, Concepts, and Practice Approaches

■ Mental health advocate, child welfare worker, policy developer

# Faculty of Engineering

## Push boundaries. Ignite innovation. Transform ideas into reality.

Join the faculty with a hand in every aspect of modern life. You could design sustainable buildings, improve transit systems, reorganize corporate ladders, or build robots that save lives – all before graduation. In Engineering, the future is in your hands. Are you ready to get to work?

uwaterloo.ca/future/engineering

**TOP 50**

**in the world for engineering**

*(QS World University Subject Rankings 2025)*

**"The sense of community at Waterloo – professors, alumni, classmates – made it feel like everyone genuinely wanted you to succeed and grow."**

**Thevany Narayanamoorthy** (she/her) (BASc '19), Management Engineering, Manager of Product Management, Enterprise Data & Analytics at TJX Canada – Winners, Marshalls, HomeSense

## Co-op employers

Recent Engineering students have worked for employers such as

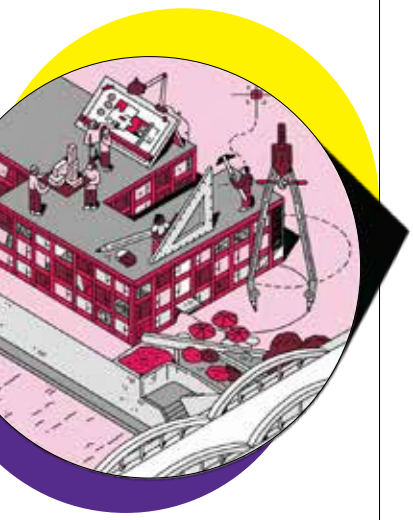
- Microsoft Azure Artificial Intelligence,
- Ontario Institute for Cancer Research,
- Arcadis,
- Bosch, and
- Massachusetts Institute of Technology (MIT).

**#1** **in Canada for engineering program reputation**
*(Maclean's 2025)*

**TOP 5**
**in Canada for architecture**
*(QS World University Subject Rankings 2025)*

LEGEND ✻ Only offered at the University of Waterloo E = Entry-level program: apply directly through the Ontario Universities' Application Centre (OUAC)

# Engineering programs



**ARCHITECTURAL ENGINEERING**
(E, Bachelor of Applied Science) Co-op only

Build better buildings (and a bright career in the process). In this program, you'll cover the science and engineering of good building design, including structural and fluid mechanics, heat transfer, building systems, and structural analysis and design – and round it out with course content in aesthetics, culture, and other design elements delivered in collaboration with our world-class School of Architecture.

● Enclosure Design Studio; Structure and Properties of Materials; Energy and the Environment

▲ Building Structures; Building Systems

■ Building design consultant, project manager, construction manager, building operations manager

★ Field co-ordinator, structural engineering assistant, building inspector, project co-ordinator and estimator

**ARCHITECTURE / SCHOOL OF ARCHITECTURE** (E, Bachelor of Architectural Studies) Co-op only

Design your future at one of North America's top schools of architecture. From day one, you'll have your own dedicated studio space to develop your ideas as you explore the relationship between architecture, technology, the environment, and society. Study at our studio in Rome, Italy in fourth year. Questions? Email archinfo@uwaterloo.ca.

● Design Studio; Introduction to Cultural History; Visual and Digital Media; Environmental Building Design; Building Construction; Digital Fabrication

■ Architect, project manager, urban designer, industrial designer, sustainable development and heritage professional

★ Architectural assistant, project co-ordinator, 3D architectural artist

**BIOMEDICAL ENGINEERING**
(E, Bachelor of Applied Science) Co-op only

Create tomorrow's life-saving and life-enhancing innovations. In this interdisciplinary program, you'll study principles of biology, physics, engineering fundamentals, systems analysis, and engineering design. With plenty of hands-on experience from labs, design projects, and co-op, you'll graduate ready to develop new solutions for health care.

● Prototyping, Simulation and Design; Engineering Biology; Physiological Systems Modelling

▲ Biomaterials and Tissues; Medical Artificial Intelligence; Medical Devices; Neural Engineering; Sports Engineering

■ Clinical app developer, imaging technology researcher, medical device designer

★ Molecular biology and drug delivery co-op, soft robotics researcher and developer, research student – cancer imaging

**CHEMICAL ENGINEERING**
(E, Bachelor of Applied Science) Co-op only

Discover how to transform raw materials while putting your creativity and problem solving to the test. You'll learn to design, implement, and supervise the processes that transform fuel into energy, waste into resources, and raw materials into useful products in almost any industry: biotechnology, pollution control, green fuels, power storage, health care, food production, and more.

● Chemical Reaction Engineering; Food Process Engineering; Air Pollution Control

▲ Energy and Environmental Systems and Processes; Materials and Manufacturing Processes; Chemical Process Modelling, Optimization and Control

■ Pharmaceutical product developer, semiconductor process engineer, process improvement specialist

★ Research lab assistant, cosmetic process engineering assistant, nuclear product management assistant

**CIVIL ENGINEERING**
(E, Bachelor of Applied Science) Co-op only

Make the world your sandbox in Canada's largest civil engineering program. Learn to design, construct, and manage the infrastructure we all depend on: bridges, highways, dams, pollution-control facilities, and more.

● Structure and Properties of Materials; Engineering and Sustainable Development; Civil Systems and Project Management

▲ Building Science; Geotechnical; Structural; Transportation; Water Resources

■ Transportation planner, structural engineer, water resources technologist

★ Quality control technician, structural engineering assistant, transportation systems modelling analyst, bridge engineering assistant

**COMPUTER ENGINEERING**
(E, Bachelor of Applied Science) Co-op only

Develop software savvy and hardware know-how. Build and test computer hardware and software in our state-of-the-art labs. You'll work with everything from circuit-level high-speed processors to artificial intelligence. Plus, gain valuable work experience in the Waterloo region: a high-tech hub home to more than 1,500 technology companies.

● Systems Programming and Concurrency; Computer Networks; Computational Intelligence

▲ Communications and Signal Processing; Quantum Engineering

■ Full-stack developer, embedded systems engineer, robotics systems developer, machine learning engineer

★ Automation developer, software developer, junior full-stack software developer

**ELECTRICAL ENGINEERING**
(E, Bachelor of Applied Science) Co-op only

Set yourself up for an electrifying future – explore electronic devices, control systems, and digital systems in some of North America's best electrical engineering student labs. By mastering the design principles required to build the latest technologies in power, information, and energy, you'll open the door to hundreds of possible careers!

● Semiconductor Physics and Devices; Power Systems and Smart Grids; Electromagnetic Fields and Waves

▲ Communications and Signal Processing; Quantum Engineering

■ Autonomous vehicle developer, renewable energy project manager, sensor design engineer

★ Electrical assembler, firmware engineering assistant, electrical and power designer

**ENVIRONMENTAL ENGINEERING**
(E, Bachelor of Applied Science) Co-op only

Ready to help solve some of the world's most pressing challenges? Environmental engineers are getting it done. You'll merge your strengths in math and physics with an interest in biology, chemistry, geology, and geography. Then put them to use with the latest science and technology. Lead the way to a more sustainable future with this in-demand field. Opportunity awaits.

● Air Quality Engineering; Design of Urban Water Systems; Environmental Modelling

▲ Energy and Climate Change; Water Resources; Pollution and Restoration; Modelling and Data Analytics; Sustainable Cities

■ Water resources engineer, emissions control engineer, green infrastructure engineer, sustainability consultant

★ Project co-ordinator, land development engineering assistant, environmental engineering assistant, climate resilience specialist

M = Major: subject of major interest; apply through an entry-level program ● Sample courses ▲ Specializations ■ Career possibilities ★ Co-op job possibilities

**GEOLOGICAL ENGINEERING**
(E, Bachelor of Applied Science) Co-op only

Put your future on solid ground – and help the world do the same. You'll combine earth sciences with civil engineering to design smart foundations, mitigate and reduce losses during natural disasters, and contribute to sustainable resource development globally. Meanwhile, with a ton of field courses and labs, you'll spend more time outside the classroom than in any other engineering program.

● Geotechnical Engineering; Rock Mechanics; Structural Geology

▲ Geology; Hydrogeology; Soil, Rock and Structures

■ Geosensing systems developer, geotechnical risk analyst, geotechnical engineer

★ Geotechnical engineering assistant, concrete lab technician, survey assistant, rock mechanics engineer, mining engineering intern

**MANAGEMENT ENGINEERING**
(E, Bachelor of Applied Science) Co-op only

Engineer business decisions in the age of big data and AI. Gain skills in analytics, data science, software and information systems, optimization, and management. You'll use your skill set to design and manage complex, efficient, technical systems and processes for today's data-driven organizations.

● Advanced Machine Learning; Databases and Software Design; Operations Planning and Inventory Control

■ Business analyst, product manager, consultant, software developer, data scientist

★ Operations analyst, software engineering assistant, technical product manager

**MECHANICAL ENGINEERING**
(E, Bachelor of Applied Science) Co-op only

Put your career in gear. This program gives you a broad foundation in all aspects of mechanical design – and lots of opportunities to get your hands dirty in our well-equipped labs. You'll study topics like manufacturing, fluid dynamics, heat transfer, material processing, and sustainable energy, so you'll graduate with the knowledge to design everything from valves to vehicles.

● Mechanical Design; Thermodynamics; Fluid Mechanics

▲ Welding and Joining

■ Advanced manufacturing engineer, propulsion systems developer, automotive R&D engineer

★ Mechanical designer, manufacturing engineer, plant maintenance master data analyst

**MECHATRONICS ENGINEERING**
(E, Bachelor of Applied Science) Co-op only

Build the next generation of "smart" machines, emergency response drones, and driverless cars. You'll combine mechanical, electrical, computer, and software engineering to develop robots, intelligent vehicles, and more. With co-op and labs starting in first year, you'll gain lots of experience creating sophisticated electro-mechanical devices.

● Sensors and Instrumentation; Microprocessors and Digital Logic; Structure and Properties of Materials

■ Robotics engineer, bioelectronics developer, wearable tech product designer

★ Aircraft control systems development intern, high-performance battery engineering assistant, senior AI robotics test engineering assistant

**NANOTECHNOLOGY ENGINEERING**
(E, Bachelor of Applied Science) Co-op only

Design solutions measured in billionths of a metre in Canada's first accredited undergraduate nanotechnology engineering program. Combining engineering principles with ideas from chemistry, electronics, quantum physics, and biology, you'll create in our state-of-the-art laboratories and cleanroom facilities the tiny technologies that are revolutionizing everything from computer chips to energy storage to biomedical devices.

● Nanomedicine and Nanobiotechnology; Quantum Mechanics; Nano-Electronics

▲ Nanobiosystems; Nanoelectronics; Nanofabrication; Nanomaterials

■ Targeted drug delivery scientist, nanomaterials engineer, semiconductor process engineer, vaccine formulation specialist, battery systems engineer

★ Software developer, compiler engineering co-op, cell manufacturer

**SOFTWARE ENGINEERING / FACULTY OF ENGINEERING AND FACULTY OF MATHEMATICS** (E, Bachelor of Software Engineering) Co-op only

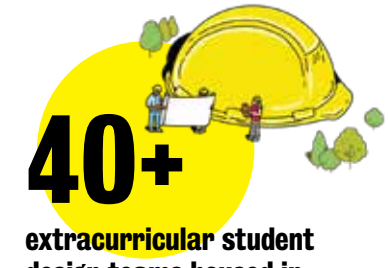
Today, even your fridge is full of software. Learn to create complex programs using math, engineering, and computer science. You'll develop the skills to analyze software architecture, apply algorithms, design human-computer interfaces, and lead major projects.

● Programming Principles; Logic and Computation; Machine Learning; Operating Systems

▲ Human-Computer Interaction; Artificial Intelligence; Business; Computational Fine Art

■ Systems software developer, cybersecurity engineer, technical project lead

★ Junior software developer, full-stack web developer, data and relevancy engineering assistant



**40+**

**extracurricular student design teams housed in the largest student design centre in North America**

**SYSTEMS DESIGN ENGINEERING**
(E, Bachelor of Applied Science) Co-op only

Analyze and design solutions for today's most complex and urgent challenges, including climate change, sustainable development, trustworthy AI, and human-machine interactions. In this interdisciplinary program, you'll apply a big-picture perspective to examining how human, technological, and environmental systems interact. Plenty of hands-on learning will give you the in-demand design skills to open doors to countless engineering careers.

● Design, Systems, and Society; Engineering Prototyping; Human Factors in Design; Systems Models

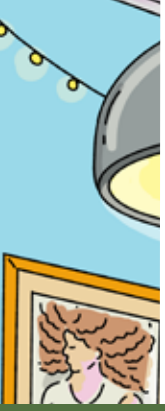
▲ Human Factors and Interfaces; Intelligent and Automated Systems; Physical and Mechatronics Systems; Societal and Environmental Systems

■ Complex systems analyst, physical and digital device designer, data scientist, socio-environmental simulation modeller

★ Automated test developer, process engineer, enterprise digital engineering assistant

**"Waterloo's co-op program gives you real, valuable work experience from the beginning – it really sets you apart from what you'd get anywhere else."**

**Hayley Whelan** (she/her) (BASc '19), Nanotechnology Engineering, Senior R&D Engineer at Irradiant Technologies





**“Environment has connected me to a supportive community that encourages learning from each other, immersing in research through local and international fieldwork, and acting with hope while working toward a just, inclusive, and environmentally sustainable future.”**

**Bethany** (she/her), Environment and Business, named a Top 25 Environmentalist under 25 by the Starfish Canada (2024)

## Co-op employers

Recent Environment co-op students have worked for employers such as

- The Regional Municipality of York,
- Habitat for Humanity,
- Deloitte,
- Environment and Climate Change Canada, and
- SC Johnson.

# Faculty of Environment

## Don't just learn about the world – experience it

In Environment, we don't just wait for the world to change – we take action. Research climate change in the Arctic. Study ocean ecosystems on the Atlantic coast. Explore cities designed to meet the challenges of the next century. And immerse yourself in complex environments around the globe. In labs, field courses, and co-op terms, gain hands-on experience before graduation and job-ready skills you can use no matter where your journey takes you. All over the world, our grads are shaping and implementing green policies in the public sector, fueling sustainable transitions in the private sector, and advocating for a better future everywhere. Are you ready to make your mark?

uwaterloo.ca/future/environment

**#3**

**in Ontario for sustainability**

*(QS Sustainability Rankings 2025)*

**150+**

**hectares of outdoor learning spaces and gardens**

LEGEND ✻ Only offered at the University of Waterloo E = Entry-level program: apply directly through the Ontario Universities' Application Centre (OUAC)

# Environment programs

### ✻ CLIMATE AND ENVIRONMENTAL CHANGE
(E, Bachelor of Science) Co-op available

Redefine tomorrow by learning how we can make the world a safer place for all. Dig into scientific solutions that help communities adapt to the impacts of climate breakdown, from floods to forest fires. With this BSc program, you'll integrate physics, chemistry, biology, and geography. Then, delve deeply into topics like atmospheric science, glaciology, and climate modelling. See how climate science becomes climate policy, to drive the environmental — and societal — change we need.

● Physical Climatology; Earth's Future Climates; Ice Sheets and Glaciers

▲ Aviation; Economy and Society; Geomatics

■ Climate modeller, climate risk analyst, agricultural scientist, renewable energy specialist, environmental consultant

★ Projects assistant, ecologist, climate change policy analyst

### ✻ ENVIRONMENT AND BUSINESS
(E, Bachelor of Environmental Studies) Co-op only

The responsibility for addressing urgent challenges such as climate change, biodiversity conservation, and social justice is shared among government, business, and consumers. But what is the right balance? How do we get there? This action-oriented program, which includes a team capstone project that has you working with a real business, does more than bolt environment and business together. It's a whole new way of thinking about our systems of commerce, manufacturing, and trade.

● Green Entrepreneurship; Fashion, Consumption, and Sustainability; Corporate Sustainability Accounting and Reporting

▲ Sustainable Finance

■ Sustainability analyst, sustainability consultant, environmental stewardship manager, sustainability policy advisor

★ Environmental project assistant, conservation intelligence and analytics associate, corporate sustainability associate

### ENVIRONMENT, RESOURCES AND SUSTAINABILITY
(E, Bachelor of Environmental Studies) Co-op available

You want to protect the living world. Now lead the way. Get your boots dirty with hands-on field courses. Integrate ecology and social science. Connect practical skills in ecosystem monitoring and restoration with environmental policy analysis, impact assessment, and collaborative decision making. Belong to a community of professors, co-op employers, and classmates committed to making positive change. Customize this program to focus on what matters to you: food security, biodiversity conservation, water management, climate adaptation, and more.

● Communities and Sustainability; Environmental and Sustainability Assessment; ReWilding and Ecological Restoration

■ Terrestrial and wetland ecologist, sustainability policy analyst, parks and protected areas manager, environmental educator

★ Waste management project assistant, sustainability projects co-ordinator, environmental education instructor

### ✻ GEOGRAPHY AND AVIATION
(E, Bachelor of Environmental Studies) Regular only

Take to the skies with Canada's largest university-level aviation program. You'll earn a degree from one of the country's top-ranked geography departments – plus your integrated Airline Transport Pilot Licence with multi-engine and instrument ratings. Between the classroom and the cockpit, you'll explore landforms, weather patterns, geographic information systems (GIS), and more.

● Global Environmental Systems; Introduction to Geographic Information Systems; Professional Pilot Program Course; Aviation Sustainability

■ Pilot, first officer, flight training instructor, aerial surveyor

### GEOGRAPHY AND ENVIRONMENTAL MANAGEMENT
(E, Bachelor of Environmental Studies) Co-op available

Move beyond the doomsday headlines and help create solutions to the challenges you're passionate about in this flexible program. Find your niche in climate change, earth systems science, human geography, or geomatics, while you practise viewing the world through a variety of lenses. Develop a broad range of expertise in topics like peatland restoration or the interconnections between climate change and shifts in tourism activities. You'll take plenty of field trips too, ranging from nearby places like Elora to distant locations like Singapore, South Africa, and Indonesia.

● Environment and Development in a Global Perspective; Low Carbon Transition; Environmental Hydrology of Terrestrial Ecosystems; Human Dimensions of Natural Hazards; Sustainable Tourism

▲ Aviation; Climate Change and Environment; Earth Systems Science; Economy and Society; Geomatics

■ Environmental stewardship co-ordinator, policy advisor, field technician, sustainability consultant, teacher

★ Assistant salmon officer, biology and ecology field associate, agroclimate analyst

### GEOMATICS
(E, Bachelor of Environmental Studies) Co-op available

Detail-oriented and love working with tech? Geomatics needs you. With environmental crises on the rise, geomatics experts combine computer science, math, satellite imagery, and GIScience to create solutions. Hands-on experience with cutting-edge software and hardware gives you the tools to gather and analyze real-world data right from week one.

● Earth from Space Using Remote Sensing; Geodesy and Surveying; Civic Technology and Digital Infrastructures

▲ Aviation; Climate Change and Environment; Earth Systems Science; Economy and Society

■ Spatial data analyst, GIS technician, remote sensing specialist

★ Transportation systems modelling & simulation analyst, surface climate data analyst, geospatial analyst

**LARGEST**
**Faculty of Environment in Canada**

M = Major: subject of major interest; apply through an entry-level program ● Sample courses ▲ Specializations ■ Career possibilities ★ Co-op job possibilities

**"My degree let me take drama classes, travel to the Arctic, and attend international climate negotiations. It gave me the space to figure out what I truly wanted to do with my life. As cliché as it sounds, it prepared me for more than just a job – it prepared me to find a purpose."**

**Ashoke Mohanraj** (he/him) (BES '21), Environment, Resources and Sustainability, Legal and Regulatory Lead for ARGONETA

**#1**
**in Canada for remote sensing**
*(Academic Ranking of World Universities 2024)*

**STANDOUT**
**environmental studies programs**
*(Maclean's 2025)*

**#2**
**in Ontario for geography**
*(QS World University Subject Rankings 2025)*

**PLANNING**
(E, Bachelor of Environmental Studies) Co-op only

Create livable and equitable cities. Address population growth. Reshape where – and how – people live, work, and get around. Just ask experts in the field: this highly respected program gives you the best preparation for a planning career. The largest of its kind in Canada and recognized internationally, the interdisciplinary School of Planning tackles a range of environmental, social, urban, and regional issues.

● Social Issues in Planning; Transportation Planning and Mobility; Planning to Confront Climate Change

▲ Environmental Planning; Land Use, Transportation, and Infrastructure Planning; Urban Design; Social Planning and Community Development

■ Environmental planner, land use planner, urban designer, transit planner

★ Planning policy analyst, transportation planning co-ordinator, map designer

**SUSTAINABILITY AND FINANCIAL MANAGEMENT / FACULTY OF ENVIRONMENT AND SCHOOL OF ACCOUNTING AND FINANCE** (E, Bachelor of Sustainability and Financial Management) Co-op only

Become a sought-after expert who can measure profits and planetary health. Through this one-of-a-kind program, you'll master accounting and financial management at Waterloo's world-class School of Accounting and Finance and study sustainability in Canada's biggest Faculty of Environment. Plus, you'll get up to 16 months of co-op experience and work toward a Chartered Professional Accountant (CPA) or Chartered Financial Analyst (CFA) designation.

● Global Financial Markets; Sustainability Economics; Enterprise Carbon Accounting

▲ Corporate Sustainability; Government Policy and Financial Markets; Indigenous Entrepreneurship

■ Accountant, financial consultant, sustainability analyst, financial analyst, internal auditor

★ Staff accountant, valuations and modelling co-op, sustainable investing student

# Faculty of Health

## Help people thrive

Join a tight-knit community of students and professors who are dedicated to preventing disease, healing injuries, and optimizing quality of life for all. You'll develop relevant skills and knowledge about physical, societal, and mental health that will prepare you to pursue a variety of health-related career paths, so that you can make a difference in your community and improve the lives of people around you.

uwaterloo.ca/future/health

### Co-op employers

Recent Health co-op students have worked for employers such as

- University Health Network,
- Maple Leaf Sports & Entertainment,
- Sunnybrook Health Sciences Centre,
- Canadian Institute for Health Information, and
- Environment and Climate Change Canada.



**“Health’s unique learning experiences and support gave me an understanding of the human body – and, more importantly, fostered my passion for the whole person that has guided my career in health care.”**

**Dr. Ethan Chan Candler** (he/they)
(BSc ’20), Kinesiology, Resident Doctor,
University of Toronto

**96%**

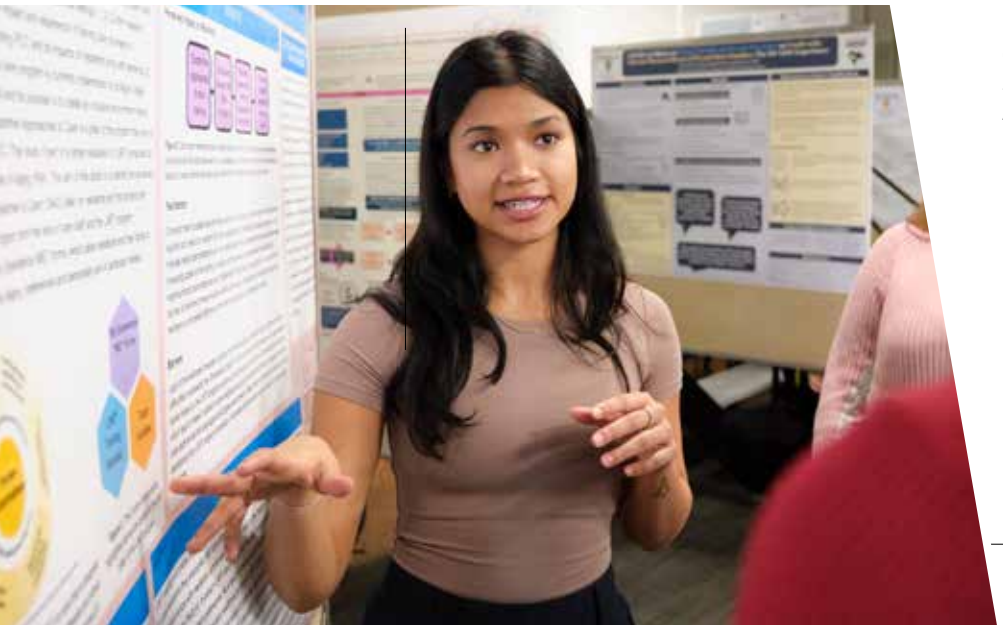
**of Health grads are employed or pursuing further education within a year of graduating**
*(survey of 2018-2023 graduates)*

**TOP 10**

**in Canada for sports-related subjects**
*(QS World University Subject Rankings 2025)*

**“Experiential learning in my classes and the expertise and connections of my professors were instrumental in fostering the critical thinking and networks that helped get me where I am today.”**

**Palvasha Thayani** (she/her)
(BSc ’18), Health Sciences,
Senior Policy and Programs
Advisor for the Ontario
Ministry of Health



LEGEND ✱ Only offered at the University of Waterloo E = Entry-level program: apply directly through the Ontario Universities' Application Centre (OUAC)

# Health programs

## Entry programs

**HEALTH SCIENCES**
(E, Bachelor of Science) Co-op available

Everybody deserves to be healthy, no matter who they are or where they live. Take a "cell to society" approach to human health – learning how biological and social factors impact everything from cancer to addictions and from infectious diseases to aging. Then put your customizable degree to work with real-world projects and community engagement opportunities.

● Global Health; Epidemiology of Communicable Diseases; Principles of Pathobiology

▲ Health Research; Pre-Clinical

■ Health professional (e.g., medical doctor, nurse, occupational therapist, midwife, genetic counsellor), epidemiologist, clinical research co-ordinator, health informatics consultant

★ Clinical research assistant, electronic medical records management assistant, disability case associate, genetic counsellor assistant

**KINESIOLOGY**
(E, Bachelor of Science) Co-op available

If you want to learn the human body inside out, you've found your fit. Kinesiology combines social sciences, biomechanics, anatomy, physiology, nutrition, and neuroscience – and even a first-year anatomy lab with human cadavers – to provide exceptional in-class and hands-on learning. Explore your interests through plenty of research and volunteer opportunities too.

● Regional Human Anatomy; Exercise Physiology and Metabolism; Musculoskeletal Injuries in Sport and Activity

▲ Rehabilitation Sciences

■ Health professional (e.g., medical doctor, physiotherapist, occupational therapist, athletic therapist, kinesiologist, chiropractor), clinical research co-ordinator, exercise physiologist

★ Rehabilitation assistant, health and safety ergonomist, health coach, research assistant

**PUBLIC HEALTH**
(E, Bachelor of Public Health) Co-op available

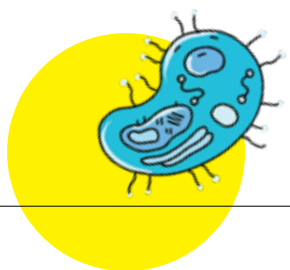
Contribute to the well-being of communities around the world. In this highly adaptable program, you'll explore how social, cultural, political, and environmental factors have an impact on modern-day health challenges. Learn how to battle infectious diseases, write health policies, and decipher life-saving research. Through initiatives from tobacco control to vaccine programs, public health professionals save millions of lives each year.

● Social Determinants of Health; Public Health Nutrition; Principles of Epidemiology

▲ Health Research

■ Community relations officer, public health planner, policy developer, health promotion specialist

★ Junior policy analyst; assistant co-ordinator, volunteer resources; fundraising campaign assistant; strategic engagement and advocacy researcher



## Recreation and Leisure Studies majors

Apply to Recreation and Leisure Studies through OUAC and choose one of three majors (M), which start right in first year.

**RECREATION, LEADERSHIP, AND HEALTH**
(M, Bachelor of Arts) Co-op available

Every time someone visits a music festival, meets friends at the neighbourhood rec centre, or sits in the stands cheering on their favourite team, recreation professionals make it happen. You'll get into the action with hands-on assignments and community-based projects in this innovative program. Graduate with transferable leadership skills that will prepare you for a rewarding career that promotes happiness, health, and brighter communities.

● Experience Design and Delivery; Leading Action for Community Change; Leisure and Well-being

■ Community recreation programmer, teacher, policy researcher, director of parks and recreation

★ Outdoor education facilitator, recreation programmer, marketing event co-ordinator, community inclusion co-ordinator

**SPORT AND RECREATION MANAGEMENT**
(M, Bachelor of Arts) Co-op available

You don't just want to play sports – there's plenty of action behind the scenes too. Merge your love of sport and recreation with business training in class and real-world learning though hands-on assignments, industry-based projects, and community engagement. Whether you're working for a major-league team or launching a sport program for equity-deserving youth, your degree will open doors to a multibillion-dollar industry where you can make your passion your profession.

● The Business of Professional Sport; Innovative Solutions in Recreation and Sport Business; Amateur Sport from Playground to Podium

■ Recreation and events director, marketing and sales director, sport programming manager

★ Sport marketing co-ordinator, e-sports event co-op, tournament operations assistant

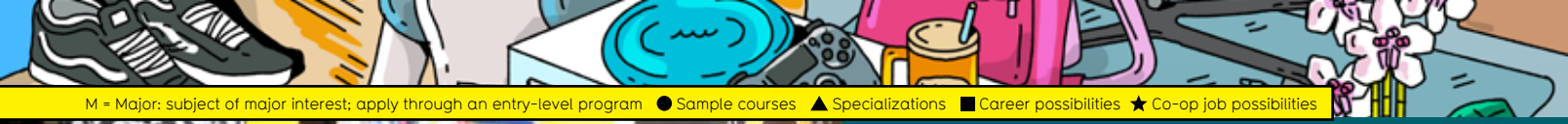
**THERAPEUTIC RECREATION**
(M, Bachelor of Arts) Co-op available

Use recreation to help others. You'll learn to design and facilitate meaningful experiences that cater to the diverse needs of people in health-care and community settings. You'll learn about disability, inclusion, and well-being. Plus, gain hands-on experience through a required 105-hour practicum and a required 560-hour internship.

● Foundations of Therapeutic Recreation Practice; Therapeutic Recreation Facilitation Techniques; Therapeutic Recreation: Physical Disabilities

■ Recreation therapist, occupational therapist, elder life specialist, child life specialist, social worker, inclusion co-ordinator

★ Vocational/residential assistant, community recreation facilitator, recreation therapy assistant



M = Major: subject of major interest; apply through an entry-level program ● Sample courses ▲ Specializations ■ Career possibilities ★ Co-op job possibilities


## Customize your degree

**EVENT MANAGEMENT MINOR**

Calling all event planners! Learn to plan, implement, and assess events while gaining practical project management skills and experience.

**NEUROSCIENCE MINOR**

Develop in-depth knowledge about the brain. From neurons to the nervous system to cognition and behaviour, this minor is a no-brainer!

**PRE-CLINICAL SPECIALIZATION**

Is there a doctor in the house? This specialization is great preparation for entry into medical school and other clinical professional schools.

**Discover more ways to tailor your degree**

uwaterloo.ca/future/customize

**"My professors gave me so many opportunities inside and outside the classroom. From special projects to networking with professionals, they truly cared about me and wanted me to succeed!"**

**Katie Ivancic** (she/her) (BA '23), Recreation and Sport Business (now Sport and Recreation Management), Manager of Partnerships at Scene+

## Health-care professions

Thinking about a health-care profession such as medicine, dentistry, or rehabilitation?

Consider these steps.

1. Research careers in health care and medicine to find what you're most interested in.
2. Review admission requirements for the professional program you're considering.
3. Learn about undergraduate programs that can help you get the requirements for the professional program.
4. Choose an undergraduate program you're passionate about!

Many Health graduates pursue further education in health care.

› 47 per cent of Health Sciences grads continue their education in programs like medicine, public heath, and epidemiology;

› 55 per cent of Kinesiology grads continue their education in programs like physiotherapy, occupational therapy, chiropody, and medicine; and

› some Therapeutic Recreation grads continue their education in occupational therapy. W

*(survey of 2023 graduates)*

uwaterloo.ca/future/careers-health

# Faculty of Mathematics

## Multiply your possibilities

Join a community of people who share your passion for mathematics in the only dedicated Faculty of Mathematics in North America. You'll be immersed in a network of math-loving peers who will help you make the most of your university experience. Through your courses, co-op, and extracurricular activities, you'll apply lessons from the classroom to real-world situations, build your professional network, and graduate ready for an impactful career. From boardrooms to research labs, your education and experiential learning will help you stand out in a competitive global job market.

uwaterloo.ca/future/mathematics

**TOP 20**

**in the world for cybersecurity**

*(EduRank 2025)*

## A computing powerhouse

The David R. Cheriton School of Computer Science is the largest academic computer science research centre in Canada. With access to 15 research areas and deep connections to Canada's growing tech sector, you'll have the chance to pursue cutting-edge research, make your mark building your own entrepreneurial venture, and learn from the best through classes taught by leading experts.

uwaterloo.ca/future/school-computer-science

**TOP 3**
**in Canada for mathematics**
*(QS World University Subject Rankings 2025)*

**#1**
**in Canada for computer science**
*(Tied for #1. Maclean's 2025)*

## Co-op employers

Recent Math co-op students have worked for employers such as

› Google,
› RBC,
› Mastercard,
› PointClickCare, and
› Canadian Tire.

**"My time at Waterloo gave me the resilience and adaptability that still drive me today. Co-op gave me a head start on my career, and my math degree trained me to think critically in any setting – whether that's advising governments or launching a startup."**

**Qasim Farasat** (he/him) (BMath '15), Co-founder of DelayDollars; Co-founder of Institute for Sustainable Development and Cooperation; and Senior Data Consultant at Co-operators General Insurance Company

LEGEND ✻ Only offered at the University of Waterloo E = Entry-level program: apply directly through the Ontario Universities' Application Centre (OUAC)

# Mathematics programs

**BUSINESS ADMINISTRATION (LAURIER) AND COMPUTER SCIENCE (WATERLOO) DOUBLE DEGREE / DAVID R. CHERITON SCHOOL OF COMPUTER SCIENCE**
(E, Bachelor of Business Administration and Bachelor of Computer Science)
Co-op only

Work at the apex of business and technology and tackle complex challenges. You'll earn two degrees in five years from prestigious computer science and business schools. Learn everything from software development to AI at Waterloo and business essentials at nearby Wilfrid Laurier University.

● Designing Functional Programs; Understanding the Business Environment; Computer Organization and Design

■ Business analyst, software engineer, application developer

★ Infrastructure systems designer, trading products quantitative analyst, full-stack developer

**BUSINESS ADMINISTRATION (LAURIER) AND MATHEMATICS (WATERLOO) DOUBLE DEGREE**
(E, Bachelor of Business Administration and Bachelor of Mathematics)
Co-op only

Combine Waterloo's strength in mathematics with the business expertise of Wilfrid Laurier University and earn two prestigious degrees simultaneously. You'll graduate from one of Canada's most technical business programs with analytical and problem-solving skills that will set you apart.

● Financial Mathematics; Management Information Systems; Introduction to Optimization

■ Securities trader, management analyst, corporate strategist

★ Portfolio management intern, investment banking analyst, project manager assistant

**COMPUTER SCIENCE / DAVID R. CHERITON SCHOOL OF COMPUTER SCIENCE** (E, Bachelor of Computer Science or Bachelor of Mathematics)
Co-op available

Earn a degree from one of the world's top computer science schools and develop a broad understanding of systems, networks, algorithms, and software engineering. Customize your degree by adding specializations and minors to match your interests and skills.

● Designing Functional Programs; Data Structures and Data Management; The Social Implications of Computing

▲ Artificial Intelligence; Bioinformatics; Business; Computational Fine Art; Digital Hardware; Game Design; Human-Computer Interaction; Software Engineering

■ Software developer, web developer, business and risk modelling analyst

★ DevOps engineer, game programmer, full-stack developer

**✻ COMPUTING AND FINANCIAL MANAGEMENT / SCHOOL OF ACCOUNTING AND FINANCE AND DAVID R. CHERITON SCHOOL OF COMPUTER SCIENCE** (E, Bachelor of Computing and Financial Management)
Co-op only

Set yourself apart in the fintech market. You'll learn to solve complex problems in the growing, trillion-dollar financial technology industry and gain real-world experience during co-op work terms employed in software development, banking, investment, risk management, and insurance.

● Object-Oriented Software Development; Regression and Forecasting Methods in Finance; Equity Investments

■ Software developer, quantitative analyst, investment banking analyst

★ Global markets quantitative analyst, software developer, investment technology developer

**MATHEMATICS**
(E, Bachelor of Mathematics)
Co-op available

Make math your own at Waterloo. After a foundational first year of studying topics including algebra, calculus, and computer science, you'll choose from 16 majors (M) to focus your studies. Take advantage of study-abroad opportunities and co-op terms, and then use your problem-solving superpowers in today's data-driven marketplace.

**ACTUARIAL SCIENCE**
(M, Bachelor of Mathematics)
Co-op available

Harness the power of mathematics, probability, and statistics to understand market trends, risks, rates, and returns for pension funds, schools, and insurance agencies. Accredited by the Canadian Institute of Actuaries, this top-ranked program streamlines entry into the high-paying field.

● Corporate Finance; Applied Linear Models; Investment Science

▲ Finance; Predictive Analytics

■ Actuarial analyst, e-trading developer, financial analyst

★ Operational risk management analyst, actuarial associate, finance and accounting analyst

**APPLIED MATHEMATICS**
(M, Bachelor of Mathematics)
Co-op available

Apply mathematical concepts and tools to solve real-world problems in this hands-on program. By expanding your knowledge of calculus and differential equations, you'll develop math and computational skills to work in many industries on everything from ocean wave behaviour to the structure of space-time.

● Computational Methods for Differential Equations; Introduction to Mathematical Biology; Calculus of Variations

▲ Biology; Climate and Sustainability; Economics; Engineering; Physics

■ Researcher, software developer, data scientist

★ Research assistant, data analyst, scientific programmer

**APPLIED MATHEMATICS WITH SCIENTIFIC COMPUTING AND SCIENTIFIC MACHINE LEARNING**
(M, Bachelor of Mathematics) Co-op available

Use AI techniques and advanced numerical methods to tackle real-world scientific and engineering challenges. This dynamic program enables you to harness the powers of machine learning and data-driven mathematical modelling to work with complex systems in science, medicine, and technology.

● Introduction to Computational Mathematics; Data-Driven Mathematical Models; Scientific Machine Learning

■ AI research scientist, LLM data scientist, AI engineer

★ Scientific programmer, web full-stack developer, assistant survey methodologist

**BIOSTATISTICS**
(M, Bachelor of Mathematics) Co-op available

Fight illness with a healthy dose of data. This program focuses on clinical, public, and population health statistics with specialized upper-year courses. You'll graduate with strong data-based decision-making skills needed to be part of an effective health-care research team.

● Introduction to Biostatistics; Statistical Methods for Life History Analysis; Applied Linear Models

■ Medical researcher, data analyst, biostatistician

★ Cancer genome data analyst, research associate, medical research assistant

**COMBINATORICS AND OPTIMIZATION**
(M, Bachelor of Mathematics) Co-op available

Master two of math's most powerful techniques. Combinatorics focuses on finite structures, while optimization explores ways to increase operational efficiency. You'll learn to apply these ideas to modern problems through courses in cryptography, graph theory, and linear programming.

● Coding Theory; Algorithm Design and Analysis; Applied Cryptography

■ Developer, operations research analyst, cryptographer

★ Web interface developer, cryptographic security analyst, information systems specialist

**COMPUTATIONAL MATHEMATICS**
(M, Bachelor of Mathematics) Co-op available

Learn how to combine computer science with powerful mathematical models to better understand the world around you, analyze data, and predict trends. Solve real-world problems using the latest technology in the fields of business, engineering, finance, medicine, and science.

● Data Structures and Data Management; Portfolio Optimization Models; Statistical Learning

■ Machine learning data analyst, data science software developer, business systems analyst

★ Data scientist, software quality assurance specialist, software developer

**DATA SCIENCE / DAVID R. CHERITON SCHOOL OF COMPUTER SCIENCE**
(M, Bachelor of Computer Science or Bachelor of Mathematics) Co-op available

Learn to collect, analyze, and find patterns in large data sets. This program combines statistics, math, and computer science with electives from business to public health. With world-renowned tech companies nearby, take advantage of the community's startup culture and industry connections.

● Computer Organization and Design; Data Visualization; Data Structures and Data Management

■ Data scientist, statistician, business analyst

★ Data scientist, IT solution developer, risk management analyst


M = Major: subject of major interest; apply through an entry-level program ● Sample courses ▲ Specializations ■ Career possibilities ★ Co-op job possibilities

**INFORMATION TECHNOLOGY MANAGEMENT**
(M, Bachelor of Mathematics) Co-op available

Bridge the gap between tech and business. Companies depend on technology teams to solve complex business problems, so being fluent in IT and business will make you indispensable to financial institutions and corporations and set you apart.

● Management Information Systems; Electronic Business; Computer Applications in Business: Databases

■ Business systems analyst, web developer, database administrator

★ Business systems analyst, web developer, IT solutions analyst

**MATHEMATICAL ECONOMICS**
(M, Bachelor of Mathematics) Co-op available

Master the math that underpins economies. Learn about the mathematical models that drive economic theory and how to use differential calculus, differential equations, and mathematical optimization to understand and predict economic behaviour. You'll graduate ready for a career with banks, government, or industry, or in academia.

● Introduction to Microeconomics; Advanced Macroeconomics; Differential Equations for Business and Economics

■ Business analyst, econometrician, consultant

★ Employment metrics analyst, enterprise portfolio manager, economic analyst

**MATHEMATICAL FINANCE**
(M, Bachelor of Mathematics) Co-op available

Study equations that include dollar signs and join other elite math students in one of the world's most advanced undergrad finance programs. Study corporate finance, quantitative risk management, statistical forecasting, and more – everything you need for an exciting career in banking and finance.

● Investment Science and Corporate Finance; Forecasting; Real Analysis

■ Controller, treasury manager, investment policy analyst

★ Business application developer, quantitative analyst, portfolio analyst

**MATHEMATICAL OPTIMIZATION**
(M, Bachelor of Mathematics) Co-op available

Find solutions to resource scarcity issues, from streamlining sports team schedules to making factories more efficient. You'll study mathematical modelling in optimization, probability, statistics, and computer science courses and hone your skills with case studies.

● Introduction to Computational Mathematics; Stochastic Simulation Methods; Portfolio Optimization Models

▲ Business; Operations Research

■ Business analyst, information technology architect, risk analyst

★ Internet marketing and analytics intern, business analyst, product manager

**MATHEMATICAL PHYSICS**
(M, Bachelor of Mathematics) Co-op available

Master advanced math to decode everything from the cosmos to quantum computing. You'll study high-level math and physics in one of Canada's most innovative departments of physics. Then choose a career from a wide range of industries, or advance to graduate studies.

● Waves, Electricity and Magnetism; Introduction to Theoretical Mechanics; Quantum Theory

■ Operations specialist, information technology architect, software modeller

★ Defence scientist, design engineer, physics technician

**MATHEMATICAL STUDIES**
(M, Bachelor of Mathematics) Co-op available

Choose your own adventure! You're looking for a degree that covers the full spectrum of math. We're one of the world's top centres for math and computer science. Together, we're a logical match! Waterloo's most flexible math program allows you to study algebra, calculus, combinatorics, computer science, number theory, statistics, and more.

● Mathematical Discovery and Invention; Introduction to Mathematical Biology; Coding Theory

■ Software or database specialist, banking executive, public service analyst

★ Math tutor, research assistant, web developer

**MATHEMATICS/TEACHING**
(M, Bachelor of Mathematics) Co-op only

Inspire the next generation of math lovers. Combine your math, statistics, and computer science courses with eight months of classroom experience – more than any other Bachelor of Education preparatory program in Canada – before you apply to teachers' college.

● Introduction to Mathematics Education; Educational Psychology; Mathematical Discovery and Invention

■ Teacher, online learning consultant, instructional media developer

★ Math tutor, mathematics teaching co-op, senior mathematics teaching co-op

**PURE MATHEMATICS**
(M, Bachelor of Mathematics) Co-op available

Go way beyond basic arithmetic to study the boundary of math and pure reason, exploring the "how" and "why" of math. You'll cover the spectrum of mathematics – including algebra, number theory, analysis, geometry, and logic – while gaining valuable problem-solving skills.

● Fields and Galois Theory; Applied Complex Analysis; Differential Geometry

■ Software model developer, operations analyst, researcher and academic

★ Instructional support assistant, research assistant, machine learning researcher

**STATISTICS**
(M, Bachelor of Mathematics) Co-op available

Earn a highly significant degree at one of the world's top centres for statistics. Learn about research methods and statistical applications to help engineers develop better AI technologies, researchers evaluate medical treatments, governments shape effective policies, and more.

● Probability Models for Business and Accounting; Sampling and Experimental Design; Applied Linear Models

■ Biostatistician, business intelligence specialist, software quality analyst

★ Data analyst, data science co-op, senior data scientist

**MATHEMATICS/BUSINESS ADMINISTRATION**
(E, Bachelor of Mathematics) Co-op available

Unlock the dynamic potential of mathematics and succeed in the world of business. A blend of courses from Waterloo's Faculty of Mathematics and Wilfrid Laurier University's Lazaridis School of Business and Economics prepares the best and brightest for top-paid co-op work terms and careers.

● Computer Applications in Business: Databases; Corporate Finance; Principles of Marketing

■ Operations manager, risk modelling analyst, investor relations specialist

★ Market research and insights co-op, supply chain analyst, business systems analyst

**MATHEMATICS/CHARTERED PROFESSIONAL ACCOUNTANCY / FACULTY OF MATHEMATICS AND SCHOOL OF ACCOUNTING AND FINANCE** (E, Bachelor of Mathematics) Co-op only

Learn how to crunch the numbers and earn a Bachelor of Mathematics as you prepare for a career as a Chartered Professional Accountant (CPA). You'll acquire a strong background in the mathematical field of your choice, along with focused studies in accounting, economics, and business.

● Introduction to Financial Accounting; Cost Management Systems; Corporate Finance

▲ Data Analytics; Finance

■ Accountant, controller, auditor

★ Junior accounting analyst, business analyst, staff tax accountant

**MATHEMATICS/FINANCIAL ANALYSIS AND RISK MANAGEMENT** (E, Bachelor of Mathematics) Co-op available

Fast-track your journey toward obtaining a Chartered Financial Analyst (CFA) or Professional Risk Manager (PRM) designation with a tight-knit class of students. You'll work alongside dedicated classmates to prepare for required accreditation examinations and build your professional network.

● Computational Methods in Business and Finance; Investment Science and Corporate Finance; Mathematics of Financial Markets

▲ Chartered Financial Analyst; Professional Risk Management

■ Financial analyst, risk analyst, investment analyst

★ Risk analyst, finance operations co-op, credit risk analyst

**SOFTWARE ENGINEERING**
See the Faculty of Engineering section (page 25) for details.

# Faculty of Science

## A place of discovery and exploration

At Waterloo, science isn't just something you learn – it's something you do. Here, you'll dive into hands-on experiences that bring science to life. Earn credits beyond the classroom and around the world – explore Costa Rica's volcanoes, observe the universe through the reflecting telescope in our rooftop observatory, or work with cutting-edge lab technology to analyze matter at the molecular level. The Faculty of Science will challenge you to think, problem-solve, innovate, and maybe even spark discoveries the world hasn't seen yet! Get ready to make the world your laboratory.

uwaterloo.ca/future/science

**$56M+**

**in research funding helps fund meaningful research jobs for students**

### Co-op employers

Recent Science co-op students have worked for employers such as

- Swap Robotics,
- Microsoft Canada,
- Herzberg Astronomy and Astrophysics Research Centre at the National Research Council Canada (NRC),
- Odette Cancer Centre, and
- University Health Network (UHN).

## Be more than a student. Be IDEAL.

Learn beyond lectures and labs to gain skills and experiences that set you apart. The IDEAL Scholar Program recognizes your achievements in Innovation, Discovery, Engagement, Application, and Leadership – the qualities that truly matter to industry and academia. In Science, you'll push boundaries through entrepreneurship, research, hands-on labs, fieldwork, co-op, and global engagement.

## Your future in Science starts here

You'll have the flexibility to shape your own path and achieve your goals while exploring your future as a scientist. Go beyond just biology, chemistry, or physics – explore exciting combinations of those fields or branch out into unique, one-of-a-kind programs to customize your degree to your interests. Whether you want to pursue graduate research, a professional program, or a career in industry, we have the pathways, tools, and direct support to you get there.

**"My program gave me a strong foundation for medical school, from rigorous coursework to invaluable mentorship. The Waterloo Science partnership streamlined my path, making the transition seamless and financially supported. It's a fantastic pathway for aspiring doctors."**

**Justen Wilmot** (he/him) (BSc '24), Biomedical Sciences, Minor in Medical Physiology, MD student at the Saba University School of Medicine

**Learn about our medical school pathways**

uwaterloo.ca/future/med-school-pathways

**#1**

**in Canada for physics**
*(Academic Ranking of World Universities 2024)*

**145+**

**hands-on labs in state-of-the-art facilities and field courses across the planet**

LEGEND ✻ Only offered at the University of Waterloo E = Entry-level program: apply directly through the Ontario Universities' Application Centre (OUAC)

# Science programs

## Life Sciences majors

Apply to Life Sciences through OUAC and start your selected major (M) on day one.

### BIOCHEMISTRY

(M, Bachelor of Science) Co-op available

Study the chemistry of life. Apply chemical and biological principles to processes while shedding light on living systems at the cellular and molecular levels. You'll learn about human metabolism, how proteins, carbohydrates and DNA affect living organisms, and how to manufacture and study biomaterials.

● Fundamentals of Metabolism; Intro Analytical Chemistry; Genetics

▲ Biotechnology

■ Toxicologist, biomaterials researcher, health-care professional

★ Chemical laboratory technician, aquatic toxicity testing technologist, food technologist

### BIOLOGY

(M, Bachelor of Science) Co-op available

Study life: it's in your DNA. With more than 80 courses available – including labs and fieldwork – this program gives you lots of opportunity to explore the functions of living organisms, where they come from, and how they evolve. You can also choose our Bioinformatics Option, combining biological analysis with computer science.

● Fundamentals of Microbiology; Principles of Human Physiology; Diversity of Life

■ Biologist, veterinarian, environmental consultant, physician, pharmacist, optometrist

★ Quality assurance assistant, sustainability co-ordinator, field and lab assistant, genetic counselling assistant

### BIOMEDICAL SCIENCES

(M, Bachelor of Science) Regular only

Paging future doctors – and dentists and chiropractors and other health-care professionals. This flexible program provides the foundation and experience required to succeed in virtually any professional health program. Plus, it gives you room to add a minor or pursue a variety of personal interests to round out your degree.

● Regional Human Anatomy; Introductory Developmental Biology and Embryology; Principles of Molecular Biology

■ Dentist, optometrist, pharmacist, physician, veterinarian

### PSYCHOLOGY

(M, Bachelor of Science) Co-op available

Explore the science of behaviour and the mind while connecting the physiological and biological processes that underlie neuroscience. Study how psychology uses scientific methods to gain insights into the mind and behaviour, with an emphasis on the biological processes that enable cognitive function. Gain hands-on skills in labs and seek to understand the scientific foundations of psychology as you work toward your Honours Bachelor of Science degree.

● Organizational Psychology; Advanced Data Analysis; Natural Science Advanced Research Methods Topics

■ Neuroscientist, child psychologist, psychiatrist, clinical psychologist

★ Health promotion assistant, health coach, research analyst

## Physical Sciences majors

Apply to Physical Sciences through OUAC and start your selected major (M) on day one.

### CHEMISTRY

(M, Bachelor of Science) Co-op available

Fire up the Bunsen burners in one of Canada's top chemistry programs. Study the composition, structure, and properties of matter while creating new products, safer medications, and alternative energy sources. This program is accredited by the Canadian Society for Chemistry and the Chemical Institute of Canada.

● Multi-Component Analysis; Structure and Bonding; Introductory Quantum Mechanics

▲ Computational Chemistry

■ Analytical chemist, chemistry patents agent, forensic scientist

★ Science and math online expert, laboratory assistant, R&D analytical chemist

### MEDICINAL CHEMISTRY

(M, Bachelor of Science) Co-op only

Explore the exciting science of drug discovery. You'll take courses in computer-aided drug design and gain valuable work experience in places like pharmaceutical companies and hospitals. By graduation, you'll understand how to design, synthesize, and evaluate potential medications – ready to create the life-saving treatments of tomorrow.

● Chemical Kinetics and Statistical Mechanics; Transition Element Compounds and Inorganic Materials; Fundamentals of Metabolism

■ Medicinal chemist, research chemist, synthetic chemist

★ Pharmaceutical research and development assistant, discovery analyst, quality control assistant analyst

### MATERIALS AND NANOSCIENCES

(M, Bachelor of Science) Co-op available

Tiny subject matter. Huge opportunities. Discover how to manipulate individual atoms and molecules, applying chemistry and physics at the nanoscale. There's no better place to learn than in Canada's Quantum Valley. You'll graduate with the tools and knowledge to work at the forefront of innovation, in fields like renewable energy and nanomedicine.

● Materials and Nanosciences in the Modern World; Chemistry and the Solid State; Biomaterials

■ Materials scientist, nanotechnologist, materials process specialist

★ Materials lab associate, nanoscale optics and photonics research assistant, product development assistant

### PHYSICS

(M, Bachelor of Science) Co-op available

Your curious mind matters to us. As Canada's top-ranked physics program, we offer a wide range of courses in applied physics, astrophysics, biophysics, chemical physics, mathematical physics, and quantum computing. Our professors have won the Nobel Prize and taken the first image of a black hole. How will you use your advanced problem-solving skills?

● Thermal Physics; Statistical Mechanics; Electricity and Magnetism

■ Physicist, research and development scientist, analyst, teacher

★ Math tutor, scientific programmer, research assistant, analytics research assistant, modelling support technician

### PHYSICS AND ASTRONOMY

(M, Bachelor of Science) Co-op available

Aim for a career with astronomical possibilities. Learn from award-winning professors who are studying some of the most fascinating phenomena in the universe: black holes, the Big Bang, dark matter, and more. It's perfect preparation for careers in optics and space science or for graduate studies in topics such as astrophysics and gravitation.

● Introduction to the Universe; Geometrical and Physical Optics; Galaxies

■ Astronomer, aerospace scientist, remote sensing scientist

★ RADARSAT operations support assistant, sun-earth development program assistant, science and math tutor, undergraduate research assistant, software development testing co-ordinator

### BIOLOGICAL AND MEDICAL PHYSICS

(M, Bachelor of Science) Co-op available

Combine physics, biology, and chemistry to explore the human body like never before! You'll study medical imaging, radiation therapy, and biomechanics – preparing for careers in health care and research. Gain hands-on lab experience and discover the science behind life-saving technology.

● Organismal and Evolutionary Ecology; Environmental Toxicology; Biostatistics and Experimental Design

■ Medical physicist, physician, biophysicist

★ Medical physics assistant, computational biophysics ultrasound image reconstruction specialist, X-ray diffraction technology medical device design assistant

### MATHEMATICAL PHYSICS

(M, Bachelor of Science) Co-op available

Unravel the universe with Mathematical Physics! Apply your love of math to quantum mechanics, relativity, and astrophysics. Solve complex problems, explore deep theories, and push the boundaries of physics. Graduate with elite problem-solving skills for cutting-edge research, tech careers, or grad school.

● Linear Algebra for Honours Mathematics; Quantum Physics; Classical Mechanics and Special Relativity

■ Theoretical physicist, data scientist, quantitative analyst

★ Design engineer – quality assurance, project engineering assistant, science math peer tutor, application programmer, quality assurance analyst

### EARTH SCIENCES

(M, Bachelor of Science) Co-op available

Launch a career that rocks. Explore the world under your feet in close-knit classes and through field experiences led by professors known internationally for their geological and water research. You'll graduate ready to develop meaningful environmental protection plans, predict natural disasters, advance health standards for water, and more.

● Physical Hydrogeology; Petrography; Mineralogy

▲ Geology; Geophysics; Hydrogeology

■ Hydrogeologist, geologist, geophysicist

★ Geophysical data processor, soil and environmental quality assistant, groundwater technician

M = Major: subject of major interest; apply through an entry-level program ● Sample courses ▲ Specializations ■ Career possibilities ★ Co-op job possibilities

## More than science

**HONOURS SCIENCE**
(E, Bachelor of Science) Regular only

Craft your own degree by taking courses that fit your interests, or align your labs and lectures to the requirements of the professional school of your choice. Whether you have a specific science career goal in mind or you just love science but don't want to devote yourself to a single discipline, this is the right program for you.

● Fundamentals of Microbiology; Modern Physics; Advanced Geochemistry

■ Physician, optometrist, pharmacist, genetic counsellor, teacher

**ENVIRONMENTAL SCIENCES**
(E, Bachelor of Science) Co-op available

Tackle real-world issues like climate change, pollution, and resource use while exploring how Earth's systems interact. Learn how human activities impact sustainability, biodiversity, and water quality. Gain hands-on experience through fieldwork and study-abroad opportunities that connect you with nature and your community.

● Organismal and Evolutionary Ecology; Environmental Toxicology; Biostatistics and Experimental Design

▲ Ecology; Geoscience; Water Science

■ Geoscientist, ecologist, environmental consultant

★ Water treatment project assistant, field technician, soil and environmental quality assistant

**SCIENCE AND AVIATION**
(E, Bachelor of Science) Regular only

Is your head in the clouds? Earn a Bachelor of Science degree and your integrated Airline Transport Pilot Licence through the largest university aviation program in Canada. Customize your studies to include courses from a range of scientific disciplines, such as physics or earth sciences. Whichever courses you choose, you'll graduate with more than 225 flight hours.

● Earth from Space Using Remote Sensing; Physical Climatology; Human Factors in Aviation

■ Pilot, flight training instructor, aerial surveyor

**SCIENCE AND BUSINESS**
(E, Bachelor of Science) Co-op available

Blend science and business for a career at the forefront of innovation. This unique degree combines biology, chemistry, physics, or earth sciences with business disciplines like marketing, law, and entrepreneurship. Gain the skills to launch your own ventures or drive industry breakthroughs.

● Business Law; Entrepreneurship and the Creative Workplace; General Chemistry

▲ Biochemistry; Biology; Biotechnology

■ Medical information specialist, biotechnology accounts manager, project manager, program analyst

★ Operations co-ordinator, business analyst, product manager, sustainability project analyst

**SCIENCE AND FINANCIAL MANAGEMENT / FACULTY OF SCIENCE AND SCHOOL OF ACCOUNTING AND FINANCE** (E, Bachelor of Science and Financial Management) Co-op only

Tap into the power of science and financial management to solve the world's biggest challenges. This program lets you explore the science that excites you while learning how to fund, scale, and bring your ideas to life. Gain real-world experience through co-op and work toward a Chartered Professional Accountant (CPA) or Chartered Financial Analyst (CFA) designation, so you can drive breakthroughs in fast-paced industries that bridge the gap between science and business.

● Financial Analysis and Planning; Accounting Information Systems; Corporate Taxation; Molecular Biotechnology

▲ Biotechnology; Earth and Water Science; Physics of Systems and Energy; Business Analytics; Financial Markets; Professional Accountant

■ Accountant, financial manager, portfolio manager

★ Staff accountant, financial analyst, forensics consultant, tax consultant

## Professional degrees

**MEDICAL SCIENCES (WATERLOO) AND DOCTOR OF MEDICINE (ST. GEORGE'S)** (E, Bachelor of Medical Sciences and Doctor of Medicine) Regular only

Your fast track to a medical career starts here! The first of its kind in Canada, this program is a six-year pathway from high school to your Doctor of Medicine (MD). After two years of Medical Sciences at Waterloo, you'll proceed to clinical training at St. George's University (SGU) in the Caribbean. Earn both a Bachelor of Medical Sciences and an MD. Apply directly through SGU. Program subject to formal approval. Visit uwaterloo.ca/future/sgu for more details.

● Human Anatomy; Human Physiology; Communication for Health Professionals; Introduction to Psychopathology

■ Physician, general practitioner, surgeon

**OPTOMETRY / SCHOOL OF OPTOMETRY AND VISION SCIENCE** (E, Doctor of Optometry) Regular only

Set your sights on a career in vision health. After three years in an accredited Bachelor of Science program, you can apply to Canada's only English-language Doctor of Optometry program. Learn about ocular health and disease, optics, and vision, while applying your knowledge in clinical settings. Questions? Email optometry.admissions@uwaterloo.ca.

● Diseases of the Eye; Practice Management; Neurophysiology of Vision

■ Registered optometrist; careers in private practice, academia, and industry

**PHARMACY / SCHOOL OF PHARMACY**
(E, Doctor of Pharmacy) Co-op only

A prescription for career success! After two years in a Bachelor of Science or other approved post-secondary program, you can apply to Canada's only co-op pharmacy program. Enhance your classroom learning with paid work terms and clinical rotations, developing skills in community practice, hospitals, or family health teams. Questions? Email pharmacy@uwaterloo.ca.

● Integrated Patient Focused Care; Professional Practice; Pharmaceutics

■ Registered pharmacist; work in community practice, hospitals, and family health teams

★ Patient care co-ordinator; reconciliation pharmacy student; corporate head office, government, advocacy, and special projects assistant

**"There's no substitute for the professional development skills that are garnered through co-op! 'Soft skills' like navigating corporate dynamics, exerting executive presence, and working collaboratively to achieve a strategic goal can often be more challenging than acing an organic chemistry final. Co-op will transform the way you show up in your career and is a rare and indispensable program."**

**Dr. Cicely Shillingford** (she/her) (BSc '15), Biochemistry, Associate Vice President, Product Development, Innovation, and Regulatory at amika

# Ontario
## admission requirements

Admission averages depend on the number of applications we receive and the number of spaces available. The ranges listed below are based on previous years. You must have a minimum of six Grade 12 U or M level courses (excluding co-op) and the required course(s) for your program to be considered on the basis of your Ontario Secondary School Diploma. Required courses will be included in the calculation of your admission average. W

**NOTES**

**AIF**: Admission Information Form – submit to tell us who you are outside of academics.

† Choose your major: see lists on pages 16-41. Some majors are competitive and require an application after first year.

Visit our website for the most up-to-date admissions information.

**uwaterloo.ca/future/admissions**

**ARTS**

| Program/minimum admission average/additional requirements | Required courses |
|---|---|
| **Accounting and Financial Management** Mid-80s. | Any Grade 12 U English (min. 75%); Advanced Functions (min. 75%); Calculus and Vectors (min. 75%) |
| **Global Business and Digital Arts** Low 80s. | Any Grade 12 U English (min. 75%) |
| **Honours Arts**† (Waterloo, St. Jerome's), **Honours Arts and Business**† (Waterloo, St. Jerome's). **Majors:** Anthropology; Classical Studies (2 majors); Communication Studies (2 majors); Economics; English (4 majors); Fine Arts (2 majors); French; Gender and Social Justice; History; Legal Studies; Liberal Studies; Medieval Studies; Music; Peace and Conflict Studies; Philosophy; Political Science; Psychology; Religion, Culture, and Spirituality; Sexualities, Relationships, and Families; Social Development Studies; Sociology; Theatre and Performance. | Any Grade 12 U English (min. 70%) |

**CFM**

| Program/minimum admission average/additional requirements | Required courses |
|---|---|
| **Computing and Financial Management** Low to mid-90s. AIF required. | Any Grade 12 U English (min. 75%); Advanced Functions; Calculus and Vectors; one other Grade 12 U course |

**ENGINEERING**

| Program/minimum admission average/additional requirements **AIF required for all Engineering programs, except Architecture** | Required courses |
|---|---|
| **Architecture** Mid-80s. Qualified applicants will be invited to complete an English précis-writing exercise and to submit a portfolio. | English (ENG4U – min. 75%); Advanced Functions (min. 70%); Calculus and Vectors (min. 70%); Physics (min. 70%) |
| **Architectural, Chemical, Civil, Environmental, Geological, Management, Nanotechnology** Mid- to high 80s. **Biomedical, Computer, Electrical, Mechanical, Mechatronics, Systems Design** High 80s to low 90s. AIF required. Online video interview required for Faculty scholarships and strongly recommended for admission to all programs. Individual selection may vary. | Advanced Functions (min. 70%); Calculus and Vectors (min. 70%); Chemistry (min. 70%); English (ENG4U – min. 70%); Physics (min. 70%) |

**SOFTWARE ENGINEERING**

| Program/minimum admission average/additional requirements | Required courses |
|---|---|
| **Software Engineering** Low to mid-90s. AIF and experience developing well-structured modular programs is required. Online video interview required. Individual selection may vary. | Advanced Functions (min. 70%); Calculus and Vectors (min. 70%); Chemistry (min. 70%); English (ENG4U – min. 70%); Physics (min. 70%) |

**ENVIRONMENT**

| Program/minimum admission average/additional requirements | Required courses |
|---|---|
| **Climate and Environmental Change** High 70s. | English (ENG4U – min. 70%); any Grade 12 U Mathematics (min. 70%); one of Chemistry or Physics |
| **Environment and Business; Environment, Resources and Sustainability; Geography and Environmental Management** High 70s. | Any Grade 12 U English (min. 70%) |
| **Geography and Aviation** Mid-80s. AIF required. Program briefing session and Transport Canada Category 1 Medical Certification required. For Permanent Residents and international students, the Aviation Language Proficiency Demonstration (ALPD) is also required. | English (ENG4U – min. 70%); any Grade 12 U Mathematics (min. 70%) |
| **Geomatics** High 70s. | Any Grade 12 U English (min. 70%); any Grade 12 U Mathematics (min. 70%) |
| **Planning** Low 80s. | Any Grade 12 U English (min. 75%) |

NOTES

Are you an Ontario student taking International Baccalaureate (IB) courses? Admission to Waterloo is based on your Ontario Grade 12 U and M courses. If you're taking IB Math, your school will convert this course to MCV4U, MHF4U, and/or MDM4U. You can take any IB Math course and be eligible for admission as long as you receive Ontario credits for both MCV4U and MHF4U.

**View admission requirements**
for other systems of study
uwaterloo.ca/future/requirements

## Programs requiring previous university study

**Optometry** Minimum overall university average of 75%. See School of Optometry and Vision Science website for required courses. Completion of at least three full years of university-level science with specific course requirements, Optometry Admission Test (OAT), Admission Information Form (AIF), CASPer test, interview, and optometrist and character references.

**Pharmacy** Minimum overall university average of 75%. See School of Pharmacy website for required courses. Completion of at least two years of university or post-secondary studies with specific course requirements, Admission Information Form (AIF), reference, CASPer test, and interview. High school students whose admission average is at least 90% may qualify for Conditional Admission to Pharmacy (CAP) status. See CAP website for more information.

**Social Work** Minimum 70% average in university studies. This program is offered through Renison University College. Three- or four-year Bachelor of Arts (or equivalent) from an accredited institution with a minimum of six units in the social sciences, including seven prerequisite courses from the Renison curriculum or equivalents. Required courses and other admission details are available online.

### HEALTH

| Program/minimum admission average/additional requirements | Required courses |
|---|---|
| **Health Sciences** Mid-80s regular, High 80s co-op. | Any Grade 12 U English (min. 70%); Biology (min. 70%); Chemistry (min. 70%); any Grade 12 U Mathematics (min. 70%) |
| **Kinesiology** Low 80s regular, Mid-80s co-op. | Any Grade 12 U English (min. 70%); any two of the following: Biology (min. 70%), Chemistry (min. 70%), or Physics (min. 70%); and one of the following: Advanced Functions (min. 70%) or Calculus and Vectors (min. 70%) |
| **Public Health** Low 80s regular, Mid-80s co-op. | Any Grade 12 U English (min. 75%); any Grade 12 U Mathematics (min. 70%) |
| **Recreation and Leisure Studies**† Low 80s. **Majors:** Recreation, Leadership, and Health; Sport and Recreation Management; Therapeutic Recreation. | Any Grade 12 U English (min. 70%) |

### MATHEMATICS

| Program/minimum admission average/additional requirements ****AIF required for all Mathematics programs.** Participation in the Euclid Contest and Canadian Senior Mathematics Contest is strongly recommended. Individual selection may vary.** | Required courses |
|---|---|
| **Business Administration (Laurier) and Computer Science (Waterloo) Double Degree** Low to mid-90s. AIF required. | Advanced Functions; Calculus and Vectors; any Grade 12 U English; one other Grade 12 U course |
| **Business Administration (Laurier) and Mathematics (Waterloo) Double Degree** Mid- to high 80s. AIF required. | |
| **Computer Science**† Low to mid-90s. AIF required. **Majors:** Computer Science, Data Science. | |
| **Mathematics**† Mid-80s. AIF required. **Majors:** Actuarial Science, Applied Mathematics, Applied Mathematics with Scientific Computing and Scientific Machine Learning, Biostatistics, Combinatorics and Optimization, Computational Mathematics, Data Science, Information Technology Management, Mathematical Economics, Mathematical Finance, Mathematical Optimization, Mathematical Physics, Mathematical Studies, Mathematics/Teaching, Pure Mathematics, Statistics. | |
| **Mathematics/Business Administration** Mid-80s. AIF required. **Major:** Information Technology Management. | |
| **Mathematics/Chartered Professional Accountancy** Mid-80s. AIF required. | |
| **Mathematics/Financial Analysis and Risk Management** Mid-80s. AIF required. | |

### SCIENCE

| Program/minimum admission average/additional requirements | Required courses |
|---|---|
| **Science and Financial Management** Low to mid-80s. | English (ENG4U – min. 70%); Advanced Functions (min. 70%); Calculus and Vectors (min. 70%); any two of the following: Biology, Chemistry, Earth and Space Science, Mathematics of Data Management, or Physics |
| **Environmental Sciences** Low 80s. | |
| **Honours Science** Low 80s. | |
| **Life Sciences**† Low 80s. **Majors:** Biochemistry, Biology, Biomedical Sciences, Psychology. | |
| **Physical Sciences**† Low 80s. **Majors:** Biological and Medical Physics, Chemistry, Earth Sciences, Materials and Nanosciences, Mathematical Physics, Medicinal Chemistry, Physics, Physics and Astronomy. | |
| **Science and Business** Low 80s. | |
| **Science and Aviation** Mid-80s. AIF required. Program briefing session and Transport Canada Category 1 Medical Certification required. For Permanent Residents and international students, the Aviation Language Proficiency Demonstration (ALPD) is also required. | |

### SFM

| Program/minimum admission average/additional requirements | Required courses |
|---|---|
| **Sustainability and Financial Management** Mid-80s. | Any Grade 12 U English (min. 75%); Advanced Functions (min. 75%); Calculus and Vectors (min. 75%) |

# Out-of-province

## admission requirements

uwaterloo.ca/future/admissions

NOTES

Complete admission requirements, recommendations, and documents are available online. Advanced Placement courses may be substituted for required courses. Some programs may require higher admission averages based on the competition for available spaces. The admission averages below are based on last year's averages and may change. **AIF**: Admission Information Form

*Final grade at least 70%
**Final grade at least 75%
†Choose your major: see lists on pages 16-41. Some majors are competitive and require an application after first year.

| Program/minimum admission average/ additional requirements | Alberta, Northwest Territories, and Nunavut | British Columbia and Yukon | Manitoba | New Brunswick |
|---|---|---|---|---|
| **ARTS** | | | | |
| **Accounting and Financial Management** Mid-80s. | English Language Arts 30-1**; Mathematics 30-1**; Mathematics 31** | One of English Studies 12** or English First Peoples 12**; Pre-Calculus 12**; Calculus 12** or AP Calculus** | English 40S**; Pre-Calculus Mathematics 40S**; one of Calculus 45A**, 45S**, or AP Calculus** | English 121** or 122**; Pre-Calculus 120B**; Calculus 120** |
| **Global Business and Digital Arts** Low 80s. | English Language Arts 30-1** | One of English Studies 12** or English First Peoples 12** | English 40S** | English 121** or 122** |
| **Honours Arts**† (Waterloo, St. Jerome's), **Honours Arts and Business**† Low 80s. | English Language Arts 30-1* | One of English Studies 12* or English First Peoples 12* | English 40S* | English 121* or 122* |
| **COMPUTING AND FINANCIAL MANAGEMENT – AIF required** | | | | |
| **Computing and Financial Management** Low to mid-90s. AIF required. | Mathematics 30-1; Mathematics 31; English Language Arts 30-1** | One of English Studies 12** or English First Peoples 12**; Pre-Calculus 12; Calculus 12 or AP Calculus | Pre-Calculus Mathematics 40S; one of Calculus 45A, 45S, or AP Calculus; English 40S** | Pre-Calculus 120B; Calculus 120; English 121** or 122** |
| **ENGINEERING – AIF required for all Engineering programs, except Architecture** | | | | |
| **Architecture** Mid-80s. Qualified applicants will be invited to complete an English précis-writing exercise and to submit a portfolio. | English Language Arts 30-1**; Mathematics 30-1*; Mathematics 31*; Physics 30* | One of English Studies 12** or English First Peoples 12**; Pre-Calculus 12*; Calculus 12* or AP Calculus*; Physics 12* | English 40S**; Pre-Calculus Mathematics 40S*; one of Calculus 45A*, 45S*, or AP Calculus*; Physics 40S* | English 121** or 122**; Pre-Calculus 120B*; Calculus 120*; Physics 121* or 122* |
| **Architectural, Chemical, Civil, Environmental, Geological, Management, Nanotechnology** Mid- to high 80s. **Biomedical, Computer, Electrical, Mechanical, Mechatronics, Systems Design** High 80s to low 90s. AIF required. Online video interview required for Faculty scholarships and strongly recommended for admission to all programs. Individual selection may vary. | Mathematics 30-1*; Mathematics 31*; Chemistry 30*; English Language Arts 30-1*; Physics 30* | One of English Studies 12* or English First Peoples 12*; Pre-Calculus 12*; Calculus 12* or AP Calculus*; Chemistry 12*; Physics 12* | Pre-Calculus Mathematics 40S*; one of Calculus 45A*, 45S*, or AP Calculus*; Chemistry 40S*; English 40S*; Physics 40S* | Pre-Calculus 120B*; Calculus 120*; Chemistry 121* or 122*; English 121* or 122*; Physics 121* or 122* |
| **SOFTWARE ENGINEERING – AIF required, experience developing well-structured modular programs required** | | | | |
| **Software Engineering** Low to mid-90s. AIF required. Experience developing well-structured modular programs required. Online video interview required. Individual selection may vary. | Mathematics 30-1*; Mathematics 31*; Chemistry 30*; English Language Arts 30-1*; Physics 30* | One of English Studies 12* or English First Peoples 12*; Pre-Calculus 12*; Calculus 12* or AP Calculus*; Chemistry 12*; Physics 12* | Pre-Calculus Mathematics 40S*; one of Calculus 45A*, 45S*, or AP Calculus*; Chemistry 40S*; English 40S*; Physics 40S* | Pre-Calculus 120B*; Calculus 120*; Chemistry 121* or 122*; English 121* or 122*; Physics 121* or 122* |

**Alberta, Northwest Territories, and Nunavut** High school diploma with five academic courses at the 30 or 31 level. For English Language Arts 30-1, we'll use only the final blended grade (in-class and exam mark). Arrange to have your school send us your official transcripts showing completed and current courses. Physical Education 30 and Career and Technology Studies courses are not acceptable academic courses. For admission purposes, two three-credit 30-level academic courses may be considered equivalent to one five-credit 30-level academic course.

**British Columbia and Yukon** High school diploma with six courses at the Grade 12 academic level, including all required courses. Academic subjects do not include courses from the Applied Design, Skills, and Technologies (ADST) curriculum, with the exception of Economics 12 and Financial Accounting 12. While B.C. will automatically send us your marks electronically, they will not arrive in time for our admissions decisions. Applicants will receive instructions by email on how to submit unofficial marks.

**Manitoba** High school diploma with five academic courses at the 40 level or higher. For programs requiring English 40S, Language and Technical Communication 40S will not be accepted.

**New Brunswick** High school diploma with five academic courses at the Grade 12, 120, 121, or 122 level.

**Newfoundland and Labrador** High school diploma with six academic courses at the 3200 level.

**Nova Scotia** High school diploma with five academic or advanced courses at the Grade 12 level.

**Prince Edward Island** High school diploma with five academic or advanced courses at the 611 or 621 level.

**Quebec (CEGEP)** One year of CEGEP with a minimum of 12 semestered academic courses. CEGEP admission averages may differ from high school admission averages. Transfer credits may be granted for most programs: **uwaterloo.ca/future/transfer**. With new changes to CEGEP course codes, please refer to our website for the most up-to-date admissions information: **uwaterloo.ca/future/requirements**.

**Saskatchewan** High school diploma with five academic courses at the 30 level.

**International Baccalaureate (IB)** Six total IB courses; at least three must be HL. Total scores exclude Diploma Points. Subjects required for admission to specific programs should be HL whenever possible. Where there are more than three prerequisite subjects, SL courses will be accepted. For programs listing HL or SL English A, HL English B with min. 5 will be accepted. For programs listing HL or SL Math: Analysis and Approaches, HL Applications and Interpretations will not be accepted unless stated otherwise. SL Applications and Interpretations will not be accepted for any program. **NOTES: HL =** Higher Level; **SL** = Standard Level; **min. =** minimum IB final grade 1–7; **total =** overall grade totals, not including Diploma Points.

| Newfoundland and Labrador | Nova Scotia | Prince Edward Island | Quebec (CEGEP) | Saskatchewan | International Baccalaureate |
|---|---|---|---|---|---|
| | | | | | |
| English 3201**; one of Advanced Mathematics 3201** or 3200**; one of Mathematics 3208** or AP Calculus** | English 12 Academic** or English 12 African Heritage**; Pre-Calculus 12**; Calculus 12** | English 621A**; Mathematics 611B**; Mathematics 621B** | English 603** or 604**; two of Linear Algebra**, Calculus I**, or Calculus II** | English Language Arts A30** and B30**; Pre-Calculus 30**; Calculus 30** or AP Calculus** | HL or SL English A, min. 4, or HL English B, min. 5; Mathematics: Analysis and Approaches (HL recommended), min. 4. Total 28. |
| English 3201** | English 12 Academic** or English 12 African Heritage** | English 621A** | English 603** or 604** | English Language Arts A30** and B30** | HL or SL English A, min. 4, or HL English B, min. 5. Total 27. |
| English 3201* | English 12 Academic* or English 12 African Heritage* | English 621A* | English 603* or 604* | English Language Arts A30* and B30* | HL or SL English A, min. 4, or HL English B, min. 5. Total 27. |
| | | | | | |
| One of Advanced Mathematics 3201 or 3200; one of Mathematics 3208 or AP Calculus; English 3201** | Pre-Calculus 12; Calculus 12; English 12 Academic** or English 12 African Heritage** | Mathematics 611B; Mathematics 621B; English 621A** | English 603** or 604**; two of Linear Algebra**, Calculus I**, or Calculus II** | Pre-Calculus 30; Calculus 30 or AP Calculus; English Language Arts A30** and B30** | HL or SL English A, min. 4; HL Mathematics: Analysis and Approaches, min. 6. Total 32. |
| | | | | | |
| English 3201**; one of Advanced Mathematics 3201* or 3200*; one of Mathematics 3208* or AP Calculus*; Physics 3204* | English 12 Academic** or English 12 African Heritage**; Pre-Calculus 12*; Calculus 12*; Physics 12 Academic* | English 621A**; Mathematics 611B*; Mathematics 621B*; Physics 621A* | English 603** or 604**; two of Linear Algebra*, Calculus I*, or Calculus II*; at least one of Mechanics*, Electricity & Magnetism*, or Waves, Optics & Modern Physics* | English Language Arts A30** and B30**; Pre-Calculus 30*; Calculus 30* or AP Calculus*; Physics 30* | Mathematics: Analysis and Approaches and Physics (HL recommended), min. 4 in each; HL or SL English A, min. 4. Total 32. |
| One of Advanced Mathematics 3201* or 3200*; one of Mathematics 3208* or AP Calculus*; Chemistry 3202*; English 3201*; Physics 3204* | Pre-Calculus 12*; Calculus 12*; Chemistry 12 Academic*; English 12 Academic* or English 12 African Heritage*; Physics 12 Academic* | Mathematics 611B*; Mathematics 621B*; Chemistry 611A* or 621A*; English 621A*; Physics 621A* | English 603* or 604*; two of Linear Algebra*, Calculus 1*, or Calculus 2*; at least one of Mechanics*, Electricity & Magnetism*, or Waves, Optics & Modern Physics*; Chemistry I* or Chemistry II* | Pre-Calculus 30*; Calculus 30* or AP Calculus*; Chemistry 30*; English Language Arts A30* and B30*; Physics 30* | Mathematics: Analysis and Approaches and Physics (HL recommended), min. 4 in each; Chemistry and English A, min. 4 in each; one other HL or SL course, min. 4. Total 32. 6s and 7s recommended. |
| | | | | | |
| One of Advanced Mathematics 3201* or 3200*; one of Mathematics 3208* or AP Calculus*; Chemistry 3202*; English 3201*; Physics 3204* | Pre-Calculus 12*; Calculus 12*; Chemistry 12 Academic*; English 12 Academic* or English 12 African Heritage*; Physics 12 Academic* | Mathematics 611B*; Mathematics 621B*; Chemistry 611A* or 621A*; English 621A*; Physics 621A* | English 603* or 604*; two of Linear Algebra*, Calculus I*, or Calculus II*; at least one of Mechanics*, Electricity & Magnetism*, or Waves, Optics & Modern Physics*; Chemistry I* or Chemistry II* | Pre-Calculus 30*; Calculus 30* or AP Calculus*; Chemistry 30*; English Language Arts A30* and B30*; Physics 30* | Mathematics: Analysis and Approaches and Physics (HL recommended), min. 4 in each; Chemistry and English A, min. 4 in each; one other HL or SL course, min. 4. Total 32. 6s and 7s recommended. |

# Out-of-province admission requirements continued

| Program/minimum admission average/ additional requirements | Alberta, Northwest Territories, and Nunavut | British Columbia and Yukon | Manitoba | New Brunswick |
|---|---|---|---|---|
| For additional province-specific information, refer to the notes on page 45. Complete admission requirements, recommendations, and documents are available online. | | | | |
| **ENVIRONMENT – AIF required for Geography and Aviation** | | | | |
| **Climate and Environmental Change** High 70s. | English Language Arts 30-1*; one of Math 30-1*, Math 31*, or Math 30-2*; one of Chemistry 30 or Physics 30 | One of English Studies 12* or English First Peoples 12*; one of Grade 12 Mathematics* or AP Calculus*; one of Chemistry 12 or Physics 12 | English 40S*; one of Pre-Calculus Mathematics 40S*, Calculus 45A*, 45S*, or AP Calculus*; Chemistry 40S or Physics 40S | English 121* or English 122*; Pre-Calculus 120B* or Calculus 120*; one of Chemistry 121 or 122 or Physics 121 or 122 |
| **Environment and Business; Environment, Resources and Sustainability; Geography and Environmental Management** High 70s. | English Language Arts 30-1* | One of English Studies 12* or English First Peoples 12* | English 40S* | English 121* or 122* |
| **Geography and Aviation** Mid-80s. AIF required. Program briefing session and Transport Canada Category 1 Medical Certification required. For Permanent Residents and international students, the Aviation Language Proficiency Demonstration (ALPD) is also required. | English Language Arts 30-1*; one of Math 30-1*, Math 31*, or Math 30-2* | One of English Studies 12* or English First Peoples 12*; one Grade 12 Mathematics* or AP Calculus* | English 40S*; one of Pre-Calculus Math 40S*, Calculus 45A*, 45S*, or AP Calculus* | English 121* or 122*; Pre-Calculus 120B* or Calculus 120* |
| **Geomatics** High 70s. | English Language Arts 30-1*; one of Math 30-1*, Math 31*, or Math 30-2* | One of English Studies 12* or English First Peoples 12*; one Grade 12 Mathematics* or AP Calculus* | English 40S*; one of Pre-Calculus Math 40S*, Calculus 45A*, Calculus 45S*, or AP Calculus* | English 121* or 122*; Pre-Calculus 120B* or Calculus 120* |
| **Planning** Low 80s. | English Language Arts 30-1** | One of English Studies 12** or English First Peoples 12** | English 40S** | English 121** or 122** |
| **HEALTH** | | | | |
| **Health Sciences** Mid-80s regular, High 80s co-op. | English Language Arts 30-1*; one of Math 30-1*, Math 31*, or Math 30-2*; Biology 30*; Chemistry 30* | One of English Studies 12* or English First Peoples 12*; Anatomy and Physiology 12*; Chemistry 12*; one Grade 12 Mathematics* or AP Calculus* | Biology 40S*; Chemistry 40S*; English 40S*; one of Pre-Calculus Mathematics 40S*, Calculus 45A*, Calculus 45S*, or AP Calculus* | Biology 121* or 122*; Chemistry 121* or 122*; English 121* or 122*; Pre-Calculus 120B* or Calculus 120* |
| **Kinesiology** Low 80s regular, Mid-80s co-op. | English Language Arts 30-1*; Math 30-1* or Math 31*; two of Biology 30*, Chemistry 30*, or Physics 30* | One of English Studies 12* or English First Peoples 12*; one of Pre-Calculus 12*, Calculus 12*, or AP Calculus*; two of Anatomy and Physiology 12*, Chemistry 12*, or Physics 12* | One of Pre-Calculus Mathematics 40S*, Calculus 45A*, Calculus 45S*, or AP Calculus*; two of Biology 40S*, Chemistry 40S*, or Physics 40S*; English 40S* | One of Pre-Calculus 120B* or Calculus 120*; two of Biology 121* or 122*, Chemistry 121* or 122*, or Physics 121* or 122*; English 121* or 122* |
| **Public Health** Low 80s regular, Mid-80s co-op. | English Language Arts 30-1**; one of Math 30-1*, Math 31*, or Math 30-2* | One of English Studies 12** or English First Peoples 12**; Grade 12 Mathematics* or AP Calculus* | English 40S**; one of Pre-Calculus Mathematics 40S*, Calculus 45A*, Calculus 45S*, or AP Calculus* | English 121** or 122**; Pre-Calculus 120B* or Calculus 120* |
| **Recreation and Leisure Studies**† Low 80s. | English Language Arts 30-1* | One of English Studies 12* or English First Peoples 12* | English 40S* | English 121* or 122* |

| Newfoundland and Labrador | Nova Scotia | Prince Edward Island | Quebec (CEGEP) | Saskatchewan | International Baccalaureate |
|---|---|---|---|---|---|
| | | | | | |
| English 3201*; one of Advanced Mathematics 3201* or 3200*, Mathematics 3208*, or AP Calculus*; Chemistry 3202 or Physics 3204 | English 12 Academic* or English 12 African Heritage*; one of Mathematics 12*, Pre-Calculus 12*, or Calculus 12*; one of Chemistry 12 Academic or Physics 12 Academic | English 621A*; one of Mathematics 611B* or Mathematics 621B*; one of Chemistry 611A or 621A or Physics 621A | English 603* or 604*; one of Linear Algebra*, Calculus I*, or Calculus II*; one of Chemistry I or II, Mechanics, Electricity & Magnetism, or Waves, Optics & Modern Physics | English Language Arts A30* and B30*; one of Pre-Calculus 30*, Calculus 30*, or AP Calculus*; one of Chemistry 30 or Physics 30 | HL or SL English A, min. 4, or HL English B, min. 5; HL or SL Mathematics: Analysis and Approaches or HL Applications and Interpretation, min. 4; Chemistry or Physics. Total 27. |
| English 3201* | English 12 Academic* or English 12 African Heritage* | English 621A* | English 603* or 604* | English Language Arts A30* and B30* | HL or SL English A, min. 4, or HL English B, min. 5. Total 27. |
| English 3201*; one of Advanced Mathematics 3201* or 3200*, Mathematics 3208*, or AP Calculus* | English 12 Academic* or English 12 African Heritage*; one of Mathematics 12*, Pre-Calculus 12*, or Calculus 12* | English 621A*; Mathematics 611B* or 621B* | English 603* or 604*; one of Linear Algebra*, Calculus I*, or Calculus II* | English Language Arts A30* and B30*; one of Foundations of Math 30*, Pre-Calculus 30*, Calculus 30*, or AP Calculus* | HL or SL English A, min. 4, or HL English B, min. 5; HL or SL Mathematics: Analysis and Approaches or HL Applications and Interpretation, min. 4; strongly recommended: one SL course in Physical or Environmental Science. Total 27. |
| English 3201*; one of Advanced Mathematics 3201* or 3200*, Mathematics 3208*, or AP Calculus* | English 12 Academic* or English 12 African Heritage*; one of Mathematics 12*, Pre-Calculus 12*, or Calculus 12* | English 621A*; Mathematics 611B* or 621B* | English 603* or 604*; one of Linear Algebra*, Calculus I*, or Calculus II* | English Language Arts A30* and B30*; one of Foundations of Math 30*, Pre-Calculus 30*, Calculus 30*, or AP Calculus* | HL or SL English A, min. 4, or HL English B, min. 5; HL or SL Mathematics: Analysis and Approaches or HL Applications and Interpretation, min. 4. Total 27. |
| English 3201** | English 12 Academic** or English 12 African Heritage** | English 621A** | English 603** or 604** | English Language Arts A30** and B30** | HL or SL English A, min. 4, or HL English B, min. 5. Total 27. |
| | | | | | |
| Biology 3201*; Chemistry 3202*; English 3201*; one of Advanced Mathematics 3201* or 3200*, Mathematics 3208*, or AP Calculus* | English 12 Academic* or English 12 African Heritage*; Biology 12 Academic*; Chemistry 12 Academic*; one of Mathematics 12*, Pre-Calculus 12*, or Calculus 12* | Biology 621A*; Chemistry 611A* or 621A*; English 621A*; Mathematics 611B* or 621B* | Biology I* or II*; Chemistry I* or II*; English 603* or 604*; one of Linear Algebra*, Calculus I*, or Calculus II* | Biology 30*; Chemistry 30*; English Language Arts A30* and B30*; one of Foundations of Mathematics 30*, Pre-Calculus 30*, Calculus 30*, or AP Calculus* | HL or SL Mathematics: Analysis and Approaches, min. 4, or HL Applications and Interpretation, min. 4; HL or SL Chemistry, min. 4; HL or SL Biology, min. 4; HL or SL English A, min. 4, or HL English B, min 5. Total 28. |
| One of Advanced Mathematics 3201* or 3200*, Mathematics 3208*, or AP Calculus*; two of Biology 3201*, Chemistry 3202*, or Physics 3204*; English 3201* | English 12 Academic* or English 12 African Heritage*; one of Pre-Calculus 12* or Calculus 12*; two of Biology 12 Academic*, Chemistry 12 Academic*, or Physics 12 Academic* | One of Mathematics 611B* or 621B*; two of Biology 621A*, Chemistry 611A* or 621A*, or Physics 621A*; English 621A* | English 603* or 604*; one of Linear Algebra*, Calculus I*, or Calculus II*; two of Biology I* or II*, Chemistry I* or II*, Mechanics*, Electricity & Magnetism*, or Waves, Optics & Modern Physics* | One of Pre-Calculus 30*, Calculus 30*, or AP Calculus*; two of Biology 30*, Chemistry 30*, or Physics 30*; English Language Arts A30* and B30* | HL or SL Mathematics: Analysis and Approaches, min. 4, or HL Applications and Interpretation, min. 4; two of HL or SL Biology, HL or SL Physics, or HL or SL Chemistry, min. 4 in each; HL or SL English A, min. 4, or HL English B, min. 5. Total 27. |
| English 3201**; one of Advanced Mathematics 3201* or 3200*, Mathematics 3208*, or AP Calculus* | English 12 Academic** or English 12 African Heritage**; one of Mathematics 12*, Pre-Calculus 12*, or Calculus 12* | English 621A**; Mathematics 611B* or 621B* | English 603** or 604**; one of Linear Algebra*, Calculus I*, or Calculus II* | English Language Arts A30** and B30**; one of Foundations of Math 30*, Pre-Calculus 30*, Calculus 30*, or AP Calculus* | HL or SL Mathematics: Analysis and Approaches, min. 4, or HL Applications and Interpretation, min. 4; HL or SL English A, min. 4, or HL English B, min. 5. Total 27. |
| English 3201* | English 12 Academic* or English 12 African Heritage* | English 621A* | English 603* or 604* | English Language Arts A30* and B30* | HL or SL English A, min. 4, or HL English B, min. 5. Total 27. |

# Out-of-province admission requirements continued

| Program/minimum admission average/ additional requirements | Alberta, Northwest Territories, and Nunavut | British Columbia and Yukon | Manitoba | New Brunswick |
|---|---|---|---|---|
| For additional province-specific information, refer to the notes on page 45. Complete admission requirements, recommendations, and documents are available online. | | | | |
| **MATHEMATICS – AIF required, participation in the Euclid and Canadian Senior Mathematics Contests is strongly recommended** | | | | |
| **Business Administration (Laurier) and Computer Science (Waterloo) Double Degree** Low to mid-90s. **Business Administration (Laurier) and Mathematics (Waterloo) Double Degree** Mid- to high 80s. **Mathematics/ Chartered Professional Accountancy** Mid-80s. AIF required. Individual selection may vary. | Math 30-1; Math 31; English Language Arts 30-1 | One of English Studies 12 or English First Peoples 12; Pre-Calculus 12; Calculus 12 or AP Calculus | Pre-Calculus Math 40S; one of Calculus 45A, 45S, or AP Calculus; English 40S | Pre-Calculus 120B; Calculus 120; English 121 or 122 |
| **Mathematics†, Mathematics/Business Administration†, Mathematics/Financial Analysis and Risk Management** Mid-80s. AIF required. Individual selection may vary. | Math 30-1; Math 31; English Language Arts 30-1 | One of English Studies 12 or English First Peoples 12; Pre-Calculus 12; Calculus 12 or AP Calculus | Pre-Calculus Math 40S; one of Calculus 45A, 45S, or AP Calculus; English 40S | Pre-Calculus 120B; Calculus 120; English 121 or 122 |
| **Computer Science†** Low to mid-90s. AIF required. Individual selection may vary. | Math 30-1; Math 31; English Language Arts 30-1 | One of English Studies 12 or English First Peoples 12; Pre-Calculus 12; Calculus 12 or AP Calculus | Pre-Calculus Math 40S; one of Calculus 45A, 45S, or AP Calculus; English 40S | Pre-Calculus 120B; Calculus 120; English 121 or 122 |
| **SCIENCE – AIF required for Science and Aviation** | | | | |
| **Science and Financial Management** Low to mid-80s. **Environmental Sciences, Honours Science, Life Sciences†, Physical Sciences†, Science and Business** Low 80s. | English Language Arts 30-1*; Math 30-1*; Math 31*; two of Biology 30, Chemistry 30, or Physics 30 | One of English Studies 12* or English First Peoples 12*; Pre-Calculus 12*; Calculus 12* or AP Calculus*; two of Anatomy and Physiology 12, Chemistry 12, Geology 12, Physics 12, Environmental Science 12, or either Statistics 12 or Foundations of Math 12 | English 40S*; Pre-Calculus Math 40S*; one of Calculus 45A*, 45S*, or AP Calculus*; two of Biology 40S, Chemistry 40S, or Physics 40S | English 121* or 122*; Pre-Calculus 120B*; Calculus 120*; two of Biology 121 or 122, Chemistry 121 or 122, Physics 121 or 122, or Foundations of Math 120 |
| **Science and Aviation** Mid-80s. AIF required. Program briefing session and Transport Canada Category 1 Medical Certification required. For Permanent Residents and international students, the Aviation Language Proficiency Demonstration (ALPD) is also required. | English Language Arts 30-1*; Math 30-1*; Math 31*; two of Biology 30, Chemistry 30, or Physics 30 | One of English Studies 12* or English First Peoples 12*; Pre-Calculus 12*; Calculus 12* or AP Calculus*; two of Anatomy and Physiology 12, Chemistry 12, Geology 12, Physics 12, Environmental Science 12, or either Statistics 12 or Foundations of Math 12 | English 40S*; Pre-Calculus Math 40S*; one of Calculus 45A*, 45S*, or AP Calculus*; two of Biology 40S, Chemistry 40S, or Physics 40S | English 121* or 122*; Pre-Calculus 120B*; Calculus 120*; two of Biology 121 or 122, Chemistry 121 or 122, Physics 121 or 122, or Foundations of Math 120 |
| **SUSTAINABILITY AND FINANCIAL MANAGEMENT** | | | | |
| **Sustainability and Financial Management** Mid-80s. | English Language Arts 30-1**; Mathematics 30-1**; Mathematics 31** | One of English Studies 12** or English First Peoples 12**; Pre-Calculus 12**; Calculus 12** or AP Calculus** | English 40S**; Pre-Calculus Mathematics 40S**; Calculus 45A**, 45S** or AP Calculus** | English 121** or 122**; Pre-Calculus 120B**; Calculus 120** |

| Newfoundland and Labrador | Nova Scotia | Prince Edward Island | Quebec (CEGEP) | Saskatchewan | International Baccalaureate |
|---|---|---|---|---|---|
| One of Advanced Mathematics 3201 or 3200; one of Mathematics 3208 or AP Calculus; English 3201 | English 12 Academic or English 12 African Heritage; Pre-Calculus 12; Calculus 12 | Math 611B; Math 621B; English 621A | English 603 or 604; two of Linear Algebra, Calculus I, or Calculus II | Pre-Calculus 30; Calculus 30 or AP Calculus; English Language Arts A30 and B30 | HL Mathematics: Analysis and Approaches, min. 6; HL or SL English A. Total 32. |
| One of Advanced Mathematics 3201 or 3200; one of Mathematics 3208 or AP Calculus; English 3201 | English 12 Academic or English 12 African Heritage; Pre-Calculus 12; Calculus 12 | Math 611B; Math 621B; English 621A | English 603 or 604; two of Linear Algebra, Calculus I, or Calculus II | Pre-Calculus 30; Calculus 30 or AP Calculus; English Language Arts A30 and B30 | HL Mathematics: Analysis and Approaches, min. 6; HL or SL English A. Total 30. |
| One of Advanced Mathematics 3201 or 3200; one of Mathematics 3208 or AP Calculus; English 3201 | English 12 Academic or English 12 African Heritage; Pre-Calculus 12; Calculus 12 | Math 611B; Math 621B; English 621A | English 603 or 604; two of Linear Algebra, Calculus I, or Calculus II | Pre-Calculus 30; Calculus 30 or AP Calculus; English Language Arts A30 and B30 | HL Mathematics: Analysis and Approaches, min. 6; HL or SL English A. Total 32. |
| English 3201*; one of Advanced Mathematics 3201* or 3200*; one of Mathematics 3208* or AP Calculus*; two of Biology 3201, Chemistry 3202, Earth Systems 3209, or Physics 3204 | English 12 Academic* or English 12 African Heritage*; Pre-Calculus 12*; Calculus 12*; two of Biology 12 Academic, Chemistry 12 Academic, Geology 12 Academic, or Physics 12 Academic | English 621A* or 611*; Math 621B*; Math 611B*; two of Biology 621A, Chemistry 611A or 621A, or Physics 621A | English 603* or 604*; two of Linear Algebra*, Calculus I*, or Calculus II*; two of Biology I or II, Chemistry I or II, Mechanics, Electricity & Magnetism, or Waves, Optics & Modern Physics | English Language Arts A30* and B30*; Pre-Calculus 30*; Calculus 30* or AP Calculus*; two of Biology 30, Chemistry 30, Foundations of Math 30, or Physics 30 | HL or SL Mathematics: Analysis and Approaches, min. 4; HL or SL English A, min. 4, or HL English B, min. 5; two of Biology, Chemistry, or Physics. Total 27. |
| English 3201*; one of Advanced Mathematics 3201* or 3200*; one of Mathematics 3208* or AP Calculus*; two of Biology 3201, Chemistry 3202, Earth Systems 3209, or Physics 3204 | English 12 Academic* or English 12 African Heritage*; Pre-Calculus 12*; Calculus 12*; two of Biology 12 Academic, Chemistry 12 Academic, Geology 12 Academic, or Physics 12 Academic | English 621A* or 611*; Math 621B*; Math 611B*; two of Biology 621A, Chemistry 611A or 621A, or Physics 621A | English 603* or 604*; two of Linear Algebra*, Calculus I*, or Calculus II*; two of Biology I or II, Chemistry I or II, Mechanics, Electricity & Magnetism, or Waves, Optics & Modern Physics | English Language Arts A30* and B30*; Pre-Calculus 30*; Calculus 30* or AP Calculus*; two of Biology 30, Chemistry 30, Foundations of Math 30, or Physics 30 | HL or SL Mathematics: Analysis and Approaches, min. 4; HL or SL English A, min. 4, or HL English B, min. 5; two of Biology, Chemistry, or Physics. Total 27. |
| English 3201**; one of Advanced Mathematics 3201** or 3200**; one of Mathematics 3208** or AP Calculus** | English 12 Academic** or English 12 African Heritage**; Pre-Calculus 12**; Calculus 12** | English 621A**; Mathematics 611B**; Mathematics 621B** | English 603** or 604**; two of Linear Algebra**, Calculus I**, or Calculus II** | English Language Arts A30** and B30**; Pre-Calculus 30**; Calculus 30** or AP Calculus** | HL or SL English A, min. 4, or HL English B, min. 5; HL (recommended) or SL Mathematics: Analysis and Approaches, min. 4. Total 28. |

# Apply to Waterloo

## Let's get started

uwaterloo.ca/future/apply

Your first stop is the Ontario Universities' Application Centre (OUAC) website: **ouac.on.ca**. If you're currently studying full-time at an Ontario high school, your school will automatically send us your grades.

If you're studying any non-Ontario curriculum, please make arrangements to have your high school send us your transcripts. All of your official documents, including transcripts and English language test results, must be sent directly from the issuing institution or testing authority.

uwaterloo.ca/future/documents

## Important fall 2026 application deadlines

FOR MOST PROGRAMS

**Apply and pay your application fees to the OUAC by**
**January 30, 2026**

**Documents must reach the University of Waterloo by**
**February 13, 2026**

FOR ENGINEERING PROGRAMS (EXCLUDING ARCHITECTURE)

**Apply and pay your application fees to the OUAC by**
**January 15, 2026**

**Documents must reach the University of Waterloo by**
**January 30, 2026**

### What about English language test scores?

If your first language is not English and you have not studied in an English-language school system for the four years immediately before beginning your studies at Waterloo, you must meet or exceed the minimum scores required for one of the accepted tests.

**Minimum scores required for direct entry***

| Internet-based TOEFL | IELTS | PTE (academic) | Cambridge Assessment (C1 or C2) | Duolingo** | English for Academic Success |
|---|---|---|---|---|---|
| 90 overall, 25 writing, 25 speaking | 6.5 overall, 6.5 writing, 6.5 speaking, 6.0 reading, 6.0 listening | 63 overall, 65 writing, 65 speaking | 180 overall, 176 writing, 176 speaking, 176 reading, 176 listening | 120 overall, 125 literacy, 125 production | 75% overall in 400 levels, 75% academic, 75% oral, 75% writing |

*If you're academically admissible but don't quite meet the minimum required scores for the English language test you submit, you'll be automatically considered for our Bridge to Academic Success in English (BASE) program where applicable. Learn more about BASE eligibility: **uwaterloo.ca/future/base-eligibility**.

**If you completed a Duolingo test before July 1, 2024, please visit our website for more information: **uwaterloo.ca/future/elr**.

# Q&A

### What's an Admission Information Form (AIF)?

The AIF is a series of questions that explore your interests, experiences, and abilities. It lets our admissions committees learn more about you! An AIF is required for programs in the faculties of Math and Engineering, as well as the Geography and Aviation program and Science and Aviation program. We use this in addition to your grades to make admission and some scholarship decisions. Visit the website for tips and the questions you'll be asked.

uwaterloo.ca/future/aif

### Will my AP or IB courses be considered for transfer credit?

Transfer credits will be considered for Advanced Placement (AP) and International Baccalaureate (IB) courses if you're applying to programs in the faculties of Arts, Environment, Health, Mathematics, or Science, or the School of Architecture.*

*Results must be sent directly from the College Board or the IBO.

### How do I receive assistance with the application process?

If you need help completing the application process, or you've had significant circumstances that affected your grades and you were not accommodated through your school or relevant services, you can request special consideration.

**Note:** Applying for special consideration does not guarantee admission.

uwaterloo.ca/future/consideration

# Tuition and scholarships

Estimate your total first-year costs using our online cost calculator. Our website also offers detailed information on federal and provincial financial aid (such as OSAP), scholarships, and awards in specific faculties.

uwaterloo.ca/future/financing

## Entrance scholarships and bursaries

You'll be automatically considered for most of our scholarships, including the Merit and President's scholarships which range from $1,000-$5,000.

Bursaries (available for Ontario students only) are awarded based on financial need and range from $1,000-$5,000.

**TIP:** Some scholarships require an application. Be sure to mark your calendar and apply by the deadline!

**Explore all scholarships**

uwaterloo.ca/future/scholarships

## Earn while you learn

Through a four-month co-op work term you can earn

**$9,600–$22,800**

There are hundreds of part-time jobs on and off campus, and our work-study program allows you to earn up to

**$2,000**

per school term

## Tuition fees

**For two academic terms (Canadian dollars)**

| Program/faculty | Domestic Ontario | Domestic out-of-province | International (study permit) |
|---|---|---|---|
| Accounting and Financial Management*; Faculty of Arts; Sustainability and Financial Management* | $9,000 | $10,000 | $58,000 |
| Architecture | $13,000 | $15,000 | $74,000 |
| Faculty of Health; Faculty of Science; Science and Financial Management* | $9,000 | $10,000 | $53,000 |
| Business Administration (Laurier) and Computer Science (Waterloo) Double Degree | $17,000 | $19,000 | $74,000 |
| Business Administration (Laurier) and Mathematics (Waterloo) Double Degree | $15,000 | $15,000 | $63,000 |
| Computer Science | $16,000 | $18,000 | $73,000 |
| Computing and Financial Management* | $10,000 | $11,000 | $63,000 |
| Faculty of Engineering; Software Engineering | $18,000 | $20,000 | $74,000 |
| Faculty of Environment | $9,000 | $10,000 | $51,000 |
| Global Business and Digital Arts | $14,000 | $16,000 | $56,000 |
| Mathematics; Mathematics/Business Administration; Mathematics/Chartered Professional Accountancy* | $9,000 | $10,000 | $61,000 |
| Mathematics/Financial Analysis and Risk Management | $12,000 | $14,000 | $63,000 |

**Notes:** Estimated amounts listed are based on 2025-26 tuition rates and include incidental fees. These are rounded numbers. Students in a co-op program will pay a fee four to eight times throughout their degree. Learn more: **uwaterloo.ca/future/co-op-fee**. Tuition will be waived for validated Indigenous students who are members of the Mississaugas of the Credit First Nation or Six Nations of the Grand River. Learn more: **uwaterloo.ca/future/tuition-waiver**.

*Tuition is significantly higher in upper years.

## Additional expenses

**For two academic terms (Canadian dollars)**

| | |
|---|---|
| **Residence** | From $7,570 (traditional, double room) to $10,080 (single room, suite style). |
| **Meal plan** | From $3,000 to $8,990. |
| **Personal expenses** | $4,320 on average ($540/month). Expenses may include phone, laundry, clothing, Internet, personal care, and entertainment. |
| **Books and supplies** | Most programs estimate $1,500 ($8,100 for Architecture students – includes laptop, studio supplies, and field trips). |

Your first-year expenses excluding tuition are estimated to be between $16,390 and $31,490.


# Keep exploring

## Come visit us

Experience life as a Warrior – join an event to explore our campus, programs, and community!

### Fall Open House

November 8, 2025

### March Open House

March 28, 2026

uwaterloo.ca/future/visit

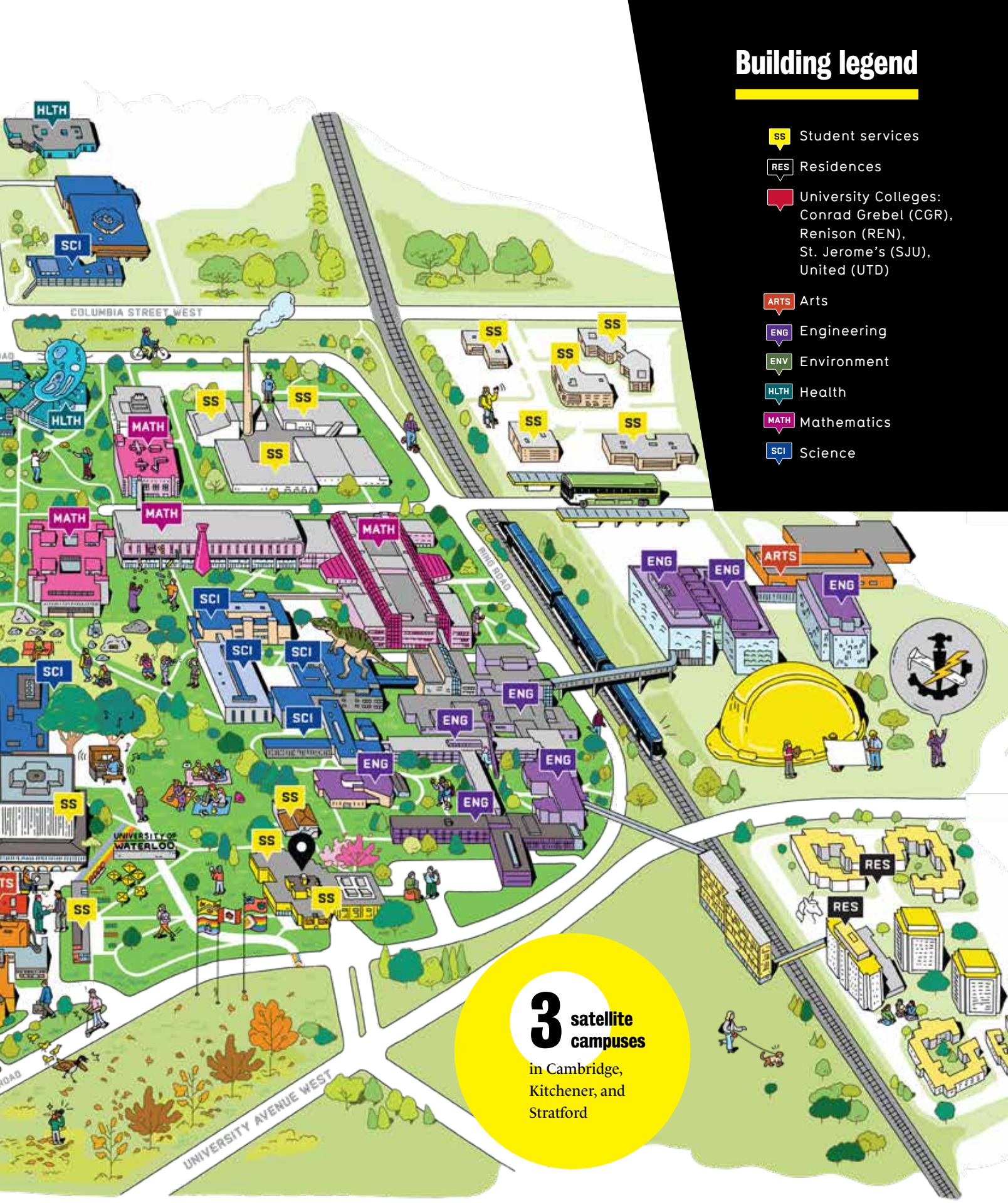
## Connect with current students

Curious about studying at Waterloo? Ask our student ambassadors about programs, classes, campus life, and more!

uwaterloo.ca/future/ask

Get tips from current students on choosing a program, applying to scholarships, and more – read our blog!

uwaterloo.ca/future/tips




All information is correct at time of printing. Please visit **uwaterloo.ca/future** for the latest information and updates.

# Important contacts

## General questions?

519-888-4567, ext. 43614

askus@uwaterloo.ca

## Questions about applying?

519-888-4567, ext. 43106

myapplication@uwaterloo.ca

## Program-related questions?

Faculty of Arts

arts@uwaterloo.ca

Faculty of Engineering

enginfo@uwaterloo.ca

Faculty of Environment

envinfo@uwaterloo.ca

Faculty of Health

health@uwaterloo.ca

Faculty of Mathematics

mathinfo@uwaterloo.ca

Faculty of Science

science@uwaterloo.ca

School of Accounting and Finance

saf@uwaterloo.ca

## Questions about University Colleges?

Conrad Grebel

grebel@uwaterloo.ca

Renison

renison@uwaterloo.ca

St. Jerome's

sjuoutreach@uwaterloo.ca

United

unitedcollege@uwaterloo.ca

## Other Waterloo contacts

_____

_____

_____

_____

# Don't miss a thing

## Scan to join our mailing list

Get reminders of important dates and deadlines, tips and advice from current students, invites to events, and more!

uwaterloo.ca/future/subscribe

## Follow us

Instagram @UofWaterlooFuture

YouTube @ExperienceWaterloo

**YOU+WATERLOO**

*Our greatest impact happens together*

**Waterloo is committed to acting on the climate emergency**
and is working toward carbon neutrality and zero waste in our own practices. The paper this publication is printed on contains post-consumer fibre and is Forest Stewardship Council® (FSC®) certified.

*Illustrations by Kathleen Fu (BAS '17, MArch '20), graduate of the University of Waterloo School of Architecture.*

An accessible version of this brochure is available at

uwaterloo.ca/future/request

University of Waterloo
200 University Ave. W., Waterloo, ON, Canada N2L 3G1

uwaterloo.ca/future

**DESIGN** CREATIVE STUDIO, UNIVERSITY OF WATERLOO **EDITORIAL** MARKETING & UNDERGRADUATE RECRUITMENT, UNIVERSITY OF WATERLOO PLEASE KEEP, SHARE OR RECYCLE FP3449