INTERNATIONAL ADMISSIONS 2020

## UNIVERSITY OF

 WALEROD


## EXCLUSIVE ONLINE CONTENT

## Life at an intersection.

Waterloo is a place of opportunity. A place to dream up new ideas and bring them to life. It's a place to explore, experiment, and experience new things as you decide what you want to do, where you want to go, and how you want to impact the world.

RANKINGS
THE CITY

At Waterloo, you're not bound by traditional conventions or expectations. Around here, innovation reigns. We'll encourage you to take risks and challenge the status quo, to launch startups and shatter glass ceilings. Whether you volunteer over Reading Week, write a best-selling book, or test drive a new career in co-op, we want you to go Beyond Ideas.

Where will you go from here?

When you see this box, it means there's more to the story. Go to our student tips and stories site to access bonus content, including videos, interviews, and how-to guides. Use the hashtags to help you search the site.

## CANADA'S MOST INNOV UNIVERSITY



WATER,
WATER,
WATER!
LOO,
LOO,
LOO!

## Discover limitless potential.

For more than 60 years, we've been challenging conventions and turning heads. We took innovation beyond a buzzword and made it our identity.

We set the bar for co-op in Canada because we saw a need for experienced, university-educated graduates. We encourage dreamers and entrepreneurs because we believe that cultivating creativity is key to global progress. We value diversity and inclusivity because we know we're better, brighter, and stronger together.
Some people call that innovative, but that's just who we are.
Be yourself, work hard, and reap the rewards. We'll do the same.
uwaterloo.ca/future/rankings

## for 27 consecutive years

 in Canada for producing venture capitalist-backed entrepreneurs (PitchBook Universities Report, 2018-2019)
global universities leading the UN Women's HeForShe IMPACT 10x10x10 initiative to equip women for success and leadership in traditionally male-dominated fields

## TOP 50

among the most international universities in the world (Times Higher Education, 2019)
in Canada for partnerships with employers
(QS Graduate Employability Rankings, 2019)

# CITY OF DREAMERS Prepare to be charmed. 

The City of Waterloo gives you the best of two worlds. You have all the perks of a big city - transportation, culture, and nightlife - with the charm and familiarity of a small town. Plus, you and your friends are only a short bus ride from Toronto, Canada's entertainment hub and home to some of our largest co-op employers.

## STARTUP PARADISE

Waterloo is an entrepreneur's playground. Everything you need to kick-start a new business is within a few minutes of campus. Even if you don't see yourself as the next startup sensation, living in one of the world's top startup hubs gives you the scoop on new trends and technologies and puts you at the centre of a vibrant job market.

uwaterloo.ca/future/city

## A LITTLE BIT OF EVERYTHING

The Region of Waterloo is made up of three cities, each with its own flavour and attractions. Use your student card to ride Grand River Transit and enjoy easy access to all the Region has to offer, from 1200+ festivals and events to the ever-growing restaurant and food truck scene. For a sneak peek of Waterloo life, check out \#KWAwesome.

## WHY STUDY IN CANADA

Canada offers a safe, welcoming environment to pursue your studies and explore your dreams. Our country is home to one of the world's best educational systems and we're internationally celebrated for our commitment to peace, multiculturalism, and inclusivity. You can work on or off campus while you study, and you can apply for a Post-Graduation Work Permit to gain more Canadian work experience once you graduate.

YUKON
NORTHWEST TERRITORIES


SAN FRANCISCO


## CO-OP

## Experience is everything.

Forget everything you thought you knew about student internships. Our co-op program adds up to two years of paid work experience to your résumé. With access to North America's largest selection of co-op jobs, you'll be able to test drive exciting careers and build a world-class professional network.


## HOW CO-OP WORKS

In co-op programs, you'll alternate school and work terms, typically spending four months as a full-time student followed by four months as a full-time, paid employee building relevant skills within a work environment. Before each work term, you'll go through an application process: you'll update your résumé, practice your interview responses, and meet with prospective employers. Students have a 98.5 per cent co-op employment rate, thanks to our professional development training, career resources, student advisors, and students' own initiative!

Once on the job, you'll learn to adapt to your new surroundings and co-workers and develop a fresh appreciation for your classroom studies. As you progress through your work terms, your résumé and confidence - will grow, preparing you to launch your career.

## EXPERIENCE PAYS OFF

Professional experience makes a difference to your job prospects and starting salary. After only two years in the workforce, 88 per cent of our co-op grads work in a field related to their program and 79 per cent earn a salary of $\$ 50,000$ or more (compared to only 39 per cent of other Ontario grads).

## ALTERNATE BETWEEN FOUR-MONTH STUDY AND PAID WORK TERMS

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

## EXPERIENCE FOR EVERYONE

If you're leaning toward a program without co-op or looking for even more ways to get hands-on experience, take advantage of programs that will help you build a standout résumé.

## EDGE CERTIFICATE

Develop professional skills, explore career options, and learn how to market yourself in this program offered exclusively to students not in co-op programs.

## GLOBAL EXPERIENCE CERTIFICATE

Expand your world view and knowledge of global issues by earning a Global Experience Certificate.

EXCHANGE AND STUDY ABROAD
Satisfy your wanderlust and your course requirements through 100+ exchange and study-abroad opportunities.

## PROFESSIONAL DEVELOPMENT PROGRAM

Learn the skills that will help you land jobs and quickly climb the corporate ladder - in our free professional development courses.

## STUDENT LEADERSHIP PROGRAM

Explore and enhance your leadership abilities and earn an e-certificate in this series of 12 workshops.

in Canada for preparing career-ready graduates (Maclean's, 2018)

## CAREER SUCCESS

## Write your own ticket.

No school can guarantee your success after graduation. But we come really close. While other university alumni try to break into the work world, you'll be focused on your next opportunity.
in the world for graduate employability (QS Graduate Employability Rankings, 2019)

Honours Arts and Business
Author and illustrator


## DIANA CHIU, BSc ’05, MBET'06

Science and Business
Senior manager, business development DuckDuckGo

## JONATHAN LAURENCIC, BA '10

Recreation and Business
Co-founder and director of operations Elora Brewing Company

## GRADUATE STUDIES

We surveyed your peers and found that almost half of incoming Waterloo students intend to pursue education beyond undergraduate studies. If that's your plan, consider continuing your studies in familiar territory by applying to one of our 180+ research and professional graduate programs.
uwaterloo.ca/future/success

## WHERE ARE THEY NOW?

More than 205,000 graduates have used their Waterloo education as a stepping stone to success. From startup founders to city planners, our alumni are workplace warriors. Two years after graduating,

96 per cent of our graduates are employed. And perks like complimentary career advising sessions and exclusive access to our alumni job board help with the next opportunity, too.
\#UWFUTURESHAPERS


RETAIL AND MANUFACTURING
> Process engineer, Toyota Motor Manufacturing Canada Inc.
> Financial analyst, The Beer Store


## EDUCATION

> Teacher recruitment manager, Teach For Canada
> Math teacher, Columbia
International College


FINANCE AND INSURANCE
> Treasury and balance sheet analyst, TD Bank Group > User experience specialist, Manulife Financial


20\%

## PROFESSIONAL SERVICES

> Senior consultant, Deloitte Consulting
> Planner, Groundswell Urban Planners Inc.
> Data scientist, Facebook
> Software engineer, Twitter

維 $2 \%$ 路 $2 \%$

## HOSPITALITY AND RECREATION

> Offensive linesman, Hamilton Tiger-Cats Football Club
> Stage manager, Stratford Festival

## 

## HEALTH CARE AND SOCIAL SERVICES

> Child protection worker, Children's Aid Society
> Resident physician MD, University of Toronto
of our employed co-op grads find jobs related to the skills they gained at Waterloo within six months of graduation


## Your new social network.

Living in residence puts you in the middle of the action. Get the full university experience while making friends and memories that will last long after graduation.

## CHOOSING A RESIDENCE

Your home away from home should suit your budget and personality. Choose from Waterloo Residences' traditional single or double rooms or suite-style apartments, or opt to live at one of our on-campus University Colleges: Conrad Grebel University College, Renison University College, St. Jerome's University, and St. Paul's University College. All nine first-year residences offer personal and academic support to help you adjust to living away from home, including LivingLearning Communities, residence dons, and tutors.

SUITE-STYLE ROOM


## DIVERSE FOOD OPTIONS

Enjoy fresh meals and snacks from 38 on-campus food outlets. Meals include halal, kosher, vegan, and vegetarian options, plus custom creations for anyone with food allergies or other dietary restrictions. There's a cafeteria that opens two hours before sunrise during Ramadan, a spice bar to add a taste of home, and residences where you can cook your own meals. In our city, you'll find it easy to buy food from home and if you want someone else to cook, local restaurants cater to tastes from around the world.

## WHO'S DON?

Residence life dons are upper-year students who live and work in the residences to facilitate an inclusive and supportive environment. They organize events, monitor the buildings, and offer support around the clock. Think of it like having fun, caring older siblings in residence with you.

## LIVING-LEARNING COMMUNITIES

Living-Learning Communities (LLCs) group students with common interests together within our larger residence communities. Live with peers from your program, students who share your passion for social justice, or other student athletes. You can apply to join an LLC when you apply to live in residence.

95\%of students who chose residence in first year returned for their second year of studies

uwaterloo.ca/future/residence


## We're all in this together.

University can be rewarding and challenging. Our campus support services give you the resources and personal care you need to get the most out of your university experience.

## STRENGTH IN DIVERSITY

Whatever your ethnicity, religion, gender, or sexual identity, you're welcome here.

```
*INTERNATIONAL AND
CANADIAN STUDENT NETWORK
```

With the goal of making all students feel at home, this network connects local, international, and exchange students through weekly events.

```
*THE GLOW CENTRE FOR SEXUAL
AND GENDER DIVERSITY
```

The Glow Centre promotes a healthy attitude toward all sexual orientations and gender identities by offering confidential peer support, discussion groups, social events, and resources.

```
WATERLOO INDIGENOUS
STUDENT CENTRE
```

This centre celebrates the values and rights of Indigenous peoples and cultures. It facilitates the sharing of Indigenous knowledge with relevant information and support.

## WATERLOO CHAPLAINS

Waterloo has chaplains representing 11 different faith traditions. They can provide you with support and help as you explore spiritual questions.

## CAMPUS WELLNESS

We offer extensive services to help keep your body and mind healthy, and you at the top of your game.

## HEALTH SERVICES

The on-campus Student Medical Clinic offers a range of services, from providing prescriptions and immunizations to addressing your mental and sexual health concerns. Meet with doctors, nurses, mental health specialists, and registered dietitians.

## COUNSELLING SERVICES

Counselling Services is dedicated to supporting your personal, social, and academic experience at Waterloo. It offers one-on-one counselling, group therapy, plus coping skills seminars and workshops to support your mental health.

## *UW MATES

MATES (Mentor Assistance Through Education and Support) is a one-to-one student peer support program providing academic, personal, and mental health supports through workshops, appointments, and drop-in sessions across campus.

## STUDENT SUPPORT

Take advantage of services to help you adjust to the expectations of university.

STUDENT SUCCESS OFFICE
From Orientation right through to convocation, the SSO supports you with academics and personal development. Services include academic skills and leadership workshops, peer success coaching, cultural integration, and study-abroad and exchange programs.

ACCESSABILITY SERVICES
It ensures everyone has equal access to education. They'll design and facilitate academic accommodation plans for you if you have permanent or temporary disabilities.

Campus Wellness staff to support you

[^0]Here 24/7
offers addictions, mental health, and crisis services in person and over the phone


## STUDENT LIFE

## We know how to have fun.

Our campus is packed with opportunities to get involved no matter how unique your interests. Between our clubs, associations, recreation programs, and events, there's something for everyone. For a behind-the-scenes look at student life, check out our Instagram stories every Thursday (@uofwaterloo).

## YOUR STUDENT ASSOCIATION

The Waterloo undergraduate student association is your student voice on campus and the centre of student life. As an undergrad, you're automatically a member, which means access to over 200 clubs, 12 student-run services, student government, and hundreds of job and volunteer opportunities.

## CLUBS AND SOCIETIES

There's no excuse for boredom on campus. We have more than 200 clubs, societies, and associations for you to explore. If you don't see one that fits your exact interest, start your own club! There's always room to expand the roster.


Badminton
Baseball
Basketball $\square$ O
Cheerleading
Cross-Country ${ }^{-1}$
Curling $\quad$ -
Field Hockey
Figure Skating
Football
Golf $\quad$ O
Ice Hockey $\square$ -
Nordic Skiing $\quad$ -
Rugby $\square$ -
Soccer $\square$ O
Squash $\square^{-}$
Swimming $\quad$ -
Tennis $\square$ O
Track and Field $\square$
Volleyball $\square$ O

## SPORTS AND RECREATION

Our fitness facilities, athletics clubs, intramural sports, varsity teams, and drop-in classes are available throughout the year to help you stay fit and get plugged in to campus life.

## STUDENT EVENTS

Clear your calendar and check out the events happening around campus. To get you started, there's Orientation, Welcome Week, and Black and Gold Day. Add in trivia nights, community festivals, and faculty events, and your social calendar will fill up quickly.

## FREE

entry to Waterloo Warriors home games with your Waterloo ID

# START <br> ST <br> RO 

## PRAGTIGE MAKES PERFECT

From a small town in Ecuador to Canada's innovation hub. Iliana was drawn to Waterloo by the Global Business and Digital Arts program. Although initially hesitant to start her academic career in the Bridge to Academic Success in English (BASE) program, Iliana is thankful for the experience.
"My BASE peer leaders helped me improve my speaking and listening skills. The program gave me the confidence to interact with English speakers while letting me work toward my degree."

## \#BEYONDIDEAS \#STUDYINENGLISH <br> \#PEERMENTORSHIP

# Here for you from day one. 

Studying in a different country takes a lot of hard work and ambition. From International Orientation to English language support and cultural student groups, we'll help you make a smooth transition to life in Waterloo.

## ENGLISH LANGUAGE PROGRAMS

If you meet our academic admission requirements but your English language scores are just below the required scores, you may receive a conditional offer of admission through one of our English language pathway programs.
> Bridge to Academic Success in English
> English Language for Academic Studies
You don't apply directly to these programs, but if you're admitted to one, you'll take intensive language courses while earning credit toward your Waterloo degree. See page 46 for our English language requirements.

## PRACTISE YOUR ENGLISH

Join groups run by fellow students and language professionals where you can make friends, practise your English, and learn about Canadian culture.
, English Conversation Cafés
> Conversation Partner Program
> International Canadian Student Network

## WE HAVE YOU COVERED

Need to visit a physician, dentist, counsellor, or physiotherapist? All these services are available on campus and are covered through the University Health Insurance Plan (UHIP) and our supplemental health and dental plan.

## FRIENDS FROM HOME

It's great to make new friends, but sometimes it's nice to connect with students from home. Among our 200+ clubs are cultural clubs such as
> Association of Caribbean Students
, Culture and Language Exchange Club
> Indian Cultural Association
> Latin American Student Association
> Muslim Students' Association
> UW Daebak

## PEER SUPPORT

Ease your transition to Waterloo with the support of your peers. The International Peer Community helps new international students build friendships and learn about Canadian culture through activities on and off campus.
countries are represented
by the undergrad
students on our campus
undergraduates are international visa students

Regulated Canadian Immigration Consultants on campus to offer you immigration advice

## puisu <br> YOU <br> 

## More than business.

Connect with others who are fascinated by the way business and money shape our world, and who want to test their problem-solving, business savvy, and technical skills as they build a better tomorrow.

## ENDLESS OPPORTUNITIES

Our programs were created in collaboration with employers to give you an edge in the marketplace. We prepare you for the world of business and give you the freedom to explore other passions that will help you define your industry niche and expand your portfolio. You'll find yourself among self-starters, working in paid co-op positions with top business leaders, and learning from a community of mentors.

of Waterloo students are enrolled in business-related majors, minors, and program options. (Business Working

Group, 2017)

## EYE ON THE BALL

Some students value sleep and studying above all. Varun thrives on chaos. An accounting and finance major, he found the right balance, even playing for the varsity baseball team. "School is about more than studying. It's balancing your physical and mental wellbeing, building friendships, and pushing yourself."

His hard work and dedication have already paid off in the form of a job offer from EY in Toronto. "Getting a job like this is the entire reason I've worked so hard these past few years."
in Canada for Business and Management Studies, and Accounting and Finance (QS World Rankings, 2019)

## ENTREPRENEURIAL CULTURE

Waterloo can help you bring innovative, worldchanging ideas to the global marketplace. Programs such as Velocity, St. Paul's GreenHouse, and the Conrad School of Entrepreneurship and Business offer mentorship, creative space, and financial resources to get you started.

## BUSINESS PROGRAMS

> Accounting and Financial Management
> Biotechnology/Chartered Professional Accountancy
> Biotechnology/Economics
> 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
>Recreation and Sport Business
> Science and Business



Want to make a difference that improves lives? Join this tight-knit community of students and professors dedicated to preventing disease, healing injuries, and optimizing the quality of life for people around the world. Learn relevant skills and concepts to prepare you for medical school, professional and graduate programs, or careers in health and leisure. You'll graduate with a degree that will help you leave a lasting legacy of health and well-being.
of Health Studies and Kinesiology graduates go on to professional or graduate school
of AHS grads are employed or pursuing further education within a year of graduating
for Hospitality and Leisure Management in Canada (QS World Rankings, 2019)

## ENTRY PROGRAMS AND MAJORS

Learn more about applied health sciences (AHS) entry programs and majors on pages 32 to 39, or go online to download an AHS brochure.
$>$ Health Studies
$>$ Kinesiology
> Public Health
$>$ Recreation and Leisure Studies

- Recreation and Leisure Studies
- Recreation and Sport Business
- Therapeutic Recreation
- Tourism Development

You can focus your studies through specializations starting in second year.

# ILIUMNATETE AND Greate 

## Faculty of Arts

This is the place where creative minds and critical thinkers unite. Collaborate with peers and professors as you explore the diversity of the human experience and shine new light on age-old questions. Whether you're in Accounting and Financial Management, Global Business and Digital Arts, or one of our 23 honours majors, you'll benefit from the variety of academic departments you'll interact with and the different perspectives they offer. You'll graduate with the expertise employers need and the hands-on experience they want thanks to co-op terms, career-focused minors, study-abroad opportunities, and experiential education certificates.

## ENTIY PROGRAMS

Learn more about arts entry programs, majors, and specializations on pages 32 to 39 , or go online to download any of our arts brochures.
$\rightarrow$ Accounting and Financial Management
> Computing and Financial Management
, Global Business and Digital Arts
> Honours Arts*
> Honours Arts and Business*
> Social Development Studies
*Explore topics that interest you and pick your major at the end of first year.

PROFESSIONAL DEGREE
> Social Work (Renison University College)
Apply after completing your undergraduate degree.

## MAJORS

You can build a second major, minor, or specialization into your degree after you choose a major in one of these subjects.
> Anthropology
> Classical Studies
> Economics
$>$ English
> Fine Arts
> French
> Gender and Social Justice
> German
> History
> Legal Studies
> Medieval Studies
> Music
> Peace and Conflict Studies
> Philosophy
> Political Science
> Psychology
> Religious Studies
> Sexuality, Marriage, and Family Studies
> Social Development Studies
> Sociology
> Spanish
> Speech Communication
> Theatre and Performance


## WE RUN THIS

Who runs the world? Girls. Or is it engineers? Zahra argues it's the combination that counts. A proud voice for women in science, technology, engineering, and mathematics (STEM), Zahra advocates that gender diversity brings fresh perspectives and ideas to the traditionally maledominated field. The trick is helping women see their own potential.
"The problem is that we put ourselves down." She challenges all high school students to be confident in their abilities, especially women studying math and science: "After all, if men can do it, why can't we?"

```
#BEYONDIDEAS
#IRONRING
#YOUCANDOIT
```


# SHAPE SOCLETY <br> Faculty of Engineering 

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?



## RAISE THE BAR

## Faculty of Environment

Join a global movement advocating for a greener, more sustainable future whatever your \#earthgoals. Learn how ecosystem restoration, environmental law, and urban planning support solutions to some of the world's biggest challenges. Be an agent of change and build a better tomorrow with an environment degree.

## ENTRY PROGRAMS

Learn more about environment entry programs and optional specializations on pages 32 to 39 , or go online to download an environment brochure.
> Environment and Business
> Environment, Resources and Sustainability
> Geography and Aviation
> Geography and Environmental Management

# TOP 5 <br> in Canada for Geography and Development studies (QS World Rankings, 2019) 

# INFNITIE OPENDOORS 

## Faculty of Mathematics

Take your talent to the next level with a degree in mathematics or computer science. With more than 500 courses in every area of mathematics, statistics, and computer science, you'll develop the theoretical and applied knowledge you need to succeed. Explore concepts that ignite your imagination, from quantum computing to number theory. Refine your skills through co-op terms, minors, and specializations. By graduation, your career prospects will be infinite.

## ENTRY PROGRAMS AND MAJORS

Learn more about these programs on pages 32 to 39, or go online to download any of our brochures.
> Business Administration (Laurier) and Computer Science (Waterloo) Double Degree
$\rightarrow$ Business Administration (Laurier) and Mathematics (Waterloo) Double Degree
> Computer Science

- Computer Science
- Data Science
> Computing and Financial Management
$\rightarrow$ Mathematics
- Actuarial Science
- Applied Mathematics
- Biostatistics
- Combinatorics and Optimization
- Computational Mathematics
- Data Science
- Mathematical Economics
- Mathematical Finance
- Mathematical Optimization
- Mathematical Physics
- Mathematics/Teaching
- Mathematical Studies
- Pure Mathematics
- Statistics
> Mathematics/Business Administration
- Information Technology Management
> Mathematics/Chartered
Professional Accountancy
$\rightarrow$ Mathematics/Financial Analysis
and Risk Management
- Online degree available
> Software Engineering
average work term earnings for mathematics students

70\%
of the top careers in 2019 start with a mathematics or computer science degree (CareerCast)



# GET A STRONG REAGTION <br> <br> Faculty of Science 

 <br> <br> Faculty of Science}

Use your curiosity, ingenuity, and passion for knowledge to discover everything from atoms and cells to the vast expanses of space in our most research-centric faculty. Learn to think critically, experiment confidently, and engage intelligently through hands-on labs, projects, and co-op terms. Participate in groundbreaking research or launch a startup through Velocity Science. Whichever path you choose to explore, your science degree will give you the foundation you need to succeed.

in annual research funding helps to finance meaningful research jobs for science students

ENTRY PROGRAMS AND MAJORS
Learn more about these programs on pages 32 to 39, or go online to download any of our science brochures.
> Biotechnology/Chartered Professional Accountancy
> Biotechnology/Economics
> Environmental Science
> Honours Science
$>$ Life Sciences*

- Biochemistry
- Biology
- Biomedical Sciences
- Psychology
$>$ Physical Sciences*
- Chemistry
- Earth Sciences
- Life Physics
- Materials and Nanosciences
- Mathematical Physics
- Medicinal Chemistry
- Physics
- Physics and Astronomy

Science and Aviation
> Science and Business
*Select your major when you apply.

ROCK'N IT
When Carson chose his major in Earth Sciences, he imagined spending time in the field, studying rocks, and bonding with nature. So when he landed a summer job in Nunavut charting rocks and living in a tent, he knew he'd made the right choice.
"It was like nothing l'd ever experienced, and yet it was exactly how I imagined myself," says Carson. "Solving mysteries within the Earth fascinates me, and there's still so much we don't understand about the world around us. Geology is like a giant puzzle with many possible outcomes. I love that."

PROFESSIONAL DEGREES
Apply to a recommended Bachelor of Science (BSc) program to meet admission requirements for these programs.
> Doctor of Optometry (OD)
Apply as early as your third year in a BSc program.
> Doctor of Pharmacy (PharmD)
Apply as early as your second year in a BSc or other post-secondary program.

# PROGRAM DETAILS 

## LEGEND

* Only offered at the University of Waterloo
e Available online
$\mathrm{E}=$ Entry-level program: apply directly through Ontario Universities' Application Centre (OUAC)
$M=$ Major: subject of major interest, apply through an entry-level program
- Sample courses

A Specializations

- Career possibilities


## The finer points.

Use the program descriptions together with the 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!

## A / PAGE 33

> Accounting and Financial Management
> Actuarial Science
> Anthropology
> Applied Mathematics
> Architectural Engineering
> Architecture
B / PAGE 33
> Biochemistry
> Biology
> Biomedical Engineering
> Biomedical Sciences
> Biostatistics
> Biotechnology/Chartered Professional Accountancy
> Biotechnology/Economics
> Business Administration (Laurier) and Computer Science (Waterloo) Double Degree
> Business Administration (Laurier) and Mathematics (Waterloo) Double Degree
C / PAGE 34
> Chemical Engineering
> Chemistry
> Civil Engineering
> Classical Studies
> Combinatorics and Optimization
> Computational Mathematics
> Computer Engineering
> Computer Science
> Computing and Financial Management

## D / PAGE 34

> Data Science
E / PAGES 34-35
> Earth Sciences
> Economics
> Electrical Engineering
> English
> Environment and Business
> Environment, Resources and Sustainability
> Environmental Engineering
> Environmental Science
F / PAGE 35
> Fine Arts
> French

G / PAGE 35
> Gender and Social Justice
> Geography and Aviation
> Geography and Environmental Management
> Geological Engineering
> Geomatics
> German
> Global Business and Digital Arts
H / PAGE 35-36
> Health Studies
> History
> Honours Arts
> Honours Arts and Business
> Honours Science
I / PAGE 36
> Information Technology Management
> International Development
K / PAGE 36
> Kinesiology
> Knowledge Integration
L / PAGE 36
> Legal Studies
> Life Physics
> Life Sciences
M / PAGES 36-37
> Management Engineering
> Materials and Nanosciences
> Mathematical Economics
> Mathematical Finance
> Mathematical Optimization
> Mathematical Physics (BMath)
> Mathematical Physics (BSc)
> Mathematics
> Mathematics/Business Administration
> Mathematics/Chartered Professional Accountancy
> Mathematics/Financial Analysis and Risk Management
> Mathematics/Teaching
> Mechanical Engineering
> Mechatronics Engineering
> Medicinal Chemistry
> Medieval Studies
> Music

N/PAGE 37
> Nanotechnology Engineering
0 / PAGE 37
> Optometry
P / PAGE 38
> Peace and Conflict Studies
> Pharmacy
> Philosophy
>Physical Sciences
> Physics
> Physics and Astronomy
> Planning
> Political Science
> Psychology (BA)
> Psychology (BSc)
> Public Health
> Pure Mathematics
R / PAGE 38
> Recreation and Leisure Studies
> Recreation and Sport Business
> Religious Studies
S / PAGE 39
> Science and Aviation
> Science and Business
> Sexuality, Marriage, and Family Studies
> Social Development Studies
> Social Work
> Sociology
> Software Engineering
> Spanish
> Speech Communication
> Statistics
> Systems Design Engineering
T / PAGE 39
> Theatre and Performance
> Therapeutic Recreation
> Tourism Development

## A

## * accounting and financial management /

FACULTY OF ARTS AND SCHOOL OF ACCOUNTING AND FINaNCE
(E, Bachelor of Accounting and Financial Management) Co-op only
Two areas of expertise, one serious career edge. Study accounting, finance, and business, and how they interrelate. Extend your learning through co-op work terms and extracurricular opportunities while working toward a Chartered Professional Accountant (CPA) and/or Chartered Financial Analyst (CFA) designation. Questions?
Email afm@uwaterloo.ca.

- Financial Accounting, Global Financial Markets, Business Analytics, International Business
- Accountant, auditor, investment banker


## ACTUARIAL SCIENCE / FACULTY OF MATHEMATICS

(M, Bachelor of Mathematics) Co-op available Predict the future - without a crystal ball. In one of North America's top-ranked actuarial science programs, you'll use math and statistics to predict uncertain events such as stock market performance or an insurance company's payouts. Prepare for your professional actuary designation with courses in finance, risk theory, pensions mathematics, and more.

- Corporate Finance, Applied Probability, Introduction to Investments
■ Actuarial analyst, consultant, financial analyst
ANTHROPOLOGY / FACULTY OF ARTS (M, Bachelor of Arts) Co-op available
From Neanderthals to Millennials, discover what it means to be human. Explore evolution and early societies, or tackle contemporary issues such as violence and media. Whether you're examining fossils and bones in the lab or conducting fieldwork in the Mediterranean, the Arctic, or Africa, you'll learn more about what makes our species tick.
- Biological Anthropology, Skeletal Biology and Forensics, Archaeological Field School
- Archaeologist, curator of natural property, heritage planner


## APPLIED MATHEMATICS / FACULTY OF MATHEMATICS

(M, Bachelor of Mathematics) Co-op available Use your math skills to push boundaries. Apply your understanding of mathematical concepts, computer science, engineering, and physics to complex communication and control-system issues. Round out your degree with engineering electives, or specialize in biology, economics, earth sciences, physics, or scientific computation

- Applied Complex Analysis, Introduction to Computational Mathematics, Introduction to Differential Equations
- Researcher, software developer, analyst

ARCHITECTURAL ENGINEERING / FACULTY OF ENGINEERING
(E, Bachelor of Applied Science) Co-op only Build better buildings (and a bright career in the process). In Waterloo's newest engineering program, you'll cover the science of good building design, including mechanics, building systems, structural analysis, and structural design - and round it out with courses in aesthetics, culture, and other design elements at our world-class School of Architecture.

- Structural Design Studio, History of the Built Environment, Architectural Graphics Studio, Electrical Circuits and Instrumentation
- Building design consultant, project manager, designer, construction consultant

ARCHITECTURE / SCHOOL OF ARCHITECTURE (E, Bachelor of Architectural Studies) Co-op only
Create the blueprints for a great career in 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, the environment, and society. In fourth year, study at our studio in Rome. Questions? Email architecture@uwaterloo.ca.

- Design Studio, Cultural History, Visual and Digital Media, Environmental Building Design, Building Construction, Digital Fabrication
- Architect, project manager, designer, architectural assistant


## B

BIOCHEMISTRY / FACULTY OF SCIENCE (M, Bachelor of Science) Co-op available
Play with the building blocks of life. Combine classroom courses in biology and chemistry with extensive lab work (where you'll learn things like chromatography, electrophoresis, and protein analysis). You'll graduate ready for careers in forensic science, pharmaceuticals, medical diagnostics, agriculture, biotechnology, and more.

- Fundamentals of Metabolism, Analytical

Chemistry, Genetics
A Biotechnology

- Toxicologist, biomaterials researcher, health-care professional


## BIOLOGY / FACULTY OF SCIENCE (M, Bachelor of Science)

 Co-op availableStudy 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 functioning of living organisms, where they come from, and how they evolve. You can also choose our Bioinformatics option, combining biological studies and computer science.

- Fundamentals of Microbiology, Principles of

Human Physiology, Diversity of Life
A Animal Biology, Biotechnology, Environmental Biology, Microbiology, Molecular Genetics,
Plant Biology

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


## BIOMEDICAL ENGINEERING / FACULTY OF 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 engineering principles in biology, mechanics, physics, systems analysis, and design. With plenty of hands-on experience in biological and medical systems, you'll graduate ready to develop new technology for health care or athletics.

- Introduction to Biomedical Design, Engineering

Biology, Anatomical Systems Modelling

- Research and development of medical devices, biomedical data analysis, product design of sporting equipment


## BIOMEDICAL SCIENCES / FACULTY OF SCIENCE

(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 in North America. Plus, it gives you room to add a minor or pursue a variety of personal interests to round out your degree.

- Human Anatomy, Biology of Human Aging,

Cell Biology of Human Disease

- Optometrist, pharmacist, physician

BIOSTATISTICS / FACULTY OF MATHEMATICS (M, Bachelor of Mathematics) Co-op available
Fight illness with a healthy dose of data. In Biostatistics, you'll focus on clinical, public, and population health statistics. You'll also take specialized upper-year courses, graduating with the strong data-based decision-making skills you need to be part of an effective health-care research team.

- Introduction to Medical Statistics, Management Information Systems, Statistical Methods for Life History Analysis
- Medical researcher, data analyst,


## project manager

## © BIOTECHNOLOGY/CHARTERED PROFESSIONAL

## 

AND FINANCE (E, Bachelor of Science) Co-op only
Spreadsheets plus science and paid co-op experience equals career success. This unique program prepares you for professional accountancy and advisory roles in the growing biotech sector. After graduation, earn your Master of Accounting (MACC) degree in only eight months - an optional next step in becoming a Chartered Professional Accountant.

- Molecular Biotechnology, Introduction to Managerial Accounting, Accounting Information Systems
- Accountant, finance coordinator, analyst


## * BIOTECHNOLOGY/ECONOMICS / FACULTY OF SCIENCE

(E, Bachelor of Science) Co-op only
Earn a science degree with economic punch. In Canada's only program to integrate biotechnology, economics, and paid co-op work terms, you'll learn to apply business knowledge to industrial and scientific technologies. Graduate ready to help the world capitalize on biotech breakthroughs, from tumour-fighting immune cells to oil-eating bacteria.

- Fermentation Biotechnology, Biostatistics and Experimental Design, Econometric Analysis
■ Economist, biotechnologist, business and customer insights analyst, financial security advisor


## * BUSINESS ADMINISTRATION (LAURIER) AND COMPUTER <br> SCIENGE (WATERLOO) DOUBLE DEGREE / DAVID R. CHERITON

 SCHOOL OF COMPUTER SCIENCE (E, Bachelor of Business Administration and Bachelor of Computer Science) Co-op onlyCombine the worlds of bytes and business and earn two degrees in five years. In one of the top computer science programs in Canada, you'll learn about software, algorithms, programming, and the limits of computation. At nearby Wilfrid Laurier University, you'll study business essentials like brand communication, accounting, and marketing.

- Designing Functional Programs, Understanding the Business Environment, Computer Organization and Design
■ Business analyst, software engineer,


## application developer

## * BUSINESS ADMINISTRATION (LAURIER) AND MATHEMATICS

(WATERLOO) DOUBLE DEGREE / FACULTY OF MATHEMATICS
(E, Bachelor of Business Administration and Bachelor of Mathematics) Co-op only Five years, two degrees, one serious edge. Combine Waterloo's strength in mathematics with the business expertise of Wilfrid Laurier University, and earn two prestigious degrees in the time it takes to earn one co-op degree. 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, Information Systems

Management, Introduction to Optimization

- Securities trader, management analyst, corporate strategist


## C

## CHEMICAL ENGINEERING / FACUITY OF 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, and more.

- Materials Science and Engineering, Bioprocess Engineering, Process Analysis and Design
- Design and creation of pharmaceuticals, manufacturing of microelectronics, process engineering of petrochemicals

CHEMISTRY / FACULTY OF SCIENCE (M, Bachelor of Science) Co-op available
Fire up the Bunsen burners in one of Canada's top 10 chemistry programs. You'll learn from leading experts in the industry, work with advanced chemical instrumentation in our labs, and participate in cutting-edge research. 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
A Bio-based Chemistry,* Computational Chemistry (*only available in the regular stream of study)
- Analytical chemist, chemistry patents agent, forensic scientist


## GIVIL ENGINEERING / FACULTY OF 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. Tailor your degree to your specific interests, with specialization options such as transportation, structures, and water resources.

- Engineering and Sustainable Development, Transportation Engineering Applications, Structural Design, Geotechnical Engineering - Design and construction of stadiums and entertainment facilities, implementation of water systems, construction site management
CLASSICAL STUDIES / FACULTY OF ARTS (M, Bachelor of Arts) Co-op available
Delve into the roots of Western civilization. Gain a deep understanding of history, culture, literature, religion, art, philosophy, and society in ancient Greece and Rome - cultures that continue to shape our thinking and our society today. Take advantage of study-abroad opportunities in the Mediterranean. Language courses are optional.
- Greek Art and Architecture, Astrology and Magic, Roman History
- Project manager, reference librarian, academic manager


## COMBINATORICS AND OPTIMIZATION / FACULTY OF MATHEMATICS

(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 make an operation more efficient. Through courses in cryptography, graph theory, and linear programming, you'll learn how to apply these ideas to problems in areas ranging from security to scheduling to risk analysis.

- Introduction to Combinatorics, Introduction to Optimization, Coding Theory
■ Developer, analyst, researcher

COMPUTATIONAL MATHEMATICS / FACULTY OF MATHEMATICS
(M, Bachelor of Mathematics) Co-op available
Get ready to solve industrial-sized problems. In one of the world's top schools for math and computer science, learn to analyze data sets and formulae to better understand the world around us. You'll develop computer modelling skills to tackle mathematical problems found in business, economics, engineering, finance, medicine, and science.

- Data Structures and Data Management, Logic and Computation, Computer Simulation of Complex Systems
■ Project manager, enterprise architect, software developer


## COMPUTER ENGINEERING / FACULTY OF ENGINEERING

(E, Bachelor of Applied Science) Co-op only Why choose? Develop software savvy and hardware know-how. Build and test computer hardware and software in our state-of-theart labs. You'll work with everything from smartphones to massive engineered systems in networked environments. Plus, gain valuable work experience in Waterloo Region: a high-tech hub home to more than 1,500 technology companies.

- Digital Circuits and Systems, Systems Programming and Concurrency, Computer Networks
- Design of computer or software architecture, manufacturing telecommunication devices, creation of application software


## COMPUTER SCIENCE / DAVID R. CHERITON SCHOOL OF COMPUTER

SCIENGE (E or M, Bachelor of Computer Science or Bachelor of Mathematics) Co-op available
Earn a degree that computes. At one of the world's best schools for computer science, you'll develop a broad understanding in areas including systems and networks, algorithms, and software engineering. With $70+$ computer science courses and loads of options and electives, you'll have lots of freedom to explore your interests.
Questions? Email future-ugrad@cs.uwaterloo.ca.

- Designing Functional Programs, Data

Structures and Data Management, The Social Implications of Computing
Software developer, web developer, project manager

* 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
Develop the know-how, networks, and experience to land a career in computer science or finance - or both. Combine your interdisciplinary studies with six co-op work terms in software development, banking, investments, risk management, or insurance to set yourself apart in a competitive marketplace. Questions? Email cfm@uwaterloo.ca.
- Object-Oriented Software Development, Regression and Forecasting Methods in Finance, Equity Investments
- Software developer, quantitative analyst, investment banking analyst


## D

DATA SCIENCE / DAVID R. CHERITON SCHOOL OF COMPUTER SCIENCE (M, Bachelor of Computer Science or Bachelor of Mathematics) Co-op available Make sense of the tsunami of data produced by business, scientific, and social activity. Develop the foundation in computing systems, data analytics, statistics, and machine learning you need to extract meaningful information from data. You'll graduate with the skills to predict trends and help governments and businesses make better decisions.

- Computer Organization and Design,

Data Visualization, Data Structures and
Data Management

- Data scientist, statistician, business analyst


## E

EARTH SCIENCES / FACUITY OF SCIENCE (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.

- Earth System Science, Petrography, Mineralogy

A Geology, Geophysics, or Hydrogeology

- Hydrogeologist, geologist, geophysicist

ECONOMICS / FACULTY OF ARTS (M, Bachelor of Arts) Co-op available
From piggybanks to the World Bank, learn how wealth is produced, distributed, and consumed and how it shapes society, politics, and culture. You'll cover the fundamentals of micro- and macroeconomics and analyze how those principles play out in a wide range of sectors, including finance, public policy, and international economics.

- Economics of Sport, Business Finance,

Environmental Economics
A Econometrics, Finance, or Public Policy

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


## ELECTRICAL ENGINEERING / FACULTY OF 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!

- Digital Circuits and Systems,

Electromagnetic Fields and Waves,
Embedded Microprocessor Systems

- Product development of telecommunications systems, software quality assurance analysis, electric equipment manufacturing

ENGLISH / FACULTY OF ARTS (M, Bachelor of Arts) Co-op available
Go way beyond emojis. Our 150+ undergraduate courses give you all kinds of opportunity to explore the written word. Examine English literature, language, and new media while honing your skills as a communicator. Choose to focus your studies in Literature; Literature and Rhetoric; or Rhetoric, Media, and Professional Communication.

- Popular Potter, Game Studies, Global Shakespeare
A Creative Writing, Digital Media Studies, Global
Literatures, Technical Writing
- Communications manager, media relations specialist, technical writer, publisher, social media strategist


## * ENVIRONMENT AND BUSINESS / FACULTY OF ENVIRONMENT

(E, Bachelor of Environmental Studies) Co-op only
Eco-warrior, meet business mogul. The only program of its kind in Canada, this degree gives you an in-depth knowledge of environmental issues and the business world. Cover everything from stakeholder engagement and industrial ecology to finance, project management, marketing, and more. Then, put it all into practice in co-op work terms.

- International Corporate Responsibility, Green Entrepreneurship, Business Finance
- Sustainability analyst, environmental stewardship manager, environmental policy advisor


## ENVIRONMENT, RESOURCES AND SUSTAINABILITY /

FACULTY OF ENVIRONMENT (E, Bachelor of
Environmental Studies) Co-op available
Become a sustainability superhero. Use insights from the natural, physical, and social sciences to help solve some of the world's biggest environmental challenges - from water scarcity to pollution to loss of biodiversity. Learn about conserving and restoring ecosystems, and explore issues in environmental politics, policy, and governance.

- Communities and Sustainability, Environmental and Sustainability Assessment, Ecosystem Assessment
-Terrestrial and wetland biologist, sustainability policy analyst, sustainable energy consultant


## ENVIRONMENTAL ENGINEERING / FACULTY OF ENGINEERING

(E, Bachelor of Applied Science) Co-op only Save the planet with a degree from Canada's largest environmental engineering program. Combine the technical rigour of engineering with a broad education in chemistry, biology, geology, and more. You'll graduate ready to clean up the world's water, soil, and air pollution - and to prevent future environmental problems.

- Air Quality Engineering, Environmental and Sustainability Assessment, Environmental Modelling
- Product design for air pollution control systems, process design for water treatment, protection and revitalization of ecosystems


## ENVIRONMENTAL SCIENCE / FACULTY OF SCIENCE

( E , Bachelor of Science) Co-op available Earn a science degree. Save the planet. Ranked among the top 10 in Canada, this program gives you a scientist's perspective of ecological and geological systems. You'll graduate with the knowledge, creativity, and expertise to create a more sustainable world.

- Organismal and Evolutionary Ecology, Geomorphology and GIS Applications, Applied Wetland Science
A Ecology, Geoscience, or Water Science
Geoscientist, ecologist, environmental consultant


## F

FINE ARTS / FACULTY OF ARTS (M, Bachelor of Arts)

## Co-op available

Explore the power of visual communication. Develop a critical understanding of art through painting, drawing, sculpture, printmaking, computer imaging, art history, and film studies. Choose Visual Culture or Studio Practice as your focus. Want more? Add the Teaching Specialization to land a spot in teacher's college at Nipissing University.

- History of Film and Visual Media,

Observational Drawing, Digital Imaging
ATeaching Preparation, Intensive Studio, Digital Art

- 3D visual effects artist, illustrator, teacher, web designer, curator, interior designer, art therapist
FRENCH / FACULTY OF ARTS (M, Bachelor of Arts)


## Co-op available

Chez Waterloo, les possibilités sont infinies. A French degree gives you a valuable edge in almost any field. Include a year of study in Québec or France, or live on the Frenchlanguage residence floor on campus. And if you choose our French Teaching Specialization, you'll guarantee yourself a spot in teacher's college at Nipissing University.

- Introduction to Translation, Business French,

Children's Literature in French
A Professional French

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


## G

## GENDER AND SOCIAL JUSTICE / FACULTY OF ARTS

(M, Bachelor of Arts) Co-op available
Be an advocate for equity, justice, and positive change. Explore multi-layered marginalization and understand cultural patterns of oppression based on attributes such as gender, sexual orientation, race, and disability. Learn how you can contribute to building just and inclusive communities.

- Gender and Social Justice in Popular Culture, Waves of Feminist Thought, Global Queer Cinema
- Counselling co-ordinator, social worker


## * gEOGRAPHY AND AVIATION / FACULTY OF ENVIRONMENT

(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 Commercial Pilot Licence. 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
- Pilot, King Air 350 pilot, first officer, flight training instructor


## GEOGRAPHY AND ENVIRONMENTAL MANAGEMENT /

FACULTY OF ENVIRONMENT (E, Bachelor of
Environmental Studies) Co-op available
Make the world your classroom. Explore how people shape our planet as you delve into Earth's physical and human systems and hone your technical skills in environmental analysis. Learn about climate change, landforms, population growth, Geographic Information Systems, and other key topics in one of Canada's top-ranked geography programs.

- Global Environmental Systems, Local Development in a Global Context, Earth's
Future Climates
■ Environmental stewardship coordinator,
sustainability consultant, teacher


## GEOLOGICAL ENGINEERING / FACULTY OF 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, you'll spend more time outside the classroom than in any other engineering program.

- Engineering Geology, Structural Geology,

Applied Geophysics, Geotechnical Engineering
Design and integration of terrain sensors, hazard and risk assessment of landslides and earthquakes, design of surface and subsurface infrastructure
GEOMATICS / FACULTY OF ENVIRONMENT (E, Bachelor of Environmental Studies) Co-op available Geotag, you're it! Tap into Waterloo's world-class computer science expertise when you join this fast-growing field that combines the power of computing with geographic and environmental analysis. Learn to use tools such as remote sensing, computer mapping, GPS, and Geographic Information Systems (GIS) to analyze data and make meaningful decisions.

- Earth from Space Using Remote Sensing, Geodesy and Surveying, Geoweb and Location-based Services
■ Data analyst, GIS operator, remote
sensing specialist

GERMAN / FACULTY OF ARTS (M, Bachelor of Arts) Co-op available
Get an education that's wunderbar. We offer way more than just German language courses. Explore German culture, film, literature, and linguistics, or add classes in Slavic languages like Russian and Croatian. You can even earn credits studying in Germany. You'll graduate with valuable skills for careers in education, business, and government.

- German through Comics, German for Professional Purposes, German Filmmakers in Hollywood
- Editor and communications manager, business analyst, sales manager


## * GLOBAL BUSINESS AND DIGITAL ARTS / FACULTY OF ARTS

(E, Bachelor of Global Business and Digital Arts) Regular only
Lead business into the future through the power of digital media. Explore cross-cultural communication and management, digital design, and emerging technologies. Spend your upper years at the Stratford School of Interaction Design and Business, and enhance your learning with a paid internship. Questions? Email stratfordprograms@uwaterloo.ca.

- Introduction to Digital Media Design,

Marketing in the Digital World, Working
in Teams and Project Management

- User experience designer, social media manager, digital marketing specialist, project manager


## H

HEALTH STUDIES / FACULTY OF APPLIED HEALTH SCIENCES
(E, Bachelor of Science) Co-op available It's true: an ounce of prevention is worth a pound of cure. Learn how to promote healthy lifestyles and improve health-care systems by combining the science and social aspects of health. You'll graduate ready to tackle global epidemics, transform public health policy, and more - or pursue further studies in medicine, epidemiology, and nursing.

- Canadian Health Systems; Development, Aging, and Health; Environmental Toxicology and Public Health
A Gerontology, Health Informatics, Health Research, Pre-Clinical
- Health professional (e.g., medical doctor, nurse, epidemiologist, occupational therapist, midwife, genetic counsellor), research coordinator, health informatics consultant

HISTORY / FACULTY OF ARTS (M, Bachelor of Arts) Co-op available
Develop a world view that goes back centuries. With support from award-winning teachers, you'll develop analytical skills and a knack for seeing patterns from the past that can make sense of the present and influence the future. Focus on Canadian, American, European, or international history. You can even take a portion of your degree in China!

- Rock 'n' Roll and US History, Russia: From Tsars to Putin, Indigenous Histories of Canada
A Applied History; Global Interactions; International Relations; Revolution, War, and Upheaval
■ Government affairs manager, executive researcher, lawyer, director of government relations
© HONOURS ARTS / FACULTY OF ARTS (E, Bachelor of Arts) Co-op available

Pursue your passions. Shape your future. Explore a variety of subjects, or immerse yourself in one of 23 arts majors. Choose to add co-op, and get up to 20 months of paid work experience before you graduate. Refer to your specific major of interest (M) for more details. This program is offered through the main Waterloo campus, St. Jerome's University, and Renison University College.

## HONOURS ARTS AND BUSINESS / FACULTY OF ARTS

(E, Bachelor of Arts) Co-op available
Follow your passion for arts and gain business know-how: combine one of our 23 arts majors with business studies. Opt for co-op and tap into North America's largest pool of co-op employers. Refer to your specific major of interest (M) for details. After applying, you may co-register with St. Jerome's University or Renison University College.

HONOURS SCIENCE / FACULTY OF SCIENGE (E, Bachelor of Science) Regular only
Deciding is difficult. If you're still exploring which sciences intrigue you the most, Honours Science is a brilliant choice. You'll have the flexibility to take the courses you want or handpick the ones you need, which is convenient if you plan to apply to a professional school with prerequisite course requirements.

- Cell Biology, Modern Physics, Geochemistry
- Physician, optometrist, pharmacist, genetic counsellor, teacher


## 1

INFORMATION TECHNOLOGY MANAGEMENT / FACULTY OF MATHEMATICS (M, Bachelor of Mathematics)

## Co-op available

Become fluent in IT talk and business jargon. Combine computer science studies in systems analysis, e-business, and networks with business courses such as marketing, project management, and statistics. You'll graduate with the ability to apply IT solutions to business processes and bridge the gap between CEO and computer specialist.

- Management Information Systems,

Electronic Business, Computer Applications in Business: Databases
Business systems analyst, web developer, database administrator

## INTERNATIONAL DEVELOPMENT / FACULTY OF ENVIRONMENT

(E, Bachelor of Environmental Studies) Regular only
Get the toolkit you need to build a better world. Tackle issues of economic inequality, social injustice, and environmental change, and apply your skills on an eight-month overseas placement. You'll graduate knowing how to design development projects that are ethical, environmentally sustainable, culturally responsible, and evidence-based.

- Problem-Solving for Development, Global Cities in Global Development, Introduction to Social Entrepreneurship
■ Not-for-profit program manager, international partnership manager, grant officer

KINESIOLOGY / FACULTY OF APPLIED HEALTH SCIENCES
(E, Bachelor of Science) Co-op available
Make a smart play: study the science of human movement. In this multidisciplinary program, you'll gain hands-on skills in preventing, assessing, and treating movement-related illness and injury (and study anatomy on real human cadavers!). Choose from four kinesiology areas of specialization and prepare for professional programs in medicine, chiropractic, or physiotherapy.

- Human Anatomy: Limbs and Trunk, Fundamentals of Neuroscience, Musculoskeletal Injuries in Work and Sport
A Ergonomics and Injury Prevention,
Human Nutrition, Medical Physiology,
Rehabilitation Sciences
- Health professional (e.g., medical doctor, physical therapist, occupational therapist, athletic therapist, kinesiologist, chiropractor), ergonomist, rehabilitation specialist


## * KNOWLEDGE INTEGRATION / FACULTY OF ENVIRONMENT <br> (E, Bachelor of Knowledge Integration) Regular only <br> Discover the freedom to pursue all your passions. More than a mix of arts and science, this program is built around a core set of skills that equip you to understand and solve tough problems, communicate effectively, and make a difference in a complex and changing world. Choose a traditional specialization or create one that is uniquely yours. <br> - Collaboration, Design Thinking, and Problem Solving; Nature of Scientific Knowledge; <br> Creative Thinking <br> A Collaborative Design; Science, Technology, and Society <br> ■ Business analyst, design strategist, user experience researcher

## L

LEGAL STUDIES / FACULTY OF ARTS ( $M$, Bachelor of Arts)
Co-op available
Judge the impact of the legal system. (No gavels required.) Explore the law and courts from the viewpoint of political science, history, sociology, philosophy, and peace and conflict studies. Because law touches almost every aspect of society, this degree is great preparation for a career in government, business, law enforcement, or law itself.

- Criminology, Women and the Law, Children's Rights in Canada
- Legal assistant, records clerk, executive researcher, probation and parole officer, lawyer


## LIFE PHYSICS / FACULTY OF SCIENGE (M, Bachelor of

## Science) Co-op available

Rocket science, meet medical science. Prepare for professions such as radiation oncology and medical imaging that harness the power of physics. This flexible, interdisciplinary program gives you a solid foundation in physics, chemistry, and biology, with plenty of hands-on labs and opportunities to get involved in research.

- Biophysics of Imaging, Modelling Life Physics, Molecular and Cellular Biophysics
A Biophysics, Medical Physics
- Medical physicist, physician, biophysicist

LIFE SCIENCES / FACULTY OF SCIENCE (E, Bachelor of Science) Co-op available for some majors If you want to study the science of living things, this is your starting point. Life Sciences is an entry program for the following majors (M): Biochemistry, Biology, Biomedical Sciences, or Psychology. Refer to your specific major of interest for details.

## * MANAGEMENT ENGINEERING / FACULTY OF ENGINEERING

(E, Bachelor of Applied Science) Co-op only
Make a smooth career move by making processes flow better. You'll study industrial engineering principles, advanced data analytics, mathematical modelling, and computer programming to optimize processes in any organization. You'll become an invaluable asset to employers, solving complex technical and management problems in a variety of industries.

- Simulation Analysis and Design, Supply Chain Management, Data Warehousing and Mining, Principles of Software Engineering
- Data scientist, management consultant, industrial engineer, business analyst, project and product manager


## MATERIALS AND NANOSCIENCES / FACULTY OF SCIENCE

( $M$, 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, Condensed Matter Physics
-Materials scientist, nanotechnologist, materials process specialist


## MATHEMATICAL ECONOMICS / FACULTY OF MATHEMATICS

(M, Bachelor of Mathematics) Co-op available Do 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 for a master's or doctoral program.

- Microeconomic Theory, Macroeconomic

Theory, Differential Equations for Business and Economics

- Business analyst, econometrician, consultant


## MATHEMATICAL FINANCE / FACULTY OF MATHEMATICS

(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. You'll explore the math behind financial markets. Study corporate finance, asset-liability management, statistics, forecasting, and more - everything you need for a high-flying career in banking and finance.

- Introduction to Investments, Forecasting, Real Analysis
- Controller, compliance analyst, investment policy analyst


## MATHEMATICAL OPTIMIZATION / FACULTY OF MATHEMATICS

 (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 your optimization, probability, statistics, and computer science courses and hone your skills with case studies. Then round out your degree with business, economics, and management science.- Introduction to Computational Mathematics, Computer Simulation of Complex Systems,


## Portfolio Optimization Models

A Business, Operations Research

- Business analyst, information technology architect, risk analyst


## MATHEMATICAL PHYSICS / FACULTY OF MATHEMATICS

(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 at Canada's only faculty of mathematics and one of Canada's most innovative departments of physics. Then choose a career in the semiconductor industry, telecommunications, or medical technology or go on to graduate studies.

- Waves, Electricity and Magnetism; Introduction to Theoretical Mechanics; Quantum Theory
$\square$ Operations specialist, information technology architect, lecturer


## MATHEMATICAL PHYSICS / FACULTY OF SCIENCE

(M, Bachelor of Science) Co-op available
Dig deeper into physics with a serious helping of math. Take advantage of Canada's only faculty of mathematics and one of Canada's most innovative departments of physics to explore both subjects in depth. It's great grounding for careers involving anything from the theoretical foundations of quantum technology to the unified theories of nature.

- Modern Physics, Quantum Theory, Classical Mechanics and Special Relativity
- Theoretical physicist, data scientist, quantitative analyst


## MATHEMATICS / FACULTY OF MATHEMATICS

(E, Bachelor of Mathematics) Co-op available Earn a degree that counts! Apply to Mathematics to study any of the following math majors (M): Actuarial Science, Applied Mathematics, Biostatistics, Combinatorics and Optimization, Computational Mathematics, Data Science, Mathematical Economics, Mathematical Finance, Mathematical Optimization, Mathematical Physics, Mathematical Studies, Mathematics/ Teaching, Pure Mathematics, and Statistics.

## MATHEMATICS/BUSINESS ADMINISTRATION / FACULTY OF

MATHEMATICS (E, Bachelor of Mathematics) Co-op available
It's a simple equation: math + business = career success. Build your degree with courses from two prestigious institutions: math courses from Waterloo's Faculty of Mathematics and business courses from Wilfrid Laurier University. You'll graduate with the technical expertise and analytical know-how to thrive in the world of business.

- Corporate Finance, Introduction to Managerial Accounting, Organizational Behaviour
- Operations manager, risk modelling analyst, investor relations specialist


## * MATHEMATICS/CHARTERED PROFESSIONAL <br> ACCOUNTANGY / FACULTY OF MATHEMATICS AND SCHOOL OF ACCOUNTING AND FINANCE (E, Bachelor of Mathematics)

Co-op only
Really understand the numbers. In this one-of-a-kind program, you'll 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 equally focused studies in accounting, economics, and business.

- Introduction to Financial Accounting, Cost Management Systems, Corporate Finance
$\square$ Accountant, controller, auditor


## * © mathematics/financial analysis and risk

 MANAGEMENT / FACULTY OF MATHEMATICS (E, Bachelor of Mathematics) Co-op availableCrunch numbers, calculate odds, and create career success in this challenging program one of just a few across Canada recognized by the CFA Institute and PRMIA. You'll combine mathematics with finance, accounting, economics, and risk management. Specialize in chartered financial analysis or risk management, and graduate ready for your professional exams.

- Computational Methods in Business and Finance, Applied Linear Models and Process Improvement for Business, Commercial and Business Law for Mathematics Students
- Financial analyst, risk analyst, investment analyst


## MATHEMATICS/TEACHING / FACULTY OF MATHEMATICS

(M, Bachelor of Mathematics) Co-op only Inspire the next generation as a high school math teacher. 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. Want to do some of your learning overseas? Opt for our four-month Math in Europe program.

- Introduction to Mathematics Education, Educational Psychology, Mathematical Discovery and Invention
- Teacher, online learning consultant, instructional media developer


## MECHANICAL ENGINEERING / FACULTY OF 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 factors like the environment, safety, manufacturing, and materials, so you'll graduate with the knowledge to design everything from switches to spacecrafts.

- Aerodynamics, Industrial Metallurgy, Electromechanical Devices and Power Processing, Heat Transfer
$\square$ Design of aerospace accessories, manufacturing of wind turbines, research and development in automotive technologies


## MECHATRONICS ENGINEERING / FACULTY OF 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 electromechanical devices.

- Sensors and Instrumentation, Microprocessors and Digital Logic, Structure and Properties of Materials
Manufacturing and programming of robotic devices, design of biomedical instruments, design and creation of wearable technology


## MEDICINAL CHEMISTRY / FACULTY OF SCIENCE

(M, Bachelor of Science) Co-op only
Explore the science of drug discovery. In this exciting program, 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 know how to design, synthesize, and evaluate potential medications - ready to create the life-saving treatments of tomorrow.

- Chemical Kinetics, Transition Element

Compounds and Inorganic Materials,
Fundamentals of Metabolism
Medicinal chemist, research chemist,
synthetic chemist

## MEDIEVAL STUDIES / FACULTY OF ARTS (M, Bachelor

 of Arts) Co-op availableImmerse yourself in the Middle Ages - minus the dysentery - in Canada's longest-standing Medieval Studies program. By concentrating on this crucial era in Western civilization, you'll gain insights into European politics, modern gender norms, the connections between Islam and Christianity, and more. (You can even study abroad in a castle!)

- Crusading in the Middle Ages, Medieval Society, The History of Islamic Civilization
$\square$ Professional writer, librarian, historical site manager, teacher


## MUSIC / FACULTY OF ARTS (M, Bachelor of Arts)

 Co-op availableExplore Beethoven to Bieber, solos to software 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 address the vital intersection of music and technology, film, global culture, and psychology.

- Music Cognition, Introduction to Jazz,

Soundtracks: Music in Film
A Church Music and Worship, Music in Global Context, Music and Peace
■Teacher, performer, associate pastor of music, music store owner, recording studio owner
$N$

* NANOTECHNOLOGY ENGINEERING / FACULTY OF ENGINEERING (E, Bachelor of Applied Science) Co-op only Design solutions measured in billionths of a metre in Canada's only undergraduate nanotechnology engineering program. Combining engineering principles with ideas from chemistry, electronics, quantum physics, and biology, you'll create the tiny technologies that are revolutionizing everything from smartphones to food processing to cancer treatment.
- Nanotoxicology, Quantum Mechanics, Societal and Environmental Impacts of Nanotechnology
- Research and development for
pharmaceuticals, design of advanced materials for electronic devices, manufacturing of medical instruments
0


## * OPTOMETRY / SCHOOL OF OPTOMETRY AND VISION

SCIENCE (Doctor of Optometry) Regular only/ Apply to a recommended accredited Bachelor of Science program to meet requirements
Set your sights on a career in vision health. After three years in a 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 opt-admissions@uwaterloo.ca.

- Diseases of the Eye, Practice Management, Neurophysiology of Vision
$\square$ Registered optometrist; careers in private practice, academia, and industry


## P

## PEACE AND CONFLICT STUDIES / FACULTY OF ARTS

( M , Bachelor of Arts) Co-op available
Choose a degree that can change the world. Develop diverse approaches to understanding conflict and promoting peace through Canada's first peace studies program. Discover how to transform conflict's violent potential into a creative force for positive change. Gain experience through an internship locally or in a former conflict zone abroad.

- Human Rights, Peace, and Business; Conflict Resolution; Restorative Justice; Gender in War and Peace
- Community development officer, international development specialist, social services worker, policy advisor, mediation consultant, lawyer
* PHARMACY / SCHOOL OF PHARMACY (Doctor of Pharmacy) Co-op only / Apply to a recommended Bachelor of Science program (or other approved post-secondary program) to meet requirements
A prescription for career success! After two years in an undergraduate science 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, Medical Microbiology
- Registered pharmacist; work in community practice, hospitals, and family health teams

PHILOSOPHY / FACULTY OF ARTS (M, Bachelor of Arts) Co-op available
Confront some of life's biggest questions. Study ancient texts and modern thinking on topics ranging from the nature of the human mind to emerging issues in science and 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.

- Foundations of Ethics, Probability and Decision Making, Philosophy of Mind
■ Lawyer, public policy analyst, ethicist, corporate archivist

PHYSICAL SCIENCES / FACULTY OF SCIENCE (E, Bachelor of Science) Co-op available for all majors Investigate what makes the physical world tick. This is an entry program for the following majors (M): Chemistry, Earth Sciences, Life Physics, Materials and Nanosciences, Mathematical Physics, Medicinal Chemistry, Physics, or Physics and Astronomy. Refer to your specific major of interest for details.

## PHYSICS / FACULTY OF SCIENCE (M, Bachelor of Science)

 Co-op availableBecome the next Einstein. (Wild hair optional.) Understand how the universe works: from quantum particles and exotic states of matter to curved space-time and black holes. In one of Canada's largest and most comprehensive physics programs, prepare for graduate studies or a wide range of careers requiring advanced problem-solving skills.

- Geometrical and Physical Optics, Classical Mechanics and Special Relativity,
Computational Physics
$\square$ Physicist, research and development scientist, physics teacher


## PHYSICS AND ASTRONOMY / FACULTY OF SCIENCE

(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 astrophysics and space science or for graduate studies in astronomy or physics.

- Introduction to the Universe, Thermal

Physics, Cosmology

- Astronomer, aerospace scientist, remote sensing scientist
PLANNING / FACULTY OF ENVIRONMENT (E, Bachelor of Environmental Studies) Co-op only Want a career with impact? We've got the plan. Tackle the environmental and social challenges facing our urban and rural areas. Learn about sustainable planning practices, designing effective transit systems, protecting natural areas, and more. You'll graduate ready to help communities create a healthy, prosperous, and sustainable future.
- Social Concepts in Planning, Transportation Planning and Analysis, Urban Planning Design and the Environment
A Decision Support and Geographic Information Systems, Environmental Planning and
Management, Land Development Planning,
Urban Design
■ Environmental planner, land use planner, urban designer, transit planner
POLITICAL SCIENCE / FACULTY OF ARTS (M, Bachelor of Arts) Co-op available
Let's get political! Explore political theory, power, global politics, and governance in one of the world's top 200 politics and international studies programs. Learn how to navigate (and shape) the political terrain and develop the critical-thinking and creative problem-solving skills to land a job in advocacy, politics, or public service.
- Globalization, International Business, and Development; Topics in Politics and Business; Global Environmental Governance
A Politics and Business, Global Governance, Canadian Politics, International Relations
$\square$ Civil servant, director of global programs, project manager, senior consultant
PSYCHOLOGY / FACULTY OF ARTS (M, Bachelor of Arts) Co-op available
Get inside people's heads. Explore the intricacies of the brain in this internationally renowned program, consistently ranked among the best in Canada. You'll examine human behaviour through a variety of perspectives, including neuroscience; cognition; and clinical, developmental, industrial/ organizational, and social psychology - great preparation for further studies in speech and language, counselling, and marketing.
- Learning Disabilities, Basic Research

Methods, Human Neuropsychology

- Mental health worker, research and development manager, human resources manager


## PSYCHOLOGY / FACULTY OF SCIENCE (M, Bachelor of

 Science) Co-op availableMajor in the science of the human mind. Investigate neuroscience; cognition; and clinical, developmental, and social psychology in one of North America's top psychology departments. You'll delve into research methods and data analysis - great preparation for further studies in medicine, speech pathology, or other health fields.

- Psychopathology, Psychological Measurement, Developmental Psychology
■ Neuroscientist, child psychologist, psychiatrist


## S

## * SCIENCE AND AVIATION / FACULTY OF SCIENCE

(E, Bachelor of Science) Regular only
Is your head in the clouds? Earn a Bachelor of Science degree and your Commercial 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 route you choose, you'll graduate with more than 200 flight hours.

- Earth from Space Using Remote Sensing, Physical Climatology, Human Factors in Aviation
■ Pilot, flight training instructor, aerial surveyor


## SCIENCE AND BUSINESS / FACULTY OF SCIENCE

(E, Bachelor of Science) Co-op available Can science majors make it big in business? You bet. Become a scientist with solid business skills or a business professiona who speaks the language of science. This unique program provides a strong foundation in science, along with courses in accounting, economics, marketing, computing, statistics, and human resources.

- Business Law, Entrepreneurship Principles and Practices, Physical and Chemical Properties of Matter
A Biochemistry, Biology, Biotechnology
- Medical information specialist, biotechnology accounts manager, project and program analyst

SEXUALITY, MARRIAGE, AND FAMILY STUDIES / FACULTY OF
ARTS (M, Bachelor of Arts) Co-op available Get ready to talk relationships. The only one of its kind in Canada, this program goes far beyond basic anatomical knowledge and sexual health. Drawing upon critical, anti-oppressive, and social justice approaches, you'll study the latest research and theory in sexuality, families, and relationships and how they apply to everyday life.

- Communication and Counselling Skills, Dynamics of Dating, Sexuality and Popular Culture
A Counselling, Human Services Practicum, Intensive Research
- Sexual health educator, youth support worker, mediator, social worker, couple and family therapist


## SOCIAL DEVELOPMENT STUDIES / FACULTY OF ARTS

(E or M, Bachelor of Arts) Co-op available through Honours Arts or Honours Arts and Business

Solve social issues at the local, national, and global level. Find your voice through the study of psychology, sociology, social development, and social work in this one-of-a-kind program. Focus your studies by adding one of five specializations and gain hands-on experience for your future career. Apply through Renison to begin this major in first year.

- Changing Concepts of Childhood, Social Work with Families, Positive Psychology
A Cultural Diversity, Education, Individual Wellbeing and Development, Social Policy and Social Action, Social Work
■ Child protection worker, teacher, social policy developer, human resources manager

SOCIAL WORK / RENISON UNIVERSITY COLLEGE (Bachelor of Social Work) Regular only
Have a hunger to help others? Prepare for a rewarding career while splitting your time between the classroom and in-field placements. This program is only available to students with an undergraduate degree. For a strong foundation, consider enrolling in Social Development Studies first. Questions? Email renison.socialwork@uwaterloo.ca.

- Diversity and Empowerment, Mental Health and Addiction Issues, Social Work with Older Adults
$\square$ Social worker, mental health clinician, counsellor, therapist

SOCIOLOGY / FACULTY OF ARTS (M, Bachelor of Arts) Co-op available
Get ready to wrestle with pressing questions about how societies work and how people organize themselves. Explore topics such as age, class, ethnicity, religion, gender, social inequality, and more. When you graduate, apply your research and data analysis skills in government, health, policy and research, law, academia, or non-profit organizations.

- Terrorism, Games and Gamers, Organized Crime

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

## 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 humancomputer interfaces, and lead major projects.

- Programming Principles, Logic and Computation,

Machine Learning, Computational Vision

- Design of operating systems, development of security systems, analysis and maintenance of web applications

SPANISH / FACULTY OF ARTS (M, Bachelor of Arts) Co-op available
Say hola to an in-depth understanding of the Hispanic world. Explore the richness of Hispanic literature and culture while learning one of the world's most popular languages. Take advantage of our exchanges to Spain or Latin America, and consider adding a Diploma in Spanish-English Translation - one of only two such diplomas in Canada.

- Poetry of the Tango, Introduction to Spanish Business Translation, The Hispanic World Through Literature and the Arts
A Spanish/English Translation
Librarian, marketing manager, senior
manager, translator
SPEECH COMMUNICATION / FACULTY OF ARTS (M, Bachelor of Arts) Co-op available
Testing one, two, three. In this program - the only one of its kind in Canada - you'll hone your skills as a communicator and discover how communication creates meaning in our world. Through creative, collaborative, and critical engagement, you'll prepare for a career in public relations, human relations, teaching, broadcasting, or marketing.
- Persuasion, Crisis Communication,

Digital Presentations

- Strategic planning officer, communications
officer, digital media coordinator

STATISTICS / FACULTY OF MATHEMATICS (M, Bachelor of Mathematics) Co-op available
Earn a degree that's highly significant 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. In today's data-driven world, these are skills in high demand!

- Applied Probability, Sampling and Experimental Design, Applied Linear Models
- Biostatistician, business intelligence specialist, software quality analyst


## * SYSTEMS DESIGN ENGINEERING / FACULTY OF ENGINEERING

(E, Bachelor of Applied Science) Co-op only
Take a creative, interdisciplinary approach to solving engineering problems. This flexible program features design courses, labs, and team-based learning that focus on the big picture. You'll develop skills from multiple engineering fields, graduating ready to tackle challenges that lie at the interface of society, technology, and the environment.

- Human Factors in Design, Computational Neuroscience, Systems Models, Software Design
$\square$ Design of medical devices, product manager, technology design and creation


## T

## THEATRE AND PERFORMANCE / FACULTY OF ARTS

(M, Bachelor of Arts) Co-op available
All the world's a stage. Find your place on it in one of Canada's most performance-intensive drama programs. Write theatre reviews, study stage direction, and reinvent theatre for today. Focus your studies in acting, directing, technical theatre, or theory; 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


## THERAPEUTIC RECREATION / FACULTY OF APPLIED HEALTH

 SCIENCES (M, Bachelor of Arts) Co-op available Help people get more out of life. You'll learn how to enhance quality of life by improving physical and mental health through recreation programs that foster inclusivity and strengthen the cultural fabric of a community. Combine practical courses with hands-on experience through co-op, volunteer placements, and a required 560-hour internship in fourth year.- Foundations of Therapeutic Recreation Practice, Therapeutic Recreation Facilitation Techniques, Therapeutic Recreation: Physical Disabilities
Recreation therapist, elder life specialist, occupational therapist


## TOURISM DEVELOPMENT / FACULTY OF APPLIED HEALTH

SCIENCES (M, Bachelor of Arts) Co-op available
Want a career in tourism - the world's largest industry? This is your boarding call. Learn how to plan and develop tourism experiences in environmentally and culturally sensitive ways. Hone those skills in a 105-hour practicum, or take your learning off-campus with a study-abroad term at Walt Disney World Resort.

- Outdoor Recreation Resources Management, Tourism Analysis, Event Management
$\square$ Festival and events coordinator, policy researcher, director of parks and recreation

INTERNATIONAL ADMISSION REQUREMENTS

Health Studies Regular and co－op．

Kinesiology Regular and co－op．

Public Health Regular and co－op．
Recreation and Leisure Studies ${ }^{\dagger}$ Regular and co－op．

Accounting and Financial Management Co－op only． Accounting and Financial Management Admissions Assessment（AFMAA）Interview and Trait Assessment required．

## Global Business and Digital Arts Regular only．

Honours Arts ${ }^{\dagger}$（Waterloo，St．Jerome＇s，Renison）Regular and co－op．
Social Development Studies（Renison）Regular only．
Honours Arts and Business ${ }^{\dagger}$ Regular and co－op．After applying， you may co－register through St．Jerome＇s or Renison．

Computing and Financial Management Co－op only． AIF required．

## AMERICAN SYSTEM

High School Diploma with prerequisite courses completed at the AP level and／ or Grade 12 senior academic level． NOTE：
min $=$ minimum final grade, average $=$ minimum final overall Grade 12 average．

## INTERNATIONAL BACCALAUREATE SYSTEM

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 acceptable．For programs listing HL or
SL Mathematics，Math Studies will not be accepted unless stated otherwise．For the new IB Math curriculum requirements， please visit our website．

HL＝Higher Level， SL＝Standard Level， $\min =$ minimum final grade, total $=$ overall minimum grade total．

Architecture Co－op only．AIF required．Qualified applicants will be invited to complete an English précis－writing exercise and to submit a portfolio．

Architectural，Biomedical，Chemical，Civil，Computer，Electrical，Environmental，Geological， Management，Mechanical，Mechatronics，Nanotechnology，Systems Design Co－op only．AIF required．Online video interview required for faculty scholarships and strongly recommended for admission to all programs．Individual selection may vary．

Software Engineering Co－op only．Experience developing well－structured，modular programs is required．AIF required．Online video interview required for faculty scholarships and strongly recommended for admission．Individual selection may vary．

## Environment and Business Co－op only．

Environment，Resources and Sustainability；Geography and Environmental Management Regular and co－op．

Geography and Aviation Regular only．Program Briefing Session and Transport Canada Category 1 Aviation Medical Certification required．

Geomatics Regular and co－op．
International Development Regular only．

Knowledge Integration Regular only．

## Planning Co－op only．

Business Administration（Laurier）and Computer Science（Waterloo），Business Administration（Laurier） and Mathematics（Waterloo）－Double Degrees Co－op only．AIF required．Individual selection may vary．

Computer Science ${ }^{\dagger}$ Regular and co－op．AIF required．Individual selection may vary．
Mathematics ${ }^{\dagger}$ ，Mathematics／Business Administration ${ }^{\dagger}$ ，Mathematics／Financial Analysis and Risk Management Regular and co－op．AIF required．Individual selection may vary．

Mathematics／Chartered Professional Accountancy Co－op only．AIF required．Individual selection may vary． only．Environmental Science，Life Sciences ${ }^{\dagger}$ ，Physical Sciences ${ }^{\dagger}$ ，Science and Business Regular and co－op．Honours Science Regular only．Science and Aviation Regular only，Program Briefing Session，Transport Canada Category 1 Medical Certification required．

## AMERICAN AND INTERNATIONAL BACCALAUREATE SYSTEMS

Senior-Level Chemistry and Senior-Level Biology (preferably one at the AP level); Grade 12 Mathematics and Grade 12 English, min $75 \%$ in each. Average 85\%.

Honours Pre-Calculus or AP Calculus, Senior-Level Chemistry, Grade 12 English, $\min 75 \%$ in each. One of Biology or Physics, min $75 \%$ (preferably at the AP level, min 3). Average $85 \%$.

Grade 12 English, min 80\%. Grade 12 Mathematics, min 75\%. Average 85\%.
Grade 12 English, min 75\%. Average 85\%.

Grade 12 English, min 80\%. AP Calculus and Algebra (Pre-Calculus), min $80 \%$ in each. Average 88\%.

Grade 12 English, min 80\%. Average 85\%.

Grade 12 English, min 75\%. Average 85\%.

Grade 12 English, min 75\%. Average 85\%.

AP Calculus exam, min 4. Algebra (Pre-Calculus). Grade 12 English, $\min 75 \%$. Average $90 \%$.

HL or SL Chemistry (HL recommended), HL or SL Biology, and HL or SL Mathematics or SL Math Studies, min 4 in each. HL or SL English A, min 4, or HL English B, min 5. Total 28

Mathematics (HL recommended) and Chemistry (HL recommended), $\min 4$ in each. One of HL or SL Physics or Biology, min 4. HL or SL English A, $\min 4$, or HL English B, min 5. Total 28.

HL or SL English A, min 4, or HL English B, min 5. HL or SL Mathematics, or SL Math Studies, min 4. Total 28.

HL or SL English A, min 4, or HL English B, min 5. Total 27.

HL or SL English A, min 4, or HL English B, min 5. HL or SL Mathematics, $\min 4$. Total 28.

HL or SL English A, min 4, or HL English B, min 5. Total 27.
HL or SL English A, min 4, or HL English B, min 5. Total 27.

HL or SL English A, min 4, or HL English B, min 5. Total 27.

AP Calculus (or equivalent), AP Physics (or equivalent), and Algebra (PreCalculus), min $76 \%$ in each. Grade 12 English, min $80 \%$. Plus two additional Grade 12 courses. Average 88\%.

HL or SL Mathematics, min 6. HL or SL English A, min 4, or HL English B, min 5. Total 32.

Mathematics and Physics (HL recommended), min 4 in each. HL or SL English A, min 4. Total 32.

Mathematics 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. 6 s and 7 s recommended for competitive programs.

AP Calculus (or equivalent), AP Physics (or equivalent), Algebra (PreCalculus), Chemistry, Grade 12 English, and one other Grade 12 academic course, $\min 75 \%$ in each. Average $88 \%$ in the six required courses. SATs or ACTs required.

AP Calculus (or equivalent), AP Physics (or equivalent), Algebra (Pre-Calculus), Chemistry, Grade 12 English, and one other Grade 12 academic course, min 75\% in each. Average $88 \%$ in the six required courses. SATs or ACTs required.

Mathematics 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 for competitive programs.

HL or SL English A, min 4, or HL English B, min 5. Total 27.
HL or SL English A, min 4, or HL English B, min 5. Total 27.
HL or SL English A, min 4, or HL English B, min 5. HL or SL Mathematics, or SL Math Studies, min 4. Strongly recommended: one SL course in Physical or Environmental Science. Total 27.

HL or SL English A, min 4, or HL English B, min 5. HL or SL Mathematics, or SL Math Studies, min 4. Total 27.

HL or SL English A, min 4, or HL English B, min 5. Total 27.
HL or SL English A, min 4, or HL English B, min 5. HL or SL Mathematics or SL Math Studies, min 4. HL or SL Science, min 4. Total 27.

HL or SL English A, min 4, or HL English B, min 5. Total 27.

AP Calculus exam, min 4. Algebra (Pre-Calculus). Grade 12 English. Average 90\%. AP Calculus exam, min 4. Algebra (Pre-Calculus). Grade 12 English. Average 90\%. AP Calculus exam, min 4. Algebra (Pre-Calculus). Grade 12 English. Average 90\%.

HL or SL Mathematics, min 6. HL or SL English A. Total 32. HL or SL Mathematics, min 6. HL or SL English A. Total 32. HL or SL Mathematics, min 6. HL or SL English A. Total 32.

AP Calculus exam, min 4. Algebra (Pre-Calculus). Grade 12 English. Average 90\%.

HL or SL Mathematics, min 6. HL or SL English A. Total 32.

HL or SL Mathematics, min 4. HL or SL English A, min 4. Two of Biology, Chemistry, or Physics. Total 27 for all; except Biotechnology/Chartered Professional Accountancy: total 35; Biotechnology/Economics: total 29.

AP Calculus (preferred) or Grade 12 Calculus, min $80 \%$. Grade 12 English, min $80 \%$. Algebra (Pre-Calculus). Two of Biology, Chemistry, Physics, or Statistics. One other Grade 12 academic or AP course. Average 85\%, including required courses; except for Biotechnology/Chartered Professional Accountancy: average 94\%; and for Biotechnology/Economics: average $87 \%$.

## INTERNaTIONAL ADMISSION REQUREMENTS <br> Minimum admission requirements are subject to change．For some programs

the demand for places by qualified applicants exceeds the number of places available．${ }^{\dagger}$ Choose your major： see lists on pages 20 to 31 ．

AIF：Admission Information Form

Health Studies Regular and co－op．

Kinesiology Regular and co－op．

Public Health Regular and co－op

Recreation and Leisure Studies ${ }^{\dagger}$ Regular and co－op．

Accounting and Financial Management Co－op only．Accounting and Financial Management Admissions Assessment（AFMAA）Interview and Trait Assessment．

Global Business and Digital Arts Regular only．
Honours Arts ${ }^{\dagger}$（Waterloo，St．Jerome＇s，Renison）Regular and co－op Social Development Studies（Renison）Regular only．

Honours Arts and Business ${ }^{\dagger}$ Regular and co－op．After applying， you may co－register through St．Jerome＇s or Renison．

Computing and Financial Management Co－op only．AIF required．

INDIAN SYSTEM
First or Second Division standing in one of the following：（1）All India Senior School Certificate awarded by CBSE or （2）Indian School Certificate awarded
by CISCE，or（3）other pre－university certificate awarded after 12 years of academic studies．Final grades will be evaluated based on board results．

Std XII＝Standard XII
$\min =$ minimum final grade, overall＝overall minimum final average．

## BRITISH SYSTEM

General Certificate of Secondary Education or equivalent with passes in at least five unique subjects，three of which must be at the Advanced Level． General paper is not accepted for the English course requirements．

NOTE：
$\min =$ minimum final grade.

Architecture Co－op only．AIF required．Qualified applicants will be invited to complete an English précis－writing exercise and to submit a portfolio．

Architectural，Biomedical，Chemical，Civil，Computer，Electrical，Environmental，Geological， Management，Mechanical，Mechatronics，Nanotechnology，Systems Design Co－op only．AIF required．Online video interview required for faculty scholarships and strongly recommended for admission to all programs．Individual selection may vary．

Software Engineering Co－op only．Experience developing well－structured，modular programs is required．AIF required．Online video interview required for faculty scholarships and strongly recommended for admission．Individual selection may vary．

## Environment and Business Co－op only

Environment，Resources and Sustainability；Geography and Environmental Management Regular and co－op．

Geography and Aviation Regular only．Program Briefing Session and Transport Canada Category 1 Aviation Medical Certification required．

Geomatics Regular and co－op．

International Development Regular only．

Knowledge Integration Regular only

Planning Co－op only．

## Business Administration（Laurier）and Computer Science（Waterloo），Business Administration（Laurier）

 and Mathematics（Waterloo）－Double Degrees Co－op only．AIF required．Individual selection may vary．
## Computer Science ${ }^{\dagger}$ Regular and co－op．AIF required．Individual selection may vary．

Mathematics ${ }^{\dagger}$ ，Mathematics／Business Administration ${ }^{\dagger}$ ，Mathematics／Financial Analysis and Risk Management Regular and co－op．AIF required．Individual selection may vary．

Mathematics／Chartered Professional Accountancy Co－op only．AIF required．
Individual selection may vary．

## INDIAN AND BRITISH SYSTEMS

## NDIAN SYSTEM

## BRITISH SYSTEM

Std XII Chemistry, Std XII Biology, Std XII Mathematics and Std XII English, min $70 \%$ in each. Overall $80 \%$ Std XII.

Std XII Mathematics, Std XII Chemistry and Std XII English, min 70\% in each. One of Std XII Physics or Std XII Biology, min 70\%. Overall 80\% Std XII.

Std XII English, min 75\%. Std XII Mathematics, min 70\%. Overall 80\% Std XII.

Std XII English, min 70\%. Overall 80\% Std XII

A-level Chemistry and A-level Biology, min B in each. A-level Mathematics, min C. English at either the GCSE, AS, or A-level, min B.

A-level Mathematics, min C. A-level Chemistry, min B. One additional A-level, min B. One of Physics or Biology at the GCSE, AS, or A-level, min B. English at either the GCSE, AS, or A-level, min B

A-level Mathematics, min C. Two other A-level courses, min B. English at either the GCSE, AS, or A-level, min B.

Three A-level courses, min two B's and one C. English at either the GCSE, AS or A-level, min B.

Std XII English, min $75 \%$. Std XII Mathematics, min $75 \%$. Overall $85 \%$ Std XII.

Std XII English, min 75\%. Overall 80\% Std XII.

Std XII English, min 70\%. Overall 80\% Std XII.

Std XII English, min 70\%. Overall 80\% Std XII.

Std XII Mathematics and one other Std XII academic course, min 90\% in each. Std XII English, min 75\%. All Std XII courses: min 85\%.

Std XII Mathematics; Std XII Physics, min 70\%; Std XII English, min 75\%; and two other Std XII courses. Overall $80 \%$ Std XII.

Std XII Mathematics, Std XII Physics, Std XII Chemistry, Std XII English, and one other Std XII course, min $70 \%$ in each. Overall $85 \%$ in the five required courses

A-level Mathematics, min B, and two other A-level courses, min B in each. English at either the GCSE, AS, or A-level, min B

Three A-level courses, min two B's and one C. English at either the GCSE, AS or A-level, min B.

Three A-level courses, min two B's and one C. English at either the GCSE, AS or A-level, min B.

Three A-level courses, min two B's and one C. English at either the GCSE, AS, or A-level, min B.

A-level Mathematics and two other academic A-level courses, min A in each. English at either the GCSE, AS, or A-level, min B.

A-level Mathematics and A-level Physics, min B in each. One additional A-level, min B. English at either the GCSE, AS, or A-level, min B. One additional course at the GCSE, AS, or A-level, min B.

A-level Mathematics and A-level Physics, min A in each. One additional A-level, min B. Chemistry (GCSE-level required, A-level recommended), min B. GCSE-level English, min B. A's and A*'s recommended for competitive programs.

A-level Mathematics and A-level Physics, min A in each. One additiona A-level, min B. Chemistry (GCSE-level required, A-level recommended), min B. GCSE-level English, min B. A's and A*'s recommended for competitive programs.

Three A-level courses, min two B's and one C. English at either the GCSE, AS, or A-level, min B.

Three A-level courses, min two B's and one C. English at either the GCSE, AS, or A-level, min B.

A-level Mathematics, min B. Two other A-level courses, min B and C. Strongly recommended: one A-level course in Physical or Environmental Science. English at either the GCSE, AS, or A-level, min B.

A-level Mathematics, min B. Two other A-level courses, min one B and one C English at either the GCSE, AS, or A-level, min B.

Three A-level courses, min two B's and one C. English at either the GCSE, AS, or A-level, min B.

A-level Mathematics and one A-level Science course, min B in each One additional A-level course, min C. English at either the GCSE, AS, or A-level, min B

Three A-level courses, min. Two B's and one C. English at either the GCSE AS, or A-level, min B.

A-level Mathematics, min A. Two other academic A-level courses, min A in each. English at either the GCSE, AS, or A-level.

A-level Mathematics, min A. Two other academic A-level courses, min A in each. English at either the GCSE, AS, or A-level.

A-level Mathematics, min A. Two other academic A-level courses, min A in each. English at either the GCSE, AS, or A-level.

A-level Mathematics, min A. Two other academic A-level courses, min A in each. English at either the GCSE, AS, or A-level.

A-level Mathematics, min B. Two of Biology, Chemistry or Physics (one must be A-level, min B). One other academic A-level, min B. GCSE-level English, $\min$ B. Higher grades required for Biotechnology/Chartered Professional Accountancy and Biotechnology/Economics.

## INTERNatIONAL ADMISSION ReQuirements subject to change．For some programs the demand for places by qualified

 applicants exceeds the number of places available．${ }^{\dagger}$ Choose your major： see lists on pages 20 to 31 ．AIF：Admission Information Form

Health Studies Regular and co－op．

Kinesiology Regular and co－op．

Public Health Regular and co－op．

Recreation and Leisure Studies ${ }^{\dagger}$ Regular and co－op．

Accounting and Financial Management Co－op only．Accounting and Financial Management Admissions Assessment（AFMAA）Interview and Trait Assessment required．

Global Business and Digital Arts Regular only．

Honours Arts ${ }^{\dagger}$（Waterloo，St．Jerome＇s，Renison）Regular and co－op Social Development Studies（Renison）Regular only．

Honours Arts and Business ${ }^{\dagger}$ Regular and co－op．After applying，you may co－register through St．Jerome＇s or Renison．

Computing and Financial Management Co－op only．AIF required．

## CARIBBEAN ADVANCED PROFICIENGY EXAMINATION

Caribbean Secondary Education Certificate with passes in at least five subjects，two of which must be at the Unit 2 level．

NOTE：
$\min =$ minimum final grade.

## CHINESE SYSTEM

Chinese High School Diploma．Completion of a minimum of five Senior 3 academic courses．Hui Kao examination results．

NOTE：
$\min =$ minimum final grade, overall＝minimum overall final average ． Gao Kao examinations results provided
by China Qualifications Verification are required from all Chinese National Curriculum students．If you are not writing the Gao Kao，you must submit a formal explanation to the Admissions Committee． For more information，refer to the program admission requirements on our website．

## APPLICATION TIPS

＞If you＇re from a high school outside of North America and not following the American，British，Caribbean Advanced Proficiency Examination，Chinese，Indian， or International Baccalaureate system of study，you should attach course descriptions for senior－level mathematics along with your transcripts．
，Repeated courses may be taken into consideration， depending on the program．
＞Engineering，mathematics，and science programs may consider GCSE－level English as a Second Language，provided that you also submit a satisfactory English language test score．

Architecture Co－op only．AIF required．Qualified applicants will be invited to complete an English précis－writing exercise and to submit a portfolio．

Architectural，Biomedical，Chemical，Civil，Computer，Electrical，Environmental，Geological， Management，Mechanical，Mechatronics，Nanotechnology，Systems Design Co－op only．AIF required．Online video interview required for faculty scholarships and strongly recommended for admission to all programs．Individual selection may vary

## Software Engineering Co－op only．Experience developing well－structured，modular programs

 is required．AIF required．Online video interview required for faculty scholarships and strongly recommended for admission．Individual selection may vary．
## Environment and Business Co－op only

Environment，Resources and Sustainability；Geography and Environmental Management Regular and co－op．

Geography and Aviation Regular only．Program Briefing Session and
Transport Canada Category 1 Aviation Medical Certification required．

Geomatics Regular and co－op．

International Development Regular only．

Knowledge Integration Regular only

Planning Co－op only．

Business Administration（Laurier）and Computer Science（Waterloo），Business Administration（Laurier） and Mathematics（Waterloo）－Double Degrees Co－op only．AIF required．

Computer Science ${ }^{\dagger}$ Regular and co－op．AIF required．
Mathematics ${ }^{\dagger}$ ，Mathematics／Business Administration ${ }^{\dagger}$ ，Mathematics／Financial Analysis and Risk Management Regular and co－op．AIF required．

Mathematics／Chartered Professional Accountancy Co－op only．AIF required

Biotechnology／Chartered Professional Accountancy Co－op only．Biotechnology／Economics Co－op only．Environmental Science，Life Sciences ${ }^{\dagger}$ ，Physical Sciences ${ }^{\dagger}$ ，Science and Business Regular and co－op．Honours Science Regular only．Science and Aviation Regular only，Program Briefing Session，Transport Canada Category 1 Medical Certification required．

## CARIBBEAN AND CHINESE SYSTEMS

## CARIBBEAN ADVANCED PROFICIENCY EXAMINATION

Unit 2 Chemistry and Unit 2 Biology, min 2 in each. Mathematics and English at the CXC, Unit 1, or Unit 2 level, min 2 in each.

Unit 2 Mathematics and Unit 2 Chemistry, min 2 in each. One of Physics or Biology at the CXC, Unit 1, or Unit 2 level, min 2. English at the CXC, Unit 1 or Unit 2 level, min 2.

Unit 2 Mathematics, min 2. One other Unit 2 course, min 3. English at the CXC, Unit 1, or Unit 2 level, min 3.

Two Unit 2 courses, $\min 2$ in one and $\min 3$ in the other. English at the CXC, Unit 1, or Unit 2 level, min 3.

Unit 2 Pure Mathematics, min 2. One other Unit 2 course, min 2. English at the CXC, Unit 1, or Unit 2 level, min 2

Two Unit 2 courses, min 2 in one and 3 in the other. English at the CXC, Unit 1 , or Unit 2 level, min 2.

Two Unit 2 courses, min 2 in one and 3 in the other. English at the CXC, Unit 1 , or Unit 2 level, min 3.

Two Unit 2 courses, min 2 in one and 3 in the other. English at the CXC, Unit 1, or Unit 2 level, min 3.

Unit 2 Pure Mathematics, min 2. One other Unit 2 academic course, min 2 English at the CXC, Unit 1, or Unit 2 level, min 2.

CHINESE SYSTEM

Senior 3 Chemistry, Senior 3 Biology, Senior 3 Mathematics, and Senior 3 English, min $75 \%$ in each. Overall $85 \%$ in Senior 3.

Senior 3 Chemistry, Senior 3 Mathematics, and Senior 3 English, min $75 \%$ in each. One of Physics or Biology at the Senior 3 level, min $75 \%$. Overall $85 \%$ in Senior 3.

Senior 3 English, min $80 \%$. Senior 3 Mathematics, min $75 \%$. Overall $85 \%$ in Senior 3.

Senior 3 English, min 75\%. Overall 85\% in Senior 3.

Senior 3 English and Senior 3 Mathematics, min 80\% in each. Overall 88\% in Senior 3.

Senior 3 English, min 80\%. Overall 85\% in Senior 3.

Senior 3 English, min $75 \%$. Overall $85 \%$ in Senior 3.

Senior 3 English, min 75\%. Overall 85\% in Senior 3.

Senior 3 Mathematics, min 90\%. Senior 3 English, min 75\%. Overall 85\% in Senior 3.

Unit 2 Pure Mathematics and Unit 2 Physics, min 2 in each. English at the CXC, Unit 1, or Unit 2 level, min 2. Two other Unit 1 or Unit 2 academic courses, min 2 in each.

Unit 2 Pure Mathematics and Unit 2 Physics, min 2 in each. Chemistry and English (CXC required, CAPE recommended), min 2 in each. One other Unit 1 or Unit 2 academic course, min 2. Mostly 1's recommended for competitive programs

Senior 3 Mathematics, min 76\%. Senior 3 Physics, min 76\%. Senior 3 English, $\min 80 \%$. Overall 88\%.

Unit 2 Pure Mathematics and Unit 2 Physics, min 2 in each. Chemistry and English (CXC required, CAPE recommended), min 2 in each. One other Unit 1 or Unit 2 academic course, min 2. Mostly 1's recommended for competitive programs.

Senior 3 Mathematics. Senior 3 Physics, Senior 3 Chemistry, and Senior 3 English, min $75 \%$ in each. One other Senior 3 academic course, $\mathrm{min} 75 \%$. Overall $88 \%$ in five required courses.

Two Unit 2 courses, min. 2 in one and 3 in the other. English at the CXC Unit 1, or Unit 2 level, min 3.

Two Unit 2 courses, min 2 in one and 3 in the other. English at the CXC, Unit 1, or Unit 2 level, min 3.

Unit 2 Mathematics, min 2. One other Unit 2 course, min 3. English at the CXC, Unit 1, or Unit 2 level, min 3. Strongly recommended: one Unit 2 course in Physical or Environmental Science.

Unit 2 Mathematics, min 2 . One other Unit 2 course, min 3 . English at the CXC, Unit 1, or Unit 2 level, min 3.

Two Unit 2 courses, $\min 2$ in one and 3 in the other. English at the CXC, Unit 1, or Unit 2 level, min 3.

Unit 2 Mathematics and Unit 2 Science, min 2 in each. English at the CXC, Unit 1, or Unit 2 level, min 2.

Two Unit 2 courses, $\min 2$ in one and 3 in the other. English at the CXC, Unit 1, or Unit 2 level, min 2.

Unit 2 Pure Mathematics, min 2 . One other Unit 2 academic course, min 2. English at the CXC, Unit 1, or Unit 2 level.

Unit 2 Pure Mathematics, min 2. One other Unit 2 academic course, min 2. English at the CXC, Unit 1, or Unit 2 level.

Unit 2 Pure Mathematics, min 2 . One other Unit 2 academic course, min 2 English at the CXC, Unit 1, or Unit 2 level.

Unit 2 Pure Mathematics, min 2. One other Unit 2 academic course, min 2. English at the CXC, Unit 1, or Unit 2 level.

Unit 2 Pure Mathematics, min 3. English at the CXC, Unit 1, or Unit 2 level, min 2. Two of Biology, Chemistry, Environmental Science, or Physics (one must be at the Unit 2 level, min 2). Higher grades required for Biotechnology/ Chartered Professional Accountancy and Biotechnology/Economics.

Senior 3 Mathematics. Senior 3 Physics, Senior 3 Chemistry, and Senior 3 English, min $75 \%$ in each. One other Senior 3 academic course, min 75\%. Overall $88 \%$ in five required courses.

Senior 3 English, min 75\%. Overall 85\% in Senior 3.

Senior 3 English and Senior 3 Mathematics, min 75\% in each. Strongly recommended: Senior 3 course in Physical or Environmental Science. Overall $85 \%$ in Senior 3.

Senior 3 English and Senior 3 Mathematics, min $75 \%$ in each. Overall 85\% in Senior 3.

Senior 3 English, min 75\%. Overall 85\% in Senior 3.

Senior 3 English, Senior 3 Mathematics, and one Senior 3 Science, min 80\% in each. Overall 85\% in Senior 3.

Senior 3 English, min 80\%. Overall 85\% in Senior 3.

Senior 3 Mathematics, min 90\%. Senior 3 English. Overall 85\% in Senior 3.

Senior 3 Mathematics, min 90\%. Senior 3 English. Overall 85\% in Senior 3.

Senior 3 Mathematics, min 90\%. Senior 3 English. Overall 85\% in Senior 3.

Senior 3 Mathematics, min 90\%. Senior 3 English. Overall 85\% in Senior 3.

Senior 3 Mathematics, min $80 \%$. Senior 3 English, min $80 \%$. Two of Senior 3 Biology, Senior 3 Chemistry, or Senior 3 Physics. One other Senior 3 academic course. Overall $85 \%$ in Senior 3, including required courses; except for Biotechnology/Chartered Professional Accountancy: overall 94\%; and for Biotechnology/Economics: overall 87\%.

# APPLY TO WATERLOO 

## Let's get started.

## uwaterloo.ca/future/apply

Why make things complicated? Simply tear off the checklist on page 49 and complete each step by the deadline. You'll be a Warrior in no time. If you have any questions, flip over the checklist to find a list of key contacts.

## HOW DO I GET STARTED?

Your first stop is the Ontario Universities' Application Centre (OUAC) website: ouac.on.ca. Complete the 105 application and 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.

## WHEN ARE MY APPLICATION AND SUPPORTING DOCUMENTS DUE?

| FALL TERM | DATE APPLICATION INFORMATION <br> AND FEES MUST REACH OUAC | DATE DOCUMENTS MUST <br> REACH WATERLOO |
| :--- | :--- | :--- |
| September 2020 - Most programs | March 27, 2020 | April 3, 2020 |
| EXCEPTIONS |  |  |
| Architecture | January 31, 2020 | February 28, 2020 |
| Accounting and Financial Management | January 31, 2020 | February 28, 2020 |
| Conditional Admission to Pharmacy | January 31, 2020 | April 3, 2020 |
| Engineering, Software Engineering | January 31, 2020 | February 28, 2020 |
| Mathematics | January 31, 2020 | February 28, 2020 |

## WHAT ABOUT ENGLISH LANGUAGE TEST SCORES?

You must meet or exceed the minimum scores required for one of the options listed below 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.

| OPTION 1 | OPTION 2 | OPTION 3 | OPTION 4 | OPTION 5 | OPTION 6 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| INTERNETBASED TOEFL | IELTS | MELAB | CAEL | PTE (ACADEMIC) | ENGLISH FOR ACADEMIC SUCCESS |
| 90 overall, writing: 25 , speaking: 25 | 6.5 overall, <br> 6.5 writing, <br> 6.5 speaking, <br> 6.0 reading, <br> 6.0 listening | 85 overall, 80 per section. For co-op programs: 3 speaking | 70 overall, <br> 60 per band, <br> 70 writing, <br> 70 speaking | 63 overall, 65 writing, 65 speaking | $75 \%$ overall in 400 levels, <br> $75 \%$ academic, 75\% oral, $75 \%$ writing |

WHAT'S AN ADMISSION INFORMATION FORM (AIF)?
The AIF lets you tell us about your extracurricular activities, explain extenuating circumstances which may have affected your grades, and brag a little about how great you are! We often use the AIF in addition to your grades to make admission decisions. For many programs an AIF is required, and we recommend all applicants submit an AIF.

## WHAT IF MY ENGLISH LANGUAGE TEST SCORES ARE TOO LOW?

If you're academically admissible but don't quite meet our English language requirements, you may be offered conditional admission through Waterloo's English Language for Academic Studies (ELAS) or Bridge to Academic Success in English (BASE). Learn more about these programs on page 17.

## 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 Applied Health Sciences, Arts, Environment, Mathematics, or Science, or the School of Architecture*.

Note: *Results must be sent directly from the college board or the IBO.

# TUITION AND SCHOLARSHIPS 

Hard earned, well spent.

Estimate your total first-year costs using our online budget calculator. Our website also offers detailed information on scholarships and faculty-specific awards.
uwaterloo.ca/future/financing

ENTRANCE SCHOLARSHIPS

\$1,000 MERIT SCHOLARSHIP 85-89.9\% admission average<br>\section*{\$2,000<br><br>PRESIDENT'S SCHOLARSHIP}<br>90-94.9\% admission average

up to
\$5,000** PRESIDENT'S SCHOLARSHIP OF DISTINCTION

95\%+ admission average

## \$10,000

 INTERNATIONAL STUDENT ENTRANCE SCHOLARSHIPSAwarded based on academic performance, contest or assignment scores, and Admission Information Form submissions


89\% of first-year students received an entrance scholarship for fall 2018

## TUITION FEES

(FOR TWO ACADEMIC TERMS)

| PROGRAM/FACULTY | INTERNATIONAL TUITION <br> (STUDY PERMIT) |
| :--- | :--- |
| Accounting and Financial Management,* <br> Applied Health Sciences, Arts | $\$ 34,200$ |
| Architecture | $\$ 51,700$ |
| Biotechnology/Chartered <br> Professional Accountancy | $\$ 37,300$ |
| Business Administration (Laurier) and <br> Mathematics (Waterloo) Double Degree | $\$ 39,700$ |
| Computer Science, Business <br> Administration (Laurier) and Computer <br> Science (Waterloo) Double Degree | $\$ 53,400$ |
| Computing and Financial Management* | $\$ 39,800$ |
| Engineering, Software Engineering | $\$ 54,700$ |
| Environment | $\$ 34,400$ |
| Global Business and Digital Arts | $\$ 38,000$ |
| Mathematics, Mathematics/Financial <br> Analysis and Risk Management | $\$ 37,000$ |
| Mathematics/Chartered <br> Professional Accountancy | $\$ 38,300$ |
| Science | $\$ 35,800$ |

Notes: Amounts listed include incidental fees. Co-op fee of $\$ 729$ /term also applies. See the website for details. *Tuition is significantly higher in your upper years. ${ }^{* *} \$ 2,000$ awarded in year one, plus up to $\$ 3,000$ in upper years.

## EARN WHILE YOU LEARN

Co-op students earn an average of $\$ 10,500$ in their first work term. These co-op earnings can go a long way to helping pay tuition fees and living expenses. Alternatively, you may choose to work part-time on your study visa*. Our provincial minimum wage is $\$ 14$ per hour.
*Exceptions apply. Visa details are available at www.canada.ca. Co-op students must have a work permit.

## LIVING EXPENSES <br> (FOR TWO <br> ACADEMIC TERMS)



RESIDENCE
From \$5,879 (traditional-style)
to \$7,823 (suite-style).

## MEAL PLAN

From \$4,904 (lite) to \$5,704 (hearty).

## PERSONAL EXPENSES



BOOKS AND SUPPLIES
Most programs estimate $\mathbf{\$ 2 , 2 8 8}$
(\$4,100 for Architecture students).


## OUR

 CAMPUS
## Chart your path.

Getting to class is a walk in the park on our pedestrian-friendly campus. Enjoy gardens, patios, and creekside benches in the summer, or dart through tunnels and overpasses in the winter. No building on campus is ever more than a 20 -minute walk away.

## ACKNOWLEDGEMENT OF TRADITIONAL TERRITORY

We acknowledge that the University of Waterloo is located on the traditional territory of the Neutral, Anishnaabeg, and Haudenosaunee people. The University is situated on the Haldimand Tract, the land promised to the Six Nations that includes 10 kilometres on each side of the Grand River.

## 3

satellite campuses in Cambridge,
Kitchener, and Stratford
in the world for sustainable cities and communities (THE University Impact Rankings, 2019)

## VISIT US

Guided campus tours are available Monday through Saturday (with some exceptions). Tour bookings are available on our website.
uwaterloo.ca/future/visit

FALL OPEN HOUSE
NOVEMBER 2, 2019

MARCH BREAK OPEN HOUSE
MARCH 21, 2020

BUILDING LEGEND
ss STUDENT SERVICES
Ris RESIDENCES
(u*) UNIVERSITY COLLEGES
Aif APPLIED HEALTH SCIENCES
(ARTI) ARTS
( ENE ENGINEERING
(iiv) ENVIRONMENT
(Mini) MATHEMATICS
(s\#) SCIENCE


# IMPORTANT CONTACTS 

GENERAL QUESTIONS

519-888-4567, ext. 43614

askus@uwaterloo.ca

## APPLICATION QUESTIONS

myapplication@uwaterloo.ca

## PROGRAM-RELATED QUESTIONS

Faculty of Applied Health Sciences
ahsinfo@uwaterloo.ca
Faculty of Arts
arts@uwaterloo.ca
Faculty of Engineering
enginfo@uwaterloo.ca
Faculty of Environment
envinfo@uwaterloo.ca
Faculty of Mathematics
mathinfo@uwaterloo.ca

Faculty of Science
science@uwaterloo.ca

## OTHER WATERLOO CONTACTS

# APPLICATION CHECKLIST 

Your guide to full-time undergraduate studies at Waterloo.
uwaterloo.ca/future/apply

## 1. ORDER BROCHURES.

Download detailed information
about one or more programs.
uwaterloo.ca/future/order

## 2. APPLY ONLINE.

Apply to Waterloo and our University Colleges (Renison and St. Jerome's)
through the Ontario Universities'
Application Centre.

## ouac.on.ca

## 3. LOG IN TO QUEST.

Quest is our student information system. We'll email you details about getting started. Add myapplication@uwaterloo.ca and askus@uwaterloo.ca to your contacts so you don't miss our emails!

## 4. SEND US YOUR DOCUMENTS.

In addition to your official transcripts, we may require other documentation (e.g., proof of English-language instruction).

## 5. COMPLETE YOUR ADMISSION INFORMATION FORM (AIF).

Some programs require an interview, portfolio, or other elements in addition to your AIF. Check the admission charts for details.

## 6. WAIT TO HEAR FROM US.

To help pass the time, check out our residences, clubs, and support services. Once you accept your offer, you'll be welcomed by our Warrior community!

## ， <br> WATERLOO

MARKETING \＆UNDERGRADUATE RECRUITMENT 200 UNIVERSITY AVE．W．，WATERLOO，ON，CANADA N2L 3G1

## uwaterloo．ca／future－students

円ロ 『


[^0]:    * Service provided by Waterloo undergraduate student association.

