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## Challenge what's possible

#### **Big things are happening at Carleton University.**

We've grown to be one of the most productive hubs of learning and growth in Canada, having the resources and networks to drive real impact in the world.

Join our smart, ambitious and tight-knit student community and be taught by award-winning faculty in cutting-edge facilities. Here, you'll have direct access to our extensive network of partnerships, helping you secure meaningful employment after graduation.

We know you have big dreams and we have everything you need to reach them.

How far will you go?

#### Get to know us better

Connect with us online for more details and stories







@carleton\_future



youtube.com/carletonuvideos



admissions.carleton.ca





# **Welcome to Carleton**

We live up to our reputation for being a compassionate, connected and caring community. Our students, faculty and staff are united in driving real change for a brighter, more inclusive and sustainable tomorrow.

We know you have big decisions to make about the next step in your journey. Here's what sets us apart and above.

## Academic excellence and outstanding choice of programs

We offer a wide range of exceptional academic programs — many of them unique in Canada. Our programs are dynamic and comprehensive and will challenge you to reach your full academic and professional potential. We're proud to have equipped over 169,000 alumni with the knowledge and practical skills to make their marks on the world.

## Career readiness and hands-on experiences

We know how important it is to prepare you today for the job market of tomorrow which is why we provide skill and knowledge development, hands-on experiences and meaningful networking opportunities within the capital region and beyond. Our ideal location means that you can participate in community service learning with local and international partners, gain work experience through Co-op, internship and practicum placements, and conduct research alongside award-winning professors.

#### Connecting you to the world

We're known as a Canadian university of choice for international students and for encouraging all students to think globally. When you come to Carleton, you'll study with student peers from over 165 different countries. Given that the education of global

citizens requires exposure to international experiences, we offer many study-abroad opportunities.

## Unrivalled student life and support services

There's a reason why we continually top the list for comprehensive student satisfaction among Canadian universities. We've built a truly inclusive community that cares and we offer so many ways to get involved, a farreaching system of student services and one of the most generous scholarship programs in Canada.



# Become a Raven

You're getting ready to start your journey and are looking for the right university to make it happen.

There are many reasons why Carleton is right for you — our academic excellence, our award-winning student life and endless opportunities to get hands-on experience across the nation's capital.

The discoveries you'll make, the relationships you'll build and the milestones you'll reach start when you become a Carleton Raven.

**ENROLMENT** 32,000+



for COMPREHENSIVE **UNIVERSITIES in Canada\*** 



in Canada for COURSE INSTRUCTORS, providing you with a wealth of teaching talent\*



\$31.9 M<sup>+</sup>

in SCHOLARSHIPS AND **BURSARIES** awarded in 2021-22 to students like you



**MOST ACCESSIBLE** university in Canada for students with disabilities



5 km

of UNDERGROUND TUNNELS conveniently link our university's buildings



#### **FAST FACTS**





150+

programs available with **CO-OP OPTIONS** 





students from 165+ **DIFFERENT COUNTRIES** 



్లి 24/7

access to free MENTAL HEALTH **COUNSELLING through the Empower Me program** 



in Canada for SCIENCE AND **MEDICAL RESEARCH FUNDING\*** 



in Canada for SOCIAL SCIENCES AND **HUMANITIES RESEARCH FUNDING\*** 



\$97 M

in RESEARCH FUNDING (2020-21)

# **Ottawa**

#### CONNECTING YOU TO THE WORLD

Home to over 1.3 million people, the Ottawa area is many things: it is a research and development hotbed and is the heart of the federal government. It is a major economic engine, offering jobs and opportunities in a wide variety of industries and sectors, and is home to world-class research centres and operations by major international companies. Ottawa is also a youthful city with a low median age that is rapidly diversifying.

Although it is a place of achievement and career opportunities, Ottawa is also an architecturally and environmentally stunning city—surrounded by waterways, perfectly blended with urban and rural beauty and providing year-round outdoor activities.



#### **QUALITY OF LIFE**

- One of the world's cleanest cities¹
- One of the safest cities in Canada<sup>2</sup>
  - Best place to live in Canada<sup>3</sup>



#### **LIFESTYLE**

- One of the world's top 50 best cities for students<sup>4</sup>
- Over 980 km of multi-use pathways, bike lanes, off-road paths and paved shoulders throughout the area



#### **EMPLOYMENT**

- Top ranked talent market in Canada in 2020<sup>5</sup>
- #1 for lowest unemployment rate compared to Canada's six other largest cities<sup>6</sup>
  - Home to 130 embassies and high commissions from around the world

<sup>1</sup>Forbes, 2007 <sup>2</sup>Mainstreet Research, 2017 <sup>3</sup>MoneySense, 2017 <sup>4</sup>QS TopUniversities <sup>5</sup>CBRE Group <sup>6</sup>Statistics Canada, 2021



## Rich history of culture and experience

Ottawa is home to seven of Canada's nine national museums, some of which include the Canadian Museum of History, the Canadian Science and Technology Museum, the National Gallery of Canada and the Canadian Museum of Nature. Enrich your studies and broaden your knowledge by visiting any one of these national institutions during your time at Carleton.

## Unique landmarks and exceptional experiences

Both a UNESCO World Heritage Site and a National Historic Site of Canada, the Rideau Canal is a 202 km historic waterway that connects a series of beautiful lakes and rivers. You can explore this major attraction all year — along its banks and sidewalks, on its water and as a Skateway in the winter months.

#### The heart of downtown Ottawa

Discover endless opportunities for shopping, dining, arts and entertainment in Ottawa's historic ByWard Market. This bustling area of Ottawa is a great place to browse the outdoor farmers' market and artisan shops on the weekend, grab dinner with friends downtown on a Friday evening, or stroll the bustling streets and absorb the sights and sounds.

## An entrepreneurial and global technology powerhouse

Ottawa boasts a vibrant entrepreneurial culture and is home to Kanata North, Canada's largest Technology Park, a global technology hub with over 1,900 companies. Carleton's innovation ecosystem thrives because of our many strong partnerships with Kanata North businesses, especially so with the CU@Kanata innovation space where faculty, staff and students can engage with more than 540 companies in the park.



# Building a better world, together

There's a reason why we're consistently recognized for being a community that truly cares. At the foundation of everything we do is our commitment to building a brighter tomorrow — for our students, our city and our world.

Here's how we're building a better world.

## **Equity, diversity and inclusion (EDI)**

Bringing together different perspectives and experiences unlocks creativity that leads to positive outcomes for all. Achieving this means committing to enhancing student

supports and re-imagining curricular and pedagogical practices, research infrastructure, and leadership development for organizational, academic and nonacademic staff. To learn more about our university's EDI Action Plan, visit carleton. ca/equity and carleton.ca/edi-plan.

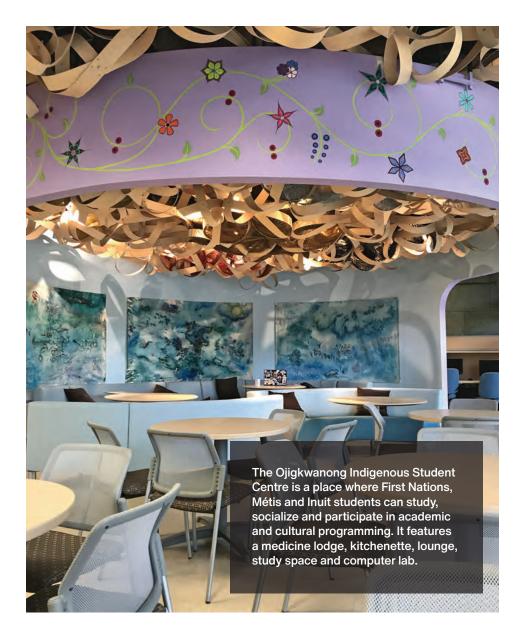
## Supporting Indigenous students

First Nations, Métis and Inuit students have access to a wide range of tailored supports and services across campus. Carleton's Centre for Indigenous Support and Community Engagement provides safe spaces for dialogue and learning through a variety of cultural activities and events, inclusive spaces and student supports. They also deliver resources and training to educate the Carleton community about the experiences, histories and worldviews of Indigenous peoples. carleton.ca/indigenous

#5

# university in Canada for promoting Indigenous visibility\*

We're committed to reinvigorating efforts to support Indigenous learners and bring Indigenous knowledge into classrooms. The launch of **Kinàmàgawin: Learning Together** — a long-term Indigenous strategy with 41 Calls to Action — signifies an important milestone in shaping a more welcoming space for Indigenous students and faculty members within the Carleton community.



## **Finding green solutions**



Carleton delivers on its responsibility to lead and act decisively in developing green solutions across campus:

- signed the United Nations-supported Race to Zero and 2050 Carbon Neutral commitments
- received Gold in the Association for the Advancement of Sustainability in Higher Education Stars program
- launched our Energy Master Plan in 2021, providing a road map for on-campus carbon reduction
- committed to not holding any direct fossil fuel investments in the Endowment and Non-Endowed Operating Funds through

- our Responsible Investing Policy (2022)
- Carleton's new Nicol Building was certified as 4 Green Globes, demonstrating a commitment to sustainable buildings and learning spaces



## most sustainable university in Canada and 39th in the world\*\*

- \*Maclean's University Rankings, 2022
- \*\*Ul Green Metric World University Ranking, 2021



# **The Carleton community**

Our Carleton community is unlike any other. We are caring, diverse and united in our vision of creating safe and inclusive spaces for everyone in our community. It's easy to see why we consistently rank within the top Canadian universities for comprehensive student satisfaction through our unparalleled package of academic and curricular initiatives that will shape your best university experience.

#### **Student Experience Office (SEO)**

We'll help you adjust to your new life at Carleton by offering so many ways for you to get involved. Some of our programming includes:

- Summer and Fall Orientation sessions
- First-Year Connections Peer Mentorship
- community service-learning initiatives, including Alternative Spring Break
- leadership development programs, including the Campus Activity Board

carleton.ca/seo

## Centre for Student Academic Support (CSAS)

We're here to support your academic success by offering a wide range of services. Some of our programming includes:

- Peer Assisted Study Sessions (PASS)
- Learning and Writing Support Workshops
- Learning Support Sessions
- · Writing Services

carleton.ca/csas

#### **Academic Advising Centre**

We offer a wide range of services to help you navigate your academic career at Carleton, including academic advising, assistance with understanding the Academic Audit and Academic Status Report (ASR) and advice on changing programs or adding elements. carleton.ca/academicadvising

## International Student Services Office (ISSO)

Our services and programs contribute to positive international experiences for all Carleton students. We help international and exchange students adjust to life in Canada and get the most out of their student experience. We support and encourage students in gaining international exposure both locally and abroad through volunteer opportunities, international internships and Co-op, and participation in exchange or study abroad programs. carleton.ca/isso

#### **University Registrar's Office**

We manage the academic activities and

records of all students and help with transcript requests, course registration and more. carleton.ca/registrar

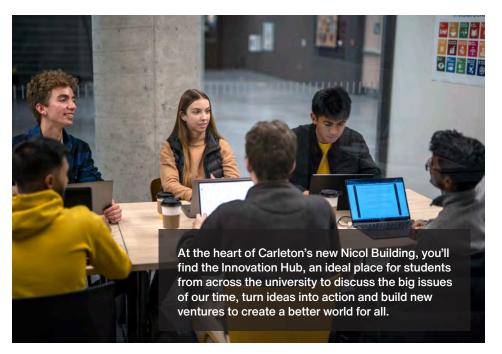
#### **Supportive facilities**

#### MacOdrum Library

Discover our wide collection of books, journals, government documents, maps, newspapers, board games, video games, graphic novels, music scores, CDs, microforms, archives and rare materials, including a wide range of electronic resources available any time online. Experienced library staff are available in person, by phone and online to help you with everything from research to data services. library.carleton.ca

## Paul Menton Centre for Students with Disabilities

The Paul Menton Centre (PMC) coordinates academic accommodations and support services for students with disabilities. Services include academic accommodations, attendant services, alternate formats,



adaptive technology, note-taking, sign language interpretation, learning support and services specific to students' education-related disability needs. carleton.ca/pmc

#### **Health and Counselling Services**

Carleton's multidisciplinary on-campus healthcare facility provides medical and counselling services, a resource centre and a health promotion program for Carleton students. carleton.ca/health

#### **Co-Curricular Record**

Campus life is not only about attending classes. It's also about joining clubs and societies, attending special events and lectures, hanging out with friends and participating in one of our community outreach programs.

We encourage you to become active members of our larger community. Participation in community service-learning activities and involvement in student organizations are acknowledged in our Co-Curricular Record (CCR), which will track your out-of-class learning experiences and become part of your official record from Carleton. carleton.ca/seo/ccr

#### An accessible and inclusive campus

We are strongly committed to providing an environment where everyone is able to study, work and live free of discrimination or harassment. Our Department of Equity and Inclusive Communities (EIC) and student-run organizations administer numerous on-campus centres and programs that foster diversity, equality, dignity and respect.

"The Carleton University Filipino Students' Association (CUFSA) became my home away from home. We organized karaoke nights, fundraising, game nights and networking opportunities, with our biggest highlight being our participation in Pinoys on Parliament, an annual, national youth leadership conference for young Filipino-Canadians."

Anselmo Seloterio, Psychology (BA) student



Some of the centres and programs that support our diverse community include the Centre for Indigenous Support and Community Engagement; Sexual Assault Support Services; RISE (Racialized and International Student Experience); Womxn's Learning, Advocacy and Support Centre; Carleton Disability Awareness Centre; Spirituality Centre; Muslim prayer room; and, the Carleton University Safer Spaces Program which supports Carleton's sexual orientation and gender equity policies.

For information on Carleton's human rights policies and procedures, visit **carleton.ca/equity.** 

#### **Clubs and societies**

Our extensive network of clubs and societies is another great way to meet new people and pursue your interests outside the classroom. With more than 300 active clubs and societies to choose from, you will certainly find a venue for your academic, social, political or charitable interests. **cusaonline.ca** 

#### Students giving back

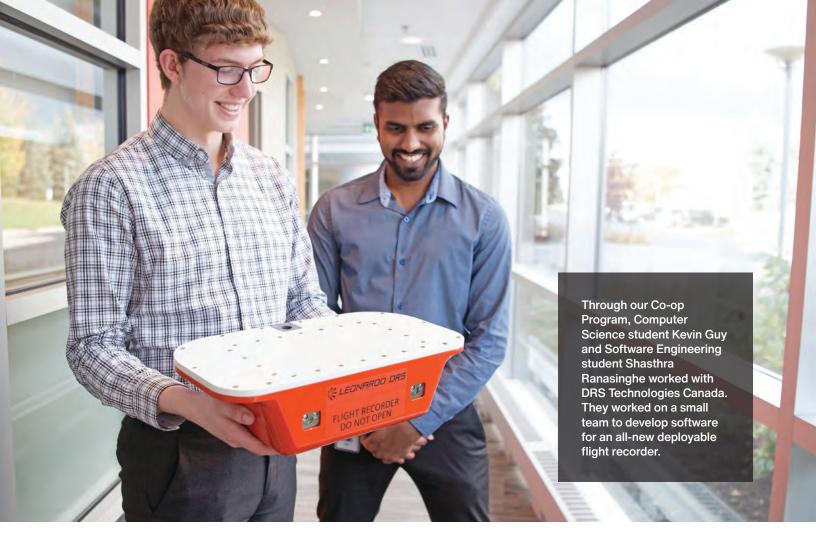
We have a long history of giving back. Since 1984, our students have spread out across the city during Fall Orientation to wash cars and shine shoes to raise money for Cystic Fibrosis through the Shinerama program. Our popular Alternative Spring Break program provides the opportunity to volunteer on community service projects in Ecuador, Guatemala, Costa Rica and more. carleton.ca/seo/alternative-spring-break

## The Discovery Centre — the perfect study space

Explore this collaborative and creative student study space on the fourth floor of the MacOdrum Library. With sofas, mobile tables and chairs, it is designed for students to configure their study space to suit their needs. Here you'll find media booths with large screens for connecting laptops or tablets to make group work engaging and easy. To assist with creativity, there are two treadmill desks for study while walking, a Gaming Lab, a Multimedia Lab and a Learning Lab. The Discovery Centre is also a resource for connecting you with hands-on learning through international experiences, community engagement, immersive learning and undergraduate research. carleton.ca/tls/learning-spaces/ discovery-centre

#### Discover your path to graduation

Pathways to Graduation is designed to help guide you along a path to graduation that is right for you. From the start of your degree to the day you graduate, Pathways to Graduation helps you to transition through each phase of your undergraduate degree and reach your ultimate goal of graduation. pathways.carleton.ca



# Co-op and career opportunities

Build the tangible skills employers are looking for through our Co-operative Education (Co-op) and work-study opportunities. These hands-on experiences outside of the classroom provide a deeper educational experience and will give you a leading edge when entering the workforce.

Do you want to pursue a professional designation such as accountant, dentist, doctor, lawyer, pharmacist, teacher or veterinarian? Our programs provide a great foundation for this next step, and Co-op hours can be used toward these professional designations.

We've fostered strong industry and government relationships across the National Capital Region, meaning that you will benefit from valuable work opportunities. We are fortunate to work with a wide range of employers who will provide you with career advice, and in some cases, an offer of employment upon graduation.

We have Co-op options in over 150 programs, streams and concentrations.

#### Co-op

Co-op at Carleton is diverse and flexible. You will alternate periods of study with full-time, paid work terms. Typically, you will require an additional year to complete all academic and

Co-op requirements, develop your work skills and acquire relevant industry experience.

Before starting your first work term, you will be required to take a preparatory course called COOP 1000. This course provides information on the Co-op Program's structure, regulations and expectations for participation. It teaches skill assessment, resume and cover letter writing, interview preparation and transitioning to the workplace, among other topics.

#### How to apply to Co-op

Select the Co-op option when you're applying to Carleton. Once you've started your studies and have earned a sufficient



We have Co-op options in over 150 programs, streams and concentrations.

number of credits towards your degree, the Co-op office will formally assess you for admission to the Co-op Program. Alternatively, you can apply to Co-op once you're at Carleton.

Co-op is only one option for gaining work experience during your university studies. Many of our programs offer practicum or internship opportunities, both of which allow you to gain work experience, learn new skills and make important contacts.

#### International internships

Gain work experience abroad through Career Services' International Internship Program, which connects students in all degree programs with a wide range of internship opportunities around the world for academic credit. carleton.ca/career/international-internship-program

#### Your career

Career Services will assist you not only in making the transition from school to work but also in developing your professional skills starting in first year. Our career counsellors and consultants will guide you through the discovery of a personal career path with a focus on how to set career

goals and achieve them. You will also have many opportunities to connect with industry professionals through a variety of activities.

#### We provide:

- access to a variety of job postings on mySuccess, our online job search system that lists part-time and full-time jobs, on-campus employment, volunteer and internship opportunities and more;
- extensive employment workshops available in person and online;
- year-round career counselling and employment advising sessions with career

consultants;

- information sessions and panel discussions with key industry employers; and
- access to recruiting employers through multiple Career Fairs and networking events.

Looking for ideas on what you can do with your degree? Explore the Employability pillar at pathways.carleton.ca.

#### Make a real difference

Communication and Media
Studies student, Johanna Button,
secured a full-time position as a
Communications Officer at the
Canadian Digital Service (CDS)
after fulfilling a Co-op placement
through which she contributed
to the Government of Canada's
COVID Alert app. Johanna was
also the winner of Carleton's 2020
Undergraduate Co-op Student of
the Year award.





## **Carleton Athletics**

Challenge yourself in sport, health and life. Carleton Athletics is the active hub of the Carleton community. Whatever your level of fitness, you are sure to find something here that suits you.

Take advantage of our first-class athletic facilities, conveniently located in one area of campus. Sign up for fitness classes, swim laps in the pool, lift weights, run on a treadmill in the 11,000 sq. ft. Fitness Centre or get together with friends to play one of your favourite sports during open recreation time.

#### **Ravens' Centre**

Here you'll find our 50-metre L-shaped pool, a Fitness Centre, two NHL-sized ice pads, an indoor track, gymnasiums, five international squash courts, and sports medicine and sports therapy clinics.

#### Alumni Hall

Check out the Ravens' Nest, a triple gymnasium that, when not serving as home court for 1,500 cheering basketball fans, is open to students for basketball. Here is where you'll find our Fitness Centre with over 50 cardio machines and a wide selection of weight training equipment.

#### Fieldhouse

Stretch your legs on a 4,500 sq. m. sports field and a 230-metre, two-lane indoor track. Rain or shine, members of Carleton Athletics benefit from access to the Fieldhouse. The facility is the perfect spot for a pick-up game of soccer or ultimate in the winter months.



WHERE CHAMPIONS PLAY

#### Ice House

We have some of the best ice in the city yearround on our two NHL-sized ice surfaces. The \$13M arena is the most comprehensive facility of its kind in central Ottawa. Access the rink for pick-up hockey games, skating lessons and open skate sessions.

#### **Outdoor fields**

Carleton's indoor venues are enhanced by incredible outdoor facilities, including the 3,000-seat Ravens' Perch, complete with FIFA-standard artificial turf, a multi-purpose field and five tennis courts.

| Join a team or watch a game     |                    |                  |
|---------------------------------|--------------------|------------------|
| Varsity teams                   | Competitive clubs  | Intramurals      |
| BasketballMW                    | Artistic SwimmingW | Ball HockeyCO    |
| FencingMW                       | BaseballM          | BasketballMWC    |
| Football M                      | CurlingMW          | DodgeballC       |
| GolfMW                          | Dance              | Flag Football MC |
| HockeyMW                        | EquestrianC        | Ice Hockey MC    |
| Nordic SkiingMW                 | Figure SkatingC    | Indoor Soccer MC |
| Rowing MW                       | KendoMW            | Indoor UltimateC |
| RugbyW                          | LacrosseM          | VolleyballC      |
| SoccerMW                        | RingetteW          | And more         |
| Water Polo M                    | RugbyM             |                  |
|                                 | SwimmingMW         |                  |
|                                 | Track and FieldMW  |                  |
|                                 | UltimateMW         |                  |
|                                 | Water PoloW        |                  |
| M=Men, W=Women, C=Co-ed, O=Open |                    |                  |



#### Fitness classes for everyone

With over 80 exciting classes offered each week, there's something for everyone. Our CUFit Pass gives you the opportunity to access a variety of drop-in classes. We offer Aquafit, CU Strong, dance, group or specialty fitness, indoor group cycling, marital arts, skating, yoga and Pilates and Zumba.

#### Intramurals

New to the city or looking to compete in a sport you love? Meet new friends and battle for a league title with Carleton's intramural leagues. Both team and individual registrations are available online at athletics.carleton.ca/leagues or in person at the Welcome Centre in Alumni Hall.

#### **Campus Rec**

Looking to keep fit and have fun without the commitment of league play? Our Campus Rec program offers a variety of inclusive programming options including badminton, basketball, soccer, pick-up hockey, skating and volleyball. We also offer adaptive Campus Rec programs in boccia and dance.

Follow @ravenscentre on social for updates, fun content and all things Carleton Athletics!

#### **Varsity sports**

Are you interested in proudly donning the Ravens crest for one of our varsity teams or competitive clubs? Visit **goravens.ca** for the latest information on the Ravens, including tryout dates and coaches' contact information.

#### **Cheer on the Ravens**

Our student spirit group, @CUBirdGang, are the loudest and proudest student fans in the country. Deck yourself out in red and black, crank up the noise level and be part of the unbeatable atmosphere at our home games. Follow @CURavens and @CUBirdGang to keep up with the action.

#### **Ravens House Cup**

Plan on living on campus? Join us for a friendly competition among the residence houses for total Ravens domination.

#### **BirdGang Pass**

Your ticket to all of our varsity action and join the loudest and proudest group of student fans in the country! Follow @CUBirdGang or visit goravens.ca/birdgang for more information.

#### Got gear?

Visit **shopravens.ca** to check out the Ravens and BirdGang gear. All proceeds from our student-run merchandise shop support our varsity programs.

#### **Ravens Sports Business Club**

Established in 2017, the Ravens Sports Business Club (RSBC) allows you to gain real-world experience in the sports industry. Our members have worked on a range of projects including social media content curation, corporate partnerships, merchandise design and sales, game entertainment and student engagement. goravens.ca/rsbc

#### **Carleton Esports**

Carleton is the founding member of a new esports league, Ontario Post-Secondary Esports. This league is the first of its kind in Canada and we are so proud to offer this new area of competition to our Ravens community. For league information, titles, schedules and standings, visit opsesports.ca.

#### **Ravens in the Community**

Our student-led varsity council includes three sub-committees in the area of social justice and activism including the Anti-Racism Committee, Community Outreach Committee and the Gender Equity/2SLGTBQ+Committee. These groups engage with our community connecting with vulnerable communities, engaging in social justice movements and raising funds for charities.

To be a part of a Ravens Varsity team or competitive club, visit **goravens.ca** for tryout times and registration.



# Living in residence

If you want to experience university life as a member of a vibrant, close-knit community, consider living in residence. You'll meet people from around the world, make friendships that last a lifetime, and will benefit from living only minutes away from your classes, the library, athletics and a large dining hall.

Every year, more than 3,600 students choose to live in residence. For many students, choosing to live on campus is one of the best decisions they make.

#### First-year guarantee

A double traditional room is guaranteed to all secondary school and CÉGEP students entering first-year studies in the fall, provided they receive an offer of admission on or before May 12, 2023. You are required to pay the deposit and accept the residence offer online by June 8, 2023, at 4:30 p.m. ET to confirm your space. If you do not qualify for a guaranteed space in residence, you can still apply. A lottery determines offers for all other residence applications. housing.carleton.ca/future-residents/apply-to-residence

#### What does residence offer?

#### **Campus connections**

Our residence buildings are conveniently located and connected to each other, and to the rest of campus, via underground tunnels, enabling you to get to class, meals or workouts within minutes. You'll find it easy to arrange meetings with friends, study partners or professors.

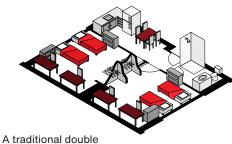
#### Two living styles

Our residences offer two types of rooms — traditional and suite-style rooms. Traditional rooms consist of one or two beds with shared washroom facilities, the majority of which are double rooms. A limited number of traditional-style rooms are in pods. The pods consist of doubles and singles, a washroom facility and shared common area.

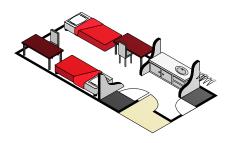
Our suite-style rooms consist of four-person suites, either two doubles or four singles, with a shared common area, washroom facility and food preparation area including a fridge and microwave.

The majority of our rooms for students entering first year are double traditional-style and are assigned as single-gender. A limited number of traditional singles, suite doubles and suite singles are available.

Roommates are an integral component of the Carleton residence life experience. You can request a specific person (who also must request you in order to be placed together) or be matched with another student based on the responses you provide on the Residence Information Form. Sharing



A traditional double room in Stormont and Dundas House.



a residence room can be an enriching and supportive experience as you transition into university life, and may even lead to life-long friendship.

#### Gender-inclusive living

Students selecting this option will have their room, pod and/or suitemates assigned through the matching of profile questions on the Residence Information Form regardless of the gender with which they identify. Please note that if you select "yes," you are agreeing to share a room (and bathroom, etc.) with a student who may identify with a different gender than the one with which you identify.

#### **All Access Meal Plan**

First-year students living in residence will be enroled in the All Access Meal Plan, which provides unlimited entry into our residence dining hall, the caf, and \$100 Dining Dollars. For students living in suite-style residences, there is a Reduced Meal Plan option, which offers ten meals per week and \$300 Dining Dollars. The caf sources food locally, accommodates dietary needs and offers an "all you care to eat" experience featuring a variety of meals cooked right in front of you. housing.carleton.ca/fees-and-food

#### Get involved

Living in residence is a great way to learn and gain experience outside of the classroom. There are several ways you can do this, including volunteering as a Mental Health Champion, visiting the Raven's Roost and participating in events, programs and committees in and around residence. housing.carleton.ca/get-involved

#### An extensive support network

Embarking on a new chapter in life, especially when living on your own for the





first time, can take some getting used to. Carleton's award-winning Residence Life program has been designed to help with this transition so you can reach your academic and personal goals. Our extensive residence support network includes residence counsellors, live-in residence staff and a focus on learning outside the classroom. housing.carleton.ca/living-in-residence

#### Cost

Fees for traditional residence for 2022-2023 range from \$11,775 (double occupancy) to \$12,999 (single occupancy) and cover

the cost of your room, communication fees and an All Access Meal Plan. Suite-style residences range from \$13,089 (double occupancy) to \$14,391 (single occupancy) with an All Access Meal Plan. Detailed information about the cost of residence is available at housing.carleton.ca/fees-and-food.

#### Off-campus accommodation

Information regarding off-campus housing is available at housing.carleton.ca/off-campushousing.



# Tuition, bursaries and scholarships

We offer one of the most generous scholarship programs in the country. Last year, 15,700 scholarships and bursaries totaling over \$31.9 million were awarded to undergraduate students.

#### **Entrance Scholarships**

If you have been admitted to Carleton for fall entry with an admission average of 80 per cent or better, you will automatically be considered for a renewable Entrance Scholarship at the time of admission. You may be offered a renewable Entrance Scholarship provided you are entering Carleton for the first time from high school or CÉGEP and have no previous attendance at post-secondary educational institutions. To be considered for an Entrance Scholarship, we must receive your complete application for admission and all required grades by June 15.

#### **Prestige Scholarships**

Our highest awards are our Prestige Scholarships. You will be considered for a Prestige Scholarship only if you are entering Carleton directly from high school or CÉGEP with an admission average of 90 per cent or better. The selection committee will also assess the range of your community or secondary school extracurricular activities. An application and letter of reference are required by March 1.

#### Other Entrance Scholarships

#### **Carleton Capital Scholarship**

Up to 13 students will be selected annually, with one recipient for each province and

territory, to receive a \$2,000 award in their first year. This scholarship is awarded in addition to other Entrance Scholarships.

Students must be Canadian citizens, permanent residents or protected persons entering the first year of a degree program and pursuing post-secondary studies for the first time. Students must also demonstrate participation in extracurricular activities and a strong academic background with a minimum admission average of 90 per cent. An application and letter of reference are required by March 1.

#### **Sprott School of Business Scholarships**

The Dean's Entrance Scholarship of Excellence, valued at \$2,000 or \$4,000, will be awarded to the top students entering the first year of the Bachelor of Commerce program. This scholarship is awarded in addition to other Entrance Scholarships.

## Faculty of Engineering and Design Scholarships

Up to 60 scholarships, valued at \$1,000 to \$5,000, will be awarded to the top students who are entering selected Bachelor of Engineering programs. The scholarship is awarded in addition to other Entrance Scholarships.

#### **Page Program Entrance Scholarships**

Up to 15 scholarships will be awarded to students in the House of Commons Page Program who are entering an undergraduate degree program at Carleton. Valued at \$1,000, the scholarship is awarded in addition to other Entrance Scholarships.

#### Arthur Kroeger College National Scholarships

Up to 10 scholarships will be awarded to students entering the Bachelor of Public Affairs and Policy Management program. Two students (minimum admission average of 90 per cent) will be selected from each of the following five regions:

- Atlantic Canada
- · British Columbia and Northern Canada
- Ontario
- Prairies
- Québec

Valued at \$2,000, the scholarship will be awarded in addition to other Entrance Scholarships.

#### Collins Memorial Entrance Scholarships for Earth Sciences

Two or more scholarships, valued at \$1,000 to \$4,000, will be awarded to students entering the first year of an Earth Sciences program.

The scholarship is awarded in addition to other Entrance Scholarships.

#### **Bursaries**

A bursary is a monetary award similar to a scholarship in that you are not expected to repay it, but is awarded primarily on financial need rather than academic achievement. A Carleton Entrance Bursary will provide you with additional funds and will help you meet the direct education costs of your first-year studies. To be considered for an Entrance Bursary, apply online by June 30. carleton. ca/awards/bursaries

#### **Leadership Entrance Bursary**

High school students who have taken a leadership role in their school's extracurricular activities and in community service may also be considered for a Leadership Entrance Bursary. carleton.ca/ awards/bursaries

#### Working on campus

A great way to offset the expense of university is to have a part-time job on campus. Most on-campus units hire students throughout the academic year. Senior students can often find positions with departments as research assistants. A part-time job not only puts extra money

in your pocket, but also provides valuable job experience at the same time. Check our online job postings at **carleton.ca/career**.

#### **Work Study Program**

This program provides part-time employment at Carleton for students demonstrating financial need. carleton.ca/awards/students

#### Other funding

If you are currently attending an Ontario high school, your guidance office can provide information on the Ontario Student Assistance Program (OSAP), which may help cover the cost of your post-secondary studies. Similar programs exist in other provinces: carleton.ca/awards/out-of-province-students.

Find out about additional financial assistance from the Carleton Awards and Financial Aid Office at carleton.ca/awards and explore our our extensive awards database at carleton. ca/awards/awards-db.

## **Equity, Diversity and Inclusion Awards**

Carleton's vision of providing equitable, diverse and inclusive opportunities is fundamental to our vision of excellence. We're proud to offer a wide range of awards that deliver on this commitment.

#### **Indigenous Student Awards**

Bursaries including the Tyendinaga Mohawk Nation Education Bursary, Humphrey Law Bursary for Indigenous Students in Business, Joyce Family Foundation Bursaries for Indigenous Students, Garay Family Award for Indigenous Students in Science, and the Métis Nation of Ontario Bursary are a few of the many awards offered to Indigenous students through the Awards and Financial Aid Office. carleton.ca/awards/awards-for-indigenous-students

#### **Awards for Students with Disabilities**

There are several awards and financial aid options available to incoming and current students with a permanent disability who are registered with the Paul Menton Centre (PMC). carleton.ca/awards/awards-forstudents-with-disabilities

#### Renewable Entrance Scholarships

| No application required. |                                 |
|--------------------------|---------------------------------|
| Admission average        | All renewable at A- standing*   |
| 95-100%                  | \$16,000 (\$4,000 x four years) |
| 90-94.9%                 | \$12,000 (\$3,000 x four years) |
| 85-89.9%                 | \$8,000 (\$2,000 x four years)  |
| 80-84.9%                 |                                 |

#### **Prestige Scholarships**

\*Annual GPA of 10.0

\*Annual GPA of 10.0

| All renewable at A- standing* Minimum 90 per cent admission average and extracurricular a Application required. Deadline: March 1 | activities.                        |
|---|------------------------------------|
| Chancellor's Scholarship (10)   | \$30,000                           |
|   | (\$7,500 x four years)             |
| Richard Lewar Scholarship (7)   | \$21,500                           |
| (\$6,500 in the first year and \$5,000 in second,   | third and fourth year)             |
| Carleton University Scholarship of Excellence (3)   | \$20,000<br>(\$5,000 x four years) |
| Carleton's Shad Valley Scholarship of Excellence (2)  | \$20,000                           |
|   | (\$5,000 x four years)             |
| Jay Woo & CAA Scholarship (1)   | \$20,000                           |
|   | (\$5,000 x four years)             |
| Riordon Scholarship (1)Full tuition in first, second Collins Prestige Scholarship (1) Full tuition in first, second               | •                                  |

#### Your tuition, your investment

#### Living on campus

| Tuition and miscellaneous fees                   | \$7,292.07 - \$12,477.86  |
|--|---------------------------|
| Traditional residence room and board*            | \$11,775                  |
| Books and supplies (varies according to program) | \$1,400                   |
| Personal expenses                                | \$2,500                   |
| Total  | \$22,967.07 - \$28,152.86 |

#### Living off campus

| Tuition and miscellaneous fees  | \$7,292.07 - 12,477.86    |  |
|---|---------------------------|--|
| Off-campus housing**  | \$9,600                   |  |
| Books and supplies (varies according to program)                              | \$1,400                   |  |
| Personal expenses   | \$2,500                   |  |
| Total   | \$20,792.07 - \$25,977.86 |  |
| Tuition fees for international students range from \$30,389 - \$46,152 (CDN). |                           |  |

- \* Based on double room, includes an All Access Meal Plan and technology fees (internet and Wi-Fi).
- \*\* Estimate based on eight months of rent (shared accommodations) and groceries. Costs will vary depending on type of accommodation.

#### carleton.ca/fees





# **Architectural Studies**

Our Bachelor of Architectural Studies (BAS) program brings creative thinking and making to the design of buildings and communities. Using a range of drawing, modelling, and visualization technologies, you can engage in the urgent social, political and environmental issues of our place and time.



Co-op available

The pre-professional BAS degree offered by the Azrieli School of Architecture and Urbanism is structured around projectoriented design studios and individual mentoring. It is supported by courses in history and theory, drawing, multimedia applications, building technology and construction. Courses are taught by dedicated faculty who will engage you on topics that are relevant to the contemporary practice of architecture. The program offers exciting research projects and experiences, including Co-op and study abroad. In addition to travel opportunities built into the BAS curriculum, you can participate in semesterlong international exchanges in cities such as Liverpool, Madrid, Paris, Melbourne and Durban.

Workshops offered from year-to-year include furniture design, digital fabrication, building information modelling, advanced structures and community development. The school's public Forum Lecture Series presents talks by internationally acclaimed architects and designers.

## Choose between the following specializations:

**Design:** Architecture at the scale of the building, with a focus on new buildings **Urbanism:** Design of communities at the scale of the block, neighbourhood, city and region

#### Conservation and Sustainability:

Conservation and adaptive re-use of existing buildings, which account for over 90 per cent of the built environment

#### An outstanding learning environment

- design studios with personal workspaces
- professionally staffed fabrication facilities for woodworking, welding, 3D printing, laser and CNC cutting
- print shop and digital photography studio
- assembly room for models and full-scale projects
- technical library and reading room
- · extensive computer labs

## Research and advanced technologies

The Carleton Immersive Media Studio (CIMS) is a leading research centre for advanced studies in modelling and visualization, using immersive, digital and hybrid media. The Carleton Urban Research Lab (C-URL) supports investigations around three major themes: water, cities and equity. The Carleton Sensory Architecture and Liminal Technologies Laboratory (CSALT) explores the uses of traditional and emerging building materials and modes of fabrication.

Our unique location in the nation's capital gives you opportunities to connect with a range of institutions and organizations.

Our unique location in the nation's capital gives you opportunities to connect with a range of institutions and organizations, including the National Gallery of Canada, the Canadian Museum of History, the Canada Science and Technology Museum, Library and Archives Canada, the National Capital Commission, the National Research Council Canada and the Canada Mortgage and Housing Corporation.

#### Your career

- a wide range of fields related to the Architecture, Engineering and Construction (AEC) sector
- art and production design in the television and film industries
- building conservation and heritage preservation
- furniture, graphic design and multimedia design
- public policy formulation
- · sustainable design
- theatre and stage design
- urban design and city planning

# **Bachelor of Arts**

Be challenged, inspired and empowered to help shape our everchanging world through our Bachelor of Arts (BA) programs.



Co-op available in selected majors

#### Carleton's BA advantage

A Carleton BA significantly broadens your career opportunities, improves your job market resiliency and increases your earning potential. Our programs prepare you for the workforce by building your transferable skills, providing work experience opportunities and opening the doors to extracurricular and global opportunities.

#### **Build transferable skills**

The job market of tomorrow is rapidly evolving and needs graduates who are able to adapt and apply their skills to many circumstances. Any one of our BA programs will teach you how to:

- communicate effectively across a variety of mediums
- think critically about local, national and international concerns
- analyze, research and interpret information
- build and articulate clear, concise arguments

#### Gain practical work experience

Gain work experience through Co-op or through a practicum, internship or placement. You will be able to apply your skills in real, on-the-job scenarios, and graduate with practical work experience and a broader network.

#### Get involved

Extracurricular involvement helps you realize your interests and capabilities, build relationships and expand your perspective. Join a club or society, participate in local or international community service-learning, study abroad and more. Participating in these activities will shape how you understand yourself and how you understand the people and world around you.

#### Shape your future

Carleton's Career Services offers career guidance starting in first year, so you can plan for your future while you build skills and gain experiences. This combination of skills, work experience, extracurricular involvement and career planning will allow you to take important first steps toward achieving your goals. carleton.ca/career

## Structure your BA program to meet your career goals. You can:

- choose a minor to complement your major
- focus on a concentration or specialization
- · combine two separate fields of study

#### First-year Seminars (FYSM)

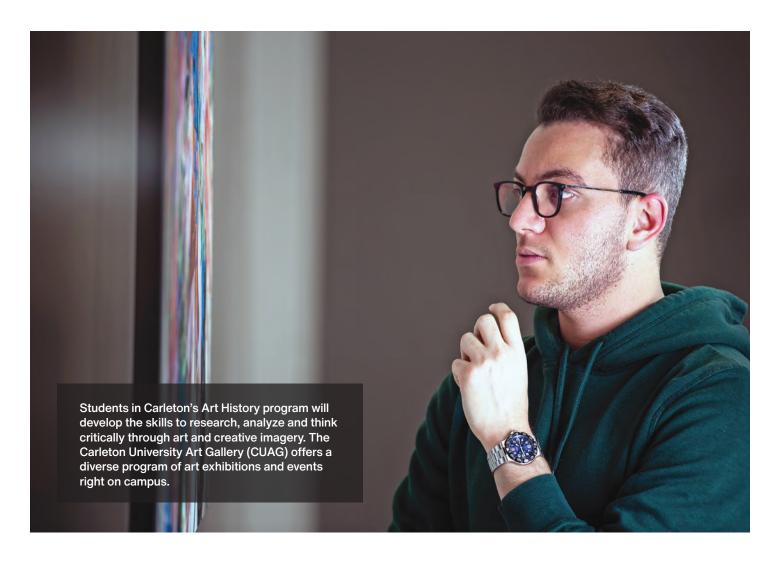
Our FYSM classes are small — around 30 students! — which means you can strengthen your critical-thinking skills through one-on-one discussions and debates with both your professors and peers. Check out our many FYSM options: carleton.ca/first-year-seminars.

Through the Co-op Program, Sociology student Angela Ingrao completed an eight-month work term at the Royal Canadian Mint. Angela's job involved pulling reports, analyzing and verifying data, updating training records and helping with tasks.









#### Finding your way

Not sure what you want to study? You can choose to not select a major in your first year. By studying a variety of topics, you will have a better sense of your interests.

#### **African Studies**

Explore the histories, cultures, languages, geographies, politics and economics of Africa, the most culturally and geographically diverse continent on Earth. Learn about the trade and investment, arts and culture and migration flow that link Africa to the rest of the world in the era of globalization.

Our unique partnerships with government agencies and departments, African diplomatic missions, NGOs and other international organizations across the National Capital Region provide you with unique opportunities to hear from guest speakers, participate in embassy events and build your network. Benefit from a work placement opportunity, a mentorship program and the chance to study in Africa through our African Studies Abroad course or by doing your third year at an African

university with which Carleton has exchange agreements.

Your career: business; education; foreign service; humanitarian aid work; international business; international development; journalism; policy analysis; research

#### **Anthropology**

In an increasingly interconnected world, where people from different places and backgrounds depend on one another to live, play, work and communicate, it is important to understand how people make sense of themselves and the world around them. This is anthropology: the study of human beings in all their cultural, geographical and historical diversity.

Learn how people confront global issues such as migration, climate change and the rise of new media technologies through their own complex understandings of kinship, age, race, gender, class, faith, nature and nation. Our location in Ottawa gives you direct access to governmental organizations, NGOs, international agencies, and a host of artistic, cultural and scientific institutions.

Our field-placement course, Co-op Program, and independent research as part of your Honours Research Essay give you practical experience to develop and apply your academic skills.

Your career: advocacy; community organizing; consultancies; counselling and mediation; education; environment; immigration services; international development; journalism; marketing and advertising; museology; public health; public policy development; research; urban planning; user-experience research

## **Applied Linguistics** and Discourse Studies

Language is an essential part of being human. Examine how language works and apply language theories to solve everyday problems. You can explore how languages are taught and learned, how language skills are evaluated, how language can influence society and vice versa, how writing performs a variety of functions, how government policies influence language practices and what makes a bilingual education program effective.

Add a minor in American Sign Language, German, Italian, Japanese, Korean, Mandarin Chinese, Russian, Spanish or Linguistics, or earn a Certificate in Teaching English as a Second Language or a Certificate in Professional Writing.

Your career: curriculum design; language teaching and testing; language-related high-tech industry; policy analysis; speechlanguage pathology; teaching; translation; writing and editing

#### **Art History**

Art History opens windows into every aspect of the societies we study. Examine how art was understood, made, used and experienced and gain the historical and methodological frameworks to interpret a wide range of imagery in different ways. As the world becomes more image-centric, this visual literacy will only become more valuable.

Our practicum program builds real-world experience — work in art galleries and other cultural institutions, such as the National Gallery of Canada or Library and Archives Canada.

Your career: archival work and art collection management; art consultation; art restoration and conservation; arts administration and programming; arts education; arts journalism; digital humanities; freelance curating; multimedia work; museum or gallery work

#### **Biology**

Biology in the twenty-first century is among the most diverse and exciting of the sciences. Many of the challenges we face as a society, from environmental decline to the demand for new health therapies, involve biological solutions. Gain valuable experiences through science, arts and social sciences courses that suit your goals. We offer BA and Bachelor of Science degrees and an interdisciplinary Bachelor of Humanities degree offered jointly with the College of the Humanities.

Your career: bioethics; education; environmental consulting; fieldwork in agriculture or wildlife management; intellectual property; medicine; natural resource management; research; science policy and regulation; science writing

#### **Canadian Studies**

Study the politics, culture, society, history and geography of a space that is many things. It is the ancestral homeland of Indigenous peoples, a place of arrival for people from across the world and a place of departure for Canadians abroad. It is a country that is continuously reshaped as diverse communities from across the regions

struggle for inclusion.

Learn to think about Canada from various angles and become adept at combining the methods and perspectives of different disciplines. You'll explore urgent and longstanding challenges in Canada by analyzing issues such as reconciliation and relations between settlers and Indigenous peoples; the need to identify and preserve heritage; tensions between urban and rural Canada; conflicts over land and natural resources; Canada's ongoing history of systemic racism; Canadian national identity and multiculturalism; social movements that try to change Canada; attempts to define and produce Canadian culture; and Canada's role in the world.

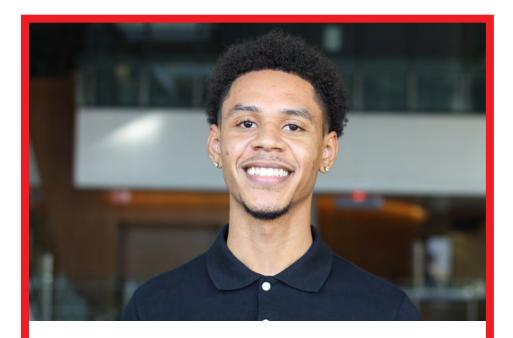
Your career: communications; journalism; law; museum and archival work; policy; public service; teaching; work with community organizations and NGOs

#### **Childhood and Youth Studies**

The demand for compassionate and skilled professionals who work with children and youth continues to increase. This program provides a critical, interdisciplinary education and equips you with the skills, knowledge and hands-on experiences you need to secure a meaningful and rewarding career in this sector. Understand the complex contexts of childhood and adolescence throughout history, gain the analytical skills necessary to work effectively with children and youth and inspire your commitment to their welfare in Canada and across the world. The flexibility to pursue a minor in another discipline will allow you to customize your program to your career

Your career: child advocacy; education services; health and social services; policy development; research in public and private agencies; senior administration





"I chose to study Criminology at Carleton because of how versatile the program is. Carleton is one of the few — if not the only — university that provides for-credit field placement opportunities for criminology students. Apart from that, the courses you'll take will challenge your pre-existing views of the field and will give you an in-depth understanding of crime and punishment through a combination of legal, sociological and psychological perspectives."

Isaiah Bell, Criminology and Criminal Justice student

#### **Criminology and Criminal Justice**

Where better to study Criminology and Criminal Justice than in Ottawa — the hub of research and employment for grassroots, provincial and federal justice-oriented organizations and agencies. We prepare you for meaningful employment by offering a comprehensive and interdisciplinary understanding of crime, criminality and processes of criminalization and punishment.

Learn about penal and transformative justice, practices of criminalization, surveillance, prevention, policing, courts, sentencing and corrections. Personalize your program by choosing a concentration in Law, Psychology or Sociology. Gain handson experience through field placements in organizations such as the Crown Attorney's Office, criminal law offices or social justice organizations. Other placements can match you with researchers and policy analysts involved in criminal justice, transformative justice and crime prevention.

**Your career:** corrections, crime prevention analysis; government and policy; graduate

work or professional studies; harm reduction and support services; legal and social policy research; probation and parole; security and law enforcement

#### **English**

We understand ourselves and our world through the stories we tell. English at Carleton approaches stories as tools for self-reflection and self-understanding, creative thinking and problem solving. Challenge yourself to think deeply and write clearly in small, supportive and inclusive classes taught by award-winning professors. Prepare yourself to live in a complex world by studying the texts that anchor our diverse histories, from Beowulf to Bollywood, Jane Austen novels to comic books, and Shakespearean plays to Indigenous drama.

Join our highly successful Co-op Program to combine your studies with valuable, paid work experience in the nation's capital. Our Co-op students frequently find employment with the federal government and in Ottawa's high-tech sector. Enjoy access to prominent national institutions, including Library and Archives Canada, the National Gallery

of Canada and the National Arts Centre. Benefit from the Carleton Dominion-Chalmers Centre, our downtown performingarts hub, or attend a range of literary events, from prestigious national galas to coffeehouse writer circles.

Your career: civil service; communications; creative writing; editing; human resources; law; library sciences; market research; non-profit sector; public relations; publishing; social media; teaching; technical and professional writing

#### **Environmental Studies**

The health of our planet depends on informed, creative thinkers who will solve the urgent environmental emergencies of our time. Be part of the solution by exploring environmental change, governance and policy in Canada and across the world.

Gain a solid foundation in environmental studies while also being able to pursue specific areas of interest, such as resource conservation, environmental justice, urban sustainability or environmental policy through required and elective courses. Select from a diverse range of courses in Anthropology, Biology, Earth Sciences, Economics, Geography, Geomatics, History, Indigenous Studies, Law and Legal Studies, Philosophy, Political Science and Sociology.

Field courses, workplace practicums and experiential learning allow you to gain valuable research skills and practical experience while you complete the program.

Your career: climate change organizer; conservation policy analysis; ecotourism; environmental assessment; environmental consulting; environmental planner; natural resources analysis

#### **European and Russian Studies**

Open doors to the world through our Institute of European, Russian and Eurasian Studies (EURUS). Examine issues such as national and regional governance; conflict and security; globalization; migration and multiculturalism; environmental and social policy; democratization and civil society; collective memory, national identity and nationalism; market reform; and European and Eurasian integration. Build a program that fits your interests by combining subjects such as history, politics, economics, language and culture with area-specific expertise. Bolster your experience by meeting and attending events with highprofile experts, foreign visitors and embassy officials throughout the year. Near the end of your degree, participate in an academic exchange or pursue Co-op employment. An internship program is available to qualified upper-year students.

Your career: academia; applied research; business; consultancy; foreign/other government service; international organizations; law; media; NGOs

#### **Film Studies**

Turn your passion for film into an exciting career by learning the critical, theoretical and historical approaches to film and emerging cinematic media like video games and virtual reality. Our small classes are taught by internationally recognized experts who will teach you to think analytically and express yourself clearly while developing a thorough understanding of the history and aesthetics of film as a social and cultural practice.

Take classes in film genres like horror, sci-fi, melodrama, film theory, the cinemas of Asia, Africa and Scandinavia, Indigenous cinema, video games, gender and sexuality in media, film festivals, film music, documentary, sound studies and queer and transgender cinema. Gain credit for internships with local production companies, film festivals, and museums or archives, such as the Canadian Film Institute, SAW Video, Ottawa International Animation Festival, Inside Out Ottawa LGBT Film Festival and Digi60 Filmmakers' Festival.

Your career: advertising and multi-media production; curation, preservation, and archiving; entertainment law; festival programming; film criticism; filmmaking; museum administration; screenwriting

#### French

Explore the literature, linguistics and cultures of the francophone world. You can engage with topics ranging from the status and features of French dialects worldwide to emerging voices in Québec literature, to writers from Africa and the Caribbean.

Whether you want to major in French, expand your BA with a minor in French or enrol in a single course, our language courses span beginner to advanced levels, helping you develop greater competency in reading, writing, listening, speaking and interacting in French. Exchange opportunities and Co-op work placements are available to students majoring in French.

Your career: business; foreign and government service; public relations; publishing; teaching; tourism; translation and interpretation

#### Geography

Geography is about a lot more than just maps. Geographers understand the complexity of the human-environment interactions that shape everyday lives, places, communities and global issues. Learn and apply geographic approaches to explore climate change, environmental degradation, globalization, urban inequality, local food systems, colonialism and spatial (in)justice. Develop a solid foundation in geographic knowledge and research skills while examining specific topics of your interest. Field courses, work placements, experiential learning and hands-on training in tools like geographic information systems (GIS) provide opportunities for you to gain practical skills and experience. Specialized concentrations in Physical Geography and Urban Geography are available. A Bachelor of Science in Physical Geography is also available.

Your career: city and regional planning; conservation analysis; environmental activism or education; natural resources management; policy analysis; sustainability research and advocacy

#### **Geomatics**

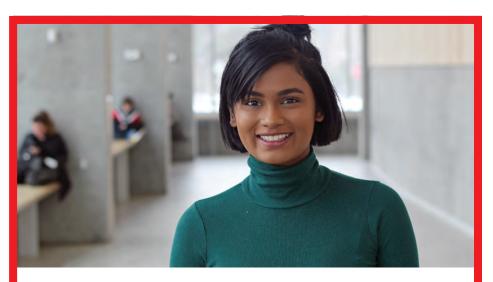
Expertise in Geomatics continues to grow in demand, offering a range of exciting career opportunities in private and public sectors across the world. We offer intensive training in geographic information systems (GIS), remote sensing (imaging from satellites and aircraft) and cartography, including desktop, web-based and mobile applications. Apply tools and techniques to understand social

and environmental systems, addressing complex problems and planning human interventions. With a Geomatics lens, explore urban planning and transportation analysis (infrastructure management, socio-economic mapping, business analysis and sustainability planning), ecosystem and environmental resource management (forestry, agriculture, water resources) and public health and security (hazard mapping, disease spread, crime analysis). Become proficient with industry tools such as Google Earth, ESRI ArcGIS software, open-source GIS and database management systems, and hardware such as GIS workstations, GPS technology, camera systems, drones, smartphones and other mobile platforms. We offer hands-on learning using the latest in laboratory facilities with opportunities to gain field experience and do work placements. A Bachelor of Science in Geomatics is also available.

Your career: environmental impact assessment; GIS analysis and consulting; map design and publishing; remote sensing and image analysis; resource management; urban planning

#### **Greek and Roman Studies (Classics)**

Dive into the ancient roots of civilization and observe the impact that the ancient



"I thoroughly enjoyed my time in Carleton's Geography program. From field courses to my undergraduate thesis, the program helped me develop both qualitative and quantitative research skills which I will take with me into grad school. Aside from the valuable skills the program taught me, I loved that I was able to choose a concentration in Cultural Geography. I also had the opportunity to have a Co-op placement with a local environmental NGO, TreeFest Ottawa. At the end of the term, I presented my findings to one of Ottawa's city councillors!"

Shania Mahendran, Geography student

world had on later eras. We examine the literature, language, history, philosophy, mythology, religion, social and economic life, technology, art, architecture and archaeology of the ancient world, framed by the impact on the Mediterranean basin of the city-states of Greece and the Roman Republic and Empire. Learn ancient Greek and Latin languages and study ancient literature in the original languages or in translation, and benefit from the expertise of our faculty who have a rich variety of interests and areas of specialty. Our program is intrinsically interdisciplinary: Classics provides a well-rounded education, producing graduates who can reason, argue and communicate - essential skills for any field. A minor in Archaeology is also available.

Your career: archaeology; archival research; business; law; museology; public service; teaching and academia

#### **History**

Whether studying war or revolution, the Americas or Africa, sport or sexuality, history helps us understand the contemporary world and our place in it. We study the past in innovative ways: you might record a podcast, prepare a briefing note, design a historical game, digitize a medieval manuscript, write a piece of historical fiction, craft an essay or do research for a government agency. You will exchange and debate ideas, find and assess evidence, and sharpen your research, writing and communication skills.

There is no better place to study history than the nation's capital. You can gain work experience through Co-op and practicum placements in a museum or government agency. In the Public History concentration, you can explore how history appears in our everyday lives — in movies, reality television, video games, music and the stories families and communities pass from one generation to the next.

Your career: education; foreign service;

"My experience in Human Rights and Social Justice has trained me to analyze and think critically about what I know. It has truly shaped the lens through which I view my life, and has made me mindful of my own privileges and biases. I'm now more aware of my actions, and use the knowledge I've accumulated in an attempt to better the world I live in."

Ameera Ali, Journalism student with minors in Human Rights and Social Justice and Indigenous Studies

government; historical research; information management; law; library and archival services; media; museums; NGOs; public relations

#### **History and Theory of Architecture**

Our built environment reflects human needs and ideas throughout history. Learn to 'read' buildings as dynamic documents that interact with all aspects of human life. As well as offering a rich variety of courses, we organize regular field trips, invite guest speakers and create study abroad opportunities in locations such as Venice, Rome and England. Our unique practicum program gives students academic credit for working in organizations like Parks Canada and the Society for the Study of Architecture in Canada, or firms like PR-TY Architects.

It all adds up to an exciting experience with like-minded students who are passionate about the field. We foster intellectual skills that apply to any profession in which critical thinking and communication skills are important.

Your career: academic research; architecture; governmental heritage management; heritage consulting and preservation; journalism and criticism; planning; teaching

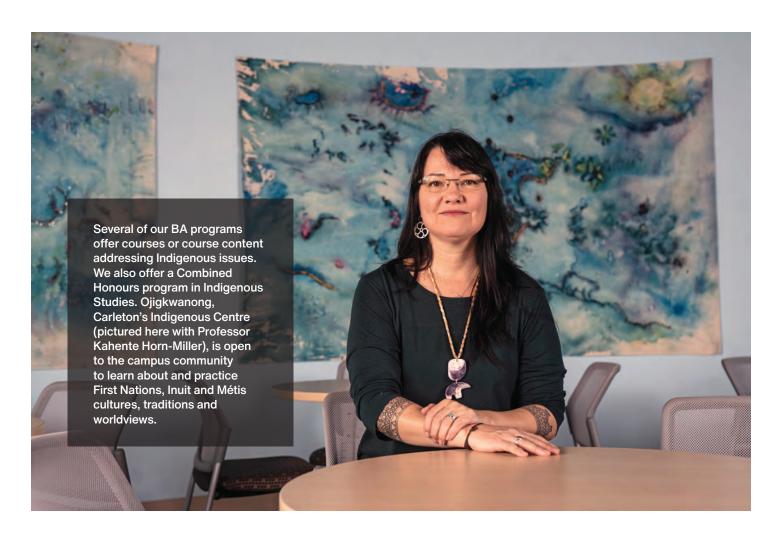
#### **Human Rights and Social Justice**

Make a difference in the lives of vulnerable and racialized individuals and communities and contribute to building a more equitable world. We examine historical and contemporary human rights issues from an interdisciplinary perspective that focuses on five key thematic areas: a scrutiny of the concepts and principles underlying human rights traditions; a study of the laws and institutions that support and implement human rights frameworks; an analysis of political repression from a human rights perspective; an examination of social marginalization and the protection of marginalized groups; and an exploration of the relationship between human rights and social justice. Our location in Ottawa gives you access to local, national and international organizations that are working towards eliminating human rights abuses and striving for social justice. The city and the university both play host to national and international visitors who offer insights into human rights activism.

**Your career:** advocacy work; government service; international relations; law; NGOs

#### **Indigenous Studies**

How do the land, Indigenous languages and kinship shape human and more-than-human relations? How are Indigenous peoples fighting the climate crisis? How can we explain the conflicts we see around land



and rights, especially in an age declared to be about (re)conciliation? These are some of the questions you will pursue as a student in Indigenous Studies, a program that centres Indigenous worldviews in our research, teaching and mentoring. While Critical Indigenous Studies is a diverse field of study and engagement, we are unified by our commitment to Indigenous resurgence and ways of knowing, community-engaged learning and dissection of colonial power and politics.

You will take courses that discuss Indigenous feminisms, genders and sexualities, ecological ways of knowing, Indigenous urbanisms, Indigenous legal orders, historical and contemporary Indigenous political struggles, Indigenous arts and culture, Indigenous languages and their relationships to the land, and global Indigeneity, among others. With a degree in Indigenous Studies, you will be prepared to participate knowledgeably in urgent agendas of change: decolonization, climate action, Indigenous cultural and political resurgence, anti-racist education, grassroots capacity-building, law and policy reform and revising public narratives of Canada and beyond.

Your career: advocacy; community sector; creative industries; journalism; law; museum and archival work; public service; teaching

#### Law

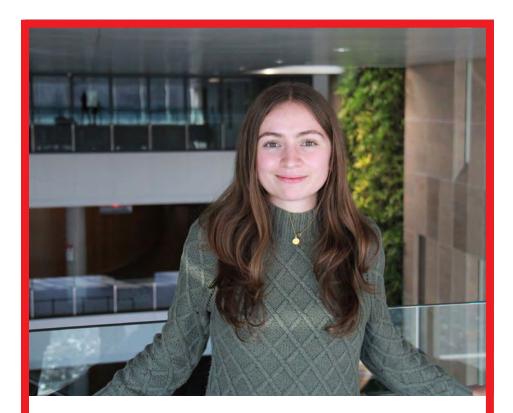
Carleton is home to the oldest and largest BA law program in Canada. Our award-winning professors will explain the dynamics and operation of law in the context of social, economic, cultural and political structures. You will study the rules, agents, institutions and power relationships that underlie the law, while developing skills in legal research, interdisciplinary methodologies and theoretical analysis. Our proximity to national public institutions and NGOs, such as the Supreme Court of Canada, Parliament, UNHCR and the Consumer's Association of Canada, provide unique work and volunteer opportunities. Honours students may choose a concentration in Business Law; Law, Policy and Government; or Transnational Law and Human Rights. We offer a servicelearning placement course where you can receive course credit while obtaining realworld experience working with a company, organization or community group on legally related issues. Qualified students have the option to study abroad in exchange programs around the world.

Your career: advocacy; banking and investment; business management; criminal justice; education; law and legal practice; legal administration; legal research; policing and law enforcement; policy analysis; public relations; public service; social policy

#### Linquistics

Linguistics is the scientific study of one of the most fundamental aspects of being human: language. Linguists explore a range of ideas about what it means to know a language; how we process and produce language; how languages are structured; how children acquire language; why there is such diversity in languages across the globe; what causes language differences and disabilities; and how languages change over time.

Learn from our dedicated faculty with a diverse set of research interests, including theoretical and experimental approaches and methods. Choose from two concentrations to tailor your degree to your interests: Linguistic Theory or Psycholinguistics and Communication Disorders. Qualified students in the Psycholinguistics and Communication Disorders concentration have the



"Studying politics in Ottawa is unmatchable. I've been able to hear directly from a range of politicians and professionals who have visited my class. Being a member of the Political Science Society of Carleton has allowed me to meet life-long friends and even become an MP for a weekend through the Carleton Model Parliament program."

Rachel Fiset, Political Science and Journalism student

opportunity to take a practicum course that provides experience in speech-language pathology.

A Bachelor of Science in Linguistics is also available.

Your career: artificial intelligence; audiology; branding and advertising; forensic linguistics; language documentation; language processing; language revitalization; speech-language pathology; translation and interpretation

#### Music

Explore Music throughout the ages as a historical and social phenomenon. You can study composition, music theory, community music, computer music, Indigenous studies, gender studies, improvisation and disability studies. Gain thorough knowledge about a wide variety of musical styles and traditions, including Western classical music, Canadian music, music of the world, jazz and popular music.

You'll benefit from a close-knit community and receive personalized attention from highly qualified faculty who are internationally distinguished and recognized for their achievements in teaching and research. There is no audition or performance requirement for this degree. If you're interested in pursuing performance, a Bachelor of Music is also available.

Your career: arts management and administration; civil service; composition; entertainment industry; law; library and archival work; music criticism; musicology; performance; radio and television work; teaching music in private and public environments

#### **Philosophy**

Studying philosophy prepares you to engage meaningfully in whatever profession you choose because it develops your ability to assess ideas, think clearly and creatively, and appreciate multiple perspectives on matters of the deepest importance. You'll

develop these abilities through a wide range of courses taught by passionate and internationally recognized faculty members. You'll also be following in the footsteps of several notable public figures who have studied philosophy at Carleton.

Your career: advocacy; cognitive science; ethics (medical, business, government and leadership in administration); law; social policy analysis; teaching

#### **Political Science**

There is no better place to study politics than in Ottawa, the nation's capital. Learn from and work with experts and experienced practitioners in the real world of Canadian and international politics, and a diverse faculty of internationally renowned scholars. Explore the foundations of the discipline, such as international relations, political philosophy and public policy, to probe complex global and domestic issues such as populism, representation and democracy, climate change governance, or the contemporary challenges of human migration. Hone your communication and critical thinking skills and get practical experience that will prepare you for almost any career path you choose to pursue.

Take advantage of Co-op placements, international or local internships, and international exchanges to expand your horizons and explore exciting new learning opportunities.

Your career: elected representative or political staff; government public service; international development; law; NGOs; polling research and consulting; public affairs or policy analyst

#### **Psychology**

Psychologists study the mechanisms that underlie our thoughts, emotions and behaviours. They examine how we think and learn, how we interact with others and how we can promote healthy development and wellness. This is accomplished by conducting research so that the knowledge gained can help us to better understand the human mind, enhance well-being and performance and generate additional research questions.

You can explore psychology's major areas within the context of an active and diverse research environment. We offer concentrations in Cognitive Psychology, Developmental Psychology, Forensic Psychology, Health Psychology, Organizational Psychology, and Social/ Personality Psychology as well as a stream in Mental Health and Well-Being. Finally, all Carleton students can complete our Certificate in Multidisciplinary Studies in Mental Health and Well-Being. The insights

you will gain from studying psychology will serve you throughout your life, in virtually any career.

Psychology is also offered as a Bachelor of Science.

Your career: corrections; early childhood education; health and social services; human resource management; marketing and public relations; mental health services; parole counselling; probation; research

#### Religion

Explore questions about identity, history and the basis of political and ethical commitments that have been posed by the world's major religions. The study of religion nurtures a respect for the complex identities of others, their histories and cultures. You can study the history and literature of Christianity, Islam and Judaism; examine Asian religions such as Buddhism and Hinduism; learn about Indigenous traditions in Canada and worldwide; follow the rise and fall of religious leaders and movements; or explore common themes in a variety of religious traditions, such as the environment, the role of women or death and the afterlife. A degree in Religion will equip you with critical reading, writing and thinking skills, as well as an understanding of different traditions toward career opportunities in our increasingly multicultural world, where religious beliefs play a significant role in human affairs and continue to affect local and global events.

Your career: archival and museum work; business; correctional services; counselling/conflict resolution; education; foreign service; intercultural communication; international development; law; library services; mediation and peace initiatives; NGOs; politics; publishing and editing; social work

#### Sociology

How are new technologies changing the ways we interact? Why are so many jobs becoming short term, and how is this situation affecting families, communities and self-identities? Why do social problems like poverty, racism, sexism, homophobia and ageism persist in the modern world? What can we do to address these problems?

Sociology explores how families, economic inequalities, sexuality, gender, race, the law and the state shape individuals, and how individuals shape these social institutions and structures. Sociology sheds light on the social processes shaping lives, problems and possibilities in contemporary society. We reveal the social, material and economic bases of these challenging inequalities and entrenched systems of oppression and exclusionary practices. Explore topics you

care about through hands-on research and further your learning through Co-op.

Our one-of-a-kind stream in Social Justice gives you first-hand experience learning from community leaders and partnering with community-based organizations to do research and work on campaigns, public events and documentary films.

Your career: business and professional work; community service work or non-profit sector; government service; policy analysis and development; research

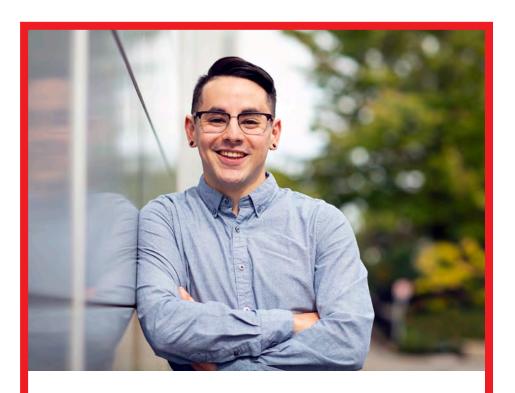
#### **Women's and Gender Studies**

Carleton's Feminist Institute of Social Transformation (formerly the Pauline Jewett Institute of Women's and Gender Studies) will engage you in critical understandings of feminist scholarship, 2SLGBTQ+ studies, disability studies and critical race studies across different historical, socio-economic, cultural and political contexts. Central to

our programs is the consideration of how gender intersects with race, class, ethnicity, age, ability and sexuality in a globalized and transnational world. You can study gender issues in courses that cross disciplines and contribute to activist projects, and are encouraged to work across all the areas of study we house. You'll also have the unique opportunity to participate in a practicum placement with feminist groups, organizations and agencies from inside and outside of the Carleton community.

The Feminist Institute of Social Transformation also offers minors in Critical Race Studies, Disability Studies and Sexuality Studies.

Your career: community service; communitybased agencies; counselling; education; government; law; media; social policy research



"Studying at Carleton has given me the necessary academic and practical skills to excel at the graduate level and within the workforce. I've pursued my goals while exploring new areas of interest through Carleton's diverse selection of courses. Now I'm prepared to work as a researcher through the numerous research opportunities I've had under the guidance of knowledgeable and passionate faculty members in world class facilities."

Justin Shimizu, Psychology student with a minor in Sexuality Studies



# **Cognitive Science**

Are you interested in understanding how people and computers think? Challenge yourself by studying thinking from a variety of perspectives to make a difference in this growing field.



Co-op available

We study the mind by combining the methods and theories of five disciplines: neuroscience, computer science, psychology, linguistics and philosophy. This interdisciplinary approach provides unique insights into human understanding, thought, perception, language and emotion.

You can develop your expertise in one of five specializations:

- Biological Foundations of Cognition
- Cognition and Computation
- Cognition and Psychology
- · Language and Linguistics
- Philosophical and Conceptual Issues

#### Our resources

We have the resources for you to succeed, including the Visualization and Simulation Centre (VSIM), the Language, Logic, and Information Lab (LLI), the Science of Imagination Lab (SOIL), the Language and Brain Lab, the Centre for Applied Cognitive Research (CACR), the Cognition and Neuroscience of Aging Lab (CANAL lab), the Language and Social Cognition Lab, the Artificial Cognition Lab, and the Children's Representational Development Lab (CRDL). Our world-renowned faculty are involved in a broad range of research areas in which you can assist.

## Conduct independent research and gain hands-on experience

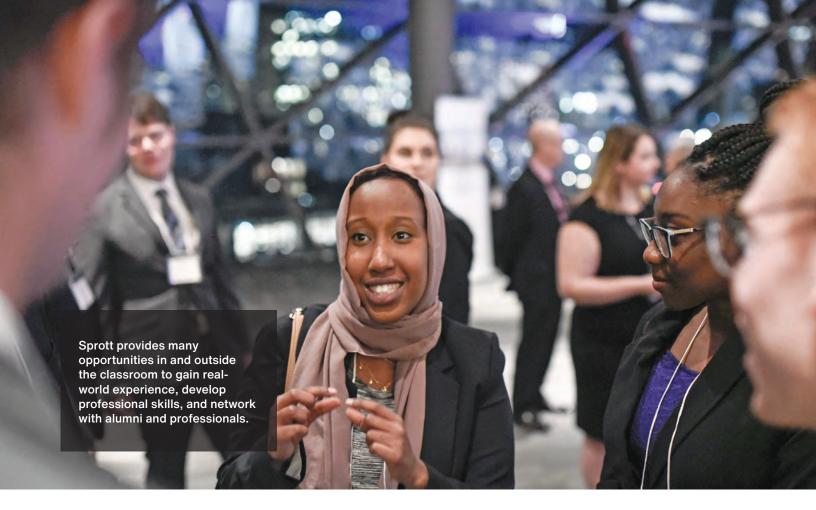
As a senior student, you may have the opportunity to complete an Honours Thesis, allowing you to develop an area of independent research alongside a faculty

supervisor. You will graduate with valuable research experience, specific skills in identifying and analyzing problems, and a defined area of expertise.

Or, you may complete an Honours Project to gain hands-on experience and prepare you for the workforce. Working in groups, you will investigate a "big" question in cognitive science and complete an original research project. This experience transforms you into a confident researcher ready to enter the competitive job market or further your education.

#### Your career

- cognitive research in universities, government research facilities or private companies
- · language processing research
- · occupational therapy
- · speech pathology
- · website usability design



# **Commerce**



The world is facing extraordinary challenges that require bold thinking, collaboration and compassion. The Sprott School of Business delivers a transformational business education that will empower you to achieve success on your own terms and make a difference in the world. You'll benefit from learning in Ottawa, an inclusive and enterprising city, internationally recognized as a hub for technological and social innovation.



Co-op available

The Bachelor of Commerce (BCom) program delivers a flexible business education and unique learning experiences. Sprott is home to a diverse and enterprising student community. New business ventures and high employment among graduates speak to the value of a Sprott education.

The BCom features options to add Co-op, study abroad or a minor in another subject. In upper years, students have the option to

add one or two concentrations, as well as streams, to build specialized knowledge.

#### **Concentrations**

#### Accounting

Prepare for careers in financial or management accounting, auditing and taxation. You can complete all of the academic courses required to enter the Chartered Professional Accountant (CPA) Professional Education Program. Co-op hours in an approved placement can be counted toward the CPA practical experience requirement. We also offer a Master of Accounting (MAcc) program. MAcc graduates can proceed directly to the CPA Common Final Exam.

Did you know Sprott offers business-related minors, such as entrepreneurship and arts management, for students in other programs?

#### **Business Analytics - NEW!**

Gain an introduction to the in-demand field of business analytics. Explore applications of data analytics in various business disciplines and learn how to leverage data to make decisions with less risk and better outcomes.



#### Work at the innovation forefront

Through Co-op, Sprott Commerce students have the opportunity to learn and make an impact in companies within one of North America's leading technology hubs: Kanata North, located just 20 minutes from the city's downtown core. BCom student Aditi Mohan completed a Co-op placement as a project management intern at Ericsson. "I now see myself working at a tech company in the future as well. It's a very dynamic environment. It's innovation, innovation, innovation – there's always something new coming up, and that's very exciting."

#### Entrepreneurship

Develop an entrepreneurial mindset and gain first-hand experience, from idea inception to development, to implementation in the marketplace. You can take courses with students across all faculties, creating a collaborative and interdisciplinary classroom environment.

#### Finance

Examine how financial managers appropriately allocate their firms' capital to invest in value-enhancing projects and how financial markets value the decisions of the financial manager. This program has been accepted into the CFA Institute University Affiliation Program.

#### Information Systems

Gain the latest technical skills and the necessary soft skills to succeed in high-paced business environments. Information Systems (IS) professionals help organizations create business value by applying their knowledge of business processes and communication technologies to create and support strategic opportunities.

#### **International Business**

Gain an appreciation for the global environment, a solid foundation in international finance, strategies in marketing and global expansion, the interpersonal skills to manage in diverse contexts and first-hand international experience through practica and study abroad opportunities.

#### Management

Develop employer-valued skills and experience in managing and understanding people and their work relationships at individual, group and organizational levels.

#### Marketing

Gain the critical thinking, analytical and creative skills to effectively manage the development, pricing, promotion and distribution of products and services for diverse organizations. Learn how to build and sustain high-value customer relationships in competitive environments.

#### **Supply Chain Management**

Develop the essential skills and expertise to manage geographically dispersed networks of suppliers, manufacturers, logistics service providers, transportation carriers, distributors, service support operators and customers.

#### Streams - NEW!

Complement your program with electives that enhance your competitiveness. You may choose to pursue multiple streams:

- · Business Analytics
- Entrepreneurship
- · Sustainability

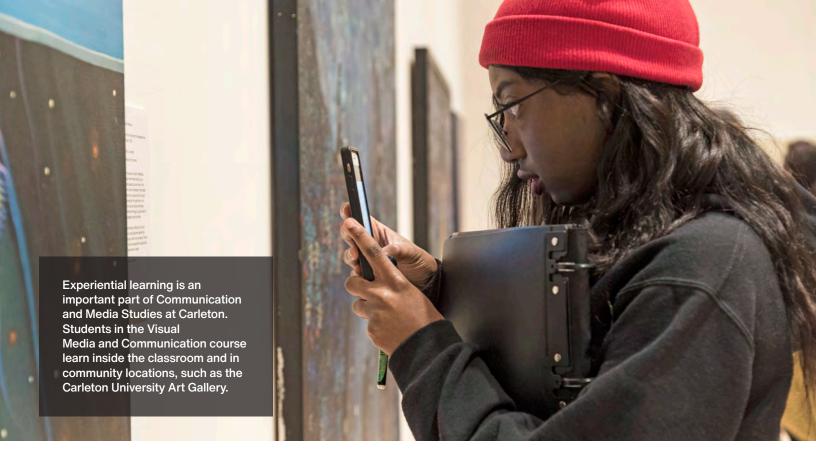
#### Your career

BCom graduates find rewarding careers across a variety of functions and sectors. Sprott's Business Career Management Centre provides a range of career services, including access to job postings, career advising, workshops and employer events.

All BCom students will complete Sprott's Employability Passport, a four-year career development program that equips students with the job-ready skills and self-awareness to find meaningful employment and career success.

Based on surveys of graduates from 2018-2020, 92 per cent of BCom respondents were employed within one year of graduation.

- · business analytics
- Certified Professional Accountant (CPA)
- consulting
- digital marketing
- entrepreneurship
- financial management
- human resources management
- · international development
- · impact investing
- project management
- · supply chain management
- · sustainable business



# Communication and Media Studies

Our prime location in the nation's capital puts you at the centre of Canadian decision-making about the most important issues of our day: speech rights and protest movements, the future of television and wireless technologies, Internet regulation, climate change, social activism and more. Ottawa offers you a window to the world: bilingual and culturally vibrant, it is the hub of public life in Canada. Carleton gives you access to key players in government, cultural institutions, the public sector, industry, NGOs and world-class research facilities.



Co-op available

Media are central to how we live and work and are vital to nearly every human relationship, sector and industry. Where news organizations were once the primary source of public information, changes in our media environment mean that all types of organizations can be media organizations, too.

Carleton's Bachelor of Communication and Media Studies (BCoMS) will empower you to think critically about the institutions, people, policies and technologies that influence the world around you. You have the option to complete your BCoMS as an Honours degree, a Combined Honours with another program or as a minor. Choose from courses that cover the past, present and future of media, including the uses and abuses of technology; the power of algorithms in shaping social life; the economics, politics and regulation of communications; the role of media in local and global contexts and so much more.

#### Gain marketable skills

You will select a course from a menu of hands-on media production workshops that will provide you with the skills you need to succeed in today's job market. Options include workshops in digital media production, social media, speechwriting,

public engagement, and event management and community partnerships.

#### Your career

- advertising
- · communication strategist
- data analysis
- digital communications advisor
- education
- entrepreneur
- lav
- market research
- media industry and cultural policy analyst
- policy development
- · political advisor
- · social media lead





# **Computer Science**

Computer Science plays a central role in business, telecommunications, science, entertainment and medicine. As the range of computer applications continues to expand, so does the demand for computer scientists.



#### Co-op available

Learn how to use the latest computing and software development techniques to solve the problems we face in business, science and society today and those we will face tomorrow. Our ideal location in Ottawa gives you a front-row seat to our vibrant high-tech sector, comprised of both established multinational firms and cutting-edge start-ups. Our city also offers a full range of employment opportunities with federal government departments and affiliated agencies.

The Bachelor of Computer Science is available as an Honours degree, a Major degree for those desiring a less-specialized program, or as a Combined Honours program with Mathematics. Choose from any one of our diverse specialty streams and gain expertise in programming, algorithms, software engineering, databases and web applications.

#### **Specialty streams**

#### Al and Machine Learning

Machines can translate language, recognize speech, interpret complex data, make intelligent decisions and increasingly, learn and problem solve. Apply artificial intelligence and machine learning theory to real-world problems and develop the technologies and procedures of tomorrow — from robotic surgery, to autonomous space exploration, to intelligent information systems, homes and vehicles.

#### **Algorithms**

This stream is for those interested in the foundational language by which computers are told what to do and how to do it. It will teach you to design, analyze, experiment with and reason about the algorithms that arise in modern applications such as search engines, games, social networks, markets, economics and computer networks.

#### **Computer and Internet Security**

Learn about the security problems faced by computing and communication networks and how to build software that defends against attacks. You will acquire a solid background in computer science and software

engineering, as well as the foundations and the practice of information systems security, including computer and network security, cryptography and software security.

#### **Computer Game Development**

Computer game development is a sophisticated subject, drawing on advanced knowledge in several computer science areas, including artificial intelligence and computer graphics. You will learn about both the principles and practices of designing and developing modern computer games.

#### **Software Engineering**

Learn to develop reliable, secure and costeffective software systems that satisfy the requirements of customers. Extend the software development skills gained in our core program with specialized software engineering knowledge in areas like quality assurance, project management and user interfaces.

#### **Multidisciplinary streams**

#### **Management and Business Systems**

Learn how to use the latest computing and software development techniques to solve problems in management and business — topics that transform how we do business, such as artificial intelligence and machine learning, and how to manage IT projects and companies by taking courses offered by both Carleton's School of Computer Science and the Sprott School of Business.

#### **Industrial Applications Internship Option**

Prepare yourself for a career in Canada's top software companies by gaining paid work experience with our industrial partner, Shopify, an Ottawa-based company that has created one of the world's leading e-commerce platforms. In addition to providing a salary, Shopify covers tuition and educational expenses.

#### Your career

- applications for biotechnology, artificial intelligence, computer gaming, business and mobile devices
- large-scale software design and development
- software and systems security analysis
- · web services and infrastructure



# **Economics**

Economics is relevant to almost every aspect of our lives. At its core, it is the study of decision-making in the face of scarce resources and competing interests.



Co-op available

Study the operation of economies, financial markets and government regulation through our Bachelor of Economics (BEcon). You'll learn about how individuals make important life decisions and will gain a thorough understanding of how firms compete, set prices and optimize processes. You'll discover how governments develop and administer policies to regulate trade, taxes or financial and environmental standards, and will develop a foundation in economic theory and modern techniques of data analysis that will allow you to carry out independent research projects.

Our location in the nation's capital gives you unique access to a wide range of resources, including research facilities and libraries, a growing high-tech sector, as well as the departments and agencies of the federal government.

Gain hands-on experience through Coop, practicum and internship placement opportunities owing to our large network of alumni and contacts throughout the city. Or, get involved in research by assisting faculty with their projects or in our economics laboratory.

#### Shape your degree to fit your goals

Focus your studies in a particular area by adding one or a combination of two concentrations:

- Computational Analysis; Economic Data Science
- Financial Economics
- Development; International Political Economy; Natural Resources, Environment and Economy
- Economic Theory; Mathematics and Quantitative Economics

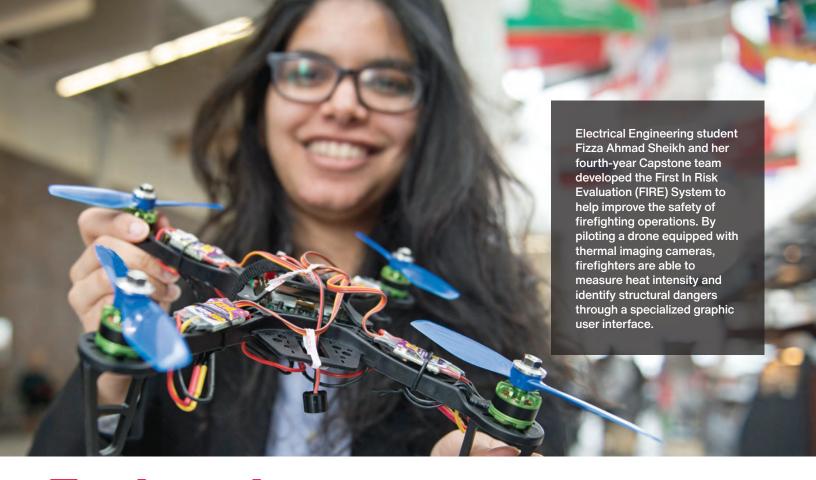
A BEcon Combined Honours is also available for students who wish to study both Economics and another eligible discipline.

We also offer courses on various relevant topics outside of concentrations, such as health economics and pandemics or behavioural economics.

#### Your career

Our graduates can be found working in different federal and provincial government departments and agencies, as well as private sector businesses and associations, including:

- Agriculture and Agri-Food Canada
- Bank of Canada and other banks
- Canada Mortgage and Housing Corporation (CMHC)
- Canada Revenue Agency (CRA)
- Canadian consulting firms and NGOs
- Department of Finance Canada
- financial institutions and insurance companies
- private-sector businesses (including hightech)
- Statistics Canada and Global Affairs Canada



# **Engineering**

Our internationally renowned Bachelor of Engineering degree offers an exceptionally comprehensive range of programs. Engage in practical, real-world training, collaborate on challenging projects and express your creativity and innovation in preparation for a rewarding career in a highly desired engineering field.



Co-op available

You'll gain hands-on experience across a range of engineering activities, including the design of aircraft, vehicles, machinery, software, telecommunications systems, medical devices and solutions to environmental challenges. Along the way, you will be exposed to exciting advances in areas such as sensor technologies, robotics and global communications networks. Each program allows you to specialize your studies according to your interests and ambitions. All programs offer an optional minor in Business, among others. Opportunities for graduates of these programs exist in many sectors including industry, education and government with careers spanning research, product

development, design, management and consulting.

#### **Co-op employment**

Find yourself in rewarding Co-op employment with well-known organizations:

- Amazon
- BlackBerry QNX
- Bombardier
- Canadian Space Agency
- Ericsson
- General Dynamics Canada
- Google
- Honeywell
- IBM
- · National Research Council Canada
- Nokia
- Public Services and Procurement Canada
- Stantec
- Tomlinson

All of our Engineering programs are accredited by the Canadian Engineering Accreditation Board.

#### **Aerospace Engineering**

Discover your potential to develop analytical, computational and hands-on engineering and design skills related to the aerospace field. The broad range of topics and applications included in this discipline are covered in four main streams: Aerodynamics, Propulsion and Vehicle Performance; Aerospace Structures, Systems and Vehicle Design; Aerospace Electronics and Systems (aircraft control, communication and navigation systems);

and Space Systems Design (astronautics and space/satellite technology). These streams emphasize the development of practical and problem-solving skills based on hands-on laboratory and design work.

Your career: aircraft communication, navigation and control systems; aircraft/ spacecraft manufacturing, certification, modification and repair/overhaul; launch vehicles, spacecraft, satellite systems and operations; piloted and autonomous aircraft, including aerodynamics, structures, avionics and propulsion systems

#### Architectural Conservation and Sustainability Engineering

There is a growing need for engineers with expertise in heritage conservation and sustainable building design and operation. Learn a modern approach for the design and retrofit of buildings that holds sustainability as the guiding objective while respecting architectural history and significance. Consider the life cycle costs and environmental impacts of building materials, energy demand, occupant comfort, and the effective reuse and conservation of existing structures. You will also work closely with Carleton's Architectural Studies students.

Your career: conservation of heritage structures; digital tools for new and historic building surveying and recording; green building design and assessment; life cycle assessment of green building technologies and materials

### Biomedical and Electrical Engineering

The field of health care relies increasingly on technology, with biomedical and electrical engineers leading the way. Learn the principles of electrical engineering and science as they apply to biotechnology and medicine. Understand the design of diagnostic and therapeutic devices, bioinstrumentation, automated signal and image analysis, computing and display devices and biometric data readout systems, and receive instruction in general electrical engineering.

Your career: biomedical informatics and telemedicine; biomedical instrumentation and biosensor design; biosignal processing and imaging diagnostic technologies; clinical and health care engineering; general electrical, electronics and instrumentation engineering

#### Biomedical and Mechanical Engineering

This program integrates life sciences with the traditional mechanical engineering topics of solid mechanics, dynamics, fluid mechanics, thermodynamics, heat transfer, materials, control systems and robotics to analyze and solve problems related to biomechanical engineering, biotechnology and medicine. You'll gain the skills that enable the development of advanced components, systems and techniques for biomechanical applications that are crucial to modern health care. We prepare

you for the workforce by emphasizing the development of practical and problemsolving skills based on hands-on laboratory and design work.

Your career: advanced drug therapy techniques; biomedical devices including artificial organs, limbs, joints, heart valves, cardiovascular devices and dental implants; clinical engineering involving medical technology in hospitals; interactive robots for biomedical applications, such as surgery and physiotherapy; nanotechnology for the manipulation of biological cells and genes

#### **Civil Engineering**

Civil engineers provide and maintain infrastructure that we depend on daily. They plan, design, construct, operate, manage and maintain airports, bridges, buildings, dams, highways, railways, pipeline systems, tunnels, water distribution systems and treatment facilities. We prepare you for a wide range of careers by offering a background in mathematics, chemistry, physics, thermodynamics, geology, experiment design and civil engineering materials. In the final two years of your program, you will focus on engineering design in the areas of structural, geotechnical, transportation and municipal engineering. You will apply your knowledge through a practical design project that explores a real-world design problem.

**Your career:** build, evaluate and maintain infrastructure; design structural,



Photo by Ashley Fraser



geotechnical, transportation or municipal systems; infrastructure safety, security and comfort; on-site construction management and supervision

#### **Communications Engineering**

We're proud to offer the only Communications Engineering program in Canada. Communications engineers play a vital role in today's world, serving as the architects of cloud-computing smart applications, next-generation internet applications, social networking technologies, network security, privacy and trust, advanced 5G and 6G wireless systems, and Al and machine learning for networking. Here, you'll gain the flexibility to succeed in a world of rapidly changing technology, alongside the specific knowledge and skills that are highly valued by employers in the telecommunications and information industries. You will be exposed to cuttingedge technologies, including artificial intelligence and machine learning, advanced communications applications in autonomous vehicles and satellites, and a fully connected world where privacy and security prevail.

Your career: Al and machine learning for networking; cloud computing, data centre networks and next-generation internet applications; communication security, privacy and trust; computer networks and emerging applications; next-generation 5G/6G wireless networks, satellite communications and navigation; smart and Internet of Things (IoT) applications.

#### **Computer Systems Engineering**

Computer systems engineers combine both hardware and software to design, develop and implement integrated computer systems for applications in such areas as robotics, artificial intelligence, aerospace and avionic systems, autonomous systems, multimedia applications and cloud computing. Challenge yourself by learning how to engineer complex systems based on computers and acquire an understanding of computers as integrated software/hardware systems.

Your career: autonomous, embedded aerospace systems; cloud computing and social network applications; robotics, smart vehicles and artificial intelligence; smart grids and wireless sensor networks, and Internet of Things (IoT) systems

#### **Electrical Engineering**

Electrical engineers design, develop, test and manage the manufacture of equipment ranging from cell phones to giant power generators. Our unique program allows for specialization in radio-frequency and microwave circuits and applications, communication circuits, integrated circuit design and fabrication, semiconductor and nanoscale technology and devices, or

electrical energy and power. And, we are one of the few universities in Canada with its own facilities for manufacturing integrated circuits.

Your career: electrical power systems, including generators, motors and power grids; high-speed integrated circuit chips; local area networks, smartphones, fibre optics and satellite communications; vehicular electronic controls and navigation

#### **Engineering Physics**

Engineering Physics is a challenging program for students who want to combine the strengths of physics and engineering. You will gain a broad and strong foundation in material science, applied physics, electronics and nanotechnology, and learn to apply it in the development of new technologies which include, but are not limited to, nanotechnology, semiconductor devices, optical systems, telecommunications and related computer hardware.

Your career: biomedical physics and sensors; microelectronics and process engineering; nanotechnology; photonics technology and communications

#### **Environmental Engineering**

Environmental engineers ensure that we have clean water to drink, clean air to

breathe, clean soil to grow our crops and clean energy to sustain our growth. The goal of environmental engineering is to offer sustainable and green solutions to many of the issues and challenges facing our society and to provide a clean and healthy environment for us and our ecosystem. Environmental engineers use engineering and science principles to design innovative treatment technologies that help to minimize our environmental footprint, prevent pollution, reduce greenhouse gas emissions, improve air quality, ensure drinking water safety and achieve environmental sustainability.

Your career: assess and improve air quality; design and improve treatment systems for water, wastewater and solid waste; mitigate and adapt to climate change; provide clean energy alternatives to reduce greenhouse gas emissions

#### **Mechanical Engineering**

Virtually anything one builds that moves or converts energy has a mechanical component, making mechanical engineering among the most versatile of all disciplines. Our program emphasizes the development of analytical, computational and hands-on skills in design, dynamics, thermodynamics, heat transfer, fluid mechanics, solid mechanics, materials, control systems and robotics.

Elective courses in energy conversion and power generation, manufacturing and production processes, aerodynamics and flight mechanics, vehicle engineering, biomedical engineering and computational methods complement the core courses of this program.

Your career: ground, sea and air transportation; heating, ventilation and air conditioning; manufacturing and robotics; power generation and energy conversion; resource extraction and processing

#### **Software Engineering**

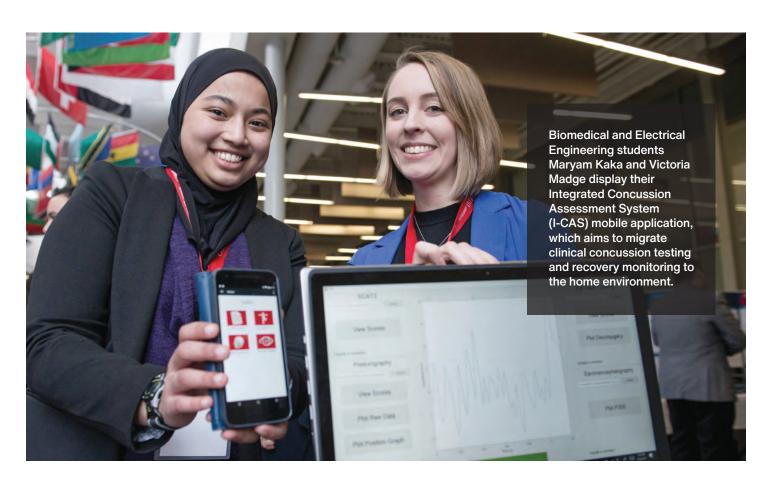
Real-world software systems, such as massively parallel internet applications and mission-critical avionics control systems, require robust and provably correct software design. We go beyond teaching simple programming and instead focus on modern software engineering principles, tools, integration and analysis techniques for the design of large, complex and high-performance software systems.

Your career: aerospace, autonomous vehicle and embedded systems; robotics, machine learning and artificial intelligence; scalable web applications such as social networking, e-commerce systems and cloud computing; smartphone and smart-tablet applications, and Internet of Things (IoT) systems

#### Sustainable and Renewable Energy Engineering

There is an increasing demand for clean sources of energy such as nuclear, wind, solar, geothermal, hydropower and biomass energies. Truly sustainable development will require the clever integration of renewable energy technologies into existing infrastructure, along with vastly improved efficiencies in non-renewable energy use. This program provides analytical and handson skills for designing, building, operating and enhancing sustainable energy systems that combine energy generation, distribution and utilization in an environmentally responsible and economically beneficial manner. We offer two streams - Smart Technologies for Power Generation and Distribution, and Efficient Energy Generation and Conversion.

Your career: energy-related industries, power utilities and government agencies; engineering consulting services specializing in efficient generation, distribution and utilization of energy; manufacturing industry sectors related to renewable energy projects; transportation systems with hybrid propulsion technology





# **Global and International Studies**

An abiding strength of Carleton University is its long tradition of study and research focusing on international problems and perspectives.



Co-op available

Our unique Bachelor of Global and International Studies (BGInS) program is the first in Canada to emphasize both global and international approaches to the study of the world. It places these two viewpoints in creative tension with each other, allowing you to gain a nuanced understanding of the world in which we live.

Our ideal location in Ottawa offers you direct access to embassies, government departments and NGOs, gives you a front-row seat in understanding global and

international issues and provides you with a unique advantage in today's job market.

BGInS offers a shared multidisciplinary foundation in global and international studies through our core courses. Our 18 specializations cover specific international and global themes or geographical areas, allowing you to tailor your studies based on your interests.

#### First-year core courses

- · Global History
- International Law and Politics
- Ethnography, Globalization and Culture

#### Second-year core courses

· Ethics and Globalization

- · Global Literatures
- Globalization and International Economic Issues

#### Third-year core courses

- · Global and International Theory
- Places, Boundaries, Movements and Global Environmental Change

#### Fourth-year core courses

 Honours Seminar in Global and International Studies

#### **Specializations**

#### Africa and Globalization

Study a wide range of issues as they apply to Africa, including democratization, human rights, international development, youth cultures, migration and refugees, colonialism and postcolonialism and social justice.

#### Europe and Russia in the World

Study the region of Europe, Russia and Eurasia in its broader global context, including its history, society, politics, culture, economics and languages. You may focus on particular countries in the region, institutions such as the European Union, or themes such as migration, civil society, EU enlargement, globalization and identity.

#### French and Francophone Studies

Gain an understanding of the multiple varieties of spoken French and the diversity of French literatures across continents. Study how both are patterned globally through issues and contexts ranging from colonial and postcolonial histories, transnational contacts, cultural transfers and experiences of migration.

#### **Global Development**

Gain a multidisciplinary perspective on this broad and important field by taking foundational courses in anthropology, economics, geography and political science. Learn about the way the world is unfolding in the face of increasingly urgent challenges from climate change to global epidemics.

#### **Global Genders and Sexualities**

Study the ways that bodies, genders and sexualities are shaped on local, national and international spaces. You will explore the ways that race, colonization, citizenship and ability shape and govern our intimate lives.

#### **Global Inequalities and Social Change**

Study global inequalities and social change, combining theoretical and applied approaches. Gain an understanding of multiple dimensions of inequality through topics such as poverty, racism, colonialism and gender. Acquire knowledge of various forms of resistance to oppression, including social movements and transnational solidarity.

#### **Global Law and Social Justice**

Develop an understanding of law as a key mechanism by which global issues, identities and institutions are organized and contested in this contemporary period of globalization. Explore legal frameworks as they relate to topics such as human rights, migration, trade and armed conflict.

#### **Global Literatures**

Literature offers one of the most compelling ways to enter into the many cultural worlds that converge in contemporary globalized societies. Explore how writers reimagine identity and belonging against a background of histories of colonialism, diaspora, migration and the experiences of living in multiple national and cultural communities.

#### **Global Media and Communication**

Media and communication technologies are engines of globalization that shape the cultural environments in which we live. You will study global media and communication in historical and contemporary contexts and develop the knowledge and skills necessary for working in global and international settings as communicators, researchers, analysts or advocates.

#### **Global Migration and Transnationalism**

Gain invaluable expertise for a world on the move. Study the movement of people and ideas with national and international leaders in topics such as citizenship, the global refugee regime, multiculturalism, state security, transnational identities and violent extremism.

#### **Global Politics**

Gain an understanding of global political issues through a problem-focused and applied approach to the study of such topics as the gap between rich and poor, democracy and its economic and political benefits, human rights, war and peace, ethnic conflict and the politics of the environment.

#### **Global Religions: Identity and Community**

Engage in the academic study of religion and become literate in the history and contemporary development of the world's diverse religious traditions. Explore how religion informs identities and shapes power relations in different societies. Gain insight into the ways people use religion to find meaning and forge communities in an increasingly interconnected world.

#### **Global and Transnational History**

Study the global community from 1400 to the present, with a particular focus on the non-western world, and explore global connections, movements and trends. You'll gain an understanding of the historical dialogue between forces of global integration and forms of local knowledge and experience.

#### Globalization, Culture and Power

Use the insights of anthropology to become conversant with the cultural impacts of globalization in terms of economic inequality, ecological vulnerabilities, colonial legacies, health practices and institutions, and new visions of human rights.

#### **Globalization and the Environment**

Understand the social and political dimensions of global ecological change, from questions of global water justice and international agreements on greenhouse gas emissions to the links between climate change and inequality. Learn about policy alternatives on global environmental challenges, such as urban sustainability, environmental disasters and displacement, and transitions to a low-carbon society.

#### **International Economic Policy**

This specialization's relatively non-technical approach will give students with diverse backgrounds the opportunity to learn about issues related to economic globalization and gain an understanding of the economic forces invoked by government intervention.

### Latin American and Caribbean Studies Develop an integrated understanding of

Develop an integrated understanding of this important geopolitical region. Study

"Global and International
Studies has provided me with
an interdisciplinary approach
to understanding the world.
Focusing my studies in Africa and
Globalization has provided me with
an enriched and enlightened way
of understanding development in
its unique and diverse approach. I
chose this concentration because I
want to be a part of Africa's future,
and the professors have readily
provided me with the academic
tools to face our changing world."

Tine Ndhlovu, Bachelor of Global and International Studies student





the region's history, politics, geography and cultures, and learn about interdisciplinary approaches to understanding sustainable development, democracy, human rights, social justice and cultural diversity.

#### **Teaching English in Global Contexts**

Study the place of the English language in an increasingly interconnected and globalized world, and the benefits and challenges it brings. Learn how to teach English as an international language using current methods and obtain valuable accreditation as an English teacher.

#### Language requirement

A basic requirement for engaging with the world is the ability to speak in more than one language. You will be required to pass a second-language requirement. If you do

not have skills in a second language, you can take courses offered by our School of Linguistics and Language Studies (SLaLS) or our Department of French. Options include Arabic, Chinese (Mandarin), French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish and American Sign Language.

#### International experience requirement

It is one thing to study a part of the world and another to immerse yourself in its culture. We offer an international experience requirement as an integral part of the program. You can fulfill this requirement by studying abroad under one of Carleton's international exchange agreements, undertaking an international work placement, completing Carleton Course Taught Abroad, participating in an experiential learning opportunity

abroad, studying abroad on a letter of permission or taking our innovative Global and International Group Project course.

#### Your career

A global perspective, intercultural understanding and second-language ability are increasingly important skills for success in the workplace.

- advertising
- business
- communications
- foreign service
- journalism
- · marketing
- · policy analysis
- · public relations and many other fields

# **Health Sciences**

There is a growing demand for highly skilled workers in Canada's health sector. Our career-focused Bachelor of Health Sciences (BHSc) provides the knowledge and skills you need to understand, participate and succeed in the rapidly evolving healthcare and research landscapes.

Our strong partnerships with both the public and private sectors in the nation's capital means that you will have unique access to organizations, agencies, research institutes and hospitals in the region. You'll gain a strong foundation in the biological and biomedical mechanisms of human health and disease as well as an indepth understanding of the social, political and environmental determinants of health.

We offer five concentrations, which can be combined in unique and innovative ways:

#### **Biomedical Sciences**

Build a foundation in biological and biomedical sciences and explore the genetic, biochemical, immunological, physiological and developmental aspects of human health. Gain a thorough understanding of human health by examining current issues from cultural, psychological, technological and environmental perspectives.

#### **Disability and Chronic Illness**

Chronic illnesses and disabilities affect the quality of life of a large number of people and include heart disease, cancer, chronic pain conditions, mental health problems and physical disabilities. In this concentration exclusive to Carleton, you'll understand the biomedical, social and psychological basis of chronic illnesses and explore treatment strategies used to enable productive and healthy lives, as well as the ethical dilemmas affecting intervention and treatment.

#### **Environment and Health**

Explore how our environment influences our health from a biological, chemical and epidemiological perspective. Study the issues related to the prevention and treatment of environmentally linked illnesses such as cancer, asthma and neurodegenerative disorders.

#### **Global Health**

Gain the biological, psychological and social knowledge required to address current and developing health issues that affect national and international populations. We focus on real-world issues such as globalization, climate change, infectious diseases and environmental pollution

in the context of the social and political factors that influence healthcare practices and policies.

#### **Health Throughout the Lifespan**

Few health sciences programs in Canada include lifespan studies, and our program is unique in featuring courses that explore the entire lifespan, from neonatal development to old age. Learn about the biological processes of aging, including how events occurring in early life can have effects that appear much later in the form of medical conditions such as diabetes, cardiovascular disease and depression. You'll also learn how factors such as gender and social conditions can influence health.

#### Hands-on approach

Start building hands-on experiences in laboratories, workshops and seminars beginning in your first year. Participate in a summer research internship or explore an international experience opportunity. In your upper years, your capstone project will give you practical experience in local, national or international research field placements, which can advance your personal and professional goals.

### **Double concentration and minor options**

Our program is unique in that you can customize your studies to meet your goals. Take upper-year courses in other concentrations or programs, take a minor in another program or take a double concentration. You can combine the concentrations in Health Throughout the Lifespan and Disability and Chronic Illness to focus on issues relating to healthy aging. Or, you can take a minor in Business if you are interested in healthcare management. Taking a double concentration or a minor can add value to your degree for when you enter the job market, or when you apply to professional or post-graduate programs.

#### Your career

The concentrations in the BHSc program will prepare you for a diverse array of health careers and will provide excellent preparation for medical school and other professional training.







# **Humanities**

Read the world's most influential books and explore the world's most exciting ideas in art, philosophy, history, literature, classics, music, religion and science in our Bachelor of Humanities (Great Books).

Study the world's greatest ideas, books and art works produced by thinkers from across the span of recorded world history — from ancient Mesopotamia to modern America. Our Humanities students love to read and are excited to exchange ideas with their fellow students and professors in small discussion groups and through their writing assignments.

It's easy to feel like you're part of a close-knit, creative community given that we admit only 70 students each year. You'll receive personalized instruction from our talented faculty and will form life-long friendships as you participate in an extensive cultural program involving a student literary journal, music nights, dramatic readings, visits to the National Arts Centre and National Gallery, and subsidized cultural trips to Montreal and New York City.

Combine your Humanities degree with another discipline to receive a Combined Honours degree or a minor in subjects such as Art History, Digital Humanities, English, History, Philosophy, Political Science or Religion.

### **Bachelor of Journalism and Humanities**

Cultivate your love of ideas while training for a career in journalism. You'll receive professional training in newspaper, radio, television, documentary and digital media journalism while gaining an in-depth understanding of world culture and history.

#### **Bachelor of Humanities and Biology**

In this Combined Honours degree, you'll be able to combine the liberal arts with science training. This program combines the insights into nature given by modern science with the insights into the human spirit given by the Great Books.

### Expand your knowledge through core seminars

At the heart of this program are four core seminars, one for each year of the program. Each seminar focuses on a different discipline — literature, philosophy, politics and religion — and on a different time period, from the ancient world to the present day. All core seminars are team-taught by two professors, include

small discussion groups and are restricted to Humanities students.

#### Your career

Our graduates can go anywhere they want to go. They gain outstanding research, writing and communications skills, and normally rise very quickly in their chosen professions. Our graduates regularly gain admittance to prestigious graduate schools, law schools and medical schools.

#### You can pursue a rewarding career in:

- business
- · foreign service
- · international relations
- journalism
- law
- medicine
- policy analysis
- public service
- teaching
- · technology and digital media
- · writing and research



# **Industrial Design**

Challenge yourself in this exciting field and learn to apply the process of innovation to develop products, systems, services and experiences that lead to a better quality of life. Industrial designers are the professionals who research and determine the features, appearance, materials and ergonomics of products and services we use daily — including consumer electronics, medical equipment, accesibility, toys, recreational and sports equipment, as well as footwear.



Co-op available

We're proud to provide the widest educational opportunities in industrial design in Canada, which includes a broadbased university foundation, international exchange opportunities, a 12-week design internship and a Co-op option. Our Bachelor of Industrial Design (BID) program includes theoretical and design studio courses, which implement applied skills and theory through projects.

There is no better place to learn Industrial Design than in Ottawa, having one of the strongest high-tech sectors in Canada and offering a wide range of opportunities for collaborative projects with both private and public sectors.

### Interdisciplinary and hands-on approach

Our unique and internationally respected program blends studies in design with applied sciences (such as math and physics) and the social sciences (such as psychology and business).

You'll learn design processes and methods by completing creative projects, and will move progressively from academic studies to more intensive design studio sessions, from theory to practice, while undertaking increasingly complex design projects. You'll work on drawings, models, mock-ups and simulated products, while learning about materials and manufacturing, marketing, environmental issues, user needs and testing.

In the upper years, you'll learn how to manage multiple design projects organized around a comprehensive major design project. A deeper understanding of design issues is fostered through a professional practice course, an industrial internship and Co-op option and a design seminar.

Industrial Design students have access to extensive facilities ranked among the best in North America, including modelling and prototyping laboratories (wood, plastic, Industrial Design students have access to extensive facilities ranked among the best in North America

metal), well-equipped design studios, computing facilities, rapid prototyping equipment, a mass-production simulation laboratory, laser cutting, 3D scanning and CNC machining.

You can also complement your studies with a minor in areas such as Business, Psychology, Sociology or Anthropology.

#### **Practical work experience**

Gain practical work experience in Canada and internationally. Internships are a

requirement in the BID and last a minimum of 12 weeks. Alternatively, students take the Co-op option that includes several work terms.

#### Your career

Our graduates can be found working as entrepreneurs and consultants, as well as in design teams at major national and international companies including Autodesk, Canadian Tire, Google, Fitbit, the Government of Canada, MEC, IBM, The Luminaires Group, Umbra, Teknion, Starfish Medical and Spinmaster Toys. You can also continue your studies by completing a Master of Design at Carleton, allowing further specialization and research focus.





# **Information Technology**

The world of information technology is always evolving — what is now commonplace was once a breakthrough. As a student in one of our Bachelor of Information Technology programs, you will acquire the theoretical knowledge and practical skills needed to address the IT issues of today and the possibilities of tomorrow.



Co-op available

The School of Information Technology, in conjunction with Algonquin College, offers four distinct programs under the Bachelor of Information Technology: Information Resource Management, Interactive Multimedia and Design, Network Technology and Optical Systems and Sensors.

#### Information Resource Management (IRM)

Gain a broad understanding of information management and specific capabilities in managing digital resources as they affect research data, websites and social media. Our program keeps up with rapid increases in digitization and data-capturing practices while providing you with skills ranging from basic data analytics to advanced big data applications. This foundation provides

a basis for building cutting-edge data analytics, machine learning and artificial intelligence-based solutions. These skills are especially important now that the library and information technology field has moved beyond the traditional library setting to allencompassing digital solutions in both the private and public sectors. These skills are also critical for today's organizations to gain a competitive advantage by having their data collected, organized, analyzed and further utilized in many different ways.

You'll graduate from the IRM program with both a Bachelor of Information Technology degree from Carleton and a Library and Information Technician Ontario College Diploma from Algonquin College.

#### Interactive Multimedia and Design (IMD)

Are you creatively inclined, technologically adept and interested in all aspects of digital media? You will acquire the tools

you need to take an idea or a problem and advance it through the entire process from concept to pre-production, production and post-production for practically all types of digital media. The program provides you with a multidisciplinary education through courses in computer animation, visual effects, game design and development, web design and development, user interface/experience design, visual communication and human-computer interaction. The program is enhanced with courses in physics, mathematics, business and social sciences. You will graduate fully equipped to work in, and shape, the digital world of the future.

We also offer streams in Animation and Visual Effects; Game Design and Development; and Web and User Interfaces/ Experience.

You'll graduate from the IMD program with both a Bachelor of Information Technology

degree from Carleton and an Ontario College Diploma in Interactive Media Development from Algonquin College.

#### **Network Technology (NET)**

Focus on the design, management, operation and installation of future complex information networks, such as those that make up the internet and cell phone networks. The program is multidisciplinary in nature, combining courses in computer and network technology with courses in physics, mathematics, business and communications. You will not only explore theories and concepts but also learn about their practical application. You will learn to design, manage, secure, operate, install and configure advanced IT networks. Stateof-the-art networking labs offer hands-on training with real-world equipment. Our partnership with the Cisco Networking Academy means that our students will learn how to write the Cisco Certified Network Associate (CCNA) and Professional (CCNP) certification exams to earn industryrecognized certification, which is in high demand in the job market. You'll also have the opportunity to gain certification from Nokia and Juniper Networks.

You'll graduate from the NET program with both a Bachelor of Information Technology degree from Carleton and an Ontario College Advanced Diploma in Computer Engineering Technology from Algonquin College.

#### **Optical Systems and Sensors (OSS)**

Gain a strong IT foundation and skills in designing applications for optical systems and sensors. This program combines computer programming, automation, signal processing and optics courses with foundational courses in physics, math and business. While also acquiring a strong IT background, you'll learn about optical communication networks, lasers, manufacturing and advanced optical component design through our specialized hands-on laboratories. Upper-year courses include advanced subjects such as remote sensing for autonomous vehicles and drones, medical imaging and biosensors, smart sensors in agriculture and computer vision. Our strong ties with industry ensure the program remains up to date with current trends. Having both IT skills and a fundamental understanding of optical technologies is in very high demand in today's industry.

You'll graduate from the OSS program with both a Bachelor of Information Technology degree from Carleton and an Ontario College Advanced Diploma in Photonics and Laser Technology from Algonquin College.

#### Your career

#### IRM

IRM students have been employed at Canadian Coast Guard, Department of National Defence, Employment and Social Development Canada, National Research Council Canada and Statistics Canada. IRM career areas include:

- · data analytics
- · data visualization
- · digital information management
- e-commerce
- library services (academic and public)
- · web design and development

#### IMD

IMD students are employed at Adobe, Sony, ImageWorks, Ubisoft, Electronic Arts, MPC, Shopify, Magmic, Image-Engine and IBM Cognos. IMD career areas include:

- · computer animation
- game design and development
- · human-computer interaction
- · user interface design and user experience
- · visual effects
- · web application and software development

#### NET

NET students are employed at Bell, Ericsson, Health Canada, IBM Cognos, Nokia, Ottawa Paramedic Service, Royal Canadian Mounted Police and Statistics Canada. NET career areas include:

- business enterprises requiring network design, management and operation
- · educational institutes
- · finance companies
- government
- · health institutes
- · network design and management
- system integration
- telecom operation

#### oss

OSS students are employed at Ciena, Mitsubishi, Nokia, OZ Optics, the RCMP and Viavi Solutions. OSS career areas include:

- · autonomous vehicles
- · defence and security
- · industrial automation
- · laser industry
- medical imaging/biosensors
- · optical communications
- optical component design
- · remote sensing





# **International Business**



Discover your unique talents, unleash your imagination and harness the opportunities of business to create shared prosperity and advance equity and justice for all. The Bachelor of International Business (BIB) will give you the foundation and global perspective to make a difference in the world.

The BIB program will equip you with the skills, knowledge, awareness and experience to succeed in a global career. It delivers a solid foundation across core business functions, specialized courses in international business and management, training in another language and first-hand international experience.

During your degree, you will take courses in all core areas of business and complete intensive language training. You will also either study abroad at a partner institution, participate in an international internship,

or a combination of the two. The language you study during years one and two will determine where you are placed. You will then return to Carleton to complete your final studies.

#### Streams - NEW!

Complement your program with electives that enhance your competitiveness. You may choose to pursue multiple streams:

- · Business Analytics
- Entrepreneurship
- · Sustainability

#### **Concentrations**

- Global Financial Management and Systems
- International Marketing and Trade
- International Strategy and Human Resources Management

#### International experience

You will have access to many opportunities to gain international experience, including the study abroad/international internship BIB requirement, experiential learning initiatives, international case competitions and more. Our location in Canada's capital

Our location in the nation's capital connects you to a network of global companies, federal government departments, international agencies, embassies and high commissions.

connects you to a network of global companies, government departments, international agencies and the diplomatic community. In addition to being home to Canada's Parliament, Ottawa is a global hub of technological and social innovation.

#### **Sprott experience**

We're home to many student-run organizations through which you can meet fellow students, develop leadership skills and build your professional network. In addition, you will gain valuable, hands-on learning experience through initiatives such as the Sprott Student Consulting Group, Sprott Student Investment Fund and the Innovation Hub.

#### Your career

BIB graduates are working in a broad array of careers both in Canada and abroad. Sprott's Business Career Management Centre provides focused career services for business students, including career advising, exclusive job opportunities, workshops and employer events.

All BIB students will complete Sprott's Employability Passport, a four-year career development program that equips students with the job-ready skills and self-awareness

| BIB languages | Study abroad locations                             |
|---------------|--|
| French        | Belgium, France                                    |
| German        | Austria, Germany, Switzerland                      |
| Japanese      | Japan  |
| Mandarin      | China  |
| Spanish       | Argentina, Chile, Colombia,<br>Mexico, Peru, Spain |

to find meaningful employment and career success.

Based on surveys of graduates from 2018-2020, 91 per cent of BIB respondents were employed within one year of graduation.

- · business development
- consulting
- digital marketing
- · entrepreneurship
- · foreign affairs
- · international development
- · international trade
- social innovation
- strategic management
- tourism

#### A year of international experience

BIB students spend a full academic year gaining international experience through either an international exchange or an international internship.

"My year abroad in Viña del Mar has been filled with so many great adventures. From gaining life-long friendships, catching the travel bug, learning about so many different cultures and even an internship in a foreign country, I have truly just lived my best life."

Alexandra Lam studied at the Universidad Adolfo Ibañez in Viña del Mar, Chile. (Shown here in Cerro Mauco, Chile.)





# **Journalism**

Our internationally renowned Bachelor of Journalism program has produced many of the top journalists in Canada and around the world, including *The Globe and Mail*'s Dakshana Bascaramurty and Mark MacKinnon, CBC's Andrew Chang and Susan Ormiston, CNN's Kim Brunhuber, *The Toronto Star*'s Rosa Saba, CTV's Stefan Keyes and Katie Griffin, Huffington Post's Andree Lau, *Wall Street Journal*'s Greg Ip and Joel Eastwood, TSN's James Duthie, Politico's Anca Gurzu, *The New Humanitarian* Director Heba Aly and Diana Mehta of The Canadian Press, just to name a few.

Where better to study Journalism than in Ottawa, Canada's major media hub. Because it is home to those who generate news and information — members of the federal government, national NGOs, embassies, arts and culture groups, and business and hightech communities — many national media outlets, staffed by some of the country's leading journalists, have bases in the city and often offer internships and career opportunities to our students.

Our reputation is built on the high-calibre professional training and academic instruction our students receive. You'll develop your skills in dynamic handson workshops, focusing on high-quality journalism delivered via text, audio, video and various digital media. You'll take specialized journalism courses that allow you to pursue your journalistic passions — from business to the arts, politics to health science. You'll round out your professional expertise with

studies focusing on the role of journalism in society, and you'll build a strong foundation in another academic field of your choice.

We'll prepare you to be a digital storyteller with a skill set that opens doors to countless exciting careers. We know that success in the media industry depends on acquiring a solid, broad-based education — that's why you'll also take Canadian history and Indigenous history courses and choose electives from a

wide range of other subject areas. You can even opt for a Combined Honours degree in a range of disciplines, from History or Law to Sociology, Political Science, English or one of the many other options.

#### Four-year program

You'll take introductory courses that help you understand journalism's role in modern Canadian society and how the media industry developed through the years. You'll also be introduced to basic journalistic principles and professional practices.

In your second year, you'll do more handson work in a digital course that teaches you
how to use tools such as social media and
photography for journalism. Small class sizes
allow for intensive instruction in your year-long
reporting workshop, where you learn how to
gather, organize, write and report information—
the fundamental elements of any form of
journalism. Your other second-year journalism
course will focus on the laws connected to your
work in the media, from freedom of speech to
rules governing such things as privacy and libel.

Third and fourth years include instruction in ethics and a range of advanced professional workshops that will help you sharpen your in-depth writing skills while mastering the techniques to produce audio, video and digital journalism across all platforms.

You'll choose from a number of journalism courses focusing on specialized subject areas, and you will participate in classes that produce student-led professional products: a community-based digital publication, a live news and current affairs radio show and a video magazine featuring short documentaries. A rotating menu of journalism electives is offered each year, from podcasting to conflict reporting to long-form writing.

### Bachelor of Journalism with a concentration in Health Sciences

This collaboration, unique in Canada, allows you to explore journalism and science — an increasingly relevant combination in a world driven by public expectations for clarity in health science and the policies that govern it.

### **Bachelor of Journalism and Humanities**

This program allows you to gain an understanding of world culture and history, studying subjects such as art history, classics, literature and philosophy while studying journalism. For details, visit carleton.ca/bhum.

#### **Distinguished faculty**

Our professors and instructors are among the finest journalists in Canada. They've distinguished themselves as writers, reporters, news editors, commentators, producers, foreign correspondents and bureau chiefs in media organizations across the country, including the CBC, *The Globe and Mail*, iPolitics and the *Toronto Star*. We have an extensive network of working journalists who share their professional expertise with our students as sessional instructors or guest lecturers. All bring invaluable knowledge of the rapidly changing world of journalism into the classroom. Working closely with our full-time faculty and these professionals, you will gain hands-on experience in our state-of-the-art digital newsrooms, broadcast studios and seminar rooms.

#### Gain practical experience

The professional apprenticeships we offer during the academic year allow you to put your skills to practical use in news organizations, public relations and communications firms, or NGOs across Canada. Summer internships and full-time jobs are also available through the media organizations that recruit our best and brightest every year.

#### Internships abroad

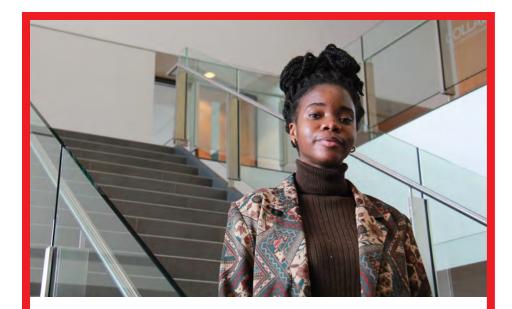
Our students have participated in the Global Journalism International Internship program run by the Centre for Media and Transitional Societies (CMTS) in partnership with Students Without Borders and Uniterra. Initially established in Rwanda, where the media sector was decimated by the 1994 genocide, the program has evolved and expanded to include placements in Africa, Latin America and Asia. Each summer, our students apply to intern with media and development organizations in the Global South.

#### **Prominent alumni**

Many of the country's top journalists — on television and radio, in newspapers and magazines, on digital sites — got their start in Carleton's journalism programs. Our alumni include Nahlah Ayed, host of CBC's Ideas, Samia Madwar of *The Walrus*, author and filmmaker Nelofer Pazira, Jen Copestake, reporter/producer with BBC London and Geoffrey York, Africa Bureau Chief of *The Globe and Mail*.

#### Your career

- academics
- · advertising executive
- author
- communications
- diplomat
- doctor
- lawyer
- media industry
- · public relations
- public servant
- teacher



"I transferred to Carleton from a smaller university, and although Carleton is larger in comparison, I feel very supported. I'm grateful for the willingness and availability of instructors and professors to meet with me one-on-one to discuss anything that I may not have been clear about in lectures."

Taniel Campbell, Journalism student with a minor in Communication and Media Studies



# **Mathematics and Statistics**

Mathematics and statistics are the driving forces behind many of today's advancements in medicine, economics, business, science and technology. As a Bachelor of Mathematics (BMath) student, you can choose from a broad range of program options according to your interests and career goals. The skills gained from our programs will provide you with a competitive edge in many careers and prepare you to contribute to the next generation of innovations.



Co-op available

Our BMath degree offers three Honours programs or a Combined Honours program. No matter which area of study you choose, our programs ensure that you master traditional mathematical or statistical analysis. You will have opportunities to learn modern mathematical or statistical techniques and use advanced computer software. Our programs also provide training

on emerging methods such as artificial intelligence and data mining.

#### **Mathematics**

Mathematical knowledge is critical to innovation across diverse fields, and this knowledge is applied in professions such as cryptography and security, economics, business, and science. Built around a strong core of traditional mathematics, this program allows you to branch into many areas of modern mathematics and become skilled with a variety of applications. You may choose to pursue a concentration

in Stochastics or combined programs with Physics or Economics. Computer Science courses may be included as options to broaden your skillset. A minor in Mathematics is also offered.

#### **Statistics**

Statistics is the science of extracting useful information in the face of uncertain data, quantifying risk and producing evidenced-based decisions. As a statistician, you will plan data collection methods, analyze data and advise on the interpretation and limitations of results. Statisticians and data



scientists have many career possibilities in a wide variety of organizations. The Honours Statistics program also includes an introduction to the theoretical dimension of statistics required for advanced studies and offers a concentration in Actuarial Science. A minor in Statistics is also offered.

#### **Actuarial Science concentration**

This concentration provides a targeted sequence of courses in Mathematics, Statistics, Actuarial Science, Business and Economics so that you can meet all three undergraduate Validation by Educational Experience (VEE) course requirements and have the background to write three undergraduate level exams set out by the

Society of Actuaries (SoA) for professional designation.

### **Computational and Applied Mathematics and Statistics**

Acquire the knowledge and skills you need to pursue careers involving the design of computers and computer networks as well as the application of computers in solving critical problems in business, government and science. For example, you might find yourself developing new ways to protect information from both improper access and corruption during transmission, helping managers in business and government to allocate resources optimally, or using computer networks to study traffic flow and

optimal routing. The Computational and Applied Mathematics and Statistics program is offered as an Honours program with a choice of three concentrations, including Applied Analysis, Applied Statistics and Probability or Discrete Mathematics.

#### **Concentrations**

Customize your academic experience through any one of our concentration options outlined at carleton.ca/math.

#### Four years, two degrees

We also offer an elite BMath/MSc fast-track program in which high-achieving students can complete a Bachelor's and a Master's degree in four years rather than the six years it would normally take to obtain both of these degrees.

#### **Combined Honours programs**

The Combined Honours programs incorporate courses in Mathematics and Statistics with those from other disciplines such as Economics, Computer Science and Physics. You can pursue a Bachelor of Science (Double Honours) in Mathematics and Physics, or choose one of the following Combined Honours within the Bachelor of Mathematics programs: Computer Science and Mathematics, Economics and Mathematics or Economics and Statistics.

#### Your career

- actuarial science
- business and financial modelling
- · clinical trials
- data analysis
- environmental and climate modelling
- epidemiological modelling
- · information security
- investment analysis
- market analysis
- networks and systems analysis
- survey design

"The Mathematics and Physics program has been the best undergraduate experience I could have asked for. It has allowed me to determine which of the two subjects I wanted to study further, and has provided me with a deeper understanding of the interplay between math and physics. The caring and approachable professors, and the tight-knit student community, ensure that everyone in the program is able to do well. During my time at Carleton, I've been given the opportunity to work on particle physics experiments in affiliated labs around the world."

Gareth Smith, Mathematics and Physics student





# **Media Production and Design**

Harness your creativity and learn to create impactful digital stories to contribute to a more informed and involved society. Our Bachelor of Media Production and Design (BMPD) will teach you to operate across all facets of narratives — designing, programming and telling non-fiction stories online. You will learn to engage, inform, entertain and ultimately contribute to a broader and deeper understanding of how we connect with each other to build stronger societies.



#### Co-op available

A combination of intensive hands-on workshops and lecture courses give you a strong foundation in writing and narrative abilities across digital media formats as well as skills in computer programming, data management and research. The classroom experience will build fundamental programming and online design skills and thinking into the development and application of narratives, with the understanding that design shapes how and what information is delivered to audiences, making "story" and "design" inseparable.

As well as acquiring editorial, design and programming skills, you will develop the theoretical knowledge and understanding of the power of a story. You will take courses in ethics, law, civic institutions and citizen interactions via policy, data and information

technology theory, and the history of persuasive narration and imagery. You will learn how to combine storytelling skills traditionally taught to journalists with handson design and computer programming skills from information technology courses, exploring where the two intersect to engage audiences in distinctive ways.

You will receive much of your instruction in small class sections of no more than 30 students with abundant opportunities for hands-on work and constant feedback, especially in the early years of your program. As you progress from year to year, developing your expertise in those core program elements, your coursework will be augmented by instruction delivered in larger lecture-size courses in subject areas such as ethics and digital media law, as well as in emerging media industries and practical aspects such as freelancing.

#### **Co-op employment**

You can choose a Co-op option, working for 12 months after the fall term of your

third year, before completing the final three terms of your degree. Placements are arranged with media companies, online design and production houses, not-for-profit organizations and NGOs, corporations and governments both in Ottawa and across the country.

#### Your career

- · data analysts/conceptualizers
- · digital communications experts
- information-based producers/designers of online content for not-for-profits, NGOs, corporations and governments, museums and research institutes
- media producers of online content for mainstream and new digital media

With your BMPD degree, you will also be prepared to pursue studies in Master's programs such as Journalism or Digital Media



## **Music**

Whether your interests are in performing, studying the intersections of music and culture or sharing the joys of music through teaching, Carleton's Bachelor of Music (BMus) will prepare you to achieve your goals.

Gain a solid grounding in the study of a wide variety of musical instruments and traditions while developing a strong background in performance, composition and analysis. Our courses will allow you to develop strong critical thinking skills through the exploration of intellectual and applied perspectives such as community music practice, ethnomusicology, Canadian music studies, improvisation studies, disability studies, Indigenous studies, critical theory and historical musicology.

Choose between a range of musical styles including jazz, classical music, singersongwriter, electronic and computer music, Celtic, world music and popular music, among others. Even as you specialize in one area, you benefit from an overall environment of diversity.

You'll gain valuable experience through practicum placements at various arts, education and media organizations. We offer a wide range of ensembles including choir, chamber music, guitar, roots, jazz, jazz-rock fusion, music theatre, opera, African drumming, the Carleton-Ottawa Symphony Orchestra chamber ensemble and more. Admission to the program is by audition, and applicants may do so on any instrument (or voice) used in classical, jazz, traditional or popular music.

Carleton also offers a Bachelor of Arts program in Music, which focuses on music as a historical and social phenomenon. A minor in Music is also offered. We are the only university in Canada to offer a performance diploma in Carillon Studies.

#### **Our resources**

We offer a wealth of performance, research and study resources, such as:

- a world-class downtown performance facility at the Carleton Dominion-Chalmers Centre:
- the Carleton-Ottawa Symphony Orchestra Ensemble in Residence;
- a computer music production studio;

- the largest collection of Canadian musical scores outside of the Canadian Music Centre:
- an Artist-in-Residence program featuring national and international artists;
- the Jacob Siskind Music Resource Centre; and
- an extensive collection of recordings, including the Jacob Siskind Collection, the Jacques Emond jazz collection (3,000+ vinyl recordings) and the Trevor Tolley Collection (7,000+ jazz recordings)

#### Your career

Our graduates can be found in careers such as:

- · archival and library positions
- · arts administration civil service
- · composing and songwriting
- law
- music criticism
- music therapy
- performing in bands, orchestras and ensembles
- teaching music in public and private educational environments
- the entertainment industry: music production, film production and broadcasting



# Public Affairs and Policy Management

The COVID-19 pandemic has shown the importance of public policy in our society. Public policy affects the extent of our exposure to illness, our access to a vaccine and the nature of our economic recovery. It affects our capacity to respond to challenges like the climate crisis, inequality and racial injustice.



Co-op available

In the Bachelor of Public Affairs and Policy Management (PAPM) program, you study public policy: how it is made, what influences it and how to improve it. The only program of its kind in Canada, PAPM takes advantage of the university's location in Ottawa, the national

capital, home of the federal government, foreign embassies and many international organizations.

The program draws directly from Carleton's research and professional strengths in the study of public administration, international affairs, politics and journalism. You'll examine a wide variety of issues facing society today and develop the necessary skills and knowledge to address them. Our curriculum combines foundational courses in public policy, institutions,

and processes, with courses in political science, economics, law and history. Together, these courses will provide you with a comprehensive understanding of what government does, why it does it and how it might be done better.

#### **Specializations**

In first year, you study a common set of core courses. From second year on, you have the opportunity to focus on one of the following areas of specialization:

#### **Communication and Policy Studies**

This specialization allows you to pursue a policy concentration in Communication Technologies and Regulation or Strategic Public Opinion. Examine topics such as broadcasting, telecommunications, internet and information systems, or strategic communication, polling and opinion research, political campaigns and market intelligence.

#### **Development Policy Studies**

This specialization enables you to study the conditions that create and perpetuate poverty, globally and within Canada, and the policies that foster sustainable human development. Choose a concentration in Global Economic Relations, Indigenous Policy or Rights and Human Development.

#### **International Policy Studies**

This specialization enables you to examine the causes and consequences of international conflict, and the role of international institutions in managing relations between states.

Concentrations are available in International Relations and Conflict, and Security and Intelligence.

#### **Public Policy and Administration**

This specialization examines public policy issues in Canada, such as housing, the environment, economic growth and Indigenous reconciliation. Choose from four concentrations: Economic Policy, Environmental and Sustainable Energy policy, Indigenous Policy or Social Policy.

### **Experiential learning and program opportunities**

#### Co-op

From the end of their second year, students (with a B+ grade or better) are eligible for Co-op, where they can work in a federal government department, an NGO such as the United Nations Association in Canada, or a private company such as the polling firm, Abacus Data.

#### **Kroeger Policy Connects**

In the first year of the program, you have the option to take Kroeger Policy Connects, in which you meet with one or more of the many organizations that do policy work in the Ottawa area and gain insight into how public policy works in practice.

The Bachelor of Public Affairs and Policy Management (PAPM) program draws directly from Carleton's research and professional strengths in the study of public administration, international affairs, politics and journalism.

#### Study abroad

With an average of B or better after first year, you can apply for a student exchange. This involves spending one or two terms studying public affairs at one of Carleton's partner institutions around the world.

### Dedicated student advising and support

PAPM students have access to a programspecific advisor who helps students with navigating the program throughout the duration of the degree.

#### Student mentors and student society

First-year students are matched with an upper-year student who is available to answer questions, offer advice and share experiences. The PAPM Student Society (PAPMSS) also organizes a variety of informal professional and social events that give students an opportunity to explore public policy outside the classroom.

#### Your career

Our graduates go on to work in Canada and around the world for a wide range of public and private sector organizations. Our alumni include: federal MPs; city councillors in Ottawa and Toronto; senior advisors and policy analysts for federal, provincial and territorial governments; advisors for the United Nations; foreign service officers; CEOs of private-sector firms; directors of social service and environmental organizations; researchers; and lawyers.



#### Become a Senate Page on Parliament Hill

"The Senate Page Program has been a once-in-a-lifetime opportunity that's truly ignited my passion for policy and politics. I've witnessed legislation being written and debated, contributed to the day-to-day proceedings of the chamber and participated in special events, like the Opening of Parliament and the Speech from the Throne. I am so grateful to be able to call the Senate of Canada not only a workplace but also a home and family."

Mira Gillis, Public Affairs and Policy Management student and Senate Page Program participant.



# **Science**

We are leaders in scientific discovery, innovation and education. Our Bachelor of Science (BSc) programs are comprehensive, challenging and designed to equip you to work, teach and conduct research effectively in a scientific and technologically advanced environment. Our graduates gain meaningful employment within their field shortly after graduation, having the knowledge, skills and hands-on experiences to make their marks on the world.



Co-op available in selected majors

We will prepare you for a promising future in a competitive and evolving world.

# Conduct research alongside our impressive, world-class researchers and faculty

Our professors are actively involved in groundbreaking research and you could find yourself working on some of these projects. Our faculty have forged strong links with Ottawa-based industries, government labs and departments, as well as teaching and research hospitals, providing you with a diverse range of research and employment opportunities. Summer Research Internships are also available

to eligible students once they have completed their first year of studies. These internships provide the opportunity to work in a research group headed by a Carleton professor.

#### First-year seminars

In your first year, we encourage you to enrol in our unique seminar course, Seminar in Science, designed specifically to introduce you to the latest scientific issues and to help you develop the kind of communication, analytical thinking and research skills you will need for your science studies and your career.

### Our ideal location in the nation's capital

Being in the National Capital Region provides you with access to government departments and agencies, national research centres, high-tech companies, and more — giving you infinite options

for valuable Co-op placements and work opportunities. Located on campus, the National Wildlife Research Centre is the national headquarters for a network of wildlife researchers from around the world. Government scientists, faculty researchers and students benefit from close collaboration on a number of shared projects. The National Research Council (NRC), the Government of Canada's premier organization for research and development, is also headquartered in Ottawa.

#### We are a connected community

Providing equitable, diverse and inclusive learning opportunities underlies everything we do. Our science community is unlike any other, and we work hard to ensure that our students feel as though they belong and that their mental health and well-being are supported. Our network of researchers, teachers and



students comprise a truly connected and caring community. Our Science Student Success Centre (SSSC) offers science-specific advice on a variety of topics, including how to get the most out of your lectures, how to study more effectively, how to get involved in research and how to apply to graduate programs or medical school.

#### **Applied Physics**

See Physics

#### **Biochemistry**

Biochemistry helps us understand and treat disease, improve food production and find new techniques to produce valuable products such as vitamins and antibiotics. You'll understand the molecular basis of life by investigating enzyme reactions, mechanisms of gene regulation, signaling pathways and cell structure at the molecular level. We study how animals, plants and microorganisms use energy to grow, compete with other organisms and reproduce. Round off your education through our many experiential learning opportunities, which provide excellent training options for entry into medicine and other health sciences professional programs.

Your career: environmental toxicology consulting; medical research technology; medicine and dentistry; patent application

and review; pharmaceutical sciences; regulatory toxicology; science policy analysis; teaching and instructional innovation; technical sales and marketing; veterinary medicine

#### **Bioinformatics**

Modern biology is greatly enriched by the infusion of ideas and tools from computer science, data science, mathematics and statistics. Bioinformatics is an interdisciplinary field that taps into the complex datasets in the life sciences. It uses techniques from computer science to pose and probe biological questions that are too complex for the human mind to untangle without computer assistance. Some example applications of bioinformatics include high-throughput analysis of the genome, transcriptome, protein structure and function, drug interactions, epidemiology and evolution, to name a few. You will take courses in several areas including bioinformatics, biology, biochemistry and computer science.

Your career: big data analytics in the medical, environmental and agricultural sectors; biodiversity monitoring; biostatistics; database design; disease diagnostics; drug discovery

#### **Biology**

Biology in the twenty-first century is among the most diverse and exciting of the

sciences. Many of the challenges we face as a society, from the development of novel health therapies and diagnostics to climate change and conservation, involve biological solutions. You will gain broad experience through core science courses and options that suit your individual interests. We offer BSc and BA degrees, a program in Biology and Biotechnology, and interdisciplinary joint programs with other departments and with the College of the Humanities. You will have extensive opportunities to learn in labbased environments and you may choose to specialize in one of five concentrations: Biodiversity, Natural History and Conservation Science; Ecology, Evolution and Behaviour; Health Science; Molecular and Cellular Biology; or Physiology.

Your career: agriculture and horticulture sciences; bioethics; biotechnology; education and academia; environmental consulting; forensics; genomics; government agencies; intellectual property; medicine and health sciences; science policy and regulation; wildlife management

#### **Biotechnology**

Biotechnology applies the principles of biochemistry and biology to the study and manipulation of living organisms for industrial, medical, agricultural and environmental applications. Some areas of biotechnology include genetic engineering, personalized medicine, drug discovery and development, applied microbiology and fermentation techniques, and biological control of insect pests. In the Ottawa area, local companies and government agencies are applying biotechnological solutions to real-world problems in projects such as biofuel production from agricultural waste, the development of medical diagnostic screening devices, and the development of new anti-cancer and antimicrobial therapies. The extensive laboratory training provided in this program will give you the experience needed to work in a laboratory environment. Biotechnology is offered as a specialized program in conjunction with Biology or Biochemistry.

Your career: agriculture; bioethics; biomedical product development; food industries; forensics; government lab research; industrial research and development; medical research; patent law; pharmacy; science writing and broadcasting; technical sales and marketing

#### Chemistry

Chemistry is a fundamental science that helps us understand the building blocks of matter and life. Chemists work to discover new materials and processes that can improve our lives. You can enrol in programs and courses in all the main areas of chemistry including analytical, inorganic, organic, physical, theoretical and environmental chemistry. Concentrations in Nanotechnology and Chemical Toxicology are also available. Extensive lab experience is offered, helping you to round out your studies with practical experience.

Your career: environmental and health policy; government and academia; law; pharmaceutical and industrial chemists; pharmacy, dentistry and medicine; pollution control; research and development

#### **Computational Biochemistry**

The modern era of biochemistry has been transformed by the recent development of technologies that can generate vast amounts of information about entire genomes, proteomes or metabolomes. One of our biggest challenges in biochemistry is the development of tools to analyze and manage this flood of data. This program provides both training in computer science and a solid foundation in biochemistry. You'll explore the core areas of biology and chemistry including genetics, cell biology, organic chemistry and analytical chemistry, as well as general and experimental biochemistry, bioinformatics and molecular modelling. Optional courses allow you to focus on areas such as molecular genetics, pharmaceutical drug design, functional genomics and protein structure and function. Your career: biomedical and genetic data analysis; biomedical data management; biomedical research and development; biotechnology research and development; combinatorial drug and enzyme design; forensic sciences and data analysis; pharmaceutical research; science communications; technical sales for biotechnology companies

#### **Earth Sciences**

Study the Earth's systems, incorporating knowledge from physics, biology and chemistry. You will learn about processes (such as evolution, climate change, earthquakes, volcanic eruptions, plate tectonics, mountain building, planetary geology, and the formation of water or hydrocarbon reservoirs and mineral deposits) influential in the Earth's geologic past that establish our present and future global development. We also offer opportunities to participate in hands-on research in laboratories and field courses that can take you to sites throughout Ontario, across Canada and around the world.

Enrol in concentrations such as Finance:
Resource Valuation; Geophysics; Resource
Economics; or Vertebrate Paleontology and
Paleoecology; or in Combined programs with
Biology, Chemistry or Physical Geography
that provide a broader understanding of fields
related to Earth Sciences. Graduates are
eligible to apply for Professional Geoscientist
registration in Canada — an important
designation in the job market. Some Earth

Sciences students may be interested in taking a minor in Business or Geomatics.

Your career: natural resources exploration; research and technical positions in government, industry or university laboratories; resource and investment valuation in business; water resources, environmental assessment or remediation; teaching

#### **Environmental Science**

We bring together the study of biology, chemistry, earth sciences and geography to enable you to address complex, multidisciplinary, environmental and conservation problems. Through lectures, field courses and hands-on laboratory work, you will become proficient in topics such as aquatic ecology, fish and wildlife conservation, groundwater protection and remediation, sustainable resource extraction and environmental monitoring and policy. In upper years, you will specialize in a chosen area of study and conduct research and a thesis project, working in teams and individually on current problems facing environmental science. Concentrations are available in Ecology, Biodiversity and Conservation; Chemistry; and Earth Sciences.

Our Honours program is accredited by ECO Canada, which allows our graduates to register as Environmental Professionals (EP) through this organization. The Earth Sciences concentration also provides students with the course requirements to



register as a Professional Geoscientist with the Association of Professional Geoscientists of Ontario (APGO). A Co-op option is also available, which allows you to gain work experience while completing your degree.

Your career: education; environmental consulting; environmental restoration; federal, provincial and municipal government environmental departments; natural resource management; scientific research in academic, government or private sectors; sustainability and environmental policy analysis; wildlife and habitat conservation

#### **Food Science**

Improving the sustainability, quality and safety of food systems is essential to fight climate change and feed a growing population. Food scientists develop products with added nutritional value; they investigate food-borne illness and fraud, design environmentally friendly and smart packaging, and provide expert advice when unsafe foods end up in consumers' hands.

We offer a unique and broad-based interdisciplinary program. Within the context of regulations, our program teaches students to investigate and analyze nutrients, natural toxins, chemical residues, microorganisms, and even the authenticity of food. Understanding the composition of food and its impact on human and environmental health is needed for a sustainable future. Graduates of our program are equipped to tackle global challenges in the natural and life sciences.

Your career: food product developers; food safety specialists; microbiologists; nutritional scientific evaluators, analytical chemists; quality assurance managers; research and development; science policy analysts

#### **Geomatics**

Solve the societal and environmental problems of tomorrow through Geomatics — the acquisition, management, analysis and display of geographic information. You'll gain intensive science-based training in geographic information systems (GIS), remote sensing (e.g. imaging from satellites and aircraft), Global Positioning Systems (GPS), and land surveying and cartography, including desktop, web-based and mobile applications. You'll also apply advanced computer software and techniques to improve understanding and management of the Earth's physical and natural systems.

Geomatics training is critical for various careers such as urban planning and transportation analysis (e.g. infrastructure management, business analysis and sustainability planning), ecosystem and environmental resource management (e.g. forestry, agriculture, water resources) and

public health and security (e.g. hazard mapping, disease spread, crime analysis). Tools of the trade include specialized computer software (e.g. Google Earth, ESRI ArcGIS software, open-source GIS and database management systems) and hardware (e.g. GIS workstations, GPS technology, camera systems, drones, smartphones and other mobile platforms).

We combine hands-on learning using modern laboratory facilities with opportunities to gain field experience and participate in work placements. The BSc in Geomatics includes training and course electives in relevant physical or natural science disciplines including computer sciences. A Bachelor of Arts degree in Geomatics is also available.

Your career: environmental consulting; environmental impact assessment; GIS analysis and consulting; land surveying; natural resource management; remotesensing and image analysis; web mapping including design and programming

### **Interdisciplinary Science and Practice**

This innovative program builds on traditional science disciplines and incorporates data science, policy, public science and science communication through experiential learning and addressing current and relevant issues. Integrate concepts from a wide range of scientific disciplines and other forms of knowledge and apply them to real-world problems through local and global perspectives.

You'll complete eight interdisciplinary science courses and one minor within the Faculty of Science, which ensures you have a demonstrated depth of knowledge in a scientific field that is recognized on your degree. You'll also participate in an academic capstone experience involving interactions with outside organizations such as federal government agencies and NGOs.

You'll be prepared to balance specialized technical knowledge with the transferable skills of critical thinking and problem solving, science communication and teamwork.

Your career: consulting agencies; data scientists; knowledge brokers; hightech industries; non-profit organizations and NGOs; medical and healthcare industries; research organizations; science communicators; various science advice positions in government agencies

#### Linguistics

Linguistics is the scientific study of one of the most fundamental aspects of being human: language. Linguists explore a range of fascinating areas including how language is represented and processed in the brain, the role of language in human-computer interfaces

and artificial intelligence, clinical applications of linguistics in treating language disorders and delays, how children acquire language, the psychology of language, and the biological and evolutionary aspects of language.

Tailor your degree to your interests by pairing one of two concentrations — Linguistic Theory or Psycholinguistics and Communication Disorders — with one of three focuses — Computer Science, Neuroscience or Psychology. If you are in the Psycholinguistics and Communication Disorders concentration, you also have the opportunity to take a practicum course that provides experience in speech-language pathology.

A Bachelor of Arts in Linguistics is also available.

Your career: artificial intelligence; audiology; forensic linguistics; human-computer interfacing; language documentation; natural language processing; second language learning technology; speech recognition; speech-language pathology; translation and interpretation

#### **Nanoscience**

Think big by working small - Nanoscience studies matter at a scale on the order of 10 to thousands of atoms. Examine nanoscience through the disciplines of physical/inorganic chemistry, biochemistry and electrical engineering to understand the physical, chemical, biochemical and electronic characteristics of matter in this size regime. Combining these areas of study will allow you to grasp nanoscience in photonic, electronic, biomedical, energy and communication technologies. We focus on materials - their use in electronic devices, their scalability and the control of their properties. Further required courses in mathematics, physics and statistics will round out the program, and advanced courses in bionanoscience and nanoelectronics are available. A concentration in Nanotechnology is also available within the Chemistry program.

Your career: biomedical technology/ diagnostics; micro (nano) electronics; research and development in aerospace technologies; research and development in green technologies; sensors and communications technology; solar cell technology

#### **Neuroscience and Mental Health**

Study the nervous system, including molecules, cells, tissues and whole organisms, to understand the relationships between thought and action, sensation and behaviour, stimulus and emotion, and to further define the basis of neurological disease and mental health. We are Canada's first Department of Neuroscience to offer independent undergraduate neuroscience programs. Our wide range of courses and

labs will give you hands-on experience with cutting-edge neuroscience techniques, such as recording electrical activity in living neurons, dissecting and imaging brain tissues using high-performance microscopy, analyzing gene and protein expression and modelling disease states in cultured brain cells.

Our students form an active and close-knit community who work alongside our faculty to explore topics including stress and mental health, neurodegeneration, feeding, nutrition and metabolism, transgenerational effects of trauma among Indigenous peoples, environmental factors impacting brain development and mechanisms of pain modulation.

Our BSc in Neuroscience and Biology (Combined Honours) program is also available for students wanting more emphasis on advanced biology and laboratory-based courses.

Your career: health care (physicians, nurses, psychologists, occupational and physical therapists, mental health workers); knowledge brokers; research scientists (government, academia, industry, and non-profit sectors); policy analysts; scientific research (clinical research assistants/coordinators); teachers; veterinary medicine

#### **Physical Geography**

We explore the natural environment at all scales, from the smallest grain of sand to the entire planet, emphasizing an understanding of the complex interactions among Earth's four major spheres: the atmosphere, the hydrosphere (water in all its forms), the biosphere (all living things) and the lithosphere (the solid earth). Physical geographers analyze and manage human-environment interactions and impacts through interdisciplinary and spatially-explicit approaches that integrate elements from traditional scientific disciplines like biology, chemistry, mathematics and physics with applied environmental disciplines such as geology, soil science, hydrology, meteorology and ecology. Choose from a wide range of courses that cover topics such as climate change, water resource analysis, natural resource management, ecosystem science, quantitative methods using geographic information systems (GIS) and remote sensing, statistical analysis and environmental models. Both fieldwork and laboratory techniques are emphasized. A Bachelor of Arts in Geography with a concentration in Physical Geography is also available.

Your career: environmental consulting; environmental technician; geoscientist; natural hazards analyst; natural resource management; water resource monitoring

#### **Physics and Applied Physics**

Physicists are passionate about studying nature at its most fundamental level to explain observed natural phenomena and to predict and search for new phenomena not yet observed. Applied physicists seek to employ our physical understanding of nature to solve practical problems. You can study Physics as your Honours subject (with Astrophysics, Experimental or Theory streams) or in combination with Biology, Chemistry or Mathematics. Double Honours Mathematics and Physics is a program for theoretically-inclined students. Our Applied Physics (Honours) program combines studies in modern physics, optics and electronics, mathematics and computer science. The Department of Physics also collaborates with the Department of Electronics in offering a professionally accredited Engineering Physics (BEng) program. Physics researchers at Carleton are engaged in subatomic physics as well as in medical physics.

Your career: advanced studies in specialized physics, such as particle physics, medical physics and astrophysics; applied research and development of new technologies in the physical sciences; data science applications to artificial intelligence, finance, social media and more; employment in industry; health care, including medical imaging and radiotherapy; instrumentation in natural resource industries; nuclear and sustainable

energy industries; science journalism; scientific policy-making; teaching

#### **Psychology**

Psychologists study the mechanisms that underlie our thoughts, emotions and behaviours. They examine a diverse range of topics such as how we think and learn, how we interact with others and how we can promote healthy development and wellness. This is accomplished by conducting research so that the knowledge gained can help us to better understand the human mind, enhance well-being and performance, and generate additional research questions.

Explore psychology's major areas within the context of an active and diverse research environment. We offer concentrations in Cognitive Psychology, Developmental Psychology, Forensic Psychology, Health Psychology, Organizational Psychology, and Social/Personality Psychology, as well as a stream in Mental Health and Well-Being. All Carleton students can take a Certificate in Multidisciplinary Studies in Mental Health and Well-Being. Psychology is also offered as a Bachelor of Arts.

Your career: corrections, probation or parole counselling; early childhood education; health and social services; human resource management; marketing and public relations; mental health services; research



"Carleton has given me endless opportunities to develop my research skills and has prepared me for my graduate school career. I'm grateful to have been able to engage with many faculty members to learn more and assist with their research—it's these experiences that will help me in writing my undergraduate thesis and applying for graduate programs."

Carine Ladki, BSc Honours Psychology student, minor in Music.

# **Social Work**

Vision, energy and a commitment to social justice, social action and working with people — these are some of the qualities required of contemporary social workers. Through a rigorous program of study that emphasizes theory, critical analysis, research, skill development and experiential learning, our Bachelor of Social Work (BSW) will prepare you to meet the challenges of this dynamic profession.

Gain the knowledge and skills necessary for working sensitively and effectively with individuals, groups and communities, for critically analyzing social policies and programs, and working towards a more equitable and just world. Our location provides students with exceptional off-campus learning opportunities, including federal departments, national think tanks and a wide range of trade unions and NGOs who provide services and support.

#### Comprehensive programming

Our courses will give you a thorough understanding of the programs and policies on the Canadian state. You'll explore:

- the principles and theories for direct intervention with individuals, families and groups and will look at social work practice as shaped by oppressive, systemic relations;
- being a social worker if you are a member of an Indigenous community, a person with a disability, an immigrant or refugee, or if you are a member of the 2SLGBTQ+ community. If you aren't a member of any of these communities, you will also learn about their experiences and how to work effectively across different communities;
- the history and theories of the state and cover topics such as the nature of the labour market, changing family structures, ageing, the voluntary sector, and research methodologies; and
- how social services and the state are administered and managed, learn about working in community and human service organizations, and have the opportunity to refine your analytic and interpersonal skills

#### Gain hands-on experiences

Put theory into practice through our field placement partnerships including child protection and children's services, community, women's health and crisis centres, probation, parole and prison services, federal government departments, and a range of international organizations and NGOs.

#### A pioneer in social work

Nationally and internationally renowned for its commitment to social justice, equality and respect for all peoples in society, our program is a pioneer of the "structural approach" to social work. Drawing on a range of theories that emerged from the structural approach, you will examine the relationship between personal troubles, problems and difficulties, and broader social, economic and political inequities in society. You will learn to connect the circumstances of individuals to economic, political and ideological structures. Carletoneducated social workers can work effectively with individuals, families and communities and for social justice because they recognize the fundamental interconnections between social structures and peoples' lives.

### A strong student society and community spirit

The BSW Student Society (BSWSS) brings students together and provides an opportunity for BSW students to discuss student issues. The BSWSS arranges many events, such as workshops, seminars and social gatherings.

Put theory into practice through our field placement partnerships including child protection and children's services, community, women's health and crisis centres, probation, parole and prison services, federal government departments, and a range of international organizations and NGOs.

Our school is an integral part of social welfare communities in Ottawa and we are active nationally and internationally. Our professors enjoy strong, collegial relations with a diverse range of people across community



organizations including the Clinical Supervision Research Network; HELP (supporting communities to provide healthy end of life options); and LERRN: The Local Engagement Refugee Research Network.

#### Your career

As a graduate with a Bachelor of Social Work, you will be eligible to join the Ontario College of Social Workers and Social Service Workers (OCSWSSW) and receive the designation of Registered Social Worker.

- · child welfare and youth services
- correctional services
- · counselling and advocacy
- · family and health services
- · housing and supportive living
- immigration and refugee settlement services
- · rehabilitation services
- · services for Indigenous peoples
- services for seniors
- social assistance and other related government services
- · women's shelters





Social Work students conduct a mock counselling session in the School of Social Work's observation room. Through a one-way mirror, other students can watch and learn from the counselling session.



# **Building your degree**

Consider adding degree elements that reflect your interests, diversify your knowledge and give you a competitive edge when entering the workforce.

Many of our programs provide the flexibility to add a **minor**, a cohesive set of courses that offer a foundation in another area of study. A minor usually consists of 4.0 credits.

In many programs, you can pursue a concentration, specialization or stream, where you study a selection of specialized courses that relate to your degree program.

Some programs are offered as **Combined Honours** degrees, where you fulfill the
degree requirements of two major programs.

#### Adding a minor

The following programs can be taken as a minor, but are available as major programs as well:

African Studies - Anthropology - Applied Linguistics and Discourse Studies - Art History - Biology - Business - Canadian Studies - Chemistry - Communication and Media Studies - Criminology and Criminal Justice - Earth Sciences: Earth Resources and Processes - Economics - English - Entrepreneurship - Environmental Studies -

European and Russian Studies - Film Studies - Food Science - French - Geography - Geomatics - Greek and Roman Studies - Health Sciences - History - History and Theory of Architecture - Human Rights and Social Justice - Indigenous Studies - Law - Linguistics - Mathematics - Music - Neuroscience and Mental Health - Philosophy - Physical Geography - Physics - Political Science - Psychology - Religion - Sociology - Statistics - Women's and Gender Studies

A minor in Business designed specifically for Engineering students is also available.

The following programs are offered exclusively as minors:

#### Archaeology

Open to students from any discipline, this minor pursues a wide variety of approaches to the field of archaeology and draws from Greek and Roman Studies, Earth Sciences, Geography, Anthropology and Art History. You will have the option to receive credit for participation in archaeological projects worldwide, including the Gabii Project in Italy, alongside our faculty.

#### **Arts Management**

Art and culture has become an important sector of Canadian industry, with ties to tourism, education and government. This minor will equip you with the business and management skills to pursue careers in arts and culture, in institutions or as sole practitioners.

#### **Business (Sustainability)**

Open to students outside of our Business programs, this unique minor will give you access to the fundamentals in business and will focus specifically on the field of sustainability as it relates to business issues.

#### **Community Engagement**

Increasingly, governmental, nongovernmental, economic, social, advocacy and research organizations are realizing the need for meaningful and ethical community engagement to bring about positive social change. You will develop theoretical tools and practical skills to engage with and build community, enabling you to work for change while respecting differences.

### **Critical Race Studies**

Drawing on interdisciplinary perspectives from across the university, this minor explores white supremacy, settler colonialism, anti-black and systemic racisms, and histories of racialization, migration, and diaspora in Canada and around the world. You will have the opportunity to think about the categories of race and racialization as necessarily entangled with other forms of social difference.

### Design

Learn the fundamentals of design and creatively integrate them into your main field of study. You will learn about the design of products, systems, services and experiences with consideration of how they are related to environmental, psycho-social and economic factors, and their contribution towards a better quality of life.

### **Digital Humanities**

Engage with powerful trends in the discipline of English studies and advance your critical thinking and cultural literacy skills. You will be able to harness the theoretical and creative possibilities opened up by computing technologies, networks and digital culture. Explore the ways in which digital technologies are transforming reading, writing and literature, and providing new insights into our textual past.

### **Disability Studies**

Explore the ethics, politics, history and contemporary cultural dynamics of 'disability' from an interdisciplinary perspective and focus on the discourses that create the category of disability in society.

### **Drama Studies**

Through the combination of academic courses taught by scholars and drama workshops led by theatre practitioners, this minor will develop your skills in Theatre Criticism and Dramaturgy — the study of dramatic composition. Course options include workshops in acting and stagecraft, as well as in writing for stage and screen, along with intensive studies of topics in world and historical drama, including Shakespeare's plays and Indigenous drama.

### **Environmental and Climate Humanities**

This minor provides a broad foundation in the environmental and climate humanities and opens new areas of inquiry by bringing together disciplines and approaches that have been too often kept apart. Explore a range of disciplines including Geography and Environmental Studies, English, French, History, Religious Studies, Visual Art, Film, Music, Curatorial Studies, Law, Economics, Sociology and Anthropology, Communication and Journalism, Human Rights, African Studies, and Indigenous and Canadian Studies, among others.

### **Heritage Conservation**

In this unique minor, you will critically examine definitions of heritage, why it matters, who it serves and who makes decisions as to what is preserved. This program also addresses intersecting questions surrounding built heritage, intangible heritage, memory studies, sustainable conservation, cultural landscapes, Indigenous and settler heritage, commemoration and tourism.

### **Industrial Economics**

Offered through the Department of Economics, this minor is designed for engineering students who wish to learn the aspects of economics that are most relevant to their major.

### **Latin American and Caribbean Studies**

Gain a competitive edge by developing interdisciplinary expertise in Latin America and the Caribbean. As a student in this program, you will explore international opportunities as well as research and language training opportunities. You'll also gain the necessary training to contribute professionally on an international level by introducing you to the politics, cultures, history and economies of this region. An added benefit is that you will become part of a scholarly community and develop networks through new connections with like-minded students and faculty.

### Medieval and Early Modern Studies (MEMS)

Gain an interdisciplinary understanding of the Middle Ages and the early modern period, as experienced not only in European and Byzantine contexts but also in the Islamic world. The MEMS minor offers a pathway for you to explore these periods by linking together many courses offered at Carleton in different departments.

### **Modern Languages**

Learning to communicate in another language can be an enriching and fulfilling part of your educational experience. It can also open many doors in the worlds of work, travel and future education. Minors are available in American Sign Language (ASL), German, Italian, Japanese, Korean, Mandarin Chinese, Russian and Spanish.

### **News Media and Information**

Perhaps you're looking to enhance your understanding of news media while studying a discipline other than Journalism. This minor explores journalism's roots, evolution and vital role in modern democracies.

Offering instruction beyond basic news literacy, the minor will familiarize you with all aspects of news work through various courses, from media law and ethics to contemporary digital disruptions.

### **Professional Writing**

Learn how to tailor your writing to specific contexts and explore professional writing as a network of skills and cultural practices. This program offers exciting opportunities to gain writing experience in the workplace — one of the most valuable transferable skills in today's knowledge-based economy. Our students leave prepared for their professional lives in government, NGOs, medical institutions and beyond.

### **Québec Studies**

Develop an interdisciplinary understanding of Québec's rich historical tradition and vibrant culture by exploring the history, culture, literature and politics of this province. You will reach an advanced level of French-language proficiency and will have opportunities to participate in experiential learning, including a course within Québec City. Knowledge of Québec and of French is a definite asset for students interested in career opportunities within government, foreign affairs, cultural institutions, education, translation, tourism and much more.

### **Sexuality Studies**

This minor offers an interdisciplinary approach to a rapidly evolving field of study. Examine sexuality in its historical context and through current social, political and cultural practices. Topics include queer and trans theory and politics, marriage and the family, pornography and censorship, reproductive rights and HIV/AIDS activism.

# Technology, Society, Environment Studies (TSE)

Multidisciplinary in nature, the TSE minor addresses the problems that have been created by the interactions of technology, society and the environment. The courses in this program cover a wide range of topics from technology in ancient societies to contemporary issues in risk, innovation, forecasting, information technology, environmental sustainability, product life cycle analysis, energy use and the philosophy of technology.

### **Urban Studies**

Urbanization has become a defining feature of the twenty-first century. Rapidly urbanizing areas pose both challenges and opportunities with regards to sustainability, social justice, equity and human rights. The minor in Urban Studies will help you understand how cities work (or fail to work), and will provide the concepts and skills needed to tackle critical questions of metropolitan governance, urban development and quality of life. It serves as a springboard for students interested in urban planning, community activism, working in urban policy in the public or non-profit sectors, or pursuing further studies in a related field.



# **Admission to Carleton**

### How to apply

Students interested in Carleton must apply online through the Ontario Universities' Application Centre (OUAC) website at **ouac.on.ca**. If you are currently finishing your last year of high school in Ontario, you must obtain login information from your school's guidance office before applying online. International applicants have the alternate option to apply directly to Carleton by completing our International Student Application available through Carleton360.

### **Application deadlines**

The following deadlines apply for admission to Carleton for fall term (September to December).

### High school students in Ontario

Ontario high school students should submit their application to the OUAC by January 12, 2023

# High school students in Canada (excluding Ontario) CÉGEP students USA students

The general application deadline for fall admission is June 1. Some programs have early

application deadlines and some programs require additional admission material.

### International students

The application deadline for students with documents originating outside Canada or the United States is April 1. Some programs have early application deadlines and some programs require additional admission material.

### **Early application deadlines**

The following deadlines apply to select programs for the fall term (September to December). Additional admission material may be required.

### **Architectural Studies**

Application deadline: March 1 Portfolio deadline: March 3

### **Humanities**

Deadline to submit optional portfolio: March 1

### **Industrial Design**

Application deadline: March 1 Portfolio deadline: March 3

# Information Technology: Interactive Multimedia and Design

Application deadline: March 1 Portfolio deadline: March 3

### Music

Application and audition booking deadline: March 1

### **Social Work**

Application deadline: March 1 Supplementary application deadline: March 3

### **Admission requirements**

All admission information should be used as a guide only. Programs have limited enrolment and cut-off averages may vary from year to year. In determining admissibility, Carleton reserves the right to take into account repeated courses, grades in specific subjects, and other aspects of the student's academic record.

### **Prerequisite courses**

Prerequisite courses are necessary requirements for admission to particular programs. Prerequisite course marks are included in the average calculated for

admission. If any prerequisites are not available at your school, please contact Admissions Services for possible alternative requirements.

### Students in Canada

### **High school students**

For admission requirements by degree program, view the Ontario admission requirements on pages 74-76. High school students in Canada (excluding Ontario) can supplement this information with the provincial requirements on page 78.

### Ontario college students

Students from Ontario Colleges with a CGPA of 3.0 or higher are normally considered for admission after completing the first year of a two or three-year diploma program.

### **University students**

Courses completed at another university may be eligible for transfer credit, depending on their applicability to the program to which you have applied and your final grade.

### **Students outside Canada**

### International high school students

Students in high schools achieving at least 12 years of study are considered for admission. For specific requirements by program, including prerequisites from various education systems, visit admissions. carleton.ca/apply. For some countries, applicants will be required to have completed one year of university studies. carleton.ca/international

### United States high schools or Americanbased high schools overseas

Minimum B- average, completion of Grade 12 with a minimum of 4 academic units and a minimum of 16 academic units completed during Grades 9-12. For some limited enrolment programs, a higher average may be required. Applicants are encouraged to submit SAT or ACT scores, school profile including accreditation information, school grading information including pass marks and rank in class to support their application. carleton.ca/usa

### **Advanced Placement (AP)**

Applicants who have completed AP exams with a minimum grade of 4 will be granted appropriate advanced standing credit, subject to the discretion of the appropriate faculty, to a maximum of 3.0 credits.

### **International Baccalaureate (IB)**

If you are enroled in an IB diploma program, you will need the full IB (three subsidiary and three higher-level subjects), with a minimum of 28 points. Please note some programs are more competitive and will require higher scores. You must also have a grade of 4 or better in prerequisite subjects. IB students may be awarded advanced standing

(transfer) credit for higher-level subjects with a grade of 5 or better, subject to the discretion of the appropriate faculty, to a maximum of 3.0 credits.

You can also see admissions information for CAPE, Chinese High School, Indian High School, French Baccalaureate, UK/ British System A Levels, and WAEC on our website. We recognize and accept national qualifications from most countries. If your education system is not listed on the website, or if you need further information, please email us at international@carleton.ca.

# International post-secondary students

We will assess any post-secondary studies achieved or currently in progress. If you have completed one year or less of post-secondary studies, please also submit your secondary school transcripts and any graduation exam results. You do not need to apply as a 'transfer student' — the application process is the same for all. For details on admission requirements including advanced standing and transfer credit, see admissions.carleton.ca/apply.

### **English language requirement**

Students whose first language is not English can demonstrate their English language proficiency by presenting proof they have studied for the last three years (full-time) in a high school, college or university in Canada, the United States or any other country in which the primary language is English and where the language of instruction was exclusively English.

Students who do not demonstrate three full-time years in an English medium school as outlined above must present an English language test score.

Students submitting test scores above those listed in the chart below may begin their degree studies without any English requirement. Those with test scores below those listed may still be eligible for an offer of admission with an ESL requirement to complete English language foundation courses in their first terms of degree study.

For more information on the language test score needed for an offer of admission with an English language requirement, visit admissions.carleton.ca/esl.

Students beginning their studies with an English language requirement are not eligible for admission to the following programs:

- · Architectural Studies
- · Health Sciences
- Humanities
- Industrial Design
- · Information Technology
- · International Business
- Journalism
- · Journalism and Humanities
- Media Production and Design
- · Public Affairs and Policy Management

### **Enriched Support Program**

For students whose high school grades do not reflect their academic potential, or for those who are apprehensive about returning to school after an absence, the Enriched Support Program (ESP) offers an opportunity for students to prove their academic ability in a structured university environment. ESP students can register in three full-credit first-year courses, which they supplement with regular weekly workshops offering academic support. After the ESP year, students who attain the necessary grade point average in their ESP courses are eligible for acceptance into a full-time degree program. carleton.ca/esp

# **Indigenous Enriched Support Program**

The Indigenous Enriched Support Program (IESP) is an alternative entrance program offered through the Centre for Indigenous Support and Community Engagement. This program offers admission opportunities as well as academic and social support for Indigenous, First Nations (Status and Non-Status), Métis and Inuit students in their first year of study. carleton.ca/indigenous/cisce/iesp

### **English language test scores**

Students presenting the following English language test scores may be eligible for an offer of admission with no

| English language tests                               | Score  |
|--|--|
| Canadian Academic English Language Assessment (CAEL) | 70   |
| Internet-based TOEFL (iBT)                           | 86 (min. 22 in writing and speaking and 20 in reading and listening) |
| IELTS  | 6.5 IELTS (min. 6.0 in each band)                                    |
| Pearson Test of English (PTE) Academic               | 60 (min. 60 in each Communicative Skill)                             |
| admissions.carleton.ca/esl                           |  |

# **Ontario admission requirements**

| Degree program                                  | Areas of study  |  | Required prerequisite courses   | Minimum<br>cut-off<br>range | 2021<br>incoming class<br>average |
|---|---|--|---|-----------------------------|-----------------------------------|
| Bachelor of Architectural<br>Studies*           | <ul> <li>Conservation and Sustainability</li> <li>Design</li> <li>Urbanism</li> </ul>   |  | <ul><li>English (ENG4U)</li><li>Physics (SPH4U)</li><li>Advanced Functions (MHF4U)</li></ul>  | 75-77%                      | 89%                               |
| Bachelor of Arts                                | <ul> <li>African Studies</li> <li>Anthropology</li> <li>Applied Linguistics and Discourse Studies</li> <li>Art History</li> <li>Biology</li> <li>Canadian Studies</li> <li>Childhood and Youth Studies</li> <li>Criminology and Criminal Justice</li> <li>English</li> <li>Environmental Studies</li> <li>European and Russian Studies</li> <li>Film Studies</li> <li>French</li> <li>Geography</li> <li>Geomatics</li> </ul> | <ul> <li>Greek and Roman Studies</li> <li>History</li> <li>History and Theory of Architecture</li> <li>Human Rights and Social Justice</li> <li>Indigenous Studies</li> <li>Law</li> <li>Linguistics</li> <li>Music</li> <li>Philosophy</li> <li>Political Science</li> <li>Psychology</li> <li>Religion</li> <li>Sociology</li> <li>Women's and Gender Studies</li> </ul> | All BA programs: • English (ENG4U)  BA Biology: • English (ENG4U) • Chemistry (SCH4U) (Advanced Functions [MHF4U] and Calculus [MCV4U] recommended)   | 75-77%                      | 85%                               |
| Bachelor of<br>Cognitive Science                | <ul> <li>Biological Foundations of<br/>Cognition</li> <li>Cognition and Computation</li> <li>Cognition and Psychology</li> </ul>  | <ul> <li>Language and Linguistics</li> <li>Philosophical and Conceptual<br/>Issues</li> </ul>  | • English (ENG4U)   | 75-77%                      | 85%                               |
| Bachelor of Commerce                            | <ul> <li>Accounting</li> <li>Business Analytics</li> <li>Entrepreneurship</li> <li>Finance</li> <li>Information Systems</li> </ul>  | <ul> <li>International Business*</li> <li>Management*</li> <li>Marketing*</li> <li>Supply Chain Management*</li> </ul>   | English (ENG4U)     Advanced Functions (MHF4U)*     Calculus (MCV4U)**      *Students without Calculus (MCV4U) may be admitted conditionally and must complete MATH 0009 in their first term of study.      *High-achieving students without the Math prerequisites may refer to: sprott.carleton.ca/alternative-pathways-to-a-business-degree. | 80%                         | 87%                               |
| Bachelor of Communication and<br>Media Studies+ |   |  | • English (ENG4U)   | 75-77%                      | 86%                               |
| Bachelor of<br>Computer Science                 | <ul> <li>Algorithms</li> <li>Artificial Intelligence and Machine<br/>Learning</li> <li>Computer and Internet Security</li> <li>Computer Game Development</li> </ul>   | <ul> <li>Management and Business<br/>Systems</li> <li>Software Engineering</li> </ul>  | <ul><li>Advanced Functions (MHF4U)</li><li>Calculus (MCV4U)</li></ul>   | 85-88%                      | 91%                               |
| Bachelor of Economics                           | <ul> <li>Computational Analysis</li> <li>Development</li> <li>Economic Theory</li> <li>Economic Data Science</li> <li>Financial Economics</li> </ul>  | <ul> <li>International Political<br/>Economy <sup>◆</sup></li> <li>Mathematics and Quantitative<br/>Economics <sup>◆</sup></li> <li>Natural Resources, Environment,<br/>and Economy <sup>◆</sup></li> </ul>  | English (ENG4U)     Advanced Functions (MHF4U)*     (Calculus [MCV4U] strongly     recommended)     *Students without Advanced Functions (MHF4U) may be admitted conditionally and must complete MATH 0005 in their first term of study.  | 75-77%                      | 80%                               |
| Bachelor of<br>Engineering                      | <ul> <li>Aerospace</li> <li>Architectural Conservation and<br/>Sustainability</li> <li>Biomedical and Electrical</li> <li>Biomedical and Mechanical</li> <li>Civil</li> <li>Communications</li> </ul>   | <ul> <li>Computer Systems*</li> <li>Electrical*</li> <li>Engineering Physics*</li> <li>Environmental*</li> <li>Mechanical*</li> <li>Software*</li> <li>Sustainable and Renewable Energy*</li> </ul>  | <ul> <li>Advanced Functions (MHF4U)</li> <li>Chemistry (SCH4U)</li> <li>Physics (SPH4U)</li> <li>One credit from Calculus (MCV4U), Biology (SBI4U), or Earth and Space Science (SES4U) (Calculus [MCV4U] recommended)</li> </ul>  | 75-85%                      | 89%                               |

For admission to undergraduate programs, Ontario students must have the Ontario Secondary School Diploma (OSSD) with six 4U/M courses. 4U English is recommended. 4U/M credits for Co-op courses will not be considered as part of the six courses. Higher averages are required for admission to programs for which the demand for places by qualified applicants exceeds the number of places available. The overall

| Degree program                                  | Areas of study  | Required prerequisite courses   | Minimum<br>cut-off<br>range | 2021<br>incoming<br>class average |  |
|---|---|---|-----------------------------|-----------------------------------|--|
| Bachelor of Global and<br>International Studies | <ul> <li>Africa and Globalization*</li> <li>Europe and Russia in the World*</li> <li>French and Francophone Studies*</li> <li>Global Development*</li> <li>Global Genders and Sexualities*</li> <li>Global Inequalities and Social Change*</li> <li>Global Law and Social Justice*</li> <li>Global Literatures*</li> <li>Global Media and Communication*</li> <li>Global Migration and Transnationalism*</li> <li>Global Politics*</li> <li>Global Religions: Identity and Community*</li> <li>Global Inant Transnational History*</li> <li>Globalization, Culture and Power*</li> <li>International Economic Policy*</li> <li>Latin American and Caribbean Studies*</li> <li>Teaching English in Global Contexts*</li> </ul> | All BGInS: • English (ENG4U)  BGInS concentration in French and Francophone Studies: • English (ENG4U) • One French credit (4U)   | 75-77%                      | 86%                               |  |
| Bachelor of Health Sciences                     | <ul> <li>Biomedical Sciences</li> <li>Disability and Chronic Illness</li> <li>Environment and Health</li> <li>Global Health</li> <li>Health Throughout the Lifespan</li> </ul>  | <ul> <li>Advanced Functions (MHF4U)</li> <li>Two credits from Biology<br/>(SBI4U), Chemistry (SCH4U),<br/>Earth and Space Science<br/>(SES4U) or Physics (SPH4U)<br/>(Calculus [MCV4U] strongly<br/>recommended)</li> </ul>   | 85-88%                      | 90%                               |  |
| Bachelor of<br>Humanities*                      | Option A: Bachelor of Humanities (Honours or Combined Honours)  | No specific prerequisites   | 80-84%                      | 89%                               |  |
|   | Option B: Bachelor of Humanities and Biology (Combined Honours)   | • Biology (SBI4U) or Chemistry (SCH4U)  |                             |                                   |  |
| Bachelor of<br>Industrial Design*◆              |   | <ul> <li>Advanced Functions (MHF4U)</li> <li>Physics [SPH4U]         (Calculus [MCV4U] and courses in visual arts and/or technological design are recommended)</li> </ul>   | 75-77%                      | 89%                               |  |
| Bachelor of<br>Information                      | Information Resource Management (IRM)   | <ul><li>English (ENG4U)</li><li>One Math credit (4U)</li></ul>  | 75-77%                      | 82%                               |  |
| Technology                                      | ■ Interactive Multimedia and Design (IMD)*  | • Advanced Functions (MHF4U)  |                             |                                   |  |
|   | • Network Technology (NET) •  | • One Math credit (4U)  |                             |                                   |  |
|   | • Optical Systems and Sensors (OSS) •   | Advanced Functions (MHF4U)  |                             |                                   |  |
| Bachelor of<br>International Business           | <ul> <li>Global Financial Management<br/>and Systems</li> <li>International Strategy and Human<br/>Resources Management</li> <li>International Strategy and Human<br/>Resources Management</li> </ul>   | • English (ENG4U) • Advanced Functions (MHF4U)* • Calculus (MCV4U)**  *Students without Calculus (MCV4U) may be admitted conditionally and must complete MATH 0009 in their first term of study. *High-achieving students without the Math prerequisites may refer to: sprott.carleton.ca/alternative-pathways- to-a-business-degree. | 80%                         | 87%                               |  |
| Bachelor of<br>Journalism                       | Health Sciences   | <ul> <li>English (ENG4U)</li> <li>Concentration in Health Sciences:</li> <li>English (ENG4U)</li> <li>One Math credit (4U)</li> <li>Biology (SBI4U) or Chemistry (SCH4U)</li> </ul>   | 85-88%                      | 90%                               |  |

average required for admission is determined each year on a program by program basis. All programs have limited enrolment. Admission is not guaranteed and all requirements are subject to change. The admission average required for entry to the Co-op option of the programs listed below may be higher than the cut-off range listed for the program itself. admissions.carleton.ca/apply

| Degree program   | Areas of study   |  | Required prerequisite courses   | Minimum<br>cut-off<br>range | 2021<br>incoming<br>class average |
|--|--|--|---|-----------------------------|-----------------------------------|
| Bachelor of Journalism and Humanities                  |  |  | • English (ENG4U)   | 85-88%                      | 91%                               |
| Bachelor of<br>Mathematics                             | <ul> <li>Computational and Applied Mathematics and Statistics</li> <li>Computer Mathematics</li> <li>Computer Science and Mathematics</li> <li>Mathematics</li> <li>Mathematics and Economics</li> </ul> | <ul> <li>Mathematics/<br/>Master of Science</li> <li>Statistics*</li> <li>Statistics and Economics*</li> <li>Statistics/Master of Science</li> </ul>                     | <ul> <li>Advanced Functions (MHF4U)</li> <li>Calculus (MCV4U)</li> </ul>  | 78-82%                      | 87%                               |
| Bachelor of Media<br>Production and Design◆            |  |  | <ul><li>English (ENG4U)</li><li>One Math credit (4U)</li></ul>  | 75-77%                      | 87%                               |
| Bachelor of<br>Music*                                  |  |  | No specific prerequisites<br>(English [ENG4U]<br>recommended)   | 75-77%                      | 86%                               |
| Bachelor of<br>Public Affairs and<br>Policy Management | <ul> <li>Communication and Policy Studies</li> <li>Development Policy Studies</li> <li>International Policy Studies</li> <li>Public Policy and Administration</li> </ul>                                 |  | No specific prerequisites   | 83-86%                      | 90%                               |
| Bachelor of<br>Science                                 | <ul> <li>Biochemistry*</li> <li>Bioinformatics*</li> <li>Biology*</li> <li>Biotechnology*</li> <li>Chemistry*</li> <li>Computational Biochemistry*</li> <li>Food Science*</li> </ul>                     | <ul> <li>Interdisciplinary Science<br/>and Practice</li> <li>Linguistics</li> <li>Nanoscience</li> <li>Neuroscience and<br/>Mental Health</li> <li>Psychology</li> </ul> | <ul> <li>Advanced Functions (MHF4U)</li> <li>Two credits from Biology<br/>(SBI4U), Chemistry (SCH4U),<br/>Earth and Space Science<br/>(SES4U) or Physics (SPH4U)<br/>(Calculus [MCV4U] strongly<br/>recommended)</li> </ul> | 78-82%                      | 87%                               |
|  | <ul> <li>Earth Sciences</li> <li>Environmental Science</li> <li>Geomatics</li> <li>Physical Geography</li> </ul>   |  | <ul> <li>Advanced Functions (MHF4U)<br/>or Calculus (MCV4U)</li> <li>Two credits from Biology<br/>(SBI4U), Chemistry (SCH4U),<br/>Earth and Space Science<br/>(SES4U) or Physics (SPH4U)</li> </ul>                         | 78-82%                      | 87%                               |
|  | <ul> <li>Physics*</li> <li>Applied Physics*</li> <li>Mathematics and Physics*</li> </ul>   |  | <ul> <li>Advanced Functions (MHF4U)<br/>and Calculus (MCV4U)</li> <li>One credit from Biology<br/>(SBI4U), Chemistry (SCH4U),<br/>Earth and Space Science<br/>(SES4U) or Physics (SPH4U)</li> </ul>                         | 78-82%                      | 87%                               |
| Bachelor of<br>Social Work*                            |  |  | No specific prerequisites<br>(English strongly<br>recommended)  | 75-80%                      | 84%                               |

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| Health Sciences                           | 46-47 |
| Health Throughout the Lifespan            |       |
| History                                   |       |
| History and Theory of Architecture        |       |
| Humanities                                |       |
| Humanities and Biology                    |       |
| Human Rights and Social Justice           |       |
| Indigenous Studies                        |       |
| Industrial Applications Internship Option |       |
| Industrial Design                         |       |
| Information Resource Management           |       |
| Information Systems                       |       |
| Information Technology                    |       |
| Interactive Multimedia and Design         |       |
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| Interdisciplinary Science and Practice                    |           |
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| International Business                                    | 34, 53-54 |
| International Economic Policy                             | 44        |
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| International Political Economy                           | 38        |
| International Marketing and Trade                         | 53        |
| International Strategy and<br>Human Resources Management  | 53        |
| Journalism  |           |
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| Journalism and Humanities                                 | 48,56     |
| Language and Linguistics                                  | 32        |
| Latin American and Caribbean Studies                      |           |
| Law   |           |
| Linguistics (Arts)  |           |
| Linguistics (Science)                                     |           |
| Management  |           |
| Management and Business Systems                           |           |
| Marketing   |           |
| Mathematics   |           |
| Mathematics and Quantitative Economics                    |           |
| Mechanical Engineering                                    |           |
| Media Production and Design                               |           |
| Music   |           |
| Music (Arts)  |           |
|   |           |
| Nanoscience<br>Natural Resources, Environment and Economy |           |
|   |           |
| Network Technology  Neuroscience and Mental Health        |           |
|   |           |
| Optical Systems and Sensors                               |           |
| Philosophical and Conceptual Issues                       |           |
| Philosophy  |           |
| Physical Geography  |           |
| Physics   |           |
| Political Science   |           |
| Public Affairs and Policy Management                      |           |
| Public Policy and Administration                          |           |
| Psychology (Arts)   |           |
| Psychology (Science)                                      |           |
| Religion  | 31        |
| Science   |           |
| Social Work   |           |
| Sociology   |           |
| Software Engineering                                      | 37, 42    |
| Statistics  |           |
| Supply Chain Management                                   |           |
| Sustainable and Renewable Energy Engineering              | 42        |
| Teaching English in Global Contexts                       | 45        |
| Urbanism  | 21        |
| Women's and Gender Studies                                | 31        |

# **Provincial requirements**

Please see the Ontario admission requirements on pages 74-76 for admission requirements by degree and averages required. Use this chart to see which courses in your province fulfill those prerequisite requirements.

| Province                      | Ontario   | Alberta,<br>Nunavut   | British<br>Columbia,<br>NWT,Yukon            | Manitoba                 | New<br>Brunswick   | Newfoundland &<br>Labrador   | Nova Scotia   | Prince<br>Edward Island   | Québec CÉGEP  | Saskatchewan  |
|-------------------------------|---|---|--|--------------------------|--|--|---|---|---|---|
| General<br>Requirements       | The Ontario<br>Secondary<br>School<br>Diploma<br>(OSSD) with<br>a minimum<br>of six 4U/M<br>courses | High school<br>diploma<br>including<br>five courses<br>numbered 30<br>or 31 | diploma<br>including<br>four Grade           |                          | High school<br>diploma<br>including five<br>academic<br>courses at the<br>Grade 12 level | High school<br>diploma<br>including 10<br>credits at the<br>3000 level | High school<br>diploma<br>including<br>five courses<br>numbered 12<br>academic or<br>advanced | High school<br>diploma<br>including five<br>academic<br>courses at<br>the 611 or 621<br>level | One year of<br>CÉGEP with a<br>minimum of<br>12 academic<br>courses     | High school<br>diploma<br>including<br>six courses<br>numbered 30 |
| Prerequisite<br>Equivalencies | Advanced<br>Functions<br>(MHF4U)  | Math 30-1   |  | Pre-Calculus<br>Math 40S | Pre-Calculus<br>B 120  | Math 3200  | Pre-Calculus<br>12  | Math 621B   | Mathematics<br>(201) Calculus 1   | Pre-Calculus<br>30  |
|                               | Biology<br>(SBI4U)  | Biology 30  | Anatomy and<br>Physiology 12                 | Biology 40S              | Biology<br>121 or 122  | Biology 3201   | Biology 12  | Biology 621   | Biology (101)<br>General<br>Biology                                     | Biology 30  |
|                               | Calculus<br>(MCV4U)   | Math 31   | Calculus 12                                  | Calculus 45S             | Calculus 120   | Calculus 3208  | Calculus 12   | Math 611B   | Mathematics<br>(201) Calculus 1   | Calculus 30   |
|                               | Chemistry<br>(SCH4U)  | Chemistry 30  | Chemistry 12                                 | Chemistry 40S            | Chemistry 121<br>or 122  | Chemistry 3202   | Chemistry 12  | Chemistry 621   | Chemistry<br>(202) General<br>Chemistry or<br>Chemistry of<br>Solutions | Chemistry 30  |
|                               | English<br>(ENG4U)  | ELA 30-1  | English 12 or<br>English First<br>Peoples 12 | ELA 40S                  | English 122  | ELA 3201   | English 12  | English 621   | English (603)   | ELA A30 and<br>B30  |
|                               | Mathematics<br>of Data<br>Management<br>(MDM4U)   | Math 30-2   |  | Applied Math<br>40S      | Foundations<br>of Math 120   | Math 3201  | Math 12   | Math 621A   | Mathematics<br>(201) Linear<br>Algebra                                  | Foundations of<br>Math 30   |
|                               | Physics<br>(SPH4U)  | Physics 30  | Physics 12                                   | Physics 40S              | Physics<br>121 or 122  | Physics 3204   | Physics 12  | Physics 621   | Physics (203)<br>Mechanics or<br>Electricity and<br>Magnetism           | Physics 30  |

Notes For a list of acceptable courses by province: admissions.carleton.ca/apply.

# **Future** opportunities

Carleton offers a variety of certificate and diploma programs. As a student enroled in any one of these programs, you will benefit from the same university resources and support services as our full-time degree students.

Visit admissions.carleton.ca/certificates for admission requirements.

Certificates and Diploma Programs:

- Certificate in Carillon Studies
- Certificate in Nunavut Public Service Studies
- Certificate in Multidisciplinary Studies in Mental Health and Wellbeing
- Certificate in Professional Writing
- Certificate in Science and Policy
- Certificate in Science Communication
- Certificate in the Teaching of English as a Second Language

- Post-Baccalaureate Diploma in Accounting
- Post-Baccalaureate Diploma in Art History
- Post-Baccalaureate Diploma in Cognitive Science
- Post-Baccalaureate Diploma in Economics
- Post-Baccalaureate Diploma in Film Studies
- Post-Baccalaureate Diploma in History and Theory of Architecture
- Post-Baccalaureate Diploma in Professional Writing



### **Graduate programs**

Thinking of grad school? Think Carleton! You'll be able to shape your future based on your specific study and research interests. We offer a wide variety of unique graduate programs with many specializations. Learn more at graduate.carleton.ca/programs.

- Master of Accounting (MAcc)
- Master of Applied Business Analytics in Technology Innovation Management (MABA)
- Master of Applied Science (MASc)

Aerospace Engineering\*

Biomedical Engineering\* **Building Engineering** 

Civil Engineering\*

Data Science and Analytics

Electrical and Computer Engineering\*

Environmental Engineering\*

Mechanical Engineering\*

Sustainable Energy Engineering and Policy Technology Innovation Management

- Master of Architecture (MArch)
- Master of Architectural Studies (MAS)
- Master of Arts (MA)

Anthropology

Applied Linguistics and Discourse Studies

Art and Architectural History

Canadian Studies

Communication

Economics English

European, Russian and Eurasian Studies

Film Studies

French and Francophone Studies

Geography

History

International Affairs†

International Affairs/Juris Doctor\*\*

Legal Studies Linguistics

Migration and Diaspora Studies

Music and Culture

Northern Studies

Philosophy

Political Economy Political Science<sup>†</sup>

Psychology

Public History

Religion and Public Life

Sociology<sup>†</sup>

Sustainable Energy<sup>†</sup>

Women's and Gender Studies

- Master of Business Administration (MBA)
- Master of Business Administration (MBA) in Shanghai
- Master of Cognitive Science (M.Cog.Sc.)
- Master of Computer Science (MCS)†

Computer Science

Data Science and Analytics

- Master of Design (MDes)
- Master of Entrepreneurship in Technology Innovation Management (MEnt)
- Master of Engineering (MEng)

Aerospace Engineering\*

Biomedical Engineering\*

**Building Engineering** 

Civil Engineering\*

Data Science and Analytics

Electrical and Computer Engineering\*

Environmental Engineering\*

Infrastructure Protection and International Security

Mechanical Engineering\*

Sustainable Energy Engineering and Policy

Technology Innovation Management

Master of Human-Computer Interaction

Master of Information Technology

Data Science and Analytics

Digital Media Network Technology

Master of Infrastructure Protection and International Security (MIPIS)†

- Master of Journalism (MJ)
- Master of Philanthropy and Nonprofit Leadership (MPNL)
- Master of Political Management (MPM)
- Master of Public Policy and Administration (MPPA)†
- Master of Science (MSc)

Biology\*

Chemistry\*

Data Science and Analytics

Earth Sciences\*

Geography (Physical Geography)

Health Sciences

Health: Science, Technology and Policy

Management

Mathematics and Statistics\*

Neuroscience

Northern Studies

Physics\*

Master of Social Work (MSW)

Doctor of Philosophy (PhD)

Aerospace Engineering\*

Anthropology

Applied Linguistics and Discourse Studies

Architecture Biology\*

Biomedical Engineering\*

**Building Engineering** 

Canadian Studies\*\*\*

Chemistry\*

Civil Engineering\*

Cognitive Science

Communication

Computer Science\*

**Cultural Mediations** Data Science and Analytics

Earth Sciences\*

Fronomics\*

Electrical and Computer Engineering\*

English

Environmental Engineering\*

Ethics and Public Affairs

Geography Health Sciences

History

Information Technology

International Affairs

Legal Studies Linguistics, Language Documentation and Revitalization

Management

Mathematics and Statistics\* Mechanical Engineering\*

Neuroscience

Political Science

Psychology Public Policy

Social Work Sociology

COLLABORATIVE SPECIALIZATIONS

African Studies (Master's)

Biochemistry (Master's, PhD)

Bioinformatics (Master's) Chemical and Environmental Toxicology (Master's, PhD)

Climate Change (Master's)

Data Science (Master's)

Digital Humanities (Master's)

Latin American and Caribbean Studies (Master's)

Political Economy (PhD)

GRADUATE DIPLOMAS

Architectural Conservation

Curatorial Studies

Economic Policy

Ethics and Public Affairs

**European Integration Studies** Health: Science, Technology and Policy

Indigenous Policy and Administration Infrastructure Protection and International Security (IPIS)

Linguistics

Migration and Diaspora Studies Northern Studies

Philanthropy and Nonprofit Leadership Public Policy and Program Evaluation (online)

Social Statistics and Data Analysis

Work and Labour

- Co-operative education available
- Joint program between Carleton and the University
- Program requires application and registration at both Carleton and the University of Ottawa
- Joint program between Carleton and Trent University



# **Start your journey**



### September

The Ontario Universities' Application Centre (OUAC) application opens

### October

Join us for Fall Open House

### **November**

Program-specific specialty tours

### **December**

Early admission period begins



2023

### **January**

Admission period begins

12th — Deadline for Ontario high school students to submit applications to the OUAC\*

### **February**

Program-specific specialty tours

### March

1st — Deadline to apply for a Prestige Scholarship Early application and additional admission material deadlines (see page 72)

Mid-March - join us for March Open House

### April

Program-specific specialty tours

### May

Join us for Spring Open House

### **June**

1st — General application deadline for fall admission\*

1st — Deadline to accept an offer of admission for Ontario high school students

8th — Deadline to accept an offer of residence and pay the residence deposit

30th — Deadline to apply for an Entrance Bursary

\*Some programs have early application deadlines and additional admission material. View page 72 for more information.

# Apply today



Apply to Carleton in just five easy steps. For more information on how to apply, visit admissions.carleton.ca/apply.

# 1 Carleton 360

Sign up today for Carleton360 to receive customized Carleton information based on your interests. As you continue to fill in your information, we will continue to tailor your experience: **360.carleton.ca**.

## Apply online at OUAC by January 12

Apply to Carleton University through the Ontario Universities' Application Centre (OUAC): ouac.on.ca.

# Track your application

After applying through the OUAC, you'll receive an email from us with your Carleton applicant number and MyCarletonOne (MC1) username and password. You can check the status of your application on Carleton360 at any time.

# Wait to hear from us

While we process your application, follow us on social at **@carleton\_future** and keep an eye out for email alerts from Carleton to learn about upcoming events and information.

# 6 Accept your offer

After you receive your offer of admission, be sure to accept by the date indicated to reserve your spot in the program. You can view and accept your offer on the Admission Offer Details page on Carleton360.





# **Discover campus**

### Join us for a tour

One of the best ways to get to know Carleton is to explore our campus in-person or online.

Our passionate and knowledgeable team of campus tour guides are current Carleton students who can't wait to share their stories about what it's like to be a Carleton student. Our on-campus walking tours usually take 1.5 hours.

You can experience our campus at any point through our regular virtual tours, which include classrooms, the university library, our underground tunnel system, athletic facilities and more. virtualtour.carleton.ca

For a more interactive online experience, we also offer 45-minute Guided Virtual Tours. Our experienced tour guides will lead you through the highlights of our campus and provide first-hand knowledge and insight into academics, support services and student life.

### Come to our events

There are so many ways to connect with Carleton! We offer several events throughout the year to connect you to Carleton and answer your questions.

admissions.carleton.ca/events

### Your home away from home

Ottawa is a wonderful place to study, offering you opportunities you won't find anywhere else. Studying in a G7 capital city gives Carleton students unparalleled advantages, such as exceptional Co-op and research opportunities that will enrich your university experience.

Carleton's self-contained campus is bordered by the Rideau Canal, the Rideau River and the surrounding community. It is located a short ride from Parliament Hill and Ottawa's downtown core. This complementary blend of city life and nature, culture and heritage, business and government makes Carleton such a unique place to study and learn.

### We are here

Ottawa is a 2-hour drive from Montreal, 4 1/2 hour drive from Toronto and a 1-hour drive to the state of New York. Ottawa is home to an international airport, a train station and is serviced by local public transit.



# **Come and visit Carleton**

