# Engineering and Design

2026 VIEWBOOK

Ottawa, Canada
carleton.ca/engineering-design

Carleton University

## Engineering and Design at Carleton



## Programs



## Next Steps



TAKE A TOUR

# Why Carleton

Make Carleton your first choice for Engineering, Architectural Studies, Industrial Design or Information Technology.

Learn from our passionate, expert professors in interdisciplinary programs that will give you the knowledge to tackle problems within the context of real-world scenarios. In the national capital of Canada, you'll study in state-of-the-art learning facilities on campus, close to national research laboratories, multinational technology companies and local start-ups.

Carleton offers a vibrant extracurricular student life and supportive culture, providing everything from competition style clubs and student societies to career preparation and research opportunities.

**TOP 10**

engineering programs in Canada*

**30+**

engineering and design student competition-style clubs and student societies

**3rd**

largest Co-op program in Ontario — the fastest growing in Canada

**90+**

countries represented in the engineering and design student body

Access to 500+ companies in Canada's largest technology park

*Maclean's Best Program by Reputation, 2025

# Study in Ottawa

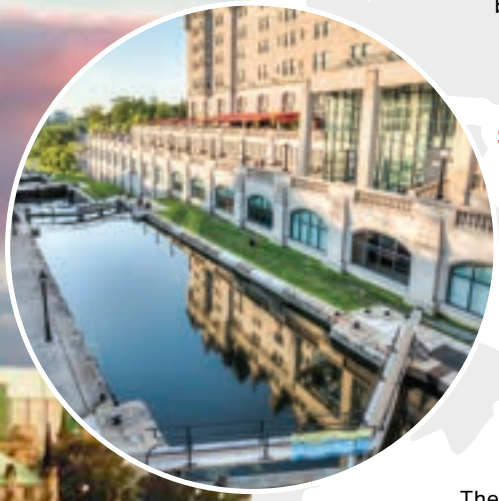
Ottawa is located within the unceded traditional Anishinàbeg Algonquin territory. It is an architecturally and environmentally stunning city surrounded by waterways, blending urban and rural beauty and providing year-round outdoor activities. It is a perfect blend of big-city resources and small-town connections.

## Culture and engagement

Ottawa is home to seven of Canada's nine national museums and host to more than 50 local, national and international film, literary, music, food and cultural festivals. You'll find year-round activities in our public parks, architectural landmarks, along the Ottawa and Rideau rivers, and the historic Rideau Canal (a UNESCO World Heritage Site).

## Ottawa's city centre

Discover shopping, dining, arts and entertainment in Ottawa's historic ByWard Market. Browse the outdoor farmers' market and local shops on the weekend, grab dinner with friends or stroll the bustling streets in neighbourhoods like the Glebe, Chinatown and Westboro Village.



## Seat of the federal government

Study in Ottawa — the hub of research and employment for federal and international organizations and agencies, as well as local startups. You'll have opportunities to visit and work in national research and testing laboratories.

## Largest tech park in Canada

The National Capital Region is a major economic engine, home to world-class industries, research centres and operations, and Kanata North — a global technology hub. With our strong ties, students have access to leading researchers and industry professionals, and unique Co-op and internship opportunities at the Kanata North tech park, a hub that brings companies together to advance research and technology

## Central location

Carleton is 200 km from Montréal, 400 km from Toronto and 80 km to New York state. Ottawa is home to an international airport, two VIA Rail train stations and a stop on several intercity bus services.

# First-year support

Carleton University is well-known for being a caring community. As a student, you will have access to a network of support services to help you make a successful transition to university. We continue that support throughout your degree to help you achieve your goals.

## First-year resources

- **Bachelor of Engineering** students have access to a dedicated team of professionals in the Academic Support Office who can assist with academic advising, peer tutoring and course registration. **carleton.ca/engineering-design/beng-first-year**
  - **Course registration:** detailed videos, checklists and a support team to assist with first-year course registration.
  - **Foundations of engineering course:** an optional, self-paced online course offered in the summer to help engineering students review key math and physics concepts.
  - **Elsie MacGill Learning Centre:** in-person or online peer-led tutoring sessions, offered in groups and individually.
  - **Academic advising:** full-time staff members who can support with course selection, program options, course availability, engineering electives and academic performance evaluation information.

- **Bachelor of Architectural Studies** students can book appointments with academic advisors who can support with registration, suggest electives and program questions. **carleton.ca/architecture**

- **Bachelor of Industrial Design** students can meet with staff for registration information, computer requirements, suggested electives and for academic advice. **carleton.ca/id**

- **Bachelor of Information Technology** students can meet with academic advisors from both Carleton University and Algonquin College about their programs. **bitdegree.ca**

The Academic Support Office helps engineering students with course selection, registration and learning support from first-year through to graduation.


**Services for all Carleton students**

- Awards and Financial Aid
- Campus Safety Services
- Centre for Indigenous Support and Community Engagement
- Centre for Student Academic Support
- Equity and Inclusive Communities
- Health and Counselling Services
- Global Opportunities and International Student Services Office
- Paul Menton Centre for Students with Disabilities
- Student Experience Office

**For more information, scan or visit students.carleton.ca**

# Carleton Co-op

With Carleton being in the National Capital Region, home to one of Canada's largest concentrations of government agencies and high-tech companies, we offer unique opportunities to gain practical experience and solve real-world problems.

- Close to 3,000 potential Co-op employers
- Choice of 4, 6, 8, 12 or 16-month work terms
- No matching/ranking process
- Access to federal government agencies and Canada's largest technology park, known as Kanata North

## How Co-op works

Each of our Engineering, Architectural Studies, Industrial Design and Information Technology programs include a paid Co-op option with flexible work terms. More than 60 per cent of students worked in the National Capital Region, while others found placements elsewhere in Canada and internationally.

Co-op work terms typically begin at the end of your second year, when you have developed the knowledge and confidence to make a substantial contribution. Typically, you will take an additional year to complete all academic and Co-op program requirements, develop your work skills and acquire relevant industry experience.

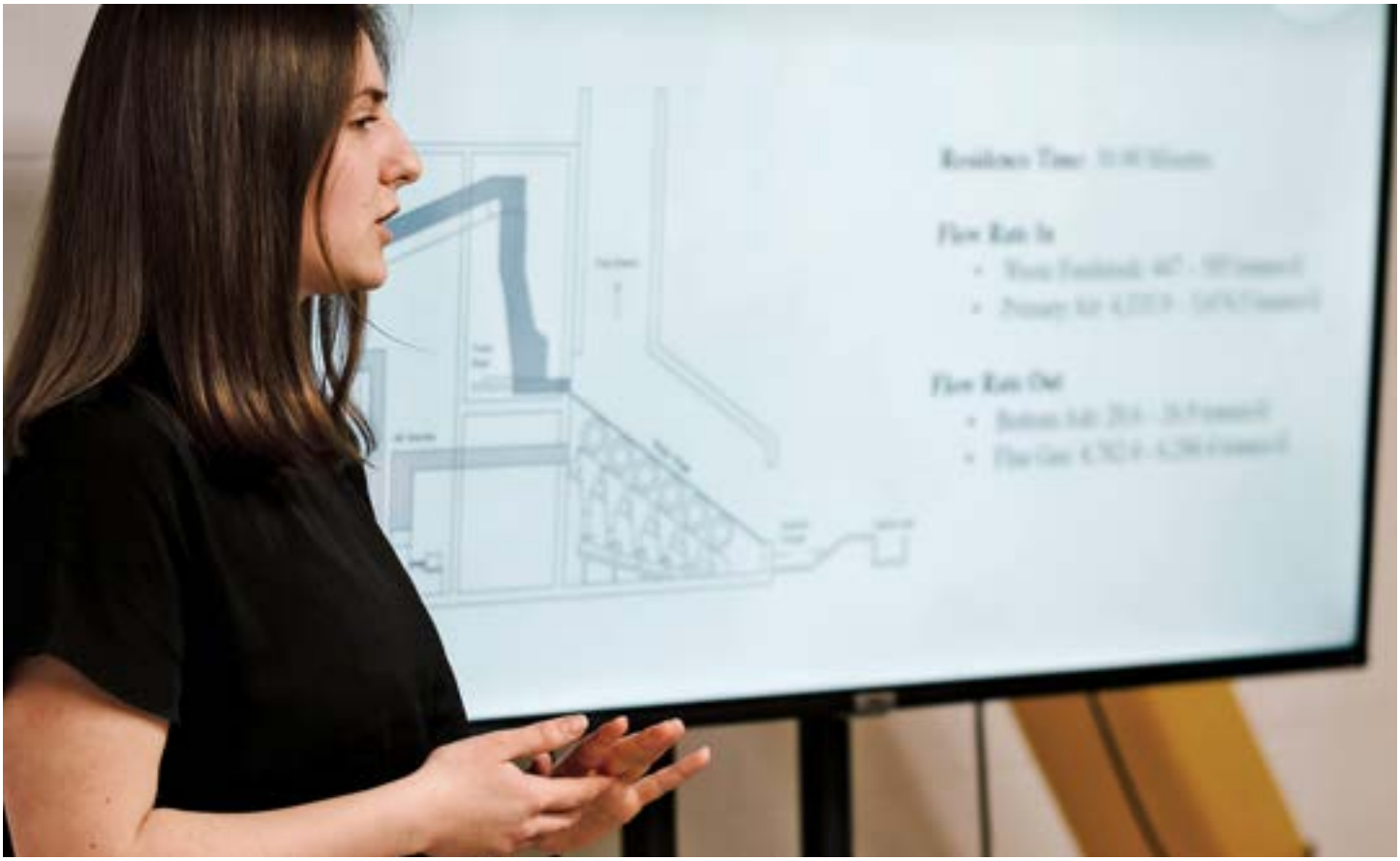
For more information, scan or visit **carleton.ca/Co-op**

**$24.51**

**Average hourly salary for a Bachelor of Engineering student**

**$22.38**

**Average hourly salary for a Bachelor of Architectural Studies student**



**$21.03**

**average hourly salary for a Bachelor of Industrial Design student**

**$25.13**

**Average hourly salary for a Bachelor of Information Technology student**

**86.3%**

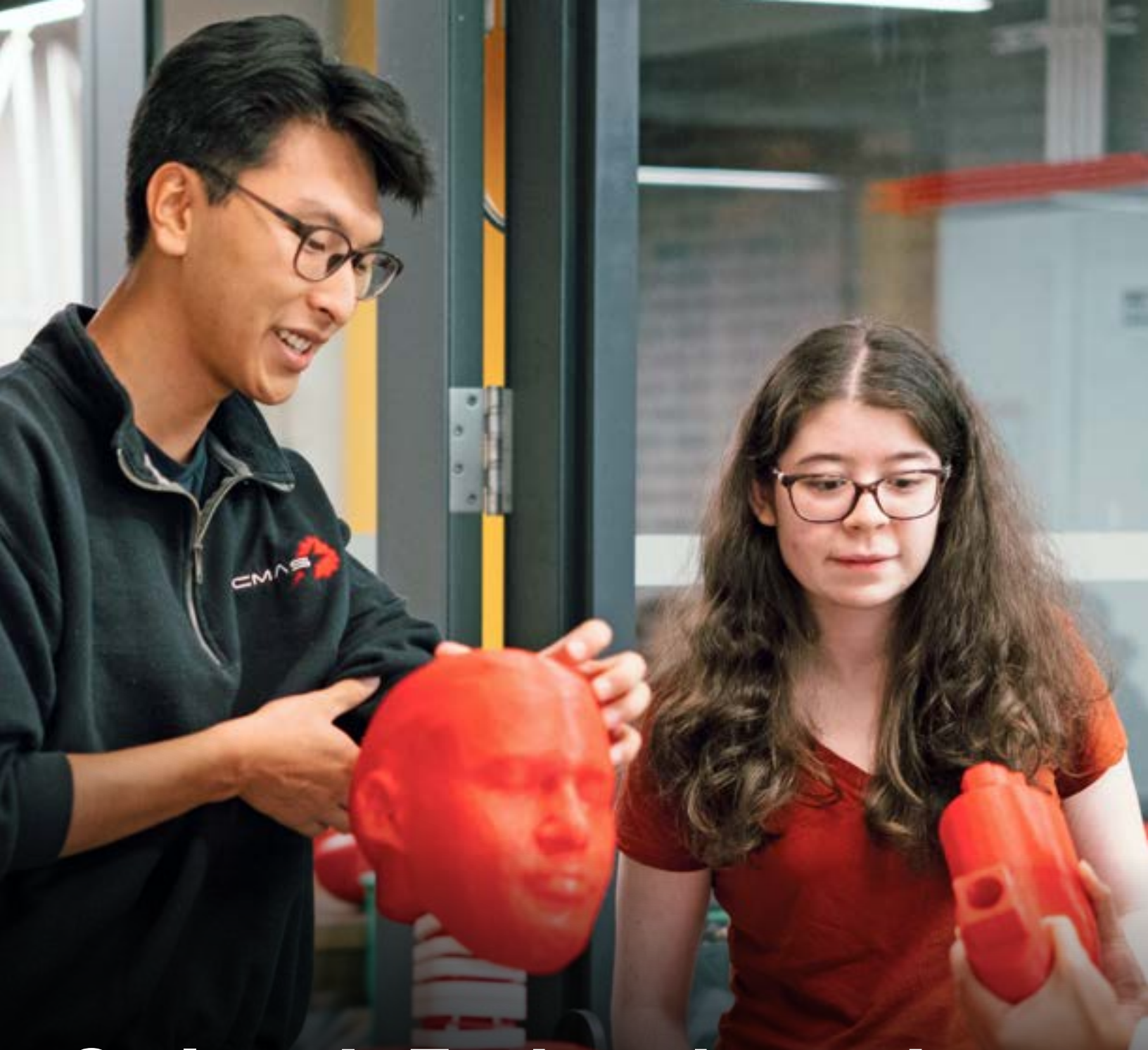
**Graduate EMPLOYMENT IN A RELATED FIELD**

## Real world experience

"I visited Carleton for the first time in 2017, coming from small-town Newfoundland. The natural beauty of the campus with a great surrounding city, and the host of the most renowned Aerospace Engineering program in the country, made Carleton the obvious choice for me!

As part of my Co-op experience, working in the research department at Gastops was a crash course in theory application. I had the opportunity to learn from experts in oil debris monitoring and experimental design from all over the world. This evolved the way I approach engineering, developed my technical expertise and shaped my long-term professional goals."

Kassidy Hammond, Aerospace Engineering student



# Carleton's Engineering and Design community

Carleton is known for its vibrant student life and supportive culture. From over 170 clubs and societies, dedicated professional development programs and hands-on projects to choose from, there's something for everyone.

## Competition-style student clubs

Carleton is home to competition-style clubs, where students work on a year-long project and travel to local, national and international competitions to compete against other university teams. From Blackbird UAV, a team that creates uncrewed arial vehicles, to Carleton's concrete canoe club, a team that builds a primarily concrete canoe (yes, you read that right) for in-water races.

## Engineering Design Centre

In 2022, Carleton opened the doors to its new Engineering Design Centre. The three-storey 2,322 square-metre facility is a space for students to access state-of-the-art equipment (like our resin and FDM (Fused Deposition Modeling) printers and 3D scanners), dedicated bays for our competition-style student club work and additional study space.

## Women in Engineering & IT (WiE&IT) Program

Supported by leading engineering and information technology organizations, our WiE&IT professional development program is one of the first-of-its-kind in Canada and strives to help close the gender gap in STEM. The program runs throughout the academic year, offering women students in STEM programs networking, mentorship and career-ready skill development opportunities, as well as access to a women's study lounge that provides graduate-level academic support.

## Connecting with industry

"As an international student, attending open houses and company tours through the Women in Engineering and IT Program gave me valuable insights into the engineering industry and its expectations for students. Visits like these helped me build meaningful connections with professionals in the field and boosted my confidence and clarified potential career paths."

Xuan-En Tan, Architectural Conservation and Sustainability Engineering student


# Aerospace Engineering

Aerospace engineers revolutionize the future of flight. Carleton's Bachelor of Engineering in Aerospace Engineering, the first in Canada, prepares students for careers in air and space technology. In Aerospace Engineering, you'll specialize in one of four streams: aerodynamics, aerospace structures, aerospace electronics and systems, or space systems designs. You will have access to our student competition style clubs, like Blackbird UAV, which designs and builds uncrewed aerial vehicles, and CU InSpace, which builds and flies high-powered rockets.

## Streams

There are four streams in the Aerospace Engineering program:

- **Stream A:** Aerodynamics, Propulsion and Vehicle Performance specializes in aircraft aerodynamics, performance, control and propulsion technologies.
- **Stream B:** Aerospace Structures, Systems and Vehicle Design focuses on lightweight structures and materials for aircraft and spacecraft.
- **Stream C:** Aerospace Electronics and Systems concentrates on modern aircraft and spacecraft electronics for navigation, guidance, communication and remote sensing.
- **Stream D:** Space Systems Design emphasizes spacecraft design and mission planning, with courses dedicated to orbital mechanics, spacecraft design, communication, propulsion and dynamics.

## 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

## Sample employers

- Bombardier
- CAE
- Canadian Space Agency
- General Dynamics Mission Systems-Canada
- Honeywell
- National Research Council of Canada
- NAV Canada
- Telesat Canada

## Other programs for consideration

You might also be interested in Electrical Engineering or Communications Engineering

# Architectural Conservation and Sustainability Engineering

Architectural heritage connects our past, present, and future, but older buildings often fall short of modern standards for comfort, efficiency and accessibility. The Bachelor of Engineering in Architectural Conservation and Sustainability teaches students to retrofit historic buildings while preserving their integrity. Built on two pillars — heritage conservation and sustainable design — the program covers topics like green building principles, indoor air quality, and energy modeling, preparing graduates to design sustainable systems for high-performance, historically sensitive buildings.

## Your career

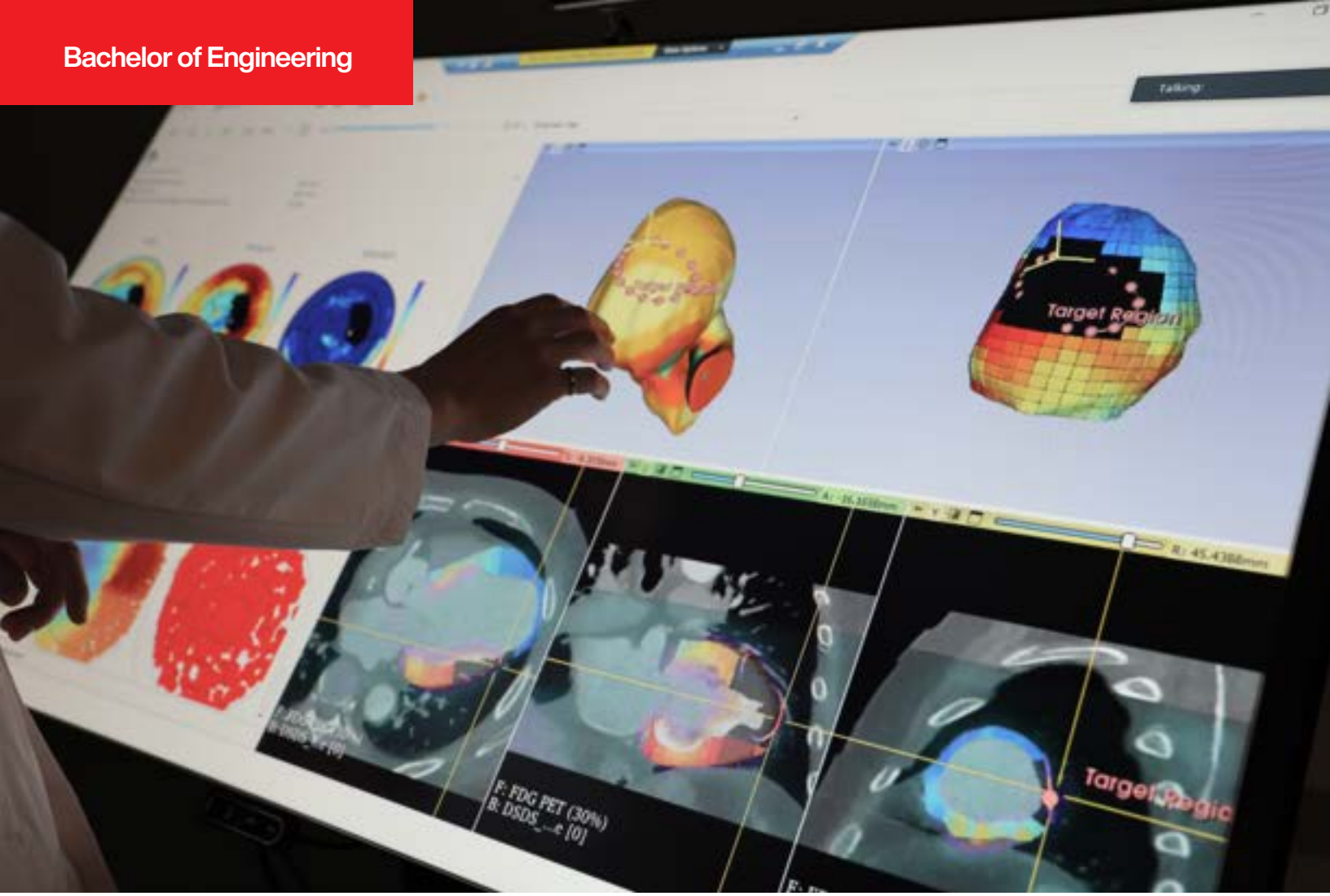
- conservation of heritage structures
- digital tools for new and historic building surveying and recording
- green building design and assessment
- life cycle assessment of green building technologies and materials
- structural analysis of historic buildings and computational modelling

## Sample employers

- Canada Green Building Council
- Canada Mortgage and Housing Corporation
- City of Ottawa — Heritage Planning Section
- Heritage Conversation Directorate
- Natural Resources Canada and Environment and Climate Change Canada
- National Research Council of Canada
- Public Works and Government Services Canada

## Other programs for consideration

You might also be interested in Civil Engineering, Environmental Engineering, or Sustainable and Renewable Energy Engineering.




# Biomedical and Electrical Engineering

Technology, meet health care. In Biomedical and Electrical Engineering, you will acquire the skills to contribute to life-changing innovations in medical technology. Through specialty labs, you'll apply theory to diagnostic imaging, sensors and other biotechnology applications. Given its multidisciplinary nature, the Biomedical and Electrical Engineering program keeps your options open — you can choose to pursue a career in biomedical or electrical engineering, or by completing prerequisites for many Ontario medical schools, you can pursue medicine.

## Your career

- biomedical informatics and telemedicine
- biomedical instrumentation and biosensor design
- biosignal processing and imaging diagnostic technologies
- medical school
- clinical and health care engineering
- general electrical, electronics and instrumentation engineering

## Sample employers

- Abbott Point of Care
- Bruyère Research Institute
- CHEO
- National Research Council of Canada
- Ottawa Hospital Research Institute
- University of Ottawa Heart Institute

## Other programs for consideration

You might also be interested in Electrical Engineering, Computer Systems Engineering, or Biomedical and Mechanical Engineering.


# Biomedical and Mechanical Engineering

Biomedical devices are used throughout our daily lives, from toothbrushes to titanium hip implants and pacemakers. In Biomedical and Mechanical Engineering, you'll work with industry standard biomedical devices in specialty labs focused on human anatomy, biomaterials and biomechanics. Building off the fundamentals of mechanical engineering, you'll graduate with multidisciplinary knowledge and the prerequisites needed for many Ontario medical schools.

## Your career

- advanced drug therapy techniques
- biomedical devices including artificial organs, limbs, joints, heart valves, cardiovascular devices and dental implants
- medical school
- clinical engineering involving medical technology in hospitals
- interactive robots for biomedical applications, such as surgery and physiotherapy

## Sample employers

- Bruyère Research Institute
- Canadian Nuclear Laboratories
- CHEO
- Ciena
- National Research Council of Canada
- Mitacs
- Ottawa Hospital Research Institute

## Other programs for consideration

You might also be interested in Biomedical and Electrical Engineering or Mechanical Engineering.

# Civil Engineering

Civil engineers design, build and maintain the infrastructure we all depend on — from highways across continents to high-rise condominium towers, to tunnels through mountains and massive hydro-electric dams. Carleton's Civil Engineering is one of the largest programs of its kind in Canada, offering both a broad education and the option to specialize in structural, geotechnical, municipal or transportation engineering.

## Areas of focus

You will develop a broad background in civil engineering in your first three years of study before you have the option to specialize in one of the following areas:

- **Structural engineering:** design, construction and functioning of safe, reliable buildings and bridges, as well as analysis and assessment of existing structures.
- **Transportation engineering:** planning design and operation of safe systems and facilities for transportation on land, by water or in the air.
- **Geotechnical engineering:** design and evaluation of soil and rock structures with applications to roads, bridges, buildings, dams, embankments and tunnels.
- **Municipal engineering:** address the range of tasks handled by municipal governments, such as road and bridge operation, water and wastewater treatment, waste management and urban planning.

## Your career

- build, evaluate and maintain infrastructure
- design structural, geotechnical, transportation or municipal systems
- infrastructure safety and security
- on-site construction management and supervision

## Sample employers

- AECOM Canada
- City of Ottawa
- EllisDon
- National Research Council of Canada
- PCL Construction
- WSP Canada

## Other programs for consideration

You might also be interested in Architectural Conversation and Sustainability Engineering or Sustainable and Renewable Energy Engineering.

# Communications Engineering

The future of communications is taking shape at Carleton. In Communications Engineering, you'll get an education at the cutting edge of technology and gain access to hands-on learning opportunities and placements at multinational firms in Ottawa. The next generation of communications technologies are already under development, and Communications Engineering teaches you in-demand skills in AI, IoT, autonomous vehicles and other technologies that are central to our increasingly connected world.

## Your career

- AI and machine learning for networking
- cloud computing smart applications, data centre networks and next-generation internet applications
- communications security, privacy and trust
- computer networks and emerging applications
- next-generation 5G/6G wireless networks, satellite communications and navigation
- wireless communications

## Sample employers

- Blackberry QNX
- Ciena
- Communications Research Centre Canada
- Ericsson
- National Research Council Canada
- Nokia
- Public Services and Procurement Canada
- Telesat

## Other programs for consideration

You might also be interested in Computer Systems Engineering, Electrical Engineering, or Network Technology.

# Computer Systems Engineering

What do generative AI (artificial intelligence), smartphones, autonomous vehicles and drones all have in common? Each demands the seamless operation of both hardware and software, and that's exactly what the Bachelor of Engineering in Computer Systems Engineering teaches you to do. The program prepares you to tackle the complex computing challenges of the real world. In Computer Systems Engineering, you'll have access to Co-op work terms including at Kanata North, Canada's largest technology park.

## Your career

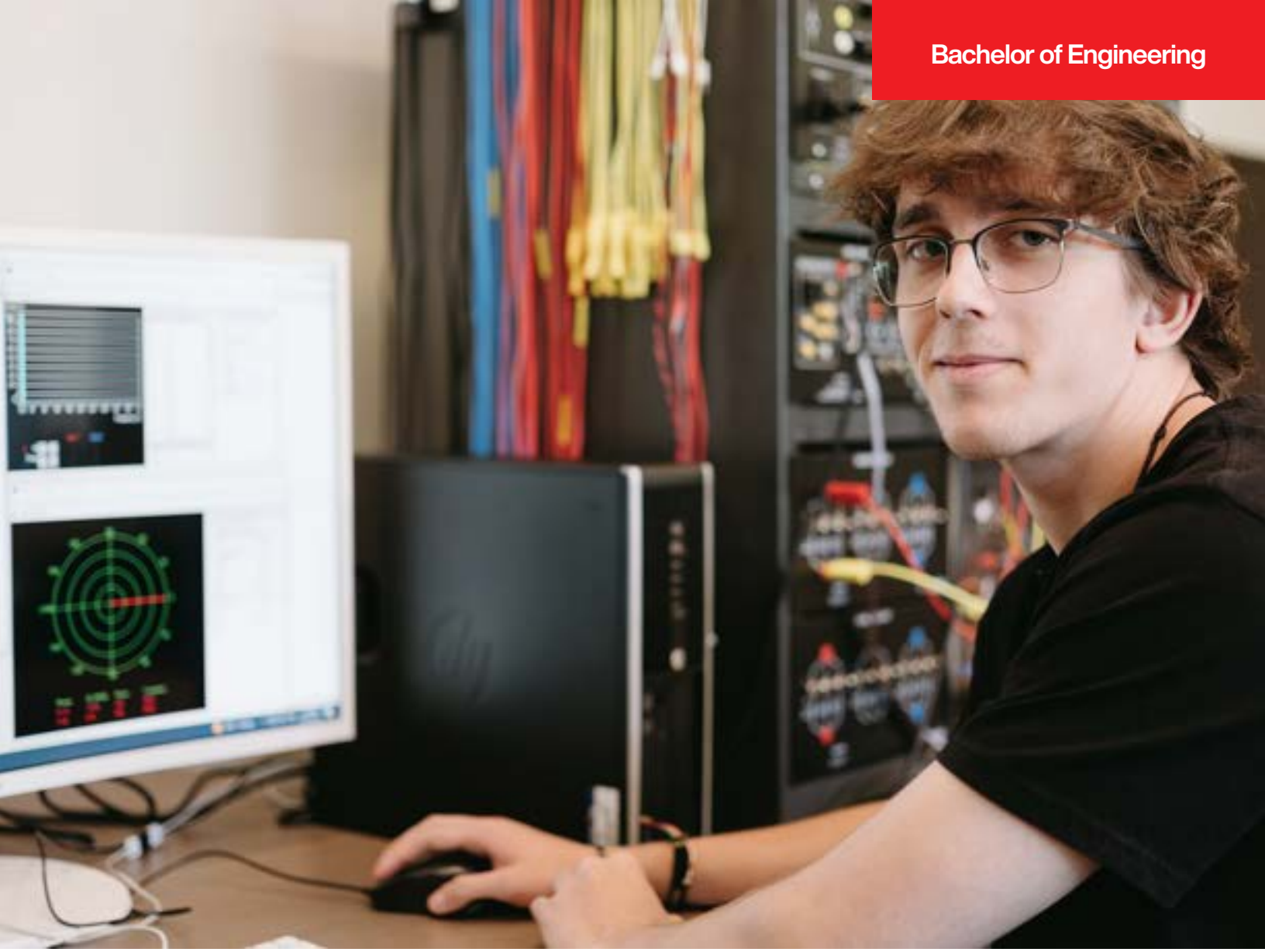
- aerospace, autonomous and embedded systems
- robotics, smart vehicles and artificial intelligence
- cloud computing and social network applications
- smart cities and Internet of Things (IoT)

## Sample employers

- Autodesk Canada
- Ciena
- Communications Research Centre Canada
- General Dynamics Mission Systems Canada
- National Research Council Canada
- Shopify

## Other programs for consideration

You might also be interested in Software Engineering or Communications Engineering.



# Electrical Engineering

In the Bachelor of Engineering in Electrical Engineering, you'll learn to design, develop and test the electronics we use every single day — from the phone in your pocket to the electrical grid that charges it. At Carleton, you'll have access to facilities that manufacture integrated circuits, and to Co-op work terms that give you a head start on your career, including at Canada's largest technology park, Kanata North.

## Your career

- communication devices and networks, fiber optics and photonics, microwave and satellite communications
- electrical power systems and the smart grid
- high-speed and application-specific integrated circuit design
- vehicular electronic controls and navigation

## Sample employers

- CHEO
- Communications Research Centre Canada
- Ericsson
- General Electric Canada
- Hatch
- Honeywell
- National Research Council Canada
- University of Ottawa Heart Institute

## Other programs for consideration

You might also be interested in Biomedical and Electrical Engineering, Engineering Physics, or Sustainable and Renewable Energy Engineering.

# Engineering Physics

Our ability to engineer the flow of electrons on a tiny silicon wafer has enabled vast computing power that has transformed just about every aspect of our lives. In Carleton's Bachelor of Engineering in Engineering Physics, you'll learn how applying electricity and magnetism principles at the smallest scale can make existing technologies better and unlock entirely new applications. With photonic devices and quantum technologies on the horizon, you'll have the opportunity to put theory into practice using our Microfabrication laboratory.

## Your career

- biomedical physics, sensors and instrumentation
- biomedicine
- energy systems
- microelectronics and process engineering
- nanotechnology
- photonics technology and communications

## Sample employers

- AECOM
- Ciena
- Communications Research Centre
- Department of National Defence
- National Research Council Canada
- Nokia
- Perimeter Medical Imaging AI
- Stantec

## Other programs for consideration

You might also be interested in Electrical Engineering.

# Environmental Engineering

Environmental engineers are trained to protect these vital systems by ensuring we continue to have access to clean air, safe water and healthy soil. Environmental Engineering gives you a broad education in science and technology that will prepare you to take a leadership role in creating an environmentally sustainable future. You'll have access to student clubs like CU Reactors, which organize visits to local government labs, research facilities and more.

## Your career

- design and improve treatment systems for water, wastewater and solid waste
- improve outdoor and indoor air quality
- prevent flooding and protect against drought
- provide clean energy alternatives to reduce greenhouse gas emissions
- restore distributed ecosystems

## Sample employers

- Environment and Climate Change Canada
- Health Canada
- J.L. Richards & Associates Limited
- National Capital Commission
- Natural Resources Canada
- Stantec
- Suncor Energy Inc.
- Telesat
- WSP Canada

## Other programs for consideration

You might also be interested in Sustainable and Renewable Energy Engineering, Architectural Conversation and Sustainability Engineering, or Civil Engineering.


# Mechanical Engineering

From a finely tuned Formula 1 car to the simplest child's toy, virtually any device that moves has a mechanical component. In the Bachelor of Engineering in Mechanical Engineering, you'll learn the skills to design and build machines. You'll have access to industry level labs that contain FDM (Fused Deposition Modeling) printers, 3D scanners, CNC (Computer Numerical Control) machines, laser cutters and more. Working with lab techs that will help transform your vision into reality, you'll gain practical hands-on skills.

## Your career

- ground, sea and air transportation
- heating, ventilation and air conditioning
- manufacturing and robotics
- power generation and energy conservation
- resource extraction and processing

## Sample employers

- Bombardier
- Canadian Nuclear Laboratories
- Flex
- Ford Motor Company of Canada
- Gastops
- Modern Niagara
- National Research Council Canada
- Siemens Canada

## Other programs for consideration

You might also be interested in Biomedical and Mechanical Engineering, Sustainable and Renewable Energy Engineering, or Aerospace Engineering.

# Mechatronics Engineering

Working together, electro-mechanical devices and computers can perform almost any task — from open-heart surgery to advances in the auto sector to helping care for older adults. Carleton's Mechatronics Engineering program puts you at the controls. This new, multidisciplinary program centres on design principles, and teaches skills in mechanical, electrical and systems engineering, with a focus on automation and AI (artificial intelligence).

## Your career

- aeronautics and avionics
- automation and manufacturing
- telecommunication
- healthcare
- product and software design
- robotic
- smart vehicle development

## Sample employers

- Apple
- General Dynamics Mission Systems Canada
- General Motors
- Google
- Leonardo DRS
- Microsoft
- National Research Council Canada
- Nokia

## Other programs for consideration

You might also be interested in Mechanical Engineering, Electrical Engineering, or Software Engineering.

# Software Engineering

Developing software systems requires more than just programming skills. Carleton's Software Engineering program teaches students how to build and test reliable, scalable and high-quality software systems that can power anything from digital maps to a remote learning platform for students in rural areas. Students will also learn career-ready skills like teamwork, communication and project management.

## Your career

- embedded systems in aerospace and automative domains
- Internet of Things (IoT) systems
- machine learning and artificial intelligence for autonomous systems
- scalable web applications such as social networking, e-commerce systems and cloud computing
- smartphone and smart-tablet applications

## Sample employers

- Apple
- Blackberry QNX
- Ericsson
- Ford Canada
- Google
- IBM
- National Research Council Canada
- Shopify

## Other programs for consideration

You might also be interested in Computer Systems Engineering, Communications Engineering, or Biomedical and Electrical Engineering.

# Sustainable and Renewable Energy Engineering

The world is racing toward net-zero emissions, driving major changes in energy production and delivery. Clean technologies like wind, solar, hydro, nuclear and carbon capture are key — but so are smarter grids and energy storage. A Bachelor of Engineering in Sustainable and Renewable Energy Engineering puts you at the heart of this transformation, teaching you to develop and integrate new technologies while thinking critically about the global systems that power a low-carbon future.

## Streams

There are two streams in the program, both of which provide courses in basic and applied sciences. In combination with stream-specific topics such as electronics, smart-grid systems, heat transfer and thermodynamics, technology for generating and converting energy, and environmental issues.

- **Stream A:** Smart Technologies for Power Generation and Distribution: emphasizing electrical engineering aspects of the energy sector.
- **Stream B:** Efficient Energy Generation and Conversion: emphasizing mechanical engineering aspects of the energy sector.

## 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

## Sample employers

- Enbridge Gas Inc.
- Housing developers
- Hydro Ottawa
- National Research Council of Canada
- Siemens
- Stantec

## Other programs for consideration

You might also be interested in Environmental Engineering, Mechanical Engineering, or Architectural Conservation and Sustainability Engineering.

# Architectural Studies

Architecture shapes how we live, work and connect — and it has the power to respond to today's most pressing social, environmental and technological challenges. Carleton's Architectural Studies program equips students with the tools to think critically, design responsibly and lead positive change through the built environment.

## Conversation and Sustainability

A city is always changing, with new buildings rising and older ones being replaced or renewed. In the Bachelor of Architectural Studies in Conservation and Sustainability, you'll learn to preserve a city's heritage while addressing future sustainability challenges. On this path to architectural practice and licensure, you'll enjoy a design education with a focus on architectural adaptation.

## Design

Architecture blends form and function, and a great building can be much more than just a place to live, work or play. The Bachelor of Architectural Studies in Design centres on designing new buildings that can work for the environment and for everyone in society. On this path to architectural practice and licensure, you'll enjoy a focus on responsible and sustainable architecture.

## Urbanism

The way a city is built shapes the lives of the people who live there. In the Bachelor of Architectural Studies in Urbanism, you'll learn about the structure of places, neighborhoods and cities, designing within the complex network of forces that shape our buildings, communities and landscapes. On this path to architectural practice and licensure, you'll enjoy a focus on urban design.

## Your career

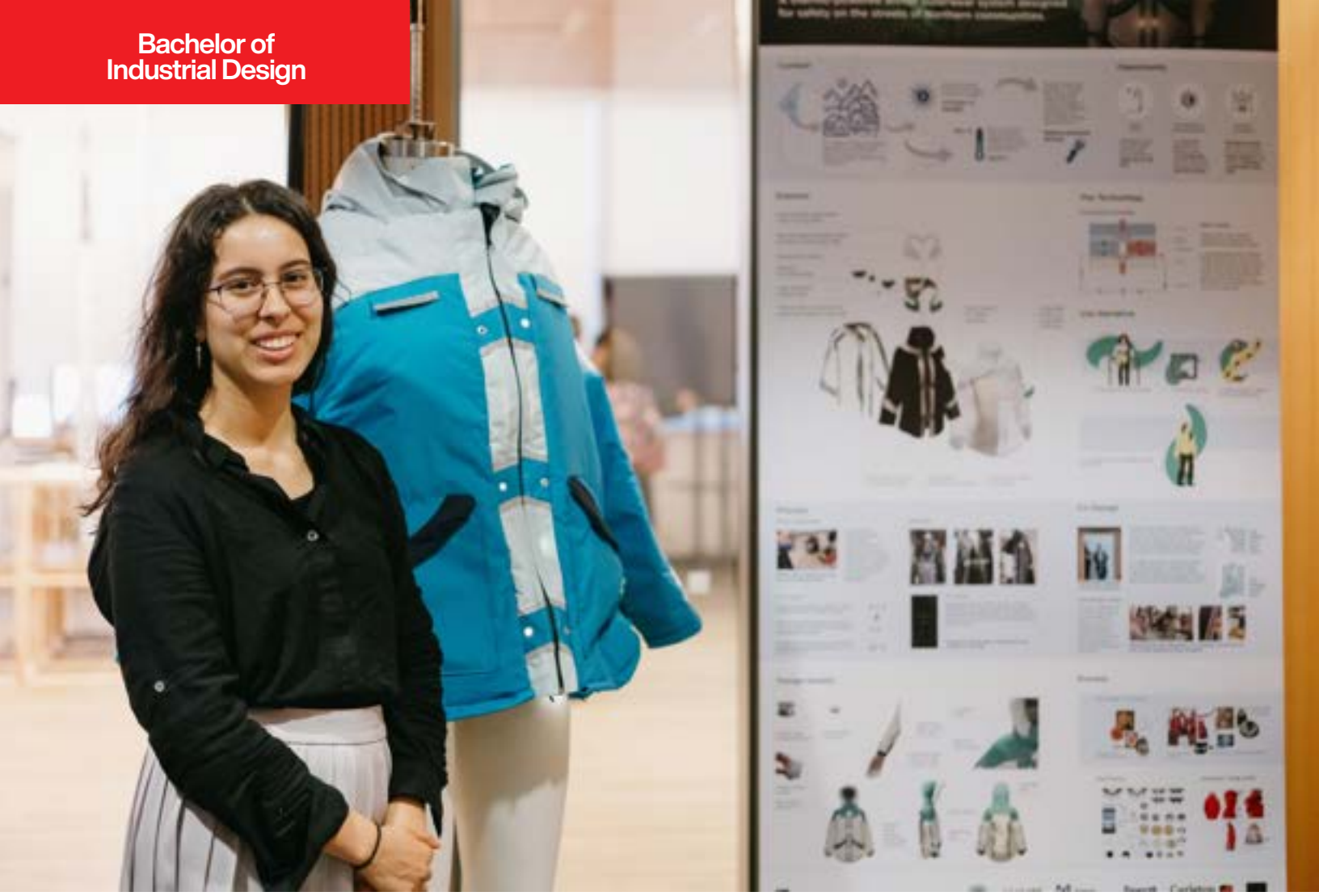
- art and production design in the television and film industries
- building conservation and heritage preservation
- furniture, graphic design and multimedia design
- public policy formulation
- sustainable design
- film, animation, theatre and stage design
- urban design and city planning

## Sample employers

- Arcadis
- Hobin Architecture
- IBI Group
- KPMB Architects
- Mattamy Homes
- National Capital Commission
- Parkin Architects Limited
- PCL Construction
- Public Services and Procurement Canada
- Stantec

## Other programs for consideration

You might also be interested in Industrial Design, Architectural Conservation and Sustainability Engineering, or Civil Engineering.



# Industrial Design

From the refillable water bottle on your desk to the shared bike at the corner, industrial designers shape the world around us. By designing the experience-based features, materials and interfaces of the products, services and systems we rely on, they influence how people care, connect and thrive. In the Bachelor of Industrial Design, students learn to work with government, business, community and academic research partners to design real solutions that explore sustainable, human-centred innovations and emerging futures.

## Your career

- consulting
- design
- entrepreneurship
- exhibit design
- furniture design
- graphic design
- interior design
- manufacturing
- packaging science
- product development

## Sample employers

- Canada Revenue Agency
- Enghouse Systems Limited
- Intelliware Software Development Inc.
- Nokia
- Public Services and Procurement Canada

## Other programs for consideration

You might also be interested in Interactive Multimedia and Design.

# Information Resource Management

We live in an age of information. Every single day, hundreds of terabytes of new data are generated. Carleton's Bachelor of Information Technology in Information Resource Management teaches students how to use emerging technologies like artificial intelligence to collect, manage, analyze and visualize this vast and ever-expanding trove of information. Jointly delivered with Algonquin College, graduates of the program earn a Bachelor of Information Technology from Carleton and a Library and Information Technician diploma from Algonquin.

### Your career

- data analytics
- data visualization
- digital information management
- e-commerce
- library and information science
- research data management
- web design and development

### Sample employers

- Adobe Canada
- Canadian Coast Guard
- Department of National Defence
- Employment and Social Development Canada
- National Research Council Canada
- Public Services and Procurement Canada
- Statistics Canada

### Other programs for consideration

You might also be interested in Interactive Multimedia and Design, Data Science, or Network Technology.


# Interactive Multimedia and Design

Animation is imagination come to life. And a great video game? Well, that can whisk you away to another universe entirely. Carleton's Bachelor of Information Technology in Interactive Multimedia and Design teaches students the skills to launch a career in the fast-paced and ever-evolving digital media production industry. Delivered jointly with Algonquin College, students earn a Bachelor of Information Technology from Carleton and an Advanced Diploma of Applied Arts from Algonquin.

## Streams

You will develop a broad background in Interactive Multimedia and Design and have the option of specializing in one of the following streams:

- **Animation and Visual Effects:** Emphasizing skills in 3D animation, compositing and visual storytelling.
- **Game Design and Development:** Emphasizing skills in design, development and implementation of interactive digital games, integrating principles of game mechanics, storytelling and user experience.
- **Web and User Interfaces/Experience:** Emphasizing skills in user-friendly, accessible digital interfaces and experiences, integrating web development, human-computer interaction and user-centred design principles.

## Your career

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

## Sample employers

- Adobe Canada
- Electronic Arts
- IBM Cognos
- ImageWorks
- Method Studios
- Shopify
- Sony Canada
- Ubisoft

## Other programs for consideration

You might also be interested in Industrial Design or Media Production and Design.

# Network Technology

Internet and cellular networks are the backbone of modern society. Designing, building, configuring and maintaining internet and cellular networks takes a great deal of expertise. The Bachelor of Information Technology in Network Technology teaches you to do it. Graduates of the Network Technology program earn both a Bachelor of Information Technology degree from Carleton, and a Computer Engineering Technology - Network Technology Ontario College Advanced Diploma from Algonquin College.

## Your career

- network design
- management and operation
- network architect
- computer hardware development
- systems administrator
- system integration
- telecom operation

## Sample employers

- Bell Canada
- Ciena
- Ericsson
- Health Canada
- Nokia
- Ottawa Paramedic Service
- Royal Canadian Mounted Police (RCMP)
- Statistics Canada

## Other programs for consideration

You might also be interested in Communications Engineering or Computer Science.

# Dates and deadlines

## September

Ontario Universities' Application Centre (OUAC) application opens

Ontario Universities' Fair (Toronto)

## October

Fall Open House

Program spotlight events

## November

Admission period begins

Program spotlight events

## December

Family Information Evening

## January 2026

Admission period continues

**January 15** — Deadline for Ontario high school students to submit applications to the OUAC*

## February

Program spotlight events

Applicant events

## March

March Open House

**March 1** — Deadline to apply for a Prestige Scholarship

**March 1** — Early application deadline*

**March 5** — Additional admission material deadlines*

## April

Program spotlight events

Applicant events

## May

Spring Open House

## June

**June 1 —** General application deadline for fall admission*

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

**June 8** — Deadline to accept an offer of residence and complete Residence Advanced Payment (RAP)

**June 30** — Deadline to apply for an Entrance Bursary

***Some programs have early application deadlines and additional admission material. admissions.carleton.ca/additional-admission-requirements**

# Your next steps

- [ ] **1. Carleton360**
  Create your Carleton360 account to receive customized information on your favourite programs. **360.carleton.ca**

- [ ] **2. Explore admission requirements**
  Once you know which program(s) you are interested in, review our admission requirements, including any prerequisite courses and supplemental application requirements (for select programs).

- [ ] **3. Apply online at OUAC**
  Apply to Carleton University through the Ontario Universities' Application Centre (OUAC) by the deadline. **ouac.on.ca**

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

- [ ] **4. Learn more about Carleton**
  While we review your application, follow us on social **@carleton_future** and join us at upcoming events to learn more about becoming a Carleton Raven.

- [ ] **5. Accept your admissions offer**
  After you receive your offer of admission, be sure to accept by the date indicated to reserve your spot in the program. Read through the entire admissions offer package for important details, including information on maintaining your offer, scholarships and residence.

- [ ] **6. Accept your residence offer**
  Once you accept your admissions offer, you can then accept your residence offer (if applicable) and pay the Residence Advanced Payment (RAP) online by June 8, 2026 to confirm your space.

- [ ] **7. Celebrate!!!**
  Celebrate all of your hard work and get excited about life as a Raven! Stay tuned to your email for any updates and advice on how to prepare for your time at Carleton.

**Explore what to do next:**
admissions.carleton.ca/your-next-steps

# Ontario admission requirements

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. Students are expected to present a minimum percentage grade and prerequisite average. The grade ranges apply to both averages. The overall 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. **admissions.carleton.ca/apply**

| Degree program | Areas of study | | Required prerequisite courses | Minimum cut-off |
|---|---|---|---|---|
| **Engineering** (BEng) | • Aerospace◆<br>• Biomedical and Mechanical◆<br>• Mechanical◆ | • Mechatronics◆<br>• Sustainable and Renewable Energy◆ | • Advanced Functions (MHF4U)<br>• Chemistry (SCH4U)<br>• Physics (SPH4U)<br>• One credit from Calculus (MCV4U), Biology (SBI4U), or Earth and Space Science (SES4U) (Calculus [MCV4U] recommended) | 82-86% |
| | • Architectural Conservation and Sustainability◆<br>• Biomedical and Electrical◆<br>• Civil◆<br>• Communications◆ | • Computer Systems◆<br>• Electrical◆<br>• Engineering Physics◆<br>• Environmental◆<br>• Software◆ | | 75-85% |
| **Architectural Studies*** (BAS) | • Conservation and Sustainability◆<br>• Design◆<br>• Urbanism◆ | | • English (ENG4U)<br>• Physics (SPH4U)<br>• Advanced Functions (MHF4U)<br>Portfolio Deadline: March 5 | 75-77% |
| **Industrial Design*◆** (BID) | | | • Advanced Functions (MHF4U)<br>• Physics (SPH4U)<br>Portfolio Deadline: March 5 | 75-77% |
| **Information Technology** (BIT) | • Information Resource Management (IRM)◆ | | • English (ENG4U)<br>• One Math credit (4U) | 75% |
| | • Interactive Multimedia and Design (IMD)*◆ | | • Advanced Functions (MHF4U)<br>Portfolio Deadline: March 5 | |
| | • Network Technology (NET)◆ | | • One Math credit (4U) | |

◆Co-operative education available ✶Early deadlines/additional admissions material, see page 30.


# Carleton's Campus

**The Carleton community is compassionate, connected and caring. Our collaborative students, faculty and staff are working together for a brighter, more inclusive and sustainable tomorrow.**

**GET TO KNOW YOUR CAMPUS**
carleton.ca/tours

**Discover these and many other reasons why Carleton is your best choice:**

**3rd**
Largest CO-OP PROGRAM in Ontario

**TOP 4**
for COMPREHENSIVE UNIVERSITIES in Canada*

**170+**
active clubs and societies


**Undergraduate Recruitment Office**

315 Pigiarvik (ᐱᑎᐊᖅᑲᒃ)
1125 Colonel By Drive
Ottawa ON K1S 5B6 Canada
1-613-520-3663
1-888-354-4414
(toll-free in Canada)
admissions@carleton.ca

**Faculty of Engineering and Design**

3010 Minto Centre
1125 Colonel By Drive
Ottawa ON K1S 5B6 Canada

@carleton_engdesign

Faculty of Engineering and Design - Carleton University


*Maclean's University Rankings, 2025

Explore 200+ programs
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Carleton University