ARE YOU READY TO MAKE YOUR FUTURE?

Learn from leading researchers in our world-class facilities, state-of-the-art labs, and broad, interdisciplinary collaborations.

Build your network through our extensive CO-OP program and our strong connections to industry.

Turn your ideas into reality through our entrepreneurship and design ecosystem, which features advanced prototyping and manufacturing facilities, competitive teams, entrepreneurial competitions, start-up growth programs, and more.

Live a transformative and fulfilling university experience by studying in English or French at uOttawa.

Choose from various program options to help you acquire the skills you need to better prepare for the many challenges and opportunities you will face in today’s—and tomorrow’s—job market.

Study right in the heart of the National Capital Region, which is also the number one tech hub in Canada.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>Study in the National Capital Region</td>
</tr>
<tr>
<td>03</td>
<td>Why choose uOttawa?</td>
</tr>
<tr>
<td>04</td>
<td>Facilities just for you!</td>
</tr>
<tr>
<td>06</td>
<td>Salaries and employment</td>
</tr>
<tr>
<td>07</td>
<td>Alumni</td>
</tr>
<tr>
<td>08</td>
<td>Our CO-OP program</td>
</tr>
<tr>
<td>10</td>
<td>International opportunities</td>
</tr>
<tr>
<td>11</td>
<td>Scholarships</td>
</tr>
<tr>
<td>12</td>
<td>CEED</td>
</tr>
<tr>
<td>14</td>
<td>Clubs and competitive teams</td>
</tr>
<tr>
<td>16</td>
<td>Our programs</td>
</tr>
<tr>
<td>18</td>
<td>CSI – Computer Science</td>
</tr>
<tr>
<td>19</td>
<td>SDS – Data Science</td>
</tr>
<tr>
<td>20</td>
<td>SEG – Software Engineering</td>
</tr>
<tr>
<td>21</td>
<td>CEG – Computer Engineering</td>
</tr>
<tr>
<td>22</td>
<td>ELG – Electrical Engineering</td>
</tr>
<tr>
<td>23</td>
<td>PHY/ELG – Physics and Electrical Engineering</td>
</tr>
<tr>
<td>24</td>
<td>CHG – Chemical Engineering</td>
</tr>
<tr>
<td>25</td>
<td>BCH/CHG – Biotechnology</td>
</tr>
<tr>
<td>26</td>
<td>MCG – Mechanical Engineering</td>
</tr>
<tr>
<td>27</td>
<td>MGB – Biomedical Mechanical Engineering</td>
</tr>
<tr>
<td>28</td>
<td>CVG – Civil Engineering</td>
</tr>
<tr>
<td>29</td>
<td>Learning from our peers and alumni</td>
</tr>
<tr>
<td>30</td>
<td>Admission requirements</td>
</tr>
<tr>
<td>32</td>
<td>Continuing your studies</td>
</tr>
<tr>
<td>33</td>
<td>How to apply</td>
</tr>
</tbody>
</table>
STUDY IN
THE NATIONAL
CAPITAL REGION

Ottawa +
Play +
Work +
Grow =
TALENT

1,700+ knowledge-based companies with 68,000+ employees
44+ national and academic research labs
Over $4.7 billion invested in Ottawa technology companies in the last ten years

800 kilometres of bike paths
430+ kilometres of cross-country ski trails
7.8 kilometres of the world’s largest skating rink, the Rideau Canal, Ottawa’s very own UNESCO World Heritage Site

#3 in quality of life for large cities in North America, 19th globally
Ottawa is the least expensive Canadian city included in the Mercer rankings
Population of 1.3M

#1 for most educated workforce in Canada
#1 for most technology-intensive city in Canada
#1 for highest concentration of scientists and engineers in Canada, and #2 in North America after Silicon Valley

Source: Invest Ottawa, the Canadian Trade Commissioner Service & mercer.com
WHY CHOOSE uOTTAWA?

Learn or perfect your French
The University of Ottawa is the world’s largest French-English bilingual university and is among the top 10 universities in the world for a number of disciplines offered in French.

The Gee-Gee spirit
Whether football, basketball, hockey, soccer or volleyball, or any of our 35+ competitive or intramural sports is your game, everyone is a Gee-Gee!

Live and eat on campus
Our 10 on-campus residences provide comfort and convenience, allowing you to make friends while focusing on your studies. And, with 27 dining options on campus, diversity is guaranteed. Take your pick of more than a dozen cafés, the 24/7 Dining Hall, pubs, food trucks and more.

Get the support you need
Delivered by professionals and fellow students who care about your success and your well-being, the programs and services of SASS (Student Academic Success Service) complement your classroom learning and support you in achieving your academic and professional goals.
FACILITIES JUST FOR YOU!

**uOttawa Richard L’Abbé Makerspace**
Invent, build and play at the uOttawa Richard L’Abbé Makerspace. This student-run space is equipped with 3D printers, Arduinos, CNC mills, Handibots, laser cutters and much more, allowing everyone to collaborate and build their dream projects for free!

**Makerlab**
The Makerlab offers a course-based laboratory setting focused on rapid prototyping technologies. University courses can include lab sessions at the Makerlab to give students a structured experience learning about many of the technologies available at the uOttawa Richard L’Abbé Makerspace.

**Sandbox**
The Sandbox provides a collaborative space for engineering students involved in small projects, pre-professional competitions and entrepreneurial projects.

*Over 40 3D printers available for students to work on their design projects*
STEM
Our new STEM (science, technology, engineering, mathematics) Complex is an interdisciplinary research and teaching facility designed to foster connections between different faculties, encourage new ways of thinking, enable experiential learning, and promote entrepreneurship. This state-of-the-art facility brings together departments from the faculties of Engineering and Science under the same roof.

Manufacturing Training Centre (MTC)
The Manufacturing Training Centre (MTC) provides training on a variety of traditional equipment, such as lathes, milling machines and saws, as well as on the latest processes, such as additive manufacturing. Students can register for free workshops throughout the year.

Brunsfield Centre
The Brunsfield Centre provides engineering students with tools and equipment to design, fabricate and test complex prototypes. Projects have included different types of vehicles, high-performance hybrid motor systems, highly fuel-efficient and off-road vehicles, as well as concrete toboggans, electrical energy storage and control systems.

John McEntyre Team Space
The John McEntyre Team Space provides pre-competitive teams involved in large-scale projects with the space and infrastructure required to succeed.

Simon Nehme Design Commons
This brand new pop-up space is open to student teams looking to brainstorm and develop their ideas.
WHY STUDY ENGINEERING OR COMPUTER SCIENCE?

Degrees that pay off

The average starting salary for computer science graduates is $68,000. The most popular first jobs for computer science graduates include:

- Web developer: $52,000
- Software developer: $68,000
- Business analyst: $74,000
- Consultant: $74,000
- Project manager: $75,000

The average starting salary for engineering graduates is $76,000. The most common jobs for engineering graduates include:

- Mechanical engineer: $73,000
- Design engineer: $73,000
- Project engineer: $75,000
- Electrical engineer: $79,000
- Software engineer: $80,000

Source: careers.workopolis.com

Benefit from a high employment rate

91.7% of uOttawa engineering and 100% of uOttawa computer science alumni find jobs in their field within two years of graduating.

Source: uOttawa.ca/institutional-research-planning/resources/facts-figures/performance-indicators

Earn a competitive salary

Your hard work and dedication will pay off when you graduate with a degree in engineering or computer science. Many recent studies in Canada and in North America have shown that engineering and computer science graduates systematically place at the top of the starting salary scale among all university undergraduate programs of study. Over the years, engineers can expect their salaries to continuously increase. Here are the average salaries of an engineer working in Ontario according to the level of responsibility and years of experience.

Source: 2019 Mercer OSPE National Engineering Compensation Survey Member Market Summary

BASE SALARY & TOTAL CASH COMPENSATION BY ENGINEERING RESPONSIBILITY LEVEL

<table>
<thead>
<tr>
<th>Average 4 years of experience</th>
<th>Average 9 years of experience</th>
<th>Average 14 years of experience</th>
<th>Average 22 years of experience</th>
<th>Average 26 years of experience</th>
<th>Average 29 years of experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cash</td>
<td>$65.2</td>
<td>$80.3</td>
<td>$103.1</td>
<td>$117.2</td>
<td>$131.2</td>
</tr>
<tr>
<td>Base Salary</td>
<td>$65.1</td>
<td>$80.2</td>
<td>$103.0</td>
<td>$117.1</td>
<td>$131.1</td>
</tr>
</tbody>
</table>

$180,000 $160,000 $140,000 $120,000 $100,000 $80,000 $60,000 $40,000 $20,000 $0
WHERE ARE OUR ALUMNI?

Our engineering and computer science alumni lead diverse and exciting careers. Here are just a few examples of our outstanding graduates and where they are working now.

Heather Abbott
BASc in Chemical Engineering (1993)
Senior Vice President, Corporate Solutions Technology at NASDAQ OMX

Emilie Cobbold
BASc in Computer Engineering (2017)
Business & Integration Arch Specialist at Accenture

Tunch Akkaya
CEO and Co-founder at GameStrat

Anita Popescu
BSc in Computer Science (2019)
Photos Engineer at Apple

Daniel Lanthier
BASc in Computer Engineering (2005)
Engineering Manager at CircleCI

Elisha Pruner
BASc in Mechanical Engineering (2008) and MASc in Mechanical Engineering (2014)
Senior Software Developer at Realize Medical Inc.

Andre Richards
BSc in Computer Science and Management Information Systems (2011)
Co-founder and Chief Technology Officer at MicroMetrics

Ali Pourshahid
PhD in Computer Science (2014)
Vice President, Cloud and Developer Experience at Solace

Jerry Zhang
BASc in Software Engineering (2019)
Software Developer at Mitel and Co-Founder of BubbleHR

Sarah de Carufel
BASc in Civil Engineering (2014) and MASc in Civil Engineering (2018)
Manager, Engineering Solutions at Giatec

“Engineering taught me problem solving, how to learn to learn, and also how to have the confidence to learn […] I never feel like there’s a problem we can’t solve; you have to break things down into goals that you work towards and you will get where you want to go.”
– Heather Abbott

“…I was very fortunate because the program I picked was a mix between in depth computer science and engineering […] So I felt a lot more prepared going into the startup world than someone who is just an engineer or just in business. I felt I had a good balance of both. Where it has helped me specifically is understanding the fundamentals of all the tools and infrastructure that we use.”
– Andre Richards

Featured on the Make the Future podcast.
EXPERIENCE YOUR FUTURE CAREER AND HELP FUND YOUR STUDIES THROUGH THE CO-OP PROGRAM

Combine study and work experience

With the Co-operative Education (CO-OP) Program, you can gain hands-on experience in your field of study while completing your degree. CO-OP can be added to any of the eleven undergraduate programs offered by the Faculty. The University of Ottawa CO-OP program has been running for over 30 years, and is now the second-largest university program of its kind in Ontario, and the fifth-largest in Canada. uOttawa CO-OP also boasts a very high placement rate.

Emmanuelle Keogh, a Biomedical Mechanical Engineering student, working at Agnico Eagle Mines in Nunavut.

David Wen, a Civil Engineering student, working with PSPC on Parliament Hill in Ottawa.
As a Faculty of Engineering student, you can benefit significantly from the CO-OP program:

**Find work** (96% faculty placement rate for 2019*)

**Earn a salary** while completing your program. On average, engineering students earn 18$/h during their first CO-OP work term, and 22$/h by their last CO-OP work term**

**Find a public or private sector employer** in Canada or even abroad

**Build your professional skills** and increase your knowledge

**Network with valuable contacts** who can help you kick-start your career

**Benefit from a quality program** that meets national criteria and standards and is approved by the Canadian Association for Co-operative Education

**Alternate between work and study terms.** Start working in the summer of your second year and then alternate between four-month work and study terms. Eight- and twelve-month work terms are also available

---

* Based on 2019 CO-OP data

** Based on summer 2019 CO-OP data

---

**Work-Study sequences**

The majority of students follow this sequence, although it can be adapted to suit your circumstances.

<table>
<thead>
<tr>
<th>Year of study</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Study</td>
<td>Study</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Study</td>
<td>Study</td>
<td>Work 1</td>
</tr>
<tr>
<td>3</td>
<td>Study</td>
<td>Work 2</td>
<td>Study</td>
</tr>
<tr>
<td>4</td>
<td>Work 3</td>
<td>Study</td>
<td>Work 4</td>
</tr>
<tr>
<td>5</td>
<td>Study</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

---

“CO-OP helps you decide where you want to work […] A lot of employers look at how a student thinks, and for them, creativity and critical thinking is something that stands out.”

Melody Habbouche - Graduate, Computer Engineering (2019)
With the support of this scholarship, I traveled to Japan to work for Tokyo Gas for 8 months. I got to compliment my mechanical engineering education with hands-on materials science experience, while also learning about Japanese culture, making new friends, and traveling all over the country. I recommend that all students take advantage of these incredible opportunities!

Nagma Mathur - Graduate, Mechanical Engineering (2020)
The University of Ottawa has one of Canada’s leading scholarship and bursary programs, with over $42 million in scholarships and bursaries distributed every year. In addition to the generous University program, engineering and computer science students have access to a wide range of admission scholarships offered by the Faculty of Engineering.

**SCHOLARSHIPS TO SUPPORT YOUR STUDIES IN ENGINEERING**

Application deadline: February 28, 2021

For bursary criteria and to apply: scholarships.uOttawa.ca

---

**DEAN’S MERIT SCHOLARSHIP**
Number: 35
Value: Depends on admission average; $5,000 awarded for 95–100% and $4,000 for 90–94.9%

**DR. TYSEER ABOLNASSR SCHOLARSHIP** *
Number: Variable
Value: $2,000 to $2,500

**ONTARIO PROFESSIONAL ENGINEERS FOUNDATION FOR EDUCATION SCHOLARSHIP** *
Number: One for a male student and one for a female student
Value: $1,500

**FACULTY OF ENGINEERING MEMORIAL SCHOLARSHIP** *For female students*
Number: 7
Value: $2,000

**NORTEL FOUNDING SCHOLARSHIP FOR THE SCHOOL OF INFORMATION TECHNOLOGY AND ENGINEERING (SITE)**
Number: 2
Value: $2,500 (minimum)

**UNDERGRADUATE RESEARCH OPPORTUNITY PROGRAM (UROP) SCHOLARSHIP**
Number: Variable
Value: $1,000

**CISCO SYSTEMS CANADA CO. FIRST ENGINEERING SCHOLARSHIP**
Number: 1
Value: $5,000

**FACULTY OF ENGINEERING’S MAKER AWARD**
Number: 1
Value: $10,000
*See p.12 for more details*

**DROSTE-KENNEDY ADMISSION SCHOLARSHIP IN CIVIL ENGINEERING**
Number: Variable
Value: $500 (minimum)

**MERIT SCHOLARSHIP OF THE FACULTY OF ENGINEERING**
Number: Variable
Value: $500 (minimum)

**PHILIPPE ARVISAIS MEMORIAL SCHOLARSHIP FOR WOMEN STUDENTS IN ENGINEERING** *
Number: Variable
Value: $1,000

**ADOBE SYSTEMS CANADA SCHOLARSHIP** *
Number: Variable
Value: $2,000 (minimum)

**RIO TINTO ALCAN PRIMARY METAL IN ENGINEERING SCHOLARSHIP**
Number: 1
Value of the scholarship: $3,000

---

*Application deadline is October 31, 2021*
DEVELOP YOUR ENTREPRENEURIAL AND ENGINEERING DESIGN SKILLS

Our Centre for Entrepreneurship and Engineering Design (CEED) offers a variety of education and experiences opportunity for engineering students! engineering.uOttawa.ca/CEED

Curriculum focused on entrepreneurship
Students can add the Engineering Management and Entrepreneurship option, which is available for most of our undergraduate programs. We also offer a Master’s in Engineering Management for students who wish to pursue graduate studies.

Sharpen your entrepreneurial and communications skills through competitions
The Entrepreneurial Idea, Entrepreneurship Concepts and Launching Entrepreneurs annual competitions let you build and apply your knowledge, with $60,000 in prize money up for grabs. Design Day offers you the opportunity to showcase your engineering design projects. Many other competitions take place on campus through the Entrepreneurship Hub and the Telfer School of Management.

Maker Award
Do you have a passion for design, technology and prototyping? Do you love creating, innovating and discovering new ways of doing things? If so, you might be eligible to win the Faculty of Engineering’s Maker Award.

The $10,000 award has been created to recognize students with inspiring achievements in the fields of engineering, design and technology.

Simon Nehme Summer School in Engineering Entrepreneurship
This program leverages the growing entrepreneurial and innovative community at the University of Ottawa and in the Ottawa region. The School offers hands-on workshops and events, delivered by members of the entrepreneurial community as well.
as academia. Participants will learn about ideation, pitching, customer discovery, marketing, sales and legal issues for start-ups.

Entrepreneurial CO-OP and internships
As a CO-OP student at our Faculty, you can work on your entrepreneurial idea during a CO-OP work term. Imagine getting financial support to work on your own business plan! Or, if you prefer, you can try working in a start-up company by doing an entrepreneurial internship!

Available funding for student initiatives
Want to participate in pre-professional design competitions? Take part in conferences related to engineering or computer science? Create a new club? Organize a social gathering? Funding for such student projects and initiatives is now more accessible than ever, thanks to the support of the Centre for Entrepreneurial Engineering Design (CEED), the Brunsfield Centre, the Engineering Endowment Fund (EEF) and the Faculty of Engineering. These funds can be used by both undergraduate and graduate students from the Faculty of Engineering, to support any project or initiative which benefits the student body.

Get ready to launch!
The MakerLaunch program provides student and recent alumni entrepreneurs with the support necessary to fast track commercialization of uOttawa Engineering technologies, and launch new tech startups.
CLUBS AND COMPETITIVE TEAMS

Engineering Student Society (ESS)
and Computer Science Student Association (CSSA)
The ESS and CSSA represent uOttawa Engineering students; these are your associations. Get involved in your student community! You will come to know your colleagues better by participating in the various activities and events put on by and for students. Find out more about the ESS at essaeg.ca and the CSSA at cssa-aei.ca

Other sub-associations and clubs include:
- Canadian Society for Civil Engineering (CSCE)
- Chemical Engineering Student Society (ChESS)
- Mechanical Engineering Students Society (MESS)
- Iron Otis
- uOttahack
- Engineering without Borders
- Jeux de Génie
- IEEE Women in Engineering

“After my first year, I became involved with the Engineering Student Society (ESS) in many capacities, including the executive team, in addition to participating in various engineering competitions and events. The opportunity to engage with others as well as create platforms for problem solving and get involved in the student community has helped me grow as a student and future engineer.”

- Rukyya Badreldin
Graduate, Civil Engineering (2019)
Competitive teams

Join a team and apply your classroom knowledge to fun and challenging real-world problems! As an engineering student, you can join one of our competitive teams, get involved in pre-professional competitions, and work on large-scale projects. These teams represent the University at diverse international competitions.

Check out our website for more details on associations and clubs:

engineering.uOttawa.ca/student-experience/clubs-and-competitive-teams
Choose from eleven undergraduate programs, each offering top quality education in engineering and computer science. Not only will you be well prepared to practice your profession, but you will also be more than able to meet the ever-changing needs of society.

**PROFESSIONAL ACCREDITATIONS**

All Engineering programs are accredited by the Canadian Engineering Accreditation Board of Engineers Canada.  
www.engineerscanada.ca

The Honours in BSc in Computer Science and BASc in Software Engineering are accredited by the Computer Science Accreditation Council of CIPS.  
www.cips.ca

**Customize your degree**

Get more than just a degree—personalize your program to suit your interests! You can choose to add one of these two options to most engineering or computer science programs:

**Engineering Management and Entrepreneurship option**

This option provides students with the opportunity to develop their entrepreneurial spirit and the tools to develop their management skills. Students learn about product development, financing, marketing and building a business plan. You may add this option to your program without having to prolong your degree.

**BSc in Computing Technology as a second degree**

In many industries—such as automotive, aerospace and construction—the integration of mechanical, electrical and computer engineering is very high. Sensors, controllers and microprocessors are integrated into cars, airplanes, smart houses, and even smart roads; computing technologies are omnipresent! In a competitive job market, this option can make your résumé stand out from the others. Computing Technology is offered as a second degree and consists of courses that are common to all programs as well as courses that can complement your specific engineering program.

Or you may want to choose a specific option according to your choice of program. The list of available options can be consulted under each program’s page.
# SCHOOL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

The School of Electrical Engineering and Computer Science (EECS) is part of the Faculty of Engineering. This interdisciplinary school combines four cutting-edge programs. Having these closely-related programs together in one academic unit means that you benefit from professors with interdisciplinary knowledge gained from teaching in one or more of the four programs offered by the school.

<table>
<thead>
<tr>
<th>Program description</th>
<th>Electrical Engineering (ELG)</th>
<th>Software Engineering (SEG)</th>
<th>Computer Science (CSI)</th>
<th>Computer Engineering (CEG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offers a solid foundation in mathematics and physics. Students learn about electricity, circuit theory and electronics to design communication devices, power generators, solid-state circuits, microelectronic devices and computing devices.</td>
<td>Studies the systematic design and development of largescale software within time and cost constraints. Students learn how to apply engineering principles through various stages: requirements analysis, measurement, modelling, validation, design, construction, testing, documentation, and management.</td>
<td>Combines the fundamental study of computation and information processing with its application to the world around us. Computer scientists build fast, reliable and secure software systems to organize, store and analyze information.</td>
<td>Combines fundamental principles from both electrical engineering and computer science, leading to more specialized studies in microprocessor-based systems, computer architecture, programming concepts, real-time systems and computer control in robotics.</td>
<td></td>
</tr>
<tr>
<td>Options</td>
<td>BASc in Electrical Engineering and BSc in Computing Technology</td>
<td>Engineering Management and Entrepreneurship</td>
<td>Honours BSc in Computer Science and Honours BSc in Mathematics (Data Science)</td>
<td>Engineering Management and Entrepreneurship</td>
</tr>
<tr>
<td>Examples of subject matter</td>
<td>Circuit theory, electronics, telecommunications, networks, photonics, power generation, microwaves.</td>
<td>Software construction, requirements engineering, software design and architecture, analysis and design of user interfaces.</td>
<td>Data structures and algorithms, design and analysis of algorithms, artificial intelligence, WWW structures, techniques and standards, and databases.</td>
<td>Electronics and circuit theory, software construction, computer architecture, real-time systems design, and computer network design.</td>
</tr>
</tbody>
</table>
COMPUTER SCIENCE (CSI)

Computer Science at the School of Electrical Engineering and Computer Science combines the study of computation and information processing fundamentals with their application in the world around us. Computer scientists build fast, reliable, scalable and secure software systems to organize and analyze information. The honours curriculum comprises advanced topics in databases, artificial intelligence, computer graphics, security, distributed computing and algorithm design, culminating in an honours project. This program teaches graduates how to use their creative and innovative talents to conceive, design and implement software systems. The French Immersion Stream is now available to all students in the Computer Science program. Our degrees are very flexible and include options, minors, and a major, which can be used to explore connections between computer science and many other fields of study.

Career opportunities
Software technologies and systems developer in many diverse fields, including entertainment, government and business.

Examples of courses in Computer Science

- **CSI 4139** Design of Secure Computer Systems
- **CSI 3140** WWW Structures, Techniques and Standards
- **CSI 4106** Introduction to Artificial Intelligence
- **CSI 4142** Fundamentals of Data Science
- **CSI 4118** Computer Networks Protocols
- **CSI 4108** Cryptography
- **CSI 3120** Programming Language Concepts
- **CSI 2372** Advanced Programming Concepts with C++
- **CSI 2110** Data Structures and Algorithms
- **CSI 4141** Real-Time Systems Design
- **CSI 4130** Computer Graphics

Undergraduate programs (bachelor’s degrees)

- Honours BSc in Computer Science
- Honours BSc in Computer Science, Management and Entrepreneurship Option
- Honours BSc in Computer Science, Data Science option
- Joint Honours BSc in Computer Science and Mathematics
- Major in Computer Science
- Minor in Computer Science*
- Minor in Computer Science for Scientists*

*Complimentary program offered only as a second discipline. Registration starts in second year.

The French Immersion Stream
The French Immersion Stream (EFS) allows you to take one third of your courses in French. You choose which courses to take in French and which to take in English. If you choose to take a minimum number of French courses, you could qualify for a $1,000 French Studies bursary.

Accelerated Stream
You can complete your Honours BSc with Specialization in Computer Science and your Master of Computer Science within five years with the Accelerated Stream.
DATA SCIENCE  (CSI/MAT)

Every day all over the world, large amounts of data are generated by business, scientific and social activities. Data-driven approaches to decision making in areas as diverse as medicine, business, sports, advertising, and entertainment are now essential. Data Science is the study, application, and development of methods to learn from this data. These are essential to understand, predict, and make improvements in management strategies, products, services, advertising campaigns, public health and safety, and many other areas. These methods combine elements of mathematics, computer science and statistics. Students in this program will obtain significant “hands-on” experience through various projects and a Data Science Laboratory.

Career opportunities
- Data scientist
- Business intelligence analyst
- Public policy development
- Artificial intelligence

Examples of courses in Data Science

MAT 3375 Methods of Machine Learning
SDS 3386 Data Science Lab
CSI 4106 Introduction to Artificial Intelligence
CSI 4142 Fundamentals of Data Science

Undergraduate programs
- Honours BSc in Computer Science and Honours BSc in Mathematics (data science)

This innovative and unique 5-year integrated program is offered in both English and French along with the French Immersion Stream.

“"In order to stay relevant, you have to have a deep understanding of the theory behind algorithms; this is precisely the aim of our data science program. We have created the undergraduate program that we all would have taken.”

Marcel Turcotte
Professor, School of Electrical Engineering and Computer Science
SOFTWARE ENGINEERING (SEG)

Software engineering is a CO-OP only program that emphasizes innovation and teamwork to develop practical, solution-driven thinking. During their fourth-year project, students in this program can form teams and leverage their work experience to create real applications; some students even start their own companies. They learn how to apply engineering principles—including rapid prototyping, requirements analysis, system modelling, design, implementation, testing, and project management—to develop software. Software engineers are key professionals in fields such as high tech, finance, telecommunications, government, health care, transportation, and entertainment. The French Immersion Stream is available to students who want to continue their French immersion studies during their university career.

Career opportunities
- Software engineer
- Systems architect
- Computer security analyst
- Quality assurance engineer
- Video game designer
- Mobile application developer
- Systems analyst
- User interface designer
- Telecommunications engineer

Examples of courses in Software Engineering

SEG 3101 Software Requirements Analysis
SEG 3102 Software Design and Architecture
SEG 3103 Software Quality Assurance
SEG 3125 Analysis and Design of User Interfaces
SEG 4135 Cloud Systems and Networks
SEG 4145 Real Time and Embedded Software Design

Undergraduate programs (bachelor’s degrees)

- BASc in Software Engineering (CO-OP)
- BASc in Software Engineering (CO-OP), Engineering Management and Entrepreneurship Option

Consult the full course sequence at engineering.uOttawa.ca.
Courses are offered in English and in French. Some advanced courses are offered in English only.

"Software Engineering is a constantly changing field with new technologies emerging all the time. My program gives me the tools, experience and foundational knowledge to be able to embrace these changes and any future changes so that I can always stay ahead in my career."

- Ian Desson
4th Year, Software Engineering
COMPUTER ENGINEERING (CEG)

Building on a solid foundation of traditional engineering skills, this program covers many different aspects of computer software and hardware, and allows for more specialized studies in microprocessor-based systems, computer architecture, programming concepts, real-time operating systems, software engineering, and robotics. This program provides multiple paths to diverse careers.

Career opportunities
- Hardware designer
- Computer applications engineer
- Embedded microsystems engineer
- Wireless & network systems technical manager
- Software developer
- Systems engineer

Examples of courses in Computer Engineering

CEG 3156 Computer Systems Design
CEG 4158 Computer Control in Robotics
CEG 4166 Real-Time Systems Design
CEG 4316 Digital Image Processing
CEG 4188 Higher Layer Network Protocols
CEG 4186 Wireless Networks
CEG 4190 Computer Network Design

Undergraduate programs (bachelor’s degrees)
- BASc in Computer Engineering
- BASc in Computer Engineering, Engineering Management and Entrepreneurship Option

"My program grants me the opportunity to explore various aspects in the field of computer engineering including software programming, hardware development, and electrical designs. Additionally, through lab work, I've been able to expand my skill set and take charge of my own learning outside of the classroom.”
- Marie Joe Sannan
4th Year, Computer Engineering with Engineering Management and Entrepreneurship

Consult the full course sequence at engineering.uOttawa.ca.
All courses are offered in English and most courses are available in French.
ELECTRICAL ENGINEERING (ELG)

Electrical engineering is at the heart of today’s exciting advances in technology. With five technical specializations—communications, systems, electronics, microwave and photonic, and power and sustainable energy—our curriculum will enable you to influence how the world’s communities communicate, generate sustainable energy, and cure diseases. As an electrical engineer, you will work with other engineers or scientists on emerging technologies. The Engineering Management option will provide you with the necessary skills to pursue entrepreneurial activities and start your own technology-related business. The double degree program—BASc in Electrical Engineering and BSc in Computing Technology—will put you at the intersection of two areas that propel technological development.

Career opportunities
- Electronics and chip designer
- Electromagnetics engineer
- Communications engineer
- Signal-processing engineer
- Product engineer
- Automation engineer
- Avionics engineer
- Biomedical engineer
- Power systems and renewable energy engineer

Examples of courses in Electrical Engineering

ELG 4115  Microwave Circuits
ELG 4117  Optoelectronics and Optical Components
ELG 4126  Sustainable Electrical Power Systems
ELG 4118  Wave Propagation and Antennas
ELG 4179  Wireless Communication Fundamentals
ELG 4159  Integrated Control Systems
ELG 4178  Optical Communications and Networking
ELG 4125  Electric Power Transmission, Distribution and Utilization

Undergraduate programs (bachelor’s degrees)

- BASc in Electrical Engineering
- BASc in Electrical Engineering, Engineering Management and Entrepreneurship Option
- BASc in Electrical Engineering and BSc in Computing Technology

Consult the full course sequence at engineering.uOttawa.ca.
All courses are offered in English and most courses are available in French.

“...This program has not only helped me get the hands-on experience I was looking for, but it has also taught me the value of teamwork. I found that since starting I have been able to apply my knowledge into everyday life and teach others around me the importance of power, electronics, and so much more in the technology we use on a daily basis.”

- Zoya Abou-Jaish
4th Year, Electrical Engineering
Discover the fundamental laws of nature and then apply this knowledge to design breakthrough technologies that will transform our society. While physics probes big questions ranging from the origin of the universe to the workings of the quantum world, electrical engineering underlies the technologies that are ubiquitous to our modern world, from power generation to the computer chip. By teaching you the foundations of how nature works, and then how to innovate with this knowledge, this integrated program will uniquely equip you to tackle societal and technological problems facing us and future generations. At the end of five years, you will earn two degrees, one in physics and one in electrical engineering, and will be truly equipped to defy the conventional.

Career opportunities

• Physicist
• Electrical engineer
• Industrial research and development scientist or engineer
• Avionics engineer
• Power systems and renewable energy engineer
• Biomedical researcher or engineer

Examples of courses in Physics and Electrical Engineering

GNG 1103 Engineering Design
PHY 2311 Waves and Optics
PHY 3355 Statistical Thermodynamics
PHY 4370 Quantum Mechanics
PHY 4382 Introduction to Solid State Physics
ELG 2138 Circuit Theory I
ELG 3126 Random Signals and Systems
ELG 4115 Microwave Circuits
ELG 4126 Sustainable Electrical Power Systems

Undergraduate programs (bachelor’s degrees)

• Honours BSc with Specialization in Physics and BASc in Electrical Engineering

What really makes this program special is the community of students around it. uOttawa Engineering students have created a family who seek to help each other succeed in life and in their academic field.”

- Madison Smrtka
4th year, Physics and Electrical Engineering
Chemical engineering is at the intersection of many disciplines, linking knowledge of basic and applied sciences, economics, and health and safety. Chemical engineering graduates use a series of operations to sustainably process raw natural materials into finished products. They work in any number of industries and during their careers, they may face a variety of challenges, such as optimizing processes and monitoring pollution, converting waste materials into renewable energy, processing foods and drugs, and manufacturing new materials.

**Career opportunities**
- Chemical engineer
- Process engineer
- Petrochemical engineer
- Biotechnological engineer
- Environmental engineer
- Biomedical engineer

**Examples of courses in Chemical Engineering**
- CHG 3112 Process Synthesis, Design and Economics
- CHG 3316 Transport Phenomena
- CHG 3335 Process Control
- CHG 4244 Plant Design Project
- CHG 4305 Advanced Materials in Chemical Engineering
- CHG 4307 Clean Processes and Sustainable Development
- CHG 4343 Computer-Aided Design in Chemical Engineering
- CHG 4381 Biochemical Engineering

**Undergraduate programs (bachelor’s degrees)**
- BASc in Chemical Engineering
- BASc in Chemical Engineering, Engineering Management and Entrepreneurship Option
- BASc in Chemical Engineering, Environmental Engineering Option
- BASc in Chemical Engineering and BSc in Computing Technology

Consult the full course sequence at engineering.uOttawa.ca.
All courses are offered in English. French courses are available in first and second year, and are very limited in third and fourth year.

"My program allows me to work in an exciting field where I can use my knowledge and apply it to industry. I am learning in a stimulating environment both on the theoretical and practical level, which will definitely help me in my future career."

- Anick St-Denis
- 4th year, Chemical Engineering
Learn how living organisms grow and develop, and how we can use this knowledge to create manufacturing processes, chemical products and life-saving drugs. Did you know that proteins, yogurt and biodiesel are all biotechnology products? So are insulin and the chickenpox vaccine, both of which have saved or improved the lives of millions. The Biotechnology program covers the fields of biology, chemistry, mathematics, engineering science and engineering design. Students in this program receive two degrees upon graduation: a BSc in Biochemistry and a BASc in Chemical Engineering.

To be admitted into this program, applicants must submit their application to the Faculty of Science.

Career opportunities

- Process engineer
- Biomedical engineer
- Chemical engineer
- Environmental engineer
- Biochemist
- Biotechnology engineer
- Cell biologist
- Patent-law specialist

Examples of courses in Biotechnology

- BCH 3125 Protein Structure and Function
- BCH 3170 Molecular Biology
- BCH 4172 Topics in Biotechnology
- BIO 3124 General Microbiology
- CHG 3127 Chemical Reaction Engineering
- BCH 4101 Human Genome Structure and Function
- CHG 4381 Biochemical Engineering
- CHG 4244 Plant Design Project

Undergraduate programs (bachelor's degrees)

- Honours BSc in Biochemistry and BASc in Chemical Engineering (biotechnology)

To be admitted to this program, applicants must submit their application to the Faculty of Science.

Consult the full course sequence at engineering.uOttawa.ca.

All courses are offered in English. French courses are available in first, second and third year.

"Biotechnology provides me with thorough scientific knowledge and understanding and teaches me to apply the knowledge to engineering processes. This opens doors in many fields as students have the abilities to look at problems through two lenses; thus, creating a unique perspective. I aspire to work in the cosmetic industry which is what lead me to choose this program as it perfectly blends two fields which are very significant in cosmetic development."

- Jasmine Silver

4th Year, Biotechnology
MECHANICAL ENGINEERING (MCG)

Mechanical engineers apply the fundamentals of science and math to create practical, useful solutions for a wide range of mechanical, thermal and biomedical systems and devices, from computer parts to power plants, from manufacturing systems to spacecrafts. This is a broad area of engineering, and graduates find work in almost every industrial sector, including high tech, aerospace, manufacturing, automotive, energy, biomedicine, and consulting.

Career opportunities
- Aeronautical/aerospace engineer
- Automotive engineer
- Manufacturing engineer
- Robotics/automation/controls engineer
- Energy systems engineer
- Biomedical engineer
- Consulting engineer
- Renewable energy engineer

Examples of courses in Mechanical Engineering

MCG 3110  Heat Transfer
MCG 3131  Machine Design
MCG 3306  System Dynamics
MCG 4136  Mechatronics
MCG 4345  Aerodynamics
MCG 4134  Robot Design and Control

Undergraduate programs (bachelor’s degrees)
- BASc in Mechanical Engineering
- BASc in Mechanical Engineering, Engineering Management and Entrepreneurship Option
- BASc in Mechanical Engineering and BSc in Computing Technology

Consult the full course sequence at engineering.uOttawa.ca.
All courses are offered in English. French courses are available in first and second year, and are very limited in third and fourth year.

"When selecting a program, I looked at what made the most sense. As an all-around technological hobbyist, I was drawn to mechatronics and I wanted to learn more about the world of mechanical engineering and computer sciences. All I have to say is that the University of Ottawa surpassed my expectations of mechatronics and I’m proud to have pursued my studies in this field."

- Mohammad Abu-Shaaban
4th Year, Mechanical Engineering and Computing Technology
BIOMEDICAL MECHANICAL ENGINEERING (MGB)

Our graduates specialize in areas that include the design of artificial hearts, implants, prostheses, and other medical devices; the development and selection of bio-compatible metallic and non-metallic materials for implants and medical equipment; robotics for medical applications; and biomechanics and rehabilitation engineering. This program’s broad scope gives its graduates a wide range of career options, not only in the biomedical field but also in conventional mechanical engineering. Biomedical systems are among the most complex mechanical systems; therefore, a strong and comprehensive education in standard mechanical engineering principles is provided, with emphasis on their application to biomedical systems.

Career opportunities

- Rehabilitation engineer
- Biomedical engineer
- Mechanical engineer

Examples of courses in Biomedical Mechanical Engineering

MCG 3141  Biomechanics
MCG 3305  Biomedical System Dynamics
MCG 4150  Bioinstrumentation
MCG 4151  Design of Artificial Joint Prostheses and Implants
MCG 4152  Design of Artificial Organs

Undergraduate programs (bachelor’s degrees)

- BASc in Biomedical Mechanical Engineering
- BASc in Biomedical Mechanical Engineering and BSc in Computing Technology

Consult the full course sequence at engineering.uOttawa.ca

All courses are offered in English. All first and second year courses, and some third year courses, are also available in French.

“Studying Biomedical Mechanical Engineering at uOttawa allowed me to develop new skills and explore different fields within the Biomedical and Biotechnology industries. By working in academic and private research institutions and being part of engineering teams, I was able to discover what I truly enjoy and what I want to do in the future.”

- David Cortes
4th Year, Biomedical Mechanical Engineering
Civil engineers design the infrastructure that are essential to their communities, both large and small, such as buildings and their foundations, bridges, canals, dams, transportation facilities, municipal sewer and water networks, as well as wastewater and solid waste treatment systems. Civil engineering students at the University of Ottawa can take advantage of world-class teaching laboratories, multimedia classrooms and computer facilities. Students develop expertise in fundamental theory, field and laboratory testing, computer application, and project management. Upon graduation, they are well-equipped to serve their communities.

**Career opportunities**
- Consulting engineer
- Structural or construction engineer
- Geotechnical engineer
- Environmental engineer
- Water-resources engineer
- Municipal engineer
- Research engineer
- Contractor

**Examples of courses in Civil Engineering**

- **CVG 4113** Hydraulics of Water Supply and Sewer Systems
- **CVG 4145** Reinforced Concrete Design
- **CVG 3147** Structural Steel Design
- **CVG 4150** Highway and Transportation Engineering
- **CVG 4108** Geotechnical Design
- **CVG 4133** Solid Waste Management
- **CVG 4146** Structural Design in Timber

**Undergraduate programs (bachelor’s degrees)**

- BASc in Civil Engineering
- BASc in Civil Engineering, Engineering Management and Entrepreneurship Option
- BASc in Civil Engineering, Environmental and Water Resources Option
- BASc in Civil Engineering, Structural and Geotechnical Option
- BASc in Civil Engineering and BSc in Computing Technology

“I chose to study Civil Engineering as it is a rewarding field that has a significant impact on the way society works, lives, plays and travels. This program focuses on theoretical concepts and is accompanied by practical laboratories to apply taught notions. Having hands-on experience through laboratories and co-op will be very beneficial going into the workplace.”

- Alexa Poirier
  4th Year, Civil Engineering

Consult the full course sequence at engineering.uOttawa.ca.
All courses are offered in English. French courses are available in first and second year.
Succeed and take advantage of our mentoring centre

The Workshop is an engineering and computer science mentoring centre; a free resource that supports students in their studies and in their transition to university life. The mentors are third- and fourth-year students from the Faculty who offer a variety of services to help students fulfill their potential. We want to see you succeed!

engineering.uOttawa.ca/the-workshop

Connect with the community of engineers on campus

Join Jacques Beauvais, our Dean at the Faculty, as he connects with alumni, students, industry partners and researchers to explore the future of tech and innovation and how, through creativity and collaboration, they can make the future.

engineering.uOttawa.ca/podcast
## ONTARIO ADMISSION REQUIREMENTS

<table>
<thead>
<tr>
<th>DISCIPLINE</th>
<th>PREREQUISITES AND ADDITIONAL REQUIREMENTS</th>
<th>ADMISSION AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical Mechanical Engineering</td>
<td>English or Français 4U, Advanced Functions 4U, Calculus and Vectors 4U, Biology 4U, Chemistry 4U, Physics 4U A combined minimum average of 70% is required for all prerequisite science and mathematics courses.</td>
<td>Mid to High 80s</td>
</tr>
<tr>
<td>Biotechnology (Biochemistry and Chemical Engineering)</td>
<td>English or Français 4U, Advanced Functions 4U, Calculus and Vectors 4U, Two of the following: Biology 4U, Chemistry 4U, Physics 4U, Earth and Space Science 4U A combined minimum average of 70% is required for all prerequisite science and mathematics courses. See science.uOttawa.ca for recommended courses.¹</td>
<td>Mid 80s</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>English or Français 4U, Advanced Functions 4U, Calculus and Vectors 4U, Chemistry 4U, Physics 4U A combined minimum average of 70% is required for all prerequisite science and mathematics courses.</td>
<td>Low 80s</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>English or Français 4U, Advanced Functions 4U, Calculus and Vectors 4U, Two of the following: Biology 4U, Chemistry 4U, Physics 4U, Earth and Space Science 4U A combined minimum average of 70% is required for all prerequisite science and mathematics courses. See science.uOttawa.ca for recommended courses.¹</td>
<td>Mid 80s</td>
</tr>
<tr>
<td>Computer Science</td>
<td>English or Français 4U, Advanced Functions 4U, Calculus and Vectors 4U A combined minimum average of 70% is required for all prerequisite mathematics courses.</td>
<td>Mid 80s</td>
</tr>
<tr>
<td>Computer Science and Mathematics</td>
<td>English or Français 4U, Advanced Functions 4U, Calculus and Vectors 4U A combined minimum average of 70% is required for all prerequisite mathematics courses.</td>
<td>Mid 80s</td>
</tr>
<tr>
<td>Data Science</td>
<td>English or Français 4U, Advanced Functions 4U, Calculus and Vectors 4U A combined minimum average of 70% is required for all prerequisite mathematics courses.</td>
<td>High 80s</td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>English or Français 4U, Advanced Functions 4U, Calculus and Vectors 4U A combined minimum average of 70% is required for all prerequisite science and mathematics courses.</td>
<td>Mid 80s</td>
</tr>
<tr>
<td>Physics and Electrical Engineering</td>
<td>English or Français 4U, Advanced Functions 4U, Calculus and Vectors 4U, Two of the following: Biology 4U, Chemistry 4U, Physics 4U A combined minimum average of 70% is required for all prerequisite science and mathematics courses.</td>
<td>Low 80s</td>
</tr>
<tr>
<td>Software Engineering (Offered with the CO-OP option only)</td>
<td>English or Français 4U, Advanced Functions 4U, Calculus and Vectors 4U One of the following: Biology 4U, Chemistry 4U, Computer Science 4U, Physics 4U A minimum average of 70% is required for each prerequisite course.</td>
<td>Mid to High 80s</td>
</tr>
</tbody>
</table>

These are minimum requirements only. They are subject to change. Admission is not guaranteed.

### General Requirements

Students must have an Ontario Secondary School Diploma with at least six 4U or 4M courses, including the prerequisites listed above. The admission average is calculated based on the six best interim or final Grade 12 courses at the 4U or 4M level, including the prerequisites for the program of choice.

---

¹ Past experience indicates that students with a strong background in biology, chemistry and physics have an increased rate of success.
# Quebec Admission Requirements

<table>
<thead>
<tr>
<th>DISCIPLINE</th>
<th>SECONDARY SCHOOL Prerequisites and additional requirements</th>
<th>ADMISSION AVERAGE</th>
<th>CEGEP Prerequisites and additional requirements</th>
<th>ADMISSION AVERAGE</th>
</tr>
</thead>
</table>
| Biomedical Mechanical Engineering      | English or Francais, Mathematics Technical and Scientific Option¹ or Science Option¹ (Secondary V); Science and Technology (with or without option) (Secondary IV); Chemistry 504; Physics 504  
A combined minimum average of 84% is required for all prerequisite science and mathematics courses.¹ | 84%               | English (603) or Francais (601); Biology (101) General Biology; Chemistry (202) General Chemistry or Organic Chemistry; Physics (203) Mechanics or Electricity and Magnetism; Mathematics (201) Calculus I  
A combined minimum average of 70% is required for all prerequisite science and mathematics courses.¹ | Mid 70s           |
| Biotechnology (Biochemistry and Chemical Engineering) | English or Francais, Mathematics Technical and Scientific Option¹ or Science Option¹ (Secondary V); Science and Technology (with or without option) (Secondary IV); Chemistry 504; Physics 504  
A combined minimum average of 84% is required for all prerequisite science and mathematics courses.¹ | 84%               | English (603) or Francais (601); Mathematics (201) Calculus I; Two of the following: Biology(101) General Biology, Chemistry (202) General Chemistry or Organic Chemistry, Physics (203) Mechanics or Electricity and Magnetism, Mathematics (201) Algebra I  
A combined minimum average of 70% is required for all prerequisite science and mathematics courses.¹  
See science.ouotawa.ca for recommended courses.² | Mid 70s           |
| Chemical Engineering                  | English or Francais, Mathematics Technical and Scientific Option¹ or Science Option¹ (Secondary V); Chemistry 504; Physics 504  
A combined minimum average of 84% is required for all prerequisite science and mathematics courses.¹ | 84%               | English (603) or Francais (601); Chemistry (202) General Chemistry or Organic Chemistry; Physics (203) Mechanics or Electricity and Magnetism; Mathematics (201) Calculus I  
A combined minimum average of 70% is required for all prerequisite science and mathematics courses.¹ | Mid 70s           |
| Computer Engineering Electrical Engineering | English or Francais, Mathematics Technical and Scientific Option¹ or Science Option¹ (Secondary V); Chemistry 504; Physics 504  
A combined minimum average of 84% is required for all prerequisite science and mathematics courses.¹ | 84%               | English (603) or Francais (601); Chemistry (202) General Chemistry or Organic Chemistry; Physics (203) Mechanics or Electricity and Magnetism; Mathematics (201) Calculus I  
A combined minimum average of 70% is required for all prerequisite science and mathematics courses.¹ | Low 70s           |
| Computer Science Computer Science and Mathematics Data Science | English or Francais, Mathematics Technical and Scientific Option¹ or Science Option¹ (Secondary V)  
A minimum average of 84% is required in the prerequisite mathematics course.¹ | 84%               | English (603) or Francais (601); Mathematics (201) Calculus I  
A minimum average of 70% is required in the prerequisite mathematics course.¹ | Mid 70s           |
| Physics and Electrical Engineering    | English or Francais, Mathematics Technical and Scientific Option¹ or Science Option¹ (Secondary V); Science and Technology (with or without option)(Secondary IV); Chemistry 504; Physics 504  
A combined minimum average of 84% is required for all prerequisite science and mathematics courses.¹ | 84%               | English (603) or Francais (601); Chemistry (202) General Chemistry or Organic Chemistry; Physics (203) Mechanics or Electricity and Magnetism; Mathematics (201) Calculus I  
A combined minimum average of 70% is required for all prerequisite science and mathematics courses.¹ | Low 70s           |
| Software Engineering (Offered with the CO-OP option only) | English or Francais, Mathematics Technical and Scientific Option¹ or Science Option¹ (Secondary V); Science and technology (with or without option) (Secondary IV); Chemistry 504; Physics 504  
A combined minimum average of 84% is required for all prerequisite science and mathematics courses.¹ | 84%               | English (603) or Francais (601); Mathematics (201) Calculus I; One of the following: Biology(101) General Biology, Chemistry (202) General Chemistry or Organic Chemistry, Physics (203) Mechanics or Electricity and Magnetism  
A minimum average of 70% is required for each prerequisite course in science and mathematics.¹ | Mid 70s           |

---

### Secondary V General Requirements

Students must have a Quebec Secondary School Diploma with five Secondary V courses, including program-specific prerequisites. A minimum average of 84% is required but does not guarantee admission. The admission average is calculated based on a student’s best Secondary V courses, including the prerequisites for the student’s selected program.

---

### CEGEP general requirements

Students must have a minimum of 12 CEGEP courses, including program-specific prerequisites, but excluding make-up courses. The admission average is calculated based on completed courses, excluding physical education and make-up courses. We do not take the “R” rating into consideration. Students may receive up to 15 credits of advanced standing. The credits we grant depend on the courses completed, the grades achieved and the program to which the student is admitted.

---

¹ Students are required to take a make-up course in functions and/or calculus and vectors at the University of Ottawa either the summer before or during their first term.

² Past experience indicates that students with a strong background in biology, chemistry and physics have an increased rate of success.

To learn more on admission requirements for students coming from provinces or territories other than Ontario and Quebec, please visit [www.uottawa.ca/undergraduate-admissions](http://www.uottawa.ca/undergraduate-admissions)
Once you have completed your undergraduate program, you may want to consider pursuing your education at the graduate level. The Faculty of Engineering provides its graduates with a top-quality education in engineering and computer science and offers a variety of masters and doctoral programs in various fields.

**Masters and/or doctorate degrees**
- Advanced Material Manufacturing
- Biomedical Engineering
- Chemical Engineering
- Civil Engineering
- Computer Science
- Electrical and Computer Engineering
- Environmental Engineering
- Mechanical Engineering
- Engineering Management
- E-Business Technologies
- Systems Science
- And many more!

For more information, visit: [engineering.uOttawa.ca/programs](https://engineering.uOttawa.ca/programs)

**Areas of research**
By continuing your studies, you could work with experts on solving global problems or on making world-changing discoveries. Our main areas of research make an impact that can be seen everywhere in our daily lives.

- Enabling technologies for health care and augmented life
- Technology for digital transformation of society
- Sustainable and resilient infrastructure
- Emerging materials and processes: design and development
- Photonics for devices, networks and energy

---

**Undergraduate Research Opportunity Program**
Are you interested in doing research as an undergraduate student? The Undergraduate Research Opportunity Program (UROP) Scholarship offers undergraduate students the chance to work on a research project of their choice with a faculty member and to showcase their findings by participating in the annual UROP poster symposium. [research.uOttawa.ca/centre-research-opportunities](https://research.uOttawa.ca/centre-research-opportunities)
HOW TO APPLY

1. Choose the program you want to study in the Faculty of Engineering.

2. Check the academic admission requirements that apply to you.

3. Check application deadlines and complete any required admission tests.

4. Include all documents and forms needed for your application.

5. Track your application for admission via UOZone.

For more information on how to apply, visit uOttawa.ca/undergraduate-admissions

Visit the Faculty of Engineering

We would be pleased to show you around our facilities (depending on public health guidelines). To schedule a visit, send us an email at genie.engineering@uOttawa.ca.
MAKE YOUR FUTURE AT uOTTAWA ENGINEERING

UNDERGRADUATES STUDIES OFFICE
800 King Edward Avenue, Room 1020
Ottawa, Ontario K1N 6N5
genie.engineering@uOttawa.ca