



uOttawa

Faculté de génie
Faculty of Engineering

Short Academic Program Proposal: Cyber Bootcamp 2026

University of Ottawa
Faculty of Engineering



THE UNIVERSITY OF OTTAWA

The University of Ottawa's privileged position as a research-intensive university, located in the capital of a G-7 country, means we are an influential partner in addressing the complex challenges facing Canada and the world. uOttawa's vision is focused, action-oriented, agile and will bring together community, industry, academia, government, and the non-profit sectors. We are creating a unique, connected, multi-cultural and bilingual ecosystem with global influence unlike any other in Canada.

Located in Canada's capital, we have access to the federal government and over 120 embassies and consulates. We have strong bonds to global technologies companies, including a satellite campus at the heart of the largest technology park in Canada, with the highest concentration of engineers and scientists outside of Silicon Valley (USA). This campus provides real time access to talents, learning and solutions to over 500 technology companies.

With more than 24 interdisciplinary research centers, institutes and entrepreneurship hubs, you will find a practical, relevant and innovative education that is fueled by purposeful public and private partnerships and collaborations on research, thought leadership, multidisciplinary education, talent development and mobility, and good global citizenship.

TOP 1%
BEST UNIVERSITIES
IN THE WORLD

OVER 1000
TEACHING AND
RESEARCH LABS

TOP 171
IN THE WORLD
UNIVERSITY RANKING

49,000
STUDENTS

TOP 10
LEADING RESEARCH
UNIVERSITIES IN CANADA

10,000+
INTERNATIONAL STUDENTS
FROM 140+ COUNTRIES

WHY OTTAWA?

- Consistently ranked one of the world's top 20 cities to live
- 25,000 employers and 765,000 jobs
- #1 for tech talent labor concentration and top 10 tech-talent markets in North America
- One of the best cities for quality of life in Canada



THE FACULTY OF ENGINEERING

The Faculty of Engineering at the University of Ottawa is a leader in engineering and computer science education and research, providing its students with top quality degrees and experiential learning experiences to prepare them to meet the ever-changing needs of society.

We train students to become forward-thinking engineers and computer scientists at every stage of their lives, from our youth outreach programs to professional development opportunities for alumni and industry professionals. We cultivate their talents with the right balance of theory and practice, and we foster their entrepreneurial spirit in our state-of-the-art design labs and facilities where they can see their ideas come to life.

We focus on collaborative, interdisciplinary research that considers the social, environmental, and economic impact of its solutions and findings. Our five areas of focus allow our world-class researchers to collaborate in meaningful ways and to lead innovation at a faculty, provincial, national, and international level.

Our strong ties and proximity to industry partners and government agencies enable our community to work on relevant issues and solve real-world problems. Our curriculum incorporates enhanced engineering design, professional skills development, and experiential learning, all to give our students an education that reflects the global world in which they live.



RESEARCH COLLABORATIONS WITH

30+

Government
institutions

60+

Countries

140+

Companies

Summary

The University of Ottawa is proposing to offer a 6-week in-person Cyber Bootcamp in Ottawa for a group of students from a partner institution. The program prepares students for the Fortinet Certified Professional (FCP) in Network Security certification. Students will also work on AI projects for cybersecurity applications, gaining hands-on experience with neural networks and experimental evaluation to meet industry demands.

The program cost is \$7,750 CAD per student with a minimum of 15 students, and \$8,500 CAD per student below this minimum, and includes training fees, on-campus accommodation, mandatory insurance, transfer to and from airport, a pizza night, several cultural outings, certificates of completion, access to the Fortinet lab environment as well as the training material, a voucher to write the Fortinet Certified Professional (FCP) in Network Security certification exam from Fortinet, access to uOttawa-IBM Cyber Range, and administrative fees.

Why uOttawa?

The University of Ottawa (uOttawa) is among the top 1% of universities globally and is the largest bilingual (English-French) university in the world. Located in Canada's capital, uOttawa offers a wealth of academic and cultural experiences.

Our downtown campus is right next door to iconic landmarks such as the ByWard Market, Rideau Canal, and Parliament Hill, providing students with easy access to vibrant cultural and historical sites. Whether students are interested in summer festivals, museums, or nature, Ottawa has something for everyone. The city offers a perfect blend of urban excitement and natural beauty, with a comfortable average temperature of around 26-27 degrees in mid-summer.

uOttawa-IBM Cyber Range

Located in the University of Ottawa's Cyber Hub, the [uOttawa-IBM Cyber Range](#) is globally unique in its structure. Operating in partnership with the international team of IBM's X-Force Cyber Range, it offers a full, immersive, and interactive training setting where students, businesses, and government organizations can experience real cyber response scenarios. Its role is also to raise public awareness and foster multidisciplinary research and collaboration between different stakeholders on how to anticipate, respond to, manage, contain, and remediate cyber-attacks. Cyber Bootcamp Students will have access to the Cyber Range and learn about Cybersecurity in this unique, state-of-the-art facility.



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Fortinet certification:

Students will learn how to manage some of the world's most widely used networking devices. They will get familiar with: network security basics such as switching, routing and TCP/IP; SD-WAN configuration and usage; virtual LANS and Domains; SSL VPN, IPSEC VPN and site-to-site routing; authentication and SSO; high availability configurations and deployments; firewall policy configuration, static NAT and dynamic NAT; Web filtering and antivirus operations on in-transit network traffic; IPS and IDS configuration and usage; Fortigate device diagnostics and configuration.

Study materials (Slides, Labs, Links to resources etc.) will be made available on Brightspace. Students must agree to have their information shared with Fortinet (Full name, student #, email) in order to receive access to the online labs provided by them. Students will have access to the Fortinet lab environment as well as the training material at no extra charge. Towards the end of the bootcamp, vouchers will be provided in order to take the Fortinet Certified Professional (FCP) in Network Security certification exam for free (the actual certification exam is provided by a third party and will have to be scheduled by the students within 12 months of receiving the voucher).

Topics to be covered:

- Networking Basics: TCP/IP
- Network Security Systems Overview, Security Fabric
- Firewalls and NAT
- Logging and Monitoring, Certificates
- Web Filtering and Application Control
- Network-level Antivirus and IPS /IDS functionality
- SSL VPN, IPSEC VPN, Site-to-Site operations
- Routing and SDWAN
- Virtual Domains and Layer 2 Switching
- SSO & High Availability
- Fortigate Diagnostics & NSE4 Exam Review
- Wrap up & NSE4 practice Quiz



Participating students are expected to bring their laptops.

Project in AI solutions for Cybersecurity Applications:

Students will carry out a comprehensive exploration of neural networks in the context of a cybersecurity problem using data generated and collected in the cyber range. The students are expected to acquire practical understanding of key topics related to neural networks design, training, assessment, and deployment, necessary for developing effective and interpretable models to safeguard against cyber threats.

Topics to be covered:

- Experimental evaluation methods;
- Performance assessment metrics;
- Data collection and preprocessing;
- Feature selection;
- Neural network architectures;
- Interpretability and explainability of the model developed.

Participating students are expected to bring their laptops.

Cost

Expense item	Cost per participant (Minimum 15 participants)
Training and other fees, mandatory insurance, activities, etc.	\$5,950
On-campus accommodations + Breakfast	1800
TOTAL	\$7,750

Expense item	Cost per participant (less than 15 participants)
Training and other fees, such as on-campus accommodations, mandatory insurance, activities, etc.	\$6,700
On-campus accommodations + Breakfast	1800
TOTAL	\$8,500

Note: All fees listed above are in Canadian Dollars (CAD).

Price and availability have yet to be determined for Summer 2026

The cost includes training fees, on-campus accommodation, mandatory insurance, airport transfers, a pizza night, several cultural outings, certificates of completion, access to the uOttawa-IBM Cyber Range, and administrative fees. Participants may choose to opt out of on-campus accommodation, in which case the total cost will be reduced by \$1800. The fee does not cover the travel from the participant's home country, visa expenses, meals, or any personal costs related to off-campus activities.

In the event that if partner university does not commit to a minimum of 15 students, please note that the students will be joining an existing group of students. If the overall number of students does not reach a minimum of 20, uOttawa reserves the right to cancel the program.

Meals:

Depending on the exact dates, meals may be available in our award-winning buffet style dining hall. If the dining hall is not available, students can also either purchase and cook food in the dorm-room kitchenette, or purchase food at nearby restaurants and eateries.



Period of study

The proposed bootcamp will last 6 weeks or 42 days in Ottawa (30 days of actual training program Mon-Fri) June-July. The exact start and end dates will be determined in conjunction with the partner university and the availability of uOttawa. Activities are expected to take place in the new uOttawa-IBM Cyber Range, first of its kind in Canada, which will allow students to experience a range of fully immersive cyberattack and cyber threat simulations using the most sophisticated technology and software.

Orientation and Closing

The Faculty of Engineering will organize a welcome session upon trainees' arrival in Ottawa. Participants will be welcomed to Ottawa and given information that will help them get the most out of their experience in Ottawa. After finishing the bootcamp, certificates will be awarded.

Insurance

All participants are required to subscribe to the University Health Insurance Plan (UHIP). This insurance will provide access to the public health-care system in Canada, equivalent to that provided to Canadian citizens and permanent residents. The cost of UHIP is included in the registration fees.

Accommodation

Participants typically stay in the 90U University residence, the same comfortable and convenient accommodations used by uOttawa students during the academic year. Students will enjoy seamless connectivity with Wi-Fi available throughout the entire campus, including the residences. Please note that accommodation is subject to availability at the time of booking.

Our two-bedroom suites at 90U are designed for comfort and convenience, featuring double beds and a kitchenette. Each participant will have their own private room and share a bathroom and kitchenette with one other participant. Located right in the center of campus, 90U offers easy access to all university facilities and activities. [Please click here for more details about the accommodations.](#)



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We look forward to welcoming you to our campus next summer!