

Cybersecurity

Global Leadership in Fredericton

FREDERICTON
NEW BRUNSWICK

Canada's
Pioneer in
Cybersecurity

Fredericton's information technology, R&D, and commercialization communities are pioneers in the cybersecurity field.

Two decades of investment in digital infrastructure, research & development, and skills-training have resulted in a city-wide ecosystem that produces cutting-edge innovations deployed around the world. Fredericton is prepared to meet the global cybersecurity challenges of the future.



\$575B
Global Cost of
Cybercrime

Projected
shortage of
cybersecurity
professionals
by 2019:

2 Million

A Globally-Renowned Cyber Cluster

When IBM purchased local network security company Q1Labs in 2009 in one of the largest technology exits in Canadian history, they discovered in Fredericton a deep pool of cybersecurity expertise, innovation, and product development. Since then, IBM has consolidated its global leadership in network level security in Fredericton, anchoring what has become a globally-renowned cyber cluster.

Today, Fredericton's cyber community features institutional research leaders and private sector innovators:



*"Fredericton is Canada's most
cost-effective location for business."*

KPMG Competitive Alternatives 2016

Canadian Institute for Cybersecurity (CIC)

Fredericton's CIC is a multidisciplinary institute that trains qualified security experts and nurtures innovation and entrepreneurial initiatives designed to build trust in use of Internet services by:

- Building private and public partnerships
- Establishing R&D industry collaborations
- Developing innovative cybersecurity technologies, processes, and structures
- Offering training to meet industry and public sector needs
- Providing an accessible knowledge-based community

Current Research

- Critical Infrastructure Protection
- Intrusion Detection and Prevention
- Security Big Data Analytics
- Security Data Visualization
- Security Analysis and Risk Management
- Malware Analysis, Malware Attribution
- Mobile Malware Detection and Mitigation

Digital Product Development Living Lab

Start-ups and large multinationals alike choose Fredericton for its digital product development living lab. With its research expertise, technology first-adoption partners, deep talent pool, and globally representative user community, Fredericton offers innovators a scaleable and repeatable environment in which to develop, refine, and launch products with global potential.



ignitefredericton.com • (506) 444-4686
adam.peabody@ignitefredericton.com



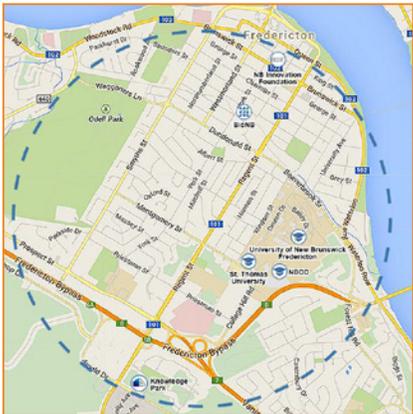
New Brunswick's Only Research and Technology Park

A member of the Association of University Research Parks

Protecting Critical Infrastructure and the Future of Energy

Energy is the currency of the future and nowhere is that more evident than Fredericton. The Siemens Smart Grid Centre of Competence and R&D Centre are both located in the city because it provides the perfect mid-sized build-test-launch market for smart grid technologies. The University of New Brunswick engineering and computer science departments are critical partners in the Siemens initiatives, as well as a number of private-sector partners. Fredericton's cybersecurity community works alongside energy innovators to produce industry-ready solutions to safeguard some of the world's most critical infrastructure.

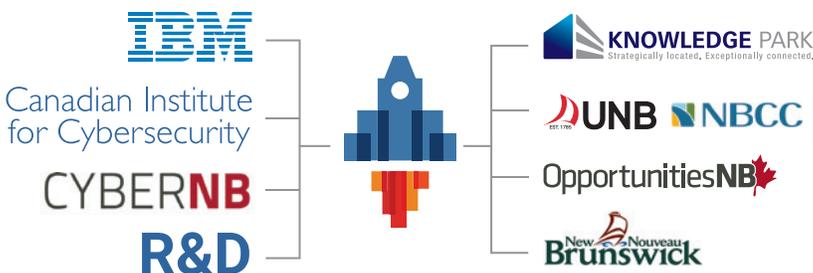
Fredericton's Innovation District



Anchored by New Brunswick's only R&D Park—The Knowledge Park—Fredericton's Innovation District is a two square kilometer area encompassing over 60 R&D organizations, including the University of New Brunswick, which outputs over 75% of the province's university-related research.

Cyber-focused People, Investment & Policy

New Brunswick invests in cyber-focused training from elementary school to post-graduate studies, with Fredericton as the epicentre of cybersecurity initiatives. CyberNB leads the Coding in Schools efforts while UNB and NBCC produce top caliber, industry-ready graduates. Fredericton features Canada's first advanced cybersecurity training program, the Canadian Institute for Cybersecurity. Opportunities New Brunswick, Ignite Fredericton, and other government representatives facilitate collaboration between industry, R&D, and educational institutions to maintain and grow our leadership position in cybersecurity.



Decades of Investment

Fredericton's cybersecurity industry rests on strategic investments in world leading digital infrastructure, as well as trailblazing R&D by local industry and educational institutions.

Fredericton: A Smart City by Design

- 1960s**
 - Canada's 1st Faculty of Computer Science established at UNB
- 1990s**
 - NBTel builds world-leading telecom and data infrastructure
 - Canada's 1st Information Highway Secretariat established in NB
 - Fredericton's Vision 2000 Strategy Goal: Building a knowledge-based economy
 - Broke ground on Knowledge Park, NB's only R&D park
- 2000s**
 - Canada's 1st free wireless city
 - Municipally-owned fiber network built
 - UNB Information Security Centre of Excellence (ISCX)
 - Twice named one of the World's Top 7 Intelligent Communities
- 2010s**
 - IBM Centre for Advanced Studies at UNB
 - Launched GoFred: Canada's best value commercial internet
 - UNB named Canada's most entrepreneurial university
 - Canada Research Chair and NB Innovation Chair in Cybersecurity
 - CyberLaunch Academy established (primary and post secondary)
 - CyberNB, NB's cybersecurity institute, established
 - Canadian Institute for Cybersecurity opens its doors
 - Knowledge Park Cybersecurity Expansion Plans
 - NB Education Plan includes competencies in coding & cybersecurity
 - Awarded Startup Canada's Community of the Year (2016)