



Network and Security Architecture

School of Information Technology

NSA1 - Network and Security Architecture

This program has been permanently suspended.

Program Description

Without the proper protection, our networks are vulnerable to black-hat hackers, identity thieves and spammers. There aren't many people who have the skills and education needed to ward off the enemies lurking behind computer screens, ready to thwart firewalls, infiltrate networks and corrupt servers. If you've been thinking of a career protecting the systems that run our networks and economy, the Network and Security Architecture one-year post-grad co-op program will prepare you for this in-demand field.

Document of Recognition

Network and Security Architecture Graduate Certificate

Program Type/Credential

One-Year Ontario College Graduate Certificate

Learning Outcomes

The graduate has reliably demonstrated the ability to:

1. Design an enterprise network by applying knowledge of networking and routing protocols.
2. Perform network monitoring, analysis and troubleshooting to determine efficient and secure operations.
3. Develop a security architecture plan to incorporate both perimeter and endpoint security controls and devices to provide layers of security.
4. Design multi-site enterprise operating system infrastructures using a security architecture framework.
5. Design a centrally managed wireless network topology that can accommodate remote sites incorporating current security standards.
6. Design and implement a virtualization and cloud computing focused infrastructure specifically addressing security risks associated with incorporating virtualization into an organizations infrastructure.
7. Deploy servers to host web applications, focusing on securing the server and web from identified security risks.
8. Identify and plan IT services that support business goals and objectives, and explain specific activities directly related to the delivery and support of the services



Career Opportunities

Graduates of Fanshawe's Network and Security Architecture program have the education and high-level skills needed to protect the systems that run our networks and economy. Job titles for graduates may include:

- network security consultant
- network security operations analyst/manager
- network penetration specialist
- security analyst
- security systems analyst
- security architect
- security systems engineer
- Cybersecurity consultant

Did you know Fanshawe consistently ranks high in graduate employment rates among large colleges in Ontario?

Here are some examples of career opportunities for graduates of Fanshawe's Network and Security Architecture program:

Network Security Architect

An expert in information security with extensive experience in secure system design and engineering.

Security Architect

Analyze software designs/implementations and resolve software security issues.

Information Security

Lead a team responsible for setting strategic and tactical direction to protect an organization's information.

Admission Requirements

A Two- or Three-Year College Diploma, or a Degree in a computing related field
OR

Professional background and experience as judged by the College to be equivalent to the above

Approximate Costs

Fee details are available at www.fanshawec.ca/fees

Contact

School of Information Technology: 519-452-4430

Campus Codes and Intakes

- Program Code: NSA1
- Campus Code: London Campus (LC)
- January, September admissions
- 30 week term
- Academic Calendars available at www.fanshawec.ca/academicdates

Applicant Selection Criteria

Where the number of eligible applicants exceeds the available spaces in the program, the Applicant Selection Criteria will be:

- Preference for Permanent Residents of Ontario
- Receipt of Application by February 1st (After this date, Fanshawe College will consider applicants on a first-come, first-served basis until the program is full)
- Achievement in the Admission Requirements

English Language Requirements

Test	Score
TOEFL iBT	Overall score of 5 with no score less than 4.5 in any band
IELTS Academic	Overall score of 6.5 with no score less than 6.0 in any of the four bands
CAEL	Overall score of 70 with no score less than 60 in any of the four bands
PTE Academic	Minimum score of 58 with no score less than 50 in any of the four bands
Cambridge English	Overall score of 176 with no language skill less than 169
ESL4/GAP5	Minimum grade of 80% in ESL4/GAP5 Level 9, or 75% in ESL4/GAP5 Level 10
Duolingo	Overall score of 120, with no score lower than 105
LanguageCert Academic	Overall score of 70 with no score less than 65 in any of the four skills



Program Pathways

For information about Program Pathways visit www.fanshawec.ca/programpathways.

Program Curriculum

Level 1

Take all of the following Mandatory courses:

SRTY-6002	Securing Networks- Credits 4
INFO-6080	Securing Servers- Credits 4
SRTY-6003	Securing the Edge 1- Credits 4
INFO-6070	Network Management- Credits 3
INFO-6076	Web Security- Credits 4
ACAD-6002	Graduate Success Strategies- Credits 1
COOP-1020	Co-operative Education Employment Prep- Credits 1

Level 2

Take all of the following Mandatory courses:

INFO-6140	Secure Access Service Edge (SASE) - Credits 4
INFO-6043	IT Service Management - Credits 3
INFO-6075	Virtualization Infrastructure -Credits 4
INFO-6010	CISSP Prep- Credits 3
INFO-6033	Enterprise Network Design -Credits 4
SRTY-6011	Securing Wireless Networks -Credits 4