

# Master of Science in Cybersecurity (M.S.-CYBERSECURITY)

The **Master of Science in Cybersecurity (M.S.-Cybersecurity)** program at New York Institute of Technology - Vancouver (New York Tech) is internationally acclaimed for its multi-faceted education and student success rate. Students will learn to critically evaluate various technical and architectural solutions in order to limit risk and mitigate the effects of hostile action, while studying algorithm concepts, risk management, and incidence response. The program covers the design, implementation, and maintenance of software tools to support network security across multiple operating systems.



### Highlights

- Students are able to enjoy brand new, state of the art facilities located at Broadway Tech Centre campus.
- The program offers an innovative, technology-oriented, and interdisciplinary curriculum taught by qualified and experienced faculty.
- M.S.- Cybersecurity is an applied degree and can be completed in less than two (2) years.
- Students have the opportunity to transfer between New York and Vancouver campuses.
- Financial aid is available to Canadian Citizens and Permanent Residents of Canada.
- Career planning services are available on campus to all students.
- International students are eligible to work off campus during their studies and can qualify for post-graduation work permits (up to three (3) years) after graduation.

# The New York Tech Vancouver M.S.-Cybersecurity Program

M.S.- Cybersecurity echoes the non-thesis curriculum option already offered in New York. The program is ideally suited for students with a computer science, electrical engineering, or related backgrounds who intend to play a leading role in the implementation and management of computer and network security systems.

Students who graduate from the M.S.- Cybersecurity program can expect great demand from the following occupations:

- Cybersecurity Specialists
- Cybersecurity Engineers
- Network Administrators
- Cyber Threat Analysts
- Information Systems Managers
- Security Analysts

#### Accreditation/Consent

The College of Engineering and Computing Sciences at New York Tech is accredited in the U.S. by the **Engineering Accreditation (EAC) of the Accreditation Board Engineering and Technology, Inc. (ABET).** This program is offered in Vancouver under the written consent of the **Ministry of Post-Secondary Education and Future Skills** in British Columbia. In the United States, New York Institute of Technology is accredited by the Middle States Commission on Higher Education. See here: <a href="https://admin.bceqa.gov.bc.ca/report/">https://admin.bceqa.gov.bc.ca/report/</a>

#### More Information $\rightarrow$

https://vancouver.nyit.edu/vancouver/degrees/cybersecurity\_ms

#### Apply Now $\rightarrow$

https://vancouver.nyit.edu/apply



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#### **Intakes & Duration**

There are three (3) terms in every academic year; Fall (15 wks, Sep.-Dec.), Spring (15 wks, Jan.-Apr.), and Summer (8 wks, May-Jul.). M.S.-Cybersecurity is a two (2) year program, but strong students can complete it in less than two years.

## Admission Requirements<sup>1</sup>

You must possess the following qualifications in order to be *considered* for the M.S.- Cybersecurity program at New York Tech Vancouver:

# A FOUR (4) - YEAR BACHELOR'S DEGREE OR EQUIVALENT IN COMPUTER SCIENCE, IT, OR RELATED FIELD<sup>1</sup>

from an accredited college or university

#### A MINIMUM UNDERGRADUATE GPA OF 3.0

(on a 4.0 scale) or equivalent

#### A MINIMUM GRE SCORE OF 295

(if required)

#### DEMONSTRATED ENGLISH PROFICIENCY<sup>2</sup>

The International English Language Testing System (IELTS - Academic or Online)

Test of English as a Foreign Language (TOEFL - iBT or Home Edition)

Pearson Test of English (PTE)

Please Review the Table Below for the Minimum English Requirments for a Direct Entry

TEST	OVERALL	READING	LISTENING	SPEAKING	WRITING
IELTS	6.5	6.0	6.0	6.5	6.0
TOEFL	88	13	12	20	21
PTE	65	60	60	65	60

[1] Minimum requirements. The M.S.-Cybersecurity program has a limited number of seats and only the best applicants will be admitted to the program.

[2] This is not required if you have completed your Bachelor's degree from an English speaking country. Please visit <a href="https://vancouver.nyit.edu/english\_requirement\_exemption">https://vancouver.nyit.edu/english\_requirement\_exemption</a> to see the list of countries from which an English language proficiency test is not required. IELTS indicator test is not accepted for admission.



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### Discretionary Admission

Applicants with an overall GPA between 2.85 and 2.99 may, at the discretion of the Vancouver program dean, be admitted into the program.

Reasons for discretionary admission include but are not limited to:

- Submission of official GRE test scores of a minimum of 295, with a minimum percentile rank of 75% in quantitative reasoning
- Completion of a relevant master's degree with a minimum GPA of 3.0
- Prior work experience (minimum 2 years in the related field)
- Applicants potential to contribute to the diversity of the student body (New York Tech Vancouver has identified a list of countries as diversity countries)

# How to Apply

All New York Tech Vancouver applications are submitted online and require a non-refundable \$50 USD application fee. The application process begins here: vancouver.nyit.edu/admissions →

Once you have paid the fee, upload the following documents:

- Four (4)-year Bachelor's degree certificate
- Transcripts from **each semester** of your four (4)-year Bachelor's degree
- Any transcripts or certificates received beyond your Bachelor's degree program
- Proof of English proficiency (IETLS, TOEFL, PTE)<sup>2</sup>
- Copy of official GRE score (may be required on a case-by-case basis)
- Statement of Purpose (recommended)
- A copy of your passport
- 1–2 page résumé or C.V.
- Two (2) letters of recommendation from professors who are familiar with your undergraduate work (recommended)

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#### **Tuition Estimates**

For two (2) years \$38,120 USD4 30 CREDITS<sup>3</sup> 7 Required Courses (21) + 2 Electives (6) + 1 Project (3) + Graduate Communications (0) Tuition per credit: \$1,210 USD Application Fee: \$50 USD (non-refundable) Graduate Communications: \$1,820 USD<sup>6</sup> College Fee: \$300 USD (per semester)

### Financial Aid

Financial Aid is available to Canadian Citizens and Permanent Residents of Canada.

### Intake Dates for 2024-2025

SEMESTER	START DATE
SUMMER 2024	May 21, 2024
FALL 2024	Sept 3, 2024
SPRING 2024 FALL 2024	TBD

For application opening dates and deadlines, please visit https://vancouver.nyit.edu/apply#applicationdate.

International students are strongly encouraged to apply at least six (6) months prior to the start of their desired intake term to accommodate the processing of their study permit application with Canadian immigration.

Original documents must be presented to campus officials for verification during new student orientation.

<sup>[3]</sup> International students must take a minimum of 18 credits + Graduate Communications (0 credits) per year to qualify for Full Time status (6 credits + Graduate Communications (o credits) in their first term and 6 credits in subsequent terms).

<sup>[4]</sup> For two (2) years. Amount does not include other fees or tuition fees for any waivable courses or bridge courses that may be required. Two-year tuition fee calculated based on: Fall 2024 USD \$1,210/credit; Spring 2025 USD\$1,210/ credit; Summer 2025 USD\$1,210/credit. Please note tuition is calculated at USD\$1,210/credit as an estimate from Fall 2025 onward. The actual tuition rate per credit will be determined later. Tuition charges may change during study period without prior notice. See https://vancouver.nyit.edu/bursar\_prospective\_students for updates.

<sup>[5]</sup> Applications may close earlier than the deadline dates. See https://vancouver.nyit.edu/apply for updates.

<sup>[6]</sup> Graduate Communications course must be taken in the Fall 2024 semester. The course fee of USD \$1,820 is only applicable to Fall 2024 semester.



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# Program Overview

The M.S.-Cybersecurity core curriculum includes 30 credits, including eight (7) required courses (21 credits), two (2) electives (6 credits), one (1) supervised project (3 credits), and one (1) Technical Communications course (0 credits).

#### Core Courses

All courses are three (3) credit hours unless otherwise specified.

REQUIRED COURSES	
INCS 615	Advanced Network and Internet Security
INCS 618	Computer Security Risk Management and Legal Issues
CSCI 620	Operating System Security
CSCI 651	Algorithm Concepts
INCS 712	Computer Forensics
INCS 741	Cryptography
INCS 745	Intrusion Detection and Hacker Exploits

INCS 870	Project I
NYIT 610	Graduate Communications (0 credits)

#### Selection of Elective Courses

Students are required to choose two (2) elective courses. All courses are three (3) credit hours. Students can choose two of the following courses:

ELECTIVE COURSES	
CSCI 690	Computer Networks
CSCI 657	Data Mining
INCS 735	Secure Software Engineering
INCS 775	Data Center Security
INCS 810	Special Topics in Computer Security

For a list of elective courses, please see:

https://www.nyit.edu/degrees/cybersecurity\_ms/curriculum →



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### Prerequisite Courses

Students who are admitted to the program with insufficient background in mathematics or computer science may be required to take one or more of the following undergraduate prerequisite courses. All courses are **three (3) credit hours.** 

PREREQUISITE COURSES	
CSCI 502	Computer Programming I
CSCI 504	Computer Programming II
CSCI 503	Computer Organization and Architecture
CSCI 507	Data Structures
CSCI 509	Operating Systems



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**Application Checklist** 

To be <b>considered</b> <sup>1</sup> for the program, you must have:
□ \$50 USD <b>non-refundable</b> application fee
☐ A four (4)-year Bachelor's degree (or equivalent) from an accredited college or university
☐ A minimum cumulative GPA of 3.0 (on a 4.0 scale) or equivalent
☐ Bachelor's degree completion certificate
☐ Semester-by-semester transcripts for all four (4)-years of your Bachelor's degree
☐ Any transcripts or certificates received beyond your Bachelor's degree program
☐ Proof of English proficiency (IELTS, TOEFL, PTE)²
☐ Copy of official GRE score (may be required on a case-by-case basis)
☐ Statement of Purpose (recommended)
☐ A copy of your passport
□ 1–2 page résumé or C.V.
☐ Two (2) letters of recommendation from professors who are familiar with your undergraduate work (recommended)
If you have met all of these qualifications, submit your application online and upload the following documents to: https://vancouver.nyit.edu/apply →
Once you apply, you can notify our Admissions department by emailing

[2] This is not required if you have completed your Bachelor's degree from an English speaking country. Please visit <a href="https://vancouver.nyit.edu/english-requirement-exemption">https://vancouver.nyit.edu/english-requirement-exemption</a> to see the list of countries from which an English language proficiency test is not required. IELTS indicator test is not accepted for admission.



# **ACADEMIC POLICY**

### Policy on submission of fraudulent academic documents for admission:

Students found to have submitted fraudulent academic documents, i.e., transcripts, for the purpose of admission to a degree program at New York Institute of Technology Vancouver, will have their admission cancelled and may be disciplined or expelled upon confirming that the documents submitted were forged. It is the responsibility of the applicant/agent to make sure the documents submitted during application process are not forged.

#### Clear understanding about the program

Before submitting the application for admission, applicants must understand they have an in-depth knowledge about the program they are applying to. They must also have clear understanding of the curriculum structure and future prospect of this program they are applying to.