Cyber Security for Control Systems

SCHOOL FOR ADVANCED DIGITAL TECHNOLOGY

Overview

Are you ready to take your knowledge and experience in cyber security to the next level? The Cyber Security for Control Systems program is designed for individuals who have completed related post-secondary studies or gained work-related experience in the field.

Whether you are an IT professional or technician, an industrial control systems (ICS) specialist, or someone focused on cyber-physical systems (CPS) and IT, this program equips you with the skills to safeguard critical control systems in diverse industrial environments.

In this post-diploma certificate, you will:

- explore the unique challenges of securing digital control systems in drilling and wellsites, power plants, power grids, water plants, manufacturing facilities, production lines, telecommunications networks and hospitals.
- learn how to defend systems that have transitioned from analog to digital, making them more susceptible to cyber threats and cybercrime
- gain insights into risk management principles with universal application, essential to every industry, by enhancing control systems' safety, reliability, security and resilience
- learn from experienced instructors with real-world knowledge and practical insights to address the evolving landscape of cyber threats in industrial settings.

Our program is designed to accommodate professionals at different stages of their careers. Our curriculum can meet your needs whether you're looking to upskill or pivot your career to computer security.

Master the challenges of cyber security in the industrial domain.

Traits, skills and aptitudes

You should have education and/or work experience in industrial systems (SCADA, PLCs, Instrumentation, etc.) and/or computer networking or related fields.

You understand the importance of cybersecurity and are intrigued by how critical infrastructure and operations technologies can be compromised and want to protect these assets.

People in the cyber security field tend to be innovative, objective, and directive.

You need:

- analytical skills
- speaking and writing skills
- an inquiring and inventive mind
- an eye for details
- patience and an organized approach to troubleshooting
- decision-making and problem-solving skills
- math and science skills
- teaching skills
- time-management skills
- high ethical standards.

To do well in this field, you should enjoy being innovative, working with others or independently, and doing your work with precision.

Practicum, Co-op and Work Integrated Learning

You'll participate in a capstone project to use all the techniques gained throughout the program to expose vulnerabilities in large systems specific to industrial control systems.

Accreditations, designations and certifications

Once you graduate, you'll be prepared with the knowledge to challenge the CompTIA Security+ exam and earn your certification.

Specialized Intakes

This program is available to **international applicants** as a stand-alone program or as part of a program bundle - two programs delivered consecutively.

For details on available bundles including this program, see international bundle programs.

Credentials

Upon successful completion of this program, you'll receive a SAIT Cyber Security for Control Systems post-diploma certificate.

Admission requirements

Applicants educated in Canada

Applicants must demonstrate English language proficiency and completion of one of the following courses or equivalents:

- a two-year diploma or undergraduate degree in information technology, instrumentation or related technical discipline.

Three to five years of experience in information technology, instrumentation or a related technical discipline may also be accepted with approval from the program Academic Chair. A combination of education and experience will be considered.

Applicants educated outside of Canada

All applicants who were educated outside of Canada must demonstrate English language proficiency and provide proof they meet the program admission requirements with an international document assessment. Find accepted educational documents and assessment options.

SAIT may also accept courses completed at certain international post-secondary institutions.

Costs

2026/27 tuition and fees

The following estimated costs are effective as of July 1, 2026.

The estimated total cost of tuition and fees is based on the full-time day-time suggested schedule of study. Following the part-time evening or accelerated streams will impact the fees you pay per semester and may alter final costs.

Domestic Students

Year	Number of semesters	Tuition fees	Additional fees	Total per year
1	2	$14,175	$1,764.50	$15,939.50
			Total cost:	**$15,939.50**

The estimated total cost of tuition and fees for domestic students is based on the recommended course load per year.

International Students

The program total is based on the estimated amount you will pay if you enter this program during the 2026/27 academic year. The program total amount listed on your letter of admission may appear higher. This amount is your maximum tuition guarantee for the program. SAIT will not exceed this maximum, regardless of changes in tuition and fees between academic years.

Year	Number of semesters	Tuition fees	Additional fees	Total per year
1	2	$24,840	$1,764.50	$26,604.50
			Total cost:	**$26,604.50**

The estimated total cost of tuition and fees for international students is based on the recommended course load per year.

Books and Supplies

Books and supplies are approximately $2,000 - $2,500 per full-time year.

This is a bring-your-own-device program with a power-user hardware and software requirement. Laptops should meet the following minimum requirements (also found on our computers and laptops page):

- Processor: i7
- RAM: 32 GB RAM or greater
- Storage: 512 GB SSD or greater
- Video card: On-board integrated
- Screen size: 15" or greater
- Screen resolution: 1920 x 1080 or greater
- OS version: Windows 10 or newer, Pro 64-bit with antivirus/malware protection (MacOS is not supported)

Required textbooks will be discussed in class. You will not need to purchase them ahead of time.