

## Information Technology Administrator (Cybersecurity)

The Information Technology Administrator (Cybersecurity) diploma program at triOS is 62 weeks. It includes a 12-week internship. triOS College knows what it takes to prepare graduates for careers in this field and this program focuses on building skills that are in key demand within today's IT industry. Students will learn how to design, implement, and audit security within an enterprise and cloud environment, as well as detect, respond to, and investigate the different types of security breaches prevalent in today's complex threat landscape. The courses within the program relate to 13 industry certification examinations. Students are provided with 6 certification exam vouchers to write the certifications they wish to pursue.

### Program Benefits

- ✓ Half Day Classes
- ✓ Job Placement Assistance
- ✓ Small Class Sizes
- ✓ Certification exam vouchers included
- ✓ Qualified instructors

### Here's a look at some of the courses included in this program:

#### PC & Windows Administration

PC Support, Windows Client Administration, Windows Server & Active Directory Administration

#### Network & Linux Administration

IT Service & Project Management ,Network Administration, Linux Administration, Security Fundamentals

#### Advanced Networking & Cybersecurity Administration

Advanced Network Technologies, Cybersecurity

#### Internship

12 weeks

### Certification Paths



## Employment and Wage Outlook for Careers in this field:



Employment Rate based on 2022 contactable triOS graduates employed in a related field within 12 months.

Source: workingincanada.gc.ca

NOC Code: 2171 / 21220, 21221, 21222- \*\*Wage data based on NOC Code 2171 and rounded down to the nearest dollar. Average wage doesn't reflect the starting salary but represents the middle value between lowest to highest wages. Local (or regional) income may vary. Last updated in Jan 2024.

### Career Opportunities

Windows Server Administrator

Active Directory Administrator

Project Manager

Cisco Administrator

Linux Administrator

Security Specialist

Cybersecurity Analyst

### Employers Who Have Hired triOS Grads

**RICOH**  
imagine. change.

**Bell**

**IBM**

**ROGERS**

**3M** Science.  
Applied to Life.™

hydro  
**one**

### Some Other Employers Are:

- KPMG
- Pace Technical Services
- Shaw Communications
- Sentex Communications
- Cogeco Cable

**"It was a wonderful experience. I have gained the right knowledge to arm myself in the right field of work that I am in right now. I have met great friends and treasured all the memories. With my experience in school, I am confident I can tackle any challenges coming my way!"**

-Charity M.,

triOS College Information Technology Administrator Graduate

# Information Technology (IT) Administration (Cybersecurity) + Internship

Diploma Program Length:  
**62 Weeks**

NOC Code: 2171/21220, 21221 & 21222

Student Success Strategies  
Career Management

**2 Weeks**

Advanced Network Technologies  
Cybersecurity

**16 Weeks**

PC Support  
Windows Client Administration  
Windows Server & Active Directory Administration

**16 Weeks**

Internship

**12 Weeks**

IT Service & Project Management  
Network Administration  
Linux Administration  
Security Fundamentals

**16 Weeks**

## Program highlights include:

- Registered and approved diploma
- 6 Certification Exam Vouchers \*\*\*
- Practice Tests (where applicable)
- Career services
- Job search assistance
- Alumni program benefits

\*\*\*The courses within the program relate to 13 industry certification examinations. Students are provided with 6 certification exam vouchers to write the certifications they wish to pursue.

## Certification Paths:



## Admission Requirements:

1. Student has an Ontario Secondary School Diploma or equivalent, OR  
Is 18 years of age or older on or before the program begins AND can pass a qualifying test that has been approved by the Superintendent.\*
2. The approved qualifying test for this program is the Wonderlic test. A passing score for this program is 20.

\*Applicants from other Canadian provinces must be at least 19 years of age and a minimum of 1 year out of high school by the program start date and successfully pass an academic achievement test.

International Students: Please contact us for more detail regarding admissions requirements.

## Accreditation Policy:

Like all post-secondary institutions in Ontario, triOS College reserves the right to accept or deny advanced standing into its programs.

## Certifications:

Students who successfully complete this program will be eligible to write certification exams leading to the following designations: CompTIA A+ (2 vouchers), CompTIA IT Project+, CompTIA Network+, CompTIA Linux+, CompTIA Security+, CompTIA CySA+, CompTIA Pentest+, CompTIA CASP+, Cisco CCNA, CWNA and Microsoft Desktop Administrator Associate (MDAA): Windows 10 (2 Vouchers). These certifications are comprised of thirteen (13) individual certification examinations. Students are provided with six (6) certification exam vouchers to write the certifications they wish to pursue.

## Note:

In order to continuously improve our programs, triOS College reserves the right to modify programs at any time. Program delivery order may vary depending on the program start date. This diploma program may not be available at all campuses. The program may have additional reading weeks, depending upon the start date.

You can find our Key Performance Indicators (graduation rate, employment rate, etc.) at [www.triOS.com/kpi](http://www.triOS.com/kpi).



## How AI is Used in Technology Programs

### What is AI?

**Artificial Intelligence (AI)** is an *evolving* technology that attempts to simulate human intelligence using computer programs. At the heart of AI is **Machine Learning (ML)**, which correlates large amounts of data to learn the relationships between different data elements. AI and ML products can be used by both IT professionals and software developers to save time on certain tasks.

### How do IT professionals leverage AI on the job?

Most IT professionals use AI to obtain or generate information that they would have previously obtained online using a search engine, such as Google. This could include generating summaries for reports and documentation, generating scripts (e.g., PowerShell, BASH), and generating infrastructure configuration templates (e.g., Ansible playbooks).

### How do software developers leverage AI on the job?

Nearly all modern development tools now have AI-based auto-suggestion, code generation, and documentation abilities. Software developers can choose to autofill in certain lines of code, as well as generate the initial structure (called stub code) for a new program to give them a solid starting point for development. Additionally, software developers can leverage AI tools to add the necessary documentation to existing code to save time.

### How do we approach AI in our programs?

While AI can be used to save time, all AI-generated content must be reviewed in depth by someone with content expertise to ensure that it provides the necessary functionality, and in a way that adheres to corporate standards, security, and software/copyright licenses. Thus, you must first have a solid understanding of IT administration or software development to leverage AI effectively in those fields.

At triOS, we leverage AI to generate content throughout several courses in the program, but only where appropriate, and in ways that mimic the use of AI in the workplace. Additionally, all AI generated content is thoroughly reviewed before use to ensure functionality, security, copyright adherence, license compatibility, and quality. Students will not learn how to create new AI technologies; however, students will learn how to use existing AI tools where appropriate.

## **Course Descriptions:**

### **Student Success Strategies**

This course stresses the importance of developing non-technical skills to enhance personal, academic and career success. This includes understanding learning styles and honing practical study skills, such as memory, reading, note- and test-taking techniques. Personal exercises will focus on teamwork, setting goals and maintaining a positive attitude. Techniques for managing change, stress, and conflict will also be explored.

### **Career Management**

In this module, you will create and refine your résumé and LinkedIn Profile. You will write cover letters and learn the value of customizing cover letters to specific job postings. You will have the opportunity to apply this knowledge as you conduct a job search and write a cover letter tailored to an ideal job post. Through research, you will create a list of top employers and target current industry opportunities. You will learn about current methods for applying to job postings using technology. You will also gain an understanding of the job interview process, typical interview questions and possible responses, and expectations of both the interviewer and interviewee. In addition, you will engage in practical application of the interview process through role-play. Topics such as negotiating salary, self-management, and on-the-job success for placements and postgraduate employment will be also covered.

### **PC Support**

This course introduces you to the essential operating system skills required of a PC support technician, and covers the concepts tested on the CompTIA A+ certification. More specifically, you will learn how to configure, troubleshoot, and maintain both computer hardware and the Windows family of desktop operating systems. Additionally, you will examine the basic configuration of Linux, macOS, and mobile operating systems.

### **Windows Client Administration**

This course introduces the skills and knowledge necessary to install, configure and support Microsoft Windows client operating systems, and covers the concepts tested on the Microsoft 365 Certified: Endpoint Administrator Associate certification exam. More specifically, students learn how to deploy and upgrade Windows clients, as well as configure storage, access, devices, network connectivity and security. Additionally, students learn how to administer systems using PowerShell, as well as leverage online resources and AI tools to generate PowerShell scripts.

### **Windows Server & Active Directory Administration**

This course provides an in-depth look at the different tasks necessary to administer, secure, and troubleshoot Windows Server 2019 systems. Focus is placed on server deployment and management, as well as data, storage, network service, virtualization, and container configuration. Additionally, this course covers Active Directory configuration and management.

### **IT Service & Project Management**

You will gain an understanding of business processes and communication, as well as time and project management skills that are vital for success in today's IT industry. Through the use of examples, demonstrations, and activities, you will examine the strategies and techniques that are commonly used within the IT industry, with a focus on ITIL processes and project management. Additionally, you will leverage AI tools to produce several industry grade deliverables for a complete IT project. This course also covers the concepts tested on the CompTIA Project+ certification.

### **Network Administration**

In this course, students examine the theory and concepts required to successfully administer and troubleshoot IP-based computer networks and network technologies. Moreover, this course covers the concepts tested on the CompTIA Network+ certification.

### **Linux Administration**

Linux provides the foundation for many systems today including embedded and mobile devices, supercomputers, and the cloud. In this course, students learn how to install, configure, and manage Linux systems and the network services that they run. Moreover, this course covers the concepts tested on the CompTIA Linux+ certification.

## **Security Fundamentals**

This course covers the core concepts that provide for security within an enterprise environment. Focus will be placed on the common security tools and procedures that every IT professional must know when working with technology in an organization. Moreover, this course covers the concepts tested on the CompTIA Security+ certification.

## **Advanced Network Technologies**

In this course students learn the configuration and support of Cisco routers, switches, and services. Additionally, students explore the design, configuration, and management of WLANs and other wireless technologies. Students will also leverage AI tools to generate an industry grade Wi-Fi infrastructure proposal for a campus location. This course covers the concepts tested on the Cisco Certified Network Associate (CCNA) and Certified Wireless Network Administrator (CWNA) certification exams.

## **Cybersecurity**

This course covers the procedures used to design, implement, and audit security within an enterprise environment, as well as detect, respond to, and investigate security breaches. During the course, students perform detailed vulnerability assessments and penetration tests on target systems and networks, as well as leverage AI tools to generate an industry grade security assessment that summarizes the results and remediation actions. Moreover, this course covers the concepts tested on the CompTIA Cybersecurity Analyst+, Pentest+, and CASP certification exams.

## **IT Administrator Internship**

At the successful completion of the classroom hours of this program, you will be placed in a 240-hour internship at an outside organization. You will have the opportunity to apply your new and developed skills in a real-world environment. Hosts include small, medium, and large organizations that have an Information Technology department, or organizations that provide technology and technology services.